

MOROCCO

Skills Development for Employment

The Role of Technical and Vocational Education and Training

May 2020

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ABBREVIATION AND ACRONYMS

ANAPEC	National Agency for Employment and Skills Promotion (<i>L'Agence Nationale de Promotion de l'Emploi et des Compétences</i>)
ATS	Specialized Technician Assistant (<i>Adjoint Technique Spécialisé</i>)
BTS	the Higher Technician Certificate (<i>Brevet de Technicien Supérieur</i>)
CAP	Certificate of Professional Aptitude (<i>Certificat d'Aptitudes Professionnelles</i>)
CBA	Competency-based Approach
CFA-IE	Training Center by Inter-Enterprise Apprenticeship (<i>Centre de formation par apprentissage inter-entreprise</i>)
CGE	<i>Conseil de gestion de l'établissement</i>
CGEM	General Confederation of Moroccan Enterprises (<i>Confédération Générale des Entreprises du Maroc</i>)
CMC	<i>Cités des Métiers et des Compétences</i> (City of Trades and Skills)
CNC	National Framework for Certification (<i>Cadre National de Certification</i>)
CNSS	National Social Security Fund (<i>Caisse nationale de sécurité sociale</i>)
CSEFRS	Higher Council for Education Training and Scientific Research (<i>Conseil Supérieur de l'Éducation de la Formation et de la Recherche Scientifique</i>)
CSF	Special Training Contract (Système des Contrat Spéciaux de Formation)
DFP	Secretary General of Vocational Training (<i>Département de la Formation Professionnelle</i>)
DIA	Diploma in Applied Engineering (<i>Diplôme d'Ingénieur d'Application</i>)
DSP	<i>Diplôme de Spécialisation Professionnelle</i>
DT	<i>Diplôme de Technicien</i>
DTS	<i>Diplôme de Technicien Spécialisé</i>
DQP	<i>Diplôme de Qualification Professionnelle</i>
ECI	Economic Complexity Index
ETF	European Training Foundation
FMEP	Moroccan Federation of Private Professional Education (<i>Fédération Marocaine de l'Enseignement Professionnel Privé</i>)
GDP	Gross Domestic Product
GIAC	Advisory Support for Interprofessional Groups (<i>Groupements Interprofessionnels d'Aide au Conseil</i>)
GoM	Government of Morocco
HCI	Human Capital Index (<i>Indice du capital Humain</i>)
HCP	High Commission for Planning (<i>Haut-Commissariat au Plan</i>)
IAP	Industrial Acceleration Program
IGD	Delegated Management Institutes (<i>Institutes à Gestion Délégée</i>)
INE	National Evaluation Body (<i>Instance Nationale d'Evaluation</i>)
MENA	Middle East and North Africa
MNEFPESRS	Ministry of National Education, Vocational Training, Higher Education and Scientific Research (<i>Ministère de l'Éducation Nationale, de la Formation Professionnelle, de l'Enseignement Supérieur et de la Recherche Scientifique</i>)
MSME	Micro, Small and Medium Enterprise
NEET	Not in Employment, Education or Training
NGO	Nongovernmental Organization
NQF	National Qualification Framework (<i>Cadre National Marocain de Qualification</i>)
NSDC	National Skills Development Corporation
OFPPT	Vocational Training and Occupational Promotion Bureau (<i>Office de la Formation Professionnelle et de la Promotion du Travail</i>)
PISA	Programme for International Student Assessment
PNEA	<i>Programme National d'Evaluation des Acquis</i>

PPP	Public-Private Partnership
REC	<i>Répertoire des Emplois Compétence</i>
REM	<i>Répertoire Emplois Métiers</i>
RUT	<i>Rol Unico Tributarios</i>
SEFP	State Secretariat for Vocational Training (<i>Secrétariat d'Etat chargé de la Formation Professionnelle</i>)
SMEs	Small and Medium Enterprises
TESDA	Technical Education and Skills Development Authority
TFP	Vocational Training Tax or Levy (<i>Taxe de la Formation Professionnelle</i>)
TVET	Technical and Vocational Education and Training

EXECUTIVE SUMMARY

Morocco has experienced a rapid expansion in the supply of education services over the last two decades resulting in impressive improvements in access to education, enrolment, and attainment. Between 2000 and 2016, the gross enrolment rate in primary education increased from 85 to 98 percent, in lower secondary education from 60 to 88 percent, and in upper secondary education from 37 to 66 percent. The Government of Morocco (GoM) allocates about 30.4 percent of its total budget and 6.4 percent of gross domestic product (GDP) to education. This is higher than the Middle East and North Africa (MENA) average at 17 percent of budget allocation and 5 percent of GDP.

The two key challenges of Morocco's education system are low learning outcomes and the large share of 15- to 24-year-olds not in employment, education or training (NEET). Although the education sector has expanded over the past two decades, this has not resulted in improvements in learning, illustrated by weak results in national and international student learning assessments (TIMSS 2015, PISA 2019, etc.). Recent PISA results show that the performance of 15-year-old students in Morocco is significantly below the participating MENA countries average and represents nearly four years of lost schooling¹ compared to the Organisation for Economic Co-operation and Development (OECD) country average. At the same time, 30 percent of 15-year-olds in Morocco are not enrolled in any type of education or training. At the lower secondary education level, there is a 38-point difference in the net enrollment rate between rural and urban areas (37 versus 75 percent in 2017). Furthermore, 28 percent of 15- to 24-year olds are considered to be NEET, and youth unemployment is three times higher than employment for the overall working-age population.

Within this context, technical and vocational education and training (TVET) has emerged as an option that could integrate students more quickly into the workforce. The number of students enrolled in TVET in Morocco has almost tripled from 136,132 in 2000 to 462,700 in 2017. Nevertheless, in 2015, TVET's share of the total enrolment at the upper secondary level was only 13.5 percent. The GoM plans to further expand TVET opportunities for the youth. The National TVET Strategy aims to intensify the cooperation between TVET institutions and employers to determine the skills needed in different geographical areas of the country. The National TVET Strategy also includes the creation of 12 new regional TVET centers to help coordinate TVET activities, build collaboration with the private sector, help manage specific regional programs, and evaluate the effectiveness of these measures.

This note (a) presents an overview of Morocco's TVET system in the context of the larger Moroccan education system, (b) maps the policies and institutions involved in the delivery of TVET, and (c) assesses the design features and implementation challenges that constrain the effective delivery of TVET. The note is based on interviews with clients and stakeholders—including Vocational Training and Occupational Promotion Bureau (*Office de la Formation Professionnelle et de la Promotion du Travail*, OFPPT), the main provider of TVET in Morocco, and TVET centers—and a review of secondary reports and materials. The note also seeks to identify a few areas where reform efforts could help improve the effectiveness and efficiency of TVET.

The report also identifies a number of areas for further improvements, including (a) expanding the application of competency-based approaches (CBAs) to training, (b) ensuring monitoring and evaluation for evidenced-based decision-making, (c) strengthening the quality framework for TVET, (d) enhancing the role for the private sector, and (e) adopting an 'all of government' approach to address these key concerns by involving all critical stakeholders in the process of delivering training.

¹ 30 points in PISA scale ≈ 1 year of schooling.

Since this note was finalized, an unprecedented crisis has substantially disrupted education at all levels. To prevent the spread of COVID-19, educational institutions at all levels in Morocco were closed on March 16, 2020, until further notice. While general K-12 schools remain closed till September 2020, decision regarding colleges and universities are still being taken. The Ministry of Education declared that educational continuity should be maintained through distance education/learning and has taken measures to facilitate continuing education service delivery. However, the degree to which learning can still take place outside the classroom, including in TVET, is often limited by lack of access to electricity, internet connectivity, digital devices, and learning platforms or the inadequate preparation of teachers and students for remote education (Hoftijzer et al. 2020). First simulations on the impact of school closures on learning reveal that learning-adjusted years of schooling are expected to decrease on average by 0.4 years of schooling and the average annual earning per student is expected to decrease by 3.4 percent (Azevedo et al. 2020).

In TVET, with its focus on practical skills and improving work readiness, remote learning is particularly challenging. Since practical skills are often acquired through learning-by-doing approach and rely on specific equipment and laboratories, distance learning is particularly challenging. How are TVET programs and students doing during the COVID-19 crisis? How are countries planning to adapt TVET to what comes next? The World Bank has joined forces with the ILO and UNESCO to collect this information from TVET providers, policy makers, and social partners (Hoftijzer et al. 2020). Survey results were not yet available at the completion of this report.

INTRODUCTION

1. The GoM's overriding concerns are steady economic growth, structural transformation toward economic competitiveness, job creation, and youth² unemployment. These issues have compelled the government to obtain a better understanding of its policies in the area of education and skills development and to make changes to improve service delivery through strategies such as adopting school-based management (De Grauwe 2005), decentralizing government structures, strengthening financial flows, and improving the efficiency in using these resources to achieve desired outcomes (IMF 2017).

2. Morocco plans to develop a more coordinated and integrated structure for education, training, skills development, employment, labor laws, and social protection programs. For Morocco to be competitive in all areas of the economy, individuals must be able to access knowledge flows and develop the necessary skills needed to spur the economy and understand their role in a globalized world. The country is keenly aware that low quality of education in general terms translates into a low- or poorly skilled labor force. According to the 2018 Investment Climate Statement, "despite the significant improvements in business environment, the lack of skilled labor, weak intellectual property rights protection, inefficient government bureaucracy and the slow pace of regulatory reform remain challenges for Morocco." While many Moroccan graduates are unable to find jobs commensurate with their educational training, employers complain of skills shortages and mismatches. Industrial skills that could benefit the needs of growing sectors are not prioritized, and skills that graduates acquire are often not transferrable to any real-world working environment, causing gaps between skills supply and demand (US Department of State 2018).

3. In Morocco, as in many other countries, the TVET system at times has struggled to sync well with both ends of the education spectrum—the schooling system on the lower end and the higher education system. In most countries, the reason for this difficulty often lies in the fact that the jurisdiction over these different systems is spread across several different ministries. Morocco has taken a bold step in integrating the responsibilities for the supply side of skills development under one roof of the Ministry of National Education, Vocational Training, Higher Education and Scientific Research (*Ministère de l'Éducation Nationale, de la Formation Professionnelle, de l'Enseignement Supérieur et de la Recherche Scientifique* [MNEFPESRS]). While this has significantly helped improve coordination on the supply side, challenges still remain. For example, programs are not very flexible in terms of entry and exit requirements, could be modularized and better articulated with basic schooling and general higher education, and most importantly, need to have multiple pathways that cater to students of different needs.

4. TVET has always struggled to garner the same importance as general schooling or higher education in the minds of both policy makers and key stakeholders—particularly parents and students. Job-oriented training has typically been considered as the option for those who have not demonstrated capacity to pursue general higher education or complete general secondary schooling. This negative perception of the TVET sector has resulted in a situation where TVET is seen as 'schooling of last resort' and not to improve access to the job market. However, this perception is beginning to change in Morocco. The TVET sector has managed to carve out a critical niche for itself in Morocco by improving coordination with the private sector, employers, social partners, and so on; by promoting the critical role played by TVET in Morocco's economy; and perhaps by illustrating that a large number of students graduate from tertiary programs with no demonstrable skills constitute a significant share of the unemployed.

² Youth is typically defined as individuals between 15 and 24 years of age.

5. The GoM increasingly believes that the TVET sector has an important role to play in helping address the issues identified earlier. It has significantly increased its attention to this sector by opening new training institutions in the country. These institutions play a pivotal role in the economic sector as they straddle the space between education and skills development and the desired labor market outcomes for these students. Recent years have seen dramatic increases in participation in the TVET programs in the country. The GoM has vastly improved and expanded communication around TVET and has managed to give it an aspirational view. Furthermore, the broadening of course offerings and the changing role and nature of technology in TVET programs have helped revive interest in TVET.

6. Finally, employers are beginning to realize that certificates and degrees do not necessarily imply skills acquisition. Technology is rapidly changing the landscape for skills certification and there is a move toward better, nimbler, more easily verifiable, and narrowly defined skills certification, which might be a better approach to getting the workers that employers need. Over the next two decades, Morocco too will benefit from these newer approaches to qualifications, such as micro certification, nanodegrees, and web badges which are revolutionizing the world of education and skills and are beginning to challenge the orthodoxy of higher education. The TVET sector and the programs and skills it imparts are particularly well suited to these emerging trends as they are key to these educational reforms and needed adjustments within the labor market.³

7. This report seeks to present an understanding of the needs of trainees and learners and expectations of employers in Morocco. Key measures to support effective, efficient, high-quality TVET programs closely articulated with the needs of the labor market are highlighted as well as the governance and institutional structures for TVET in Morocco. Improving the performance of the TVET sector and overall skill levels of graduates emerging from the system could have knock-on effects on labor market outcomes and the functioning of the overall economy as more and more people are able to access jobs. This would help Morocco become a more competitive economy in the medium to long term and play a more active role in MENA, African, and global affairs from a position of strength.

³ For example, Pearson's Acclaim Badges give learners a wide variety of opportunities to acquire skills and share evidence of their competence in specific areas to prospective employers.

I REGIONAL AND COUNTRY CONTEXT

8. The young form the largest share of the population in the Arab states. Over half the population in the region is under the age of 24 and an estimated two-thirds are below 30 years (Amin et al. 2012). In fact, one undeniable reason behind the ‘Arab Spring’ is that the youth in these countries have been disproportionately affected by the lack of democratic processes and participation, decades of sluggish economic growth, and alarmingly low levels of job opportunities and creation in some countries. Figures 1 and 2 illustrate the sluggishness of economic growth in Morocco and across a select set of comparator countries. While Morocco performs better than some neighboring or comparator countries, and although the International Monetary Fund (IMF) had predicted favorable growth prospects in the medium term (IMF 2019), the real concern for Morocco has been that growth in recent years has failed to create jobs, leading to high levels of underemployment and unemployment. The current situation brought about by the COVID-19 crisis lays bare the enormous policy challenges and deficits facing Morocco and the region more broadly.

Figure 1. Economic growth rates in select MENA countries

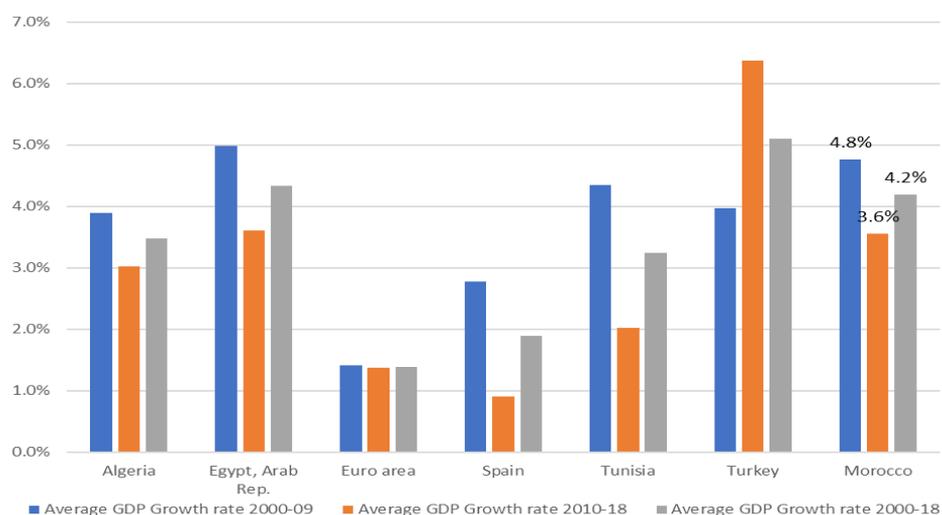
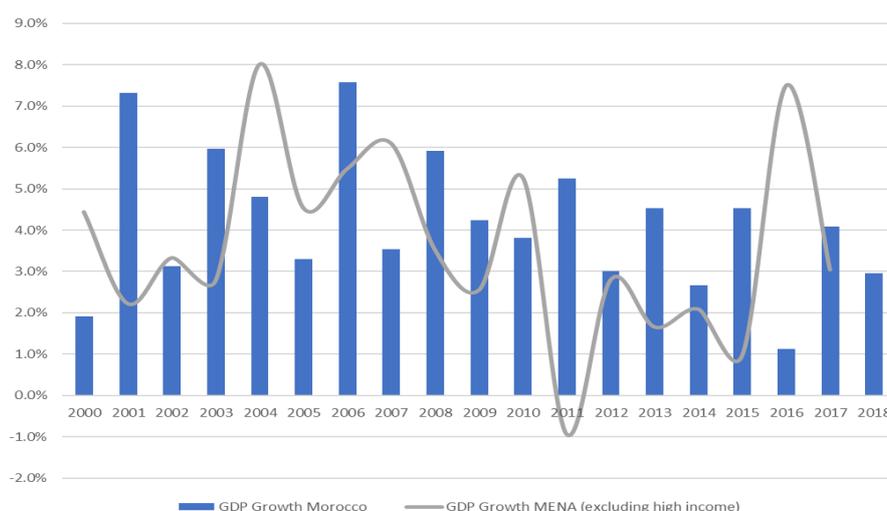


Figure 2. GDP growth in Morocco and MENA

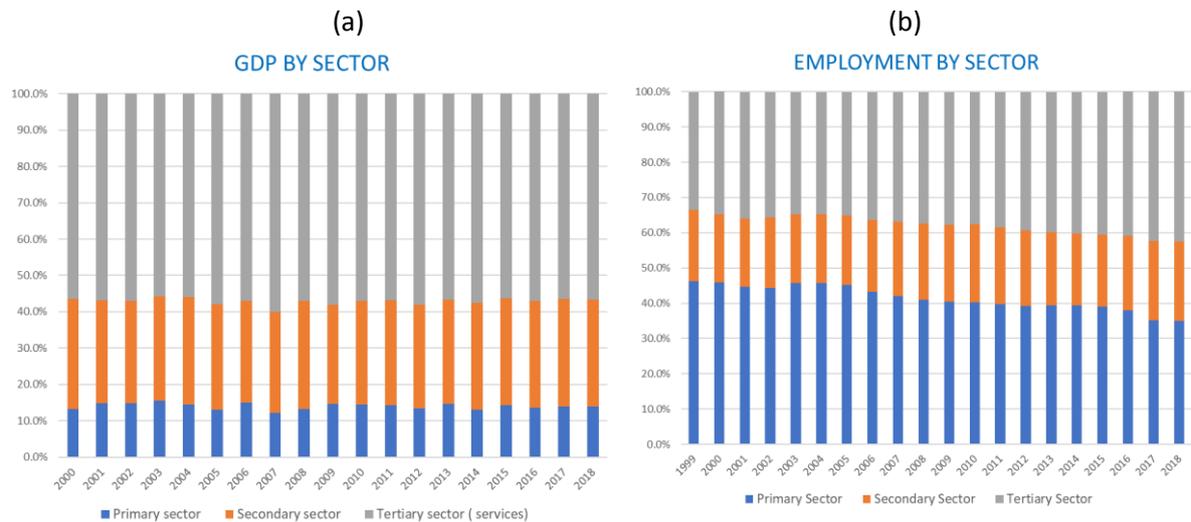


9. The Moroccan economy has also exhibited a slow structural transformation process, which will be needed for the country to achieve higher growth. Global evidence illustrates that for strong economic performance, what matters is not how much of a product is exported but what the product

itself is (World Bank 2006). Morocco needs to move toward exporting more sophisticated products compared to its current product mix. Product diversification will require Morocco to enhance its infrastructure and human capital, improve the country’s competitiveness, and move toward higher value-added products. While GDP mainly stems from the service sector, employment is mostly found in the primary sector.

10. The complexity of the Moroccan economy grew steadily over the years between 1970 and 2017. However, Morocco’s rank in terms of its economic complexity has continued to fall relative to other countries, illustrating that the process of structural transformation of the Moroccan economy has been relatively slow. It is only in recent years that the structure of Moroccan exports has become more sophisticated, having spent several decades in producing low-complexity products—knitted products, textiles, and food processing.⁴ However, in the most recent phase of transformation, the country has moved toward some products that require higher technological content. For example, in recent years Morocco has acquired the reputation of being the largest assembler and exporter of cars in Africa, overtaking South Africa in the process.⁵ This was the result of deliberate policy measures adopted by the government and required a new set of skills to be developed. These plans were enshrined in Morocco Industrial Acceleration Plan 2014–2020.⁶

Figure 3. Structural transformation in the Moroccan Economy



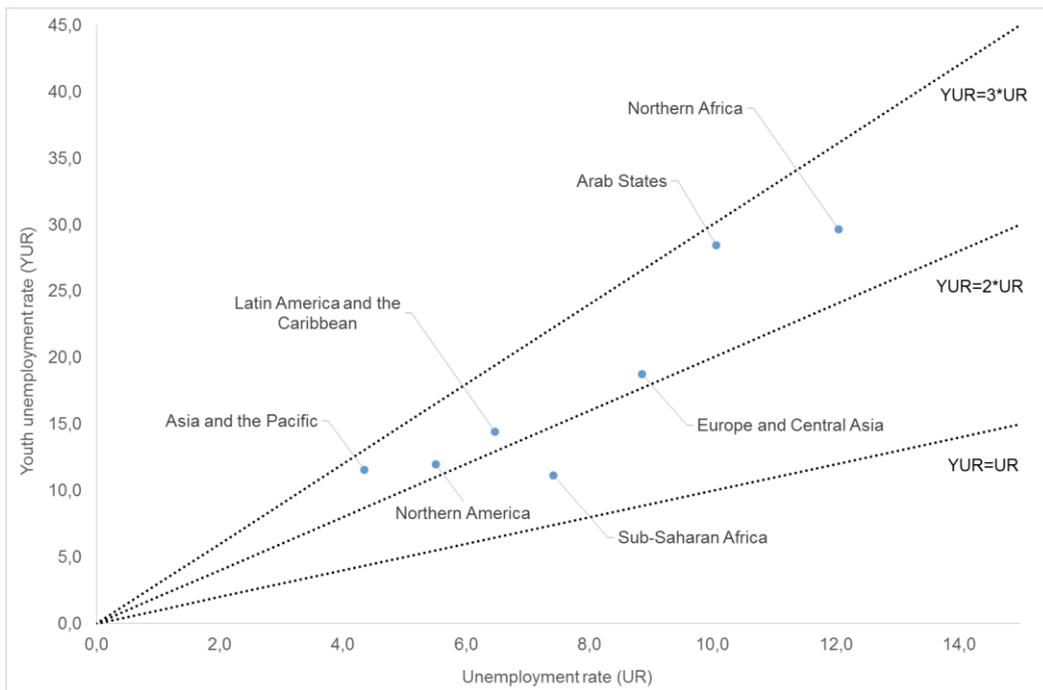
11. High levels of unemployment, particularly youth unemployment, characterize the entire MENA region. Figure 4 illustrates that MENA has had persistently high youth unemployment rates for over two decades and is estimated to be 25 percent, which is the highest in the world. The high levels of youth unemployment also show a level of persistence due to years of tepid economic and job growth (HCP 2018).

⁴ This was referred to Phase II of the process of industrialization for Morocco where the focus was on low complexity, export-oriented, and labor-absorbing sectors such as textiles and food processing. Knitted products, such as carpets, have been the mainstay of the Moroccan economy for years and continues to be so though their contribution to the overall economy has declined over the years.

⁵ Please refer to <https://www.moroccoworldnews.com/2018/05/246127/morocco-surpasses-south-africas-car-production/>.

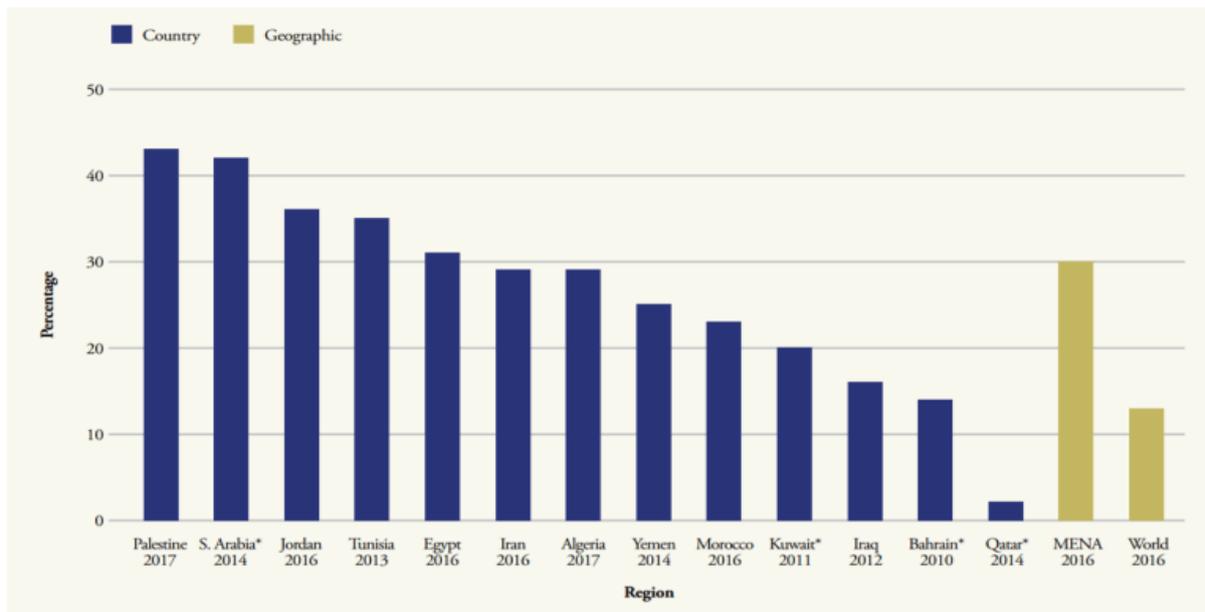
⁶ Please refer to <http://www.mcinet.gov.ma/en/content/industrial-acceleration-plan-2014-2020>.

Figure 4. Unemployment and youth unemployment rate in world regions



Source: Ramos 2017.

Figure 5. Youth unemployment rates in MENA, by country



Source: Kabbani 2019.

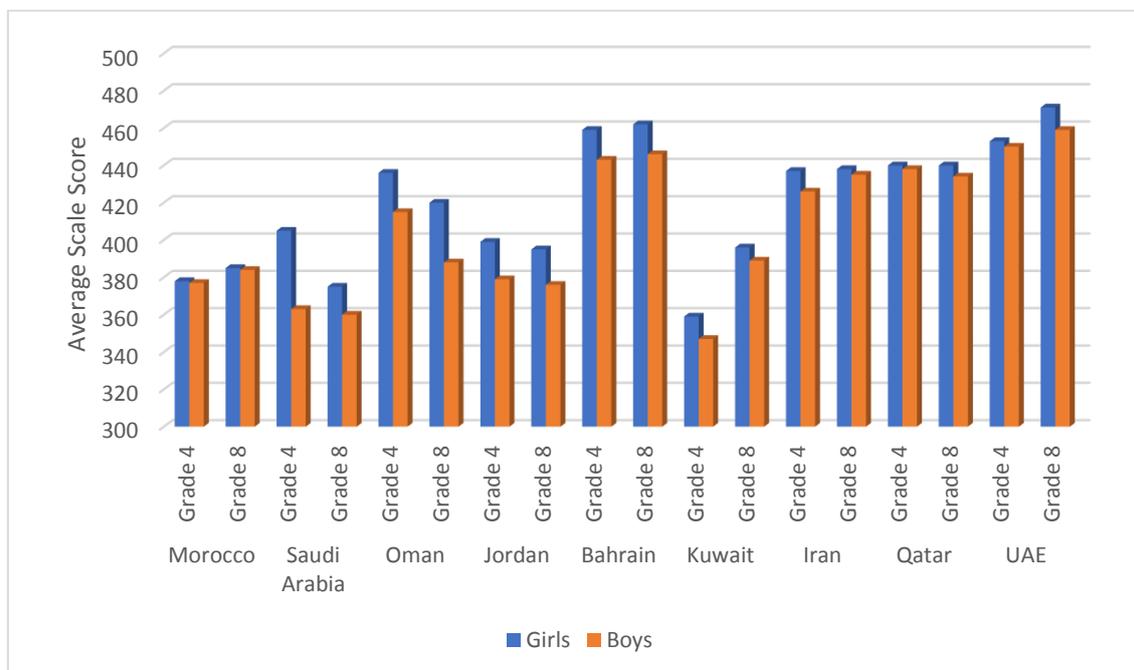
12. High levels of youth unemployment have many implications, for example, the youth spend years searching for the right jobs before they can find opportunities. Amin et al. (2012) note that “...in the mid-1970s, 80 percent of first-time job seekers found employment in a formal wage or salary job; by the mid-2000s, only 30 percent did.” The youth, individuals, and families have had to deal with this enormous change in just one generation. Delays in finding a job or transitioning from school to work also has other (negative) knock-on effects. It results in transitioning more slowly to other important aspects of adulthood, such as marriage and household formation. Regional governments have placed high priority on addressing this issue of high youth unemployment, and the urgency to address this issue is only growing.

13. However, the MENA region is not a monolithic set of countries, and it would be a mistake to look at the region through a single lens. There is considerable variation across and within MENA countries.

- **Oil exporting countries**—for example, Qatar, Saudi Arabia, and the United Arab Emirates (or more generally, the Gulf Cooperation Council countries)—have created more jobs than can be effectively met by local labor supply. They have addressed this gap for decades by having significant inflow of migrant labor from the region and beyond. A key challenge for this set of countries has been the need to diversify their economy away from oil and petrochemical industries in general. This too has contributed significantly to their decision to import labor (and hence the necessary skills) as needed.
- **Oil importing countries**—for example, Tunisia, Morocco, and the Arab Republic of Egypt—have struggled to generate domestic jobs over many years and have found it particularly difficult to meet the growing demands to help their youth transition into work and productive lives. However, the fact that their economies have not been dependent on oil has allowed them to organically grow the importance of other sectors of the economy⁷ and thereby focus on developing a broader range of skills in the workforce.

14. One key characteristic of MENA labor markets compared to the rest of the world is that there is a significant gender dimension to youth unemployment in this region. Women’s labor force participation rates in the region remain incredibly low, even as young women continuously outperform young men in the schooling system and having made considerable gains in educational attainment in recent years. Figure 6 illustrates the performance of girls relative to boys in recent international assessments and Figure 7 shows the female labor force participation rates by region and gender.

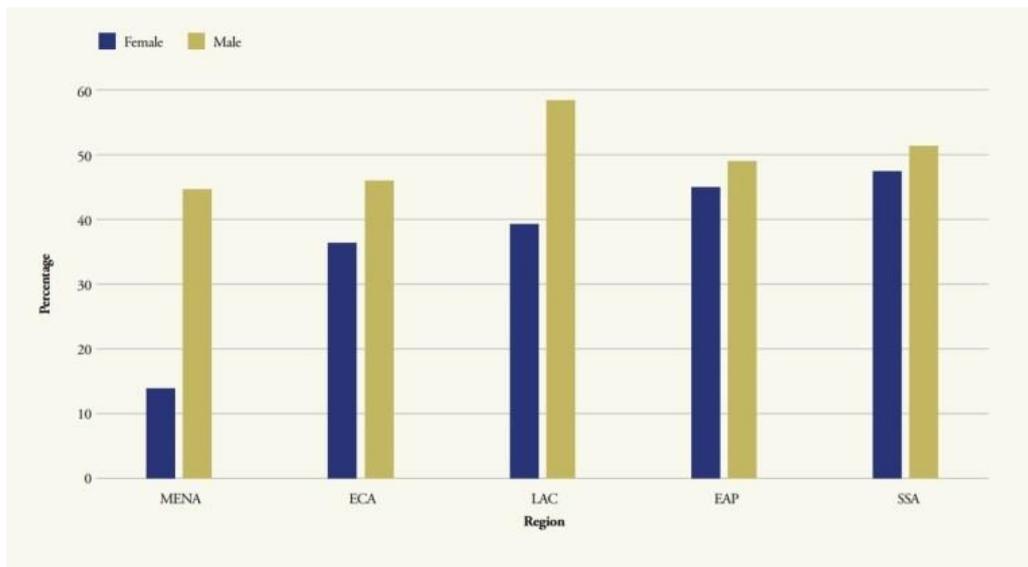
Figure 6. Performance by gender in recent international assessments



Source: Kabbani 2019.

⁷ Though economic concentration and complexity still remain a challenge.

Figure 7. Regional labor force participation rates by gender



Source: Kabbani 2019.

1.1 Exploiting the opportunities of a youthful population

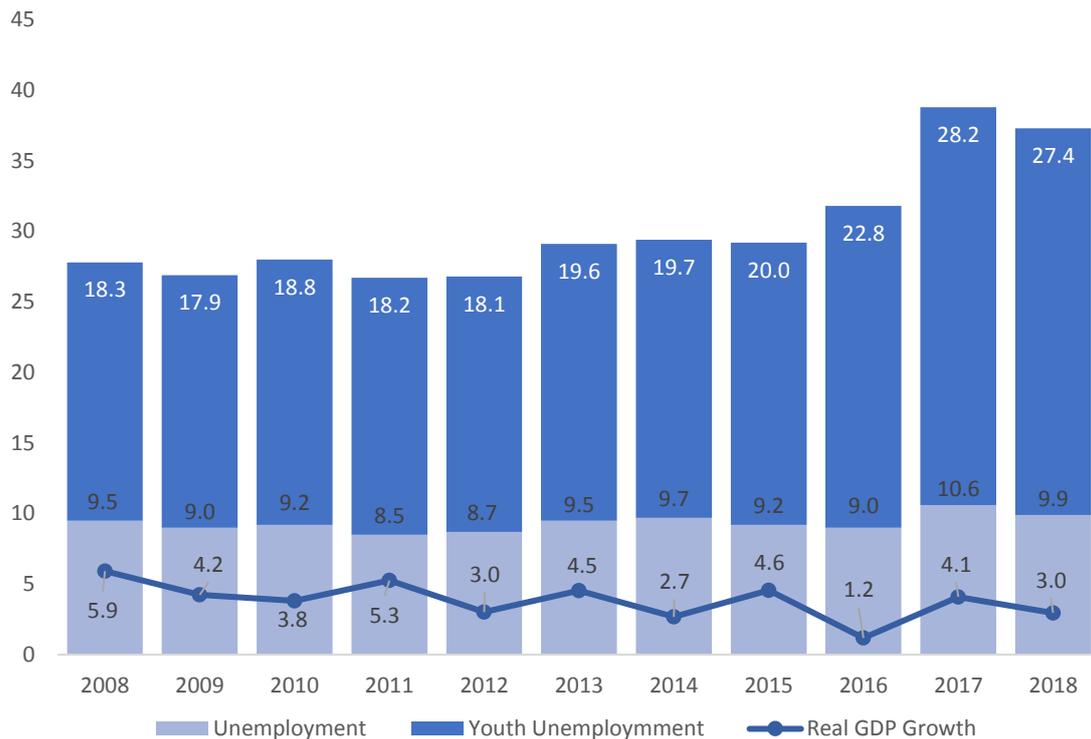
15. The regional characteristics with respect to demographics, unemployment, and youth unemployment are mirrored in the context of Morocco. The youth share is large and accounts for about 17 percent of the population.⁸ Unemployment and youth unemployment rates are very high, with nearly a tenth of the working-age population of the country, or approximately a million individuals, being unemployed (World Bank 2018a). Average youth unemployment rates mask significant intra-country differences, for example, youth unemployment rates are approximately 20 percent nationally, but rise to almost twice the level in select urban areas. The share of NEET is also high, estimated to be 27.9 percent in 2015 for the 15–24 age group and with men accounting for about 11.4 percent and women for about 45.1 percent⁹ (ETF 2016a).

16. The impacts of the Arab Spring reverberated and were fully manifested in Morocco. Protests took place across the country, youth groups emerged on the streets to demand change, fulfil their democratic aspirations, and improve the set of opportunities available to them. Unlike in Egypt and Tunisia where similar protests had significant negative impacts, they were less disruptive in Morocco. A combination of higher levels of transparency, and an existing and ongoing dialogue between the state and its citizens on a wide range of issues helped Morocco moderate the negative impacts of these protests and provided multiple avenues for political, constitutional, and social reforms (Sater 2011).

⁸ Morocco's total population in 2018 was estimated at 35 million and the working-age population was estimated at 26 million.

⁹ Approximately 1,685,000 youth between ages 15 and 24 based on data from the HCP (OECD 2017).

Figure 8. Unemployment, youth unemployment, and real GDP growth (%)



Source: Moroccan Authorities, IMF World Economic Outlook (April 2019).

17. A paradoxical feature of the Moroccan labor market is that returns to education, especially to higher education, are not particularly high. Unemployment rates do not differ between individuals having completed a 3 or 4-year License (higher education degree) versus those having completed merely general secondary education. Da Silva (2017) identifies four possible factors that contribute to this issue of skilled unemployment in Morocco. These include, among others, (a) oversupply of skilled labor caused by fairly rapid increase in access to tertiary programs; (b) the degree of openness of the economy that has a positive impact on the demand for skilled workers; (c) the creation of more and better jobs, with a greater skills component and employment; and (d) further exacerbation of skilled unemployment by a skills mismatch created by the supply side with the tertiary system producing a large number of graduates in sectors that are not as much in demand or marketable. Da Silva (2017) finds that youth with science, technology, engineering, and mathematics backgrounds are more likely to be employed after completing a basic degree compared to those who complete a basic degree in humanities or other similar subjects which have less market appeal.

18. There are other important indicators of how youth in Morocco are constrained in their participation in the labor market. A study by the World Bank (2012) finds that nearly 88 percent of the youth work in the informal sector, which is a sizeable part of the Moroccan economy. Othmane and Mama (2016) estimate the size of the informal economy in Morocco to be 45 percent¹⁰ and identify urbanization, tax burden,¹¹ and corruption as the main causes for the size of the informal economy. Morocco is urbanizing rapidly. Between 2005 and 2015, Morocco’s urban population grew by about 5 percent per year from about 55.1 percent to about 60.2 percent.¹² This rapid increase in urban populations makes absorption into the labor market difficult for all new migrants and contributes to the growth of informal sector. However, Morocco also offers an example of an informal sector that

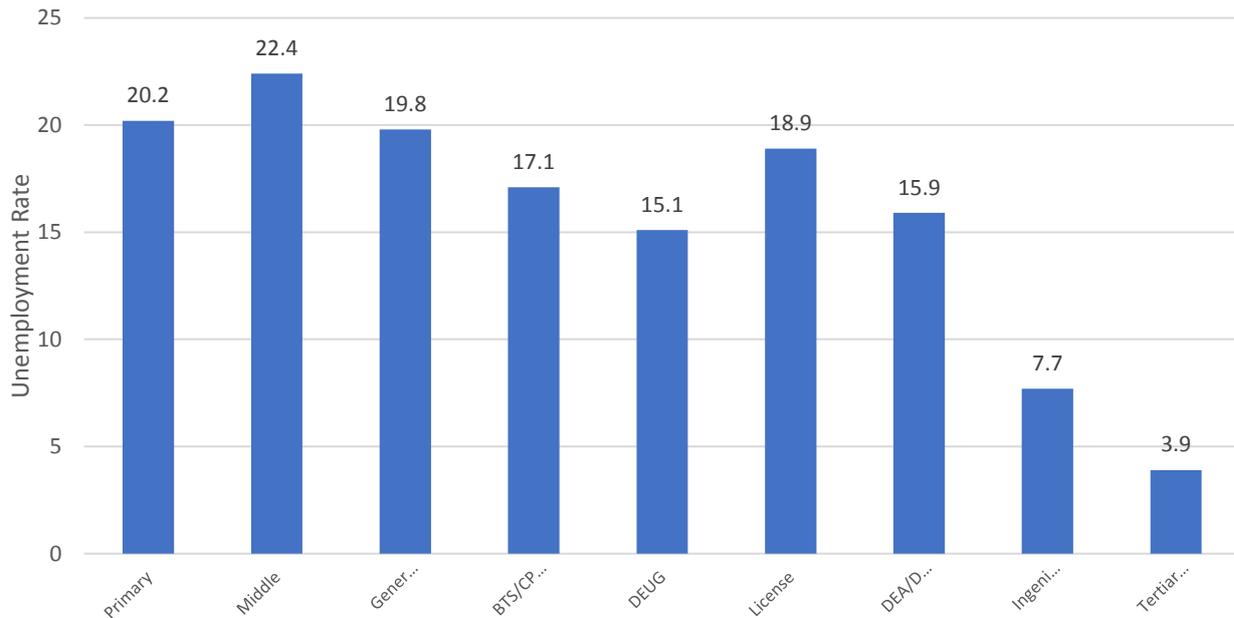
¹⁰ See https://www.researchgate.net/publication/306528117_An_Estimation_of_the_Informal_Economy_in_Morocco.

¹¹ The authors find that an increase of 1 percent in the tax burden results in an increase of the informal economy by as much as 0.11 percent.

¹² See <https://www.statista.com/statistics/455886/urbanization-in-morocco/>.

has significant economic potential if carefully harnessed. Nearly 70 percent of enterprises in Morocco work in this informal space. These are typically unregistered establishments with fewer employees.¹³ As in most countries, informal sector entities tend to have no structured benefits and have limited access to financing. Although there are clearly some undesirable characteristics in the informal sector,¹⁴ it offers opportunities for poorly qualified or trained young workers with almost half the youth in the informal sector never having been to school and about 70 percent with no qualification. Male workers form the largest share of the young workers in the informal sector, though women also find opportunities that offer less security from termination and are typically poorly paid.

Figure 9. Unemployment by education level in Morocco

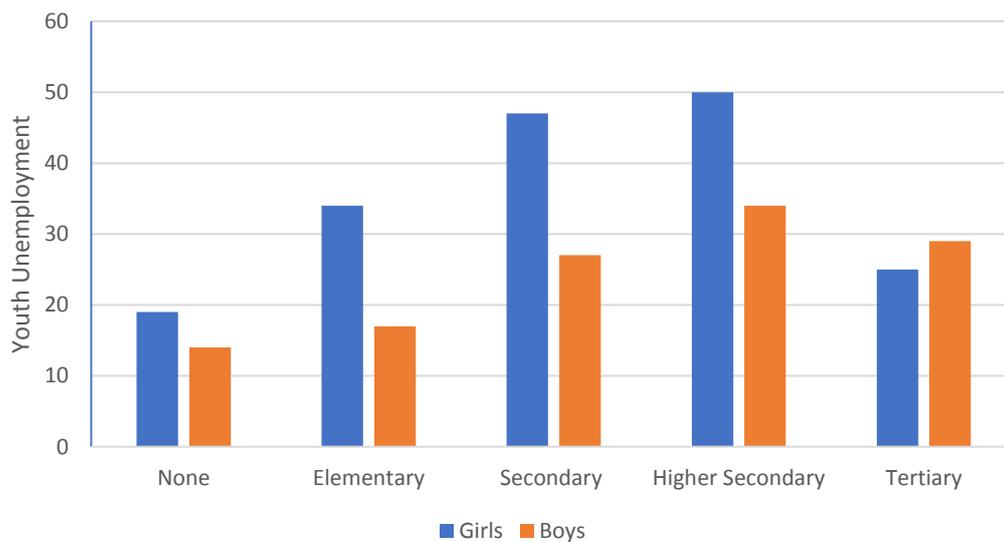


Source: Dadush and Saoudi 2019.

¹³ Simply from the viewpoint of exposition, it has been estimated that if each of these entities could be made to absorb just one additional employee per year, Morocco would be able to eliminate unemployment and this would benefit semi- and unskilled workers disproportionately. <https://moroccoonthemove.com/2018/01/12/informal-economy-africa-can-make-sustainable-impact-jean-r-abinader/>.

¹⁴ Only 11.4 percent of employed youth contribute to social security and only 9.7 percent have health insurance.

Figure 10. Unemployment by education level and gender in Morocco



Source: UN ECANA 2013.

19. Informality in the workplace continues to support skills development through informal apprenticeships. In a country like Morocco, with a large share of people working in the informal sector, informal apprenticeship programs at home or with a relative are likely to be the main source of skills development. This reinforces and crystalizes low-level basic skills, leaves individuals with limited ability for further upskilling since their foundational skills are poor, and limits the prospects for productivity improvements. Even for those who can make it to formal vocational or TVET programs, the absence of pathways between TVET and general education results in an unattractive dead end, which limits future career options for the individual.

20. A World Bank report 'Labor Market in Morocco: Challenges and Opportunities' (2017) identified three key challenges facing the labor market in Morocco: (a) lack of inclusion, (b) slow job growth, and (c) poor quality of jobs. Specifically, the report¹⁵ stated the following:

- **Lack of inclusion:** Youth and women are less integrated into the labor market. Female labor force participation is particularly low (23%). Youth participation has declined as the share of youth staying in school has more than doubled.
- **Slow job growth:** Job creation has not been sufficient to absorb the inflow of working-age population. Formal employment is concentrated in older and larger firms while small and medium enterprises face numerous constraints to operate and expand.
- **Low quality of jobs:** Informality dominates the labor market. The growth of nonagricultural employment is slow and employment in the services sector is concentrated in low-skilled services. Productivity is low, and workers lack sufficient mechanisms for protection and social dialogues.

21. The report notes that formal employment is concentrated in older and larger firms and that newer smaller and medium enterprises (SMEs) have not traditionally played a major role in creating

¹⁵ The three points have been copied verbatim from an article noting the publication of the report. This can be found at <https://www.worldbank.org/en/country/morocco/publication/labor-market-in-morocco-challenges-and-opportunities>

formal sector jobs in Morocco.¹⁶ However, recent results from a World Bank-financed project between 2012 and 2017, the *Moroccan Micro, Small and Medium Enterprise (MSME) Development Project*, provides some contradictory evidence. The Implementation Completion and Results Report for this project notes that “MSMEs are the job creators in Morocco.”¹⁷ This leads to the concern over quality of jobs as most of the jobs are created in the informal sector.

22. Job creation and the skills needed to sustain such creation are closely linked to the government’s industrial policy. Morocco has gone through several distinct phases in terms of its industrial policy and this can be classified into three distinct phases: (a) Phase I: 1960–1980, (b) Phase II: 1980–2005, and (c) Phase III: since 2005. The first phase focused on a period of self-reliance, with an emphasis on establishing a production base and on import substitution policies.¹⁸ Although this phase supported a base for industrial production, it did not achieve the goals envisioned at the start. The second phase was characterized by a move from self-reliance to export growths, and this allowed Morocco to move toward sectors that needed labor and helped absorb workers. While this allowed progress in the textiles sector and food sector, it did not translate to a comprehensive industrialization in many sectors. The final phase is characterized by a more structured move to support industrialization (el Mokri 2016).

23. Such policies have direct implications for the skills mix needs in the country. For example, the Industrial Acceleration Program (IAP)¹⁹ (2014–2020) has focused on eliminating three constraints of the Moroccan economy: (a) access to finance for the development of the industrial economy; (b) access to critical inputs, such as land, and other integrated platforms; and (c) building up of the human resource capacity of the country to support key sectors. The IAP placed emphasis on a select number of sectors: automotive, aerospace, textile and leather, chemical and parachechemical, heavy goods vehicles and bodywork, construction materials, and the pharmaceutical industry.²⁰

24. Growth in each of these sectors places an increasing demand for skills and the portfolio mix will generate differential demands for skills across sectors. However, by using the Economic Complexity Index (ECI) approach, policy makers can begin to think about the ‘capacity gap’ which shows the gap between the productive capacity of the country and the productive capacity needed to develop a new product. The ECI helps reveal the set of productive and human capital abilities available in a country through a glimpse of the complexity or sophistication of its exports and the diversified nature of its export structures. The ECI of Morocco has steadily declined over the years and in 2017 stood at 99 out of 129 countries on the list.

¹⁶ There is an ongoing debate on whether or not small businesses are the most important generators of jobs and indeed form the backbone of a nation’s economy. In the context of Morocco, given the high degree of informality and the extremely small size of the formal sector, this may indeed be true. Refer to <https://thereader.mitpress.mit.edu/small-business-job-creation-myth/> for more on the measurement issues associated with such an analysis.

¹⁷ World Bank. 2018. “Implementation Completion and Results Report (Loan No. 8182-Ma)” on a loan in the amount of EUR 37.9 million (US\$50 million equivalent) to the Kingdom of Morocco for the MSME Development Project (P129326) June 7, 2018. <http://documents.worldbank.org/curated/en/855841539102439892/pdf/ICR4419-PUBLIC-Morocco-ICR.pdf>

¹⁸ Such policies were common during that period across numerous countries with some of the major economies in the world today—China, India, the Republic of Korea, and so on focusing on self-dependence and becoming self-reliant to the extent possible.

¹⁹ IAP.

²⁰ The demand in skills is partly driven by growth in these sectors while also being subject to the demands of the service and primary sectors of the economy. For example, tourism and the related hospitality sector generated about MAD 70 billion in 2017, even though the total GDP growth was a bit more sluggish. Another area for potential growth is in the gig economy in Morocco. While in most advanced economies, the size of the gig economy ranges between 1 and 4 percent of the economy, the size of the economy was larger in the context of developing countries. The higher share of gig economy worker in the context of developing countries is not surprising given the high levels of labor market informality.

1.2 Why focus on TVET skills?

25. Within this context, TVET has emerged as an option that may offer quicker student integration into the workforce and more directly meets the needs of the labor market. Enrollment in TVET has significantly increased in Morocco since 2000. The number of enrolled students tripled since 2000 and doubled since 2008. TVET students currently represented only 13.5 percent of enrolled students at upper secondary education level, but demand is increasing. There are more students demanding access to TVET than can currently be absorbed by the TVET providers.

Figure 11. Number of students enrolled in TVET 2000–2018

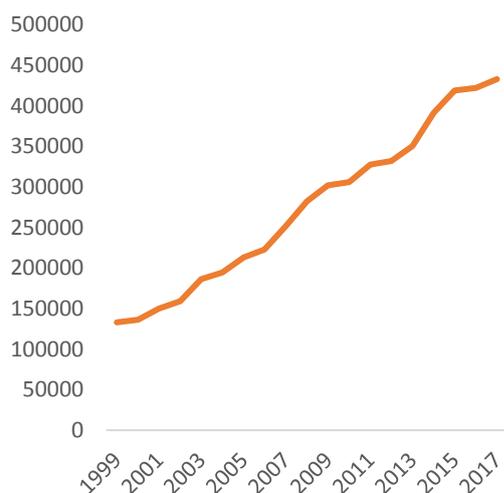
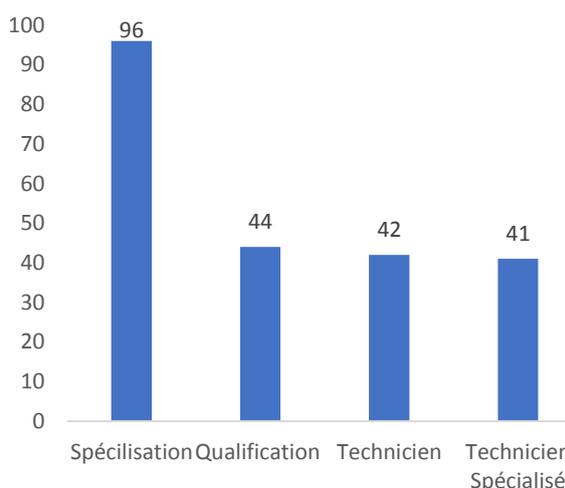
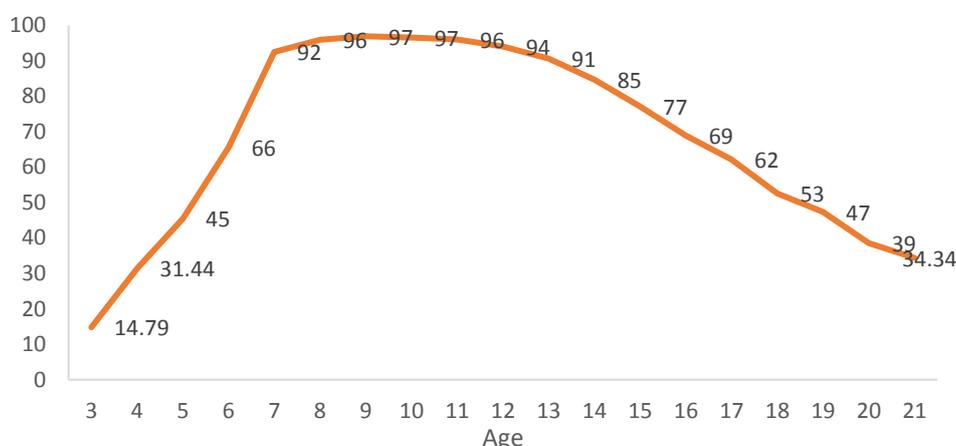


Figure 12. TVET acceptance rate, 2016–2017



26. Enrollment significantly drops at ages 13–14, when students in Morocco complete lower secondary education. Overall, the transition from lower secondary education to upper secondary education, or TVET, is challenging in Morocco. Transitioning from lower secondary education to general upper education is generally more challenging than transitioning to TVET education, as the entry requirements are often lower at that level. Therefore, TVET can also be a catalyzer to increase enrollment in education, beyond lower secondary education.

Figure 13. Enrollment by age

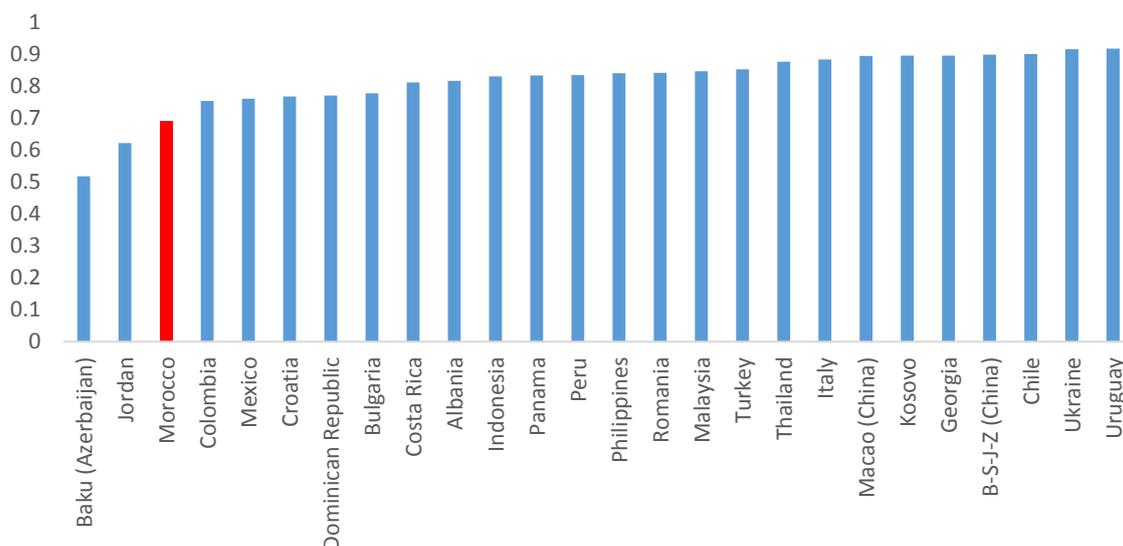


Source: Morocco Population and Housing Census 2014 - Recensement General de la Population et de l'Habitat de 2014 (RGPH 2014).

Note: These data are also available by gender and by province.

27. PISA data reveal that only about 30 percent of 15-year-olds are not enrolled in education, which is the third lowest enrollment rate of all countries participating in PISA. Also, at lower secondary education level, there is a 38 point difference in the net enrollment rate between rural and urban areas (37 versus 75 percent in 2017). There is no comprehensive analysis explaining the factors behind early school leaving in Morocco, and students who leave school early often experience interrelated economic, schooling, and home environment challenges.²¹ Some of these factors are endogenous to the education system, such as the perceived relevance of the curricula, teacher behavior and limited student support, or hostility within the school environment. Others, such as poverty and inequality, are exogenous to the education system, yet can still affect an individual's ability to benefit from his or her schooling experience. These factors are not mutually exclusive and, in fact, closely influence one another.

Figure 14. Total population of 15-year-olds enrolled in grade 7 or above, international comparison



Source: PISA 2018; ANNEX A PISA 2018 Technical Background, Table I.A2.2. 25 Countries are sorted by enrollment level.

28. When analyzing employment returns to TVET, one challenge is that the education track individuals choose to follow is endogenous.²² Hence, differences in employment patterns may be the result of selection into these tracks. Also, while vocational education may facilitate the transition from school to work, especially for students who are less academically inclined, it also entails the risk that the demand for the student's specific skill may decrease due to changes in the labor market in the long term (Golsteyn and Stenber 2017; Hanushek et al. 2017). In other words, the skills generated by vocational education may facilitate the transition into the labor market but may become obsolete at a faster rate. Because of the lack of time series information and the nonrandom selection of the general and technical tracks, there are few studies that have conducted rigorous evaluations of the effectiveness of TVET versus general secondary education tracks.²³

29. Overall, in the context of Morocco, unemployment among TVET graduates remains high. The High Commission for Planning (*Haut-Commissariat au Plan* [HCP]) recently presented a report on the employability and employment of different categories of entrants to the labor market (HCP 2018). The report found that for TVET higher levels of education correspond with lower likelihood of

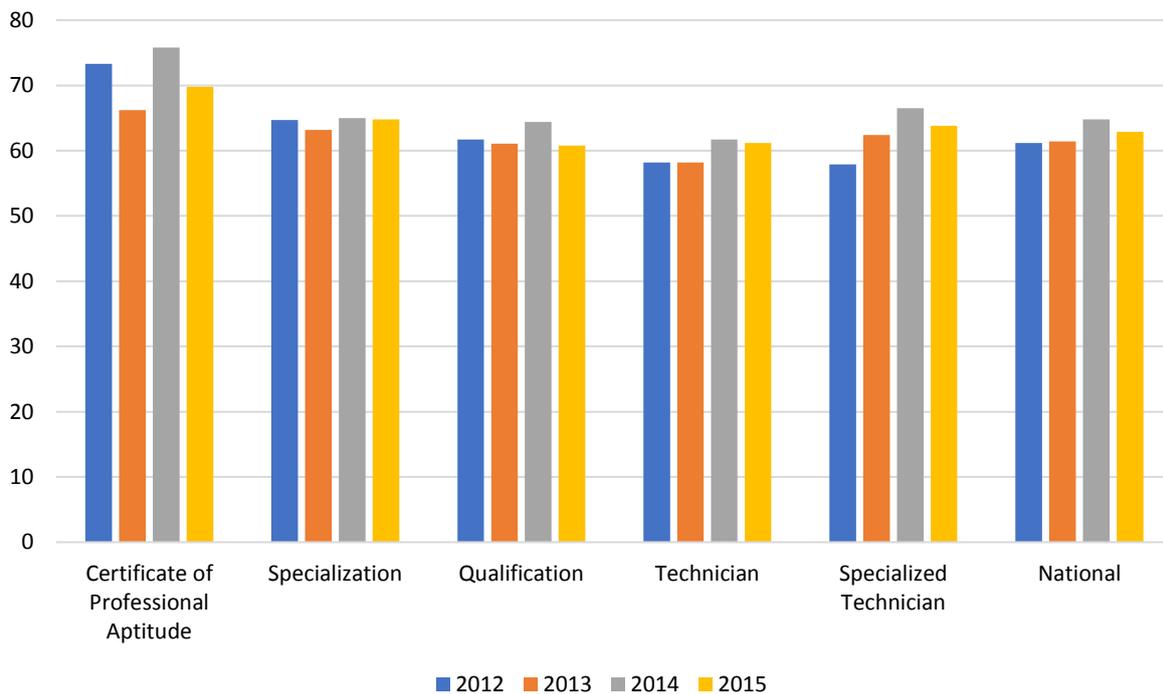
²¹ For a detailed overview of factors, see Almeida, Fitzsimons, and Rogers (2015).

²² Individuals choose their academic path based on a number of idiosyncratic characteristics which are not observable to the analyst and therefore analysis of this nature has to address the issue of selection into a particular course of study.

²³ For more information on evaluations of this nature, refer to Moenjak and Worswick (2003), Malamud and Pop-Eleches (2010), Hanushek, Woessmann, and Zhang (2011), Goldsteyn and Stenberg (2017), and Woessmann (2018).

employment. The unemployment rate was 21 percent for initial professional vocational training graduates, 26 percent for those with ‘specialization’ diploma, 29 percent for those with ‘qualification’ diploma, and 27 percent for ‘specialized technician’. The HCP also observed that for young people with secondary education, only 22 percent were unemployed, for graduates with a master’s degree 15.9 percent were looking for a job, for those with a Licence (degree equivalent to three years of tertiary education) 19 percent, for engineers 7.7 percent, and for medical graduates 4 percent (HCP 2018). Higher education graduates, however, represented only 20 percent of unemployed workers ages 15–34, while one-third of the unemployed population had no education beyond secondary school. OFPPT—the leading public TVET provider—estimates that 70 percent of the graduates have found employment within one year of graduation.²⁴ Most laureates are employed (self-employed) in the private sector.

Figure 15. Labor market absorption rate of graduates after nine months by level of training 2012–2015

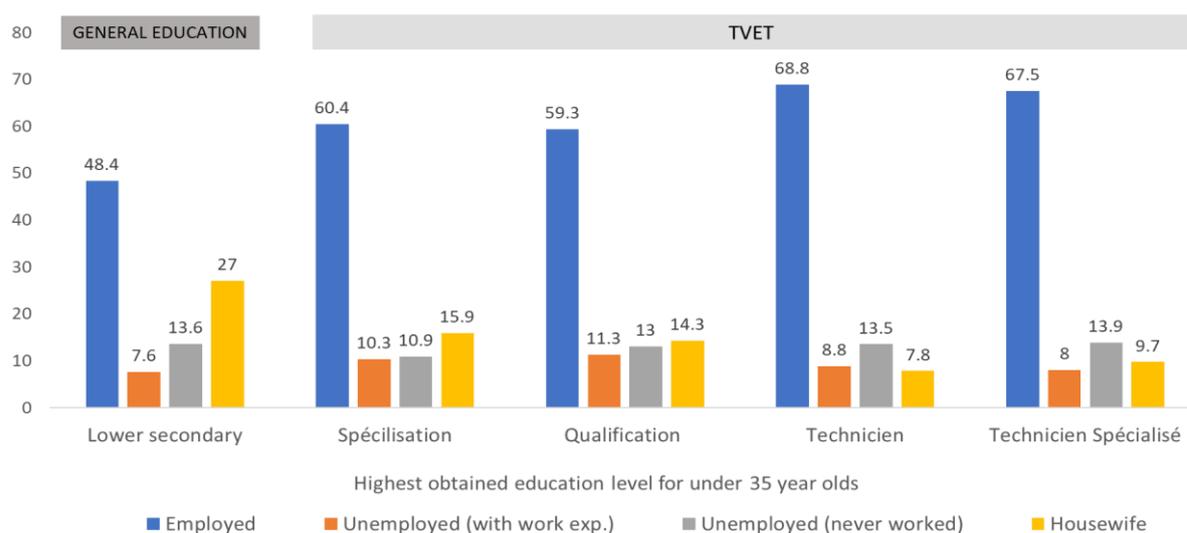


Source: CSEFRS 2019.

30. However, when comparing students with a TVET degree to students who have merely completed lower secondary education, employment benefits can be observed. Students having completed any type of TVET have a higher employment rate compared to students who have merely completed lower secondary education (general track). Therefore, the returns to TVET education are positive compared to not continuing education at all beyond lower secondary education.

²⁴ Statement by OFPPT representative during an interview in June 2018.

Figure 16. Employment status for age group <35 years, by TVET degree



Source: Morocco Population and Housing Census 2014 - Recensement General de la Population et de l'Habitat de 2014 (RGPH 2014).

31. The rest of this note will focus on the TVET sector whose relative importance has grown given the current pressures faced by the government. This enhanced perception of the TVET sector in the face of sluggish economic growth, a growing and expanding workforce, an overbloated public sector wage bill, high levels of youth unemployment, and a persistently weak demand for labor and job growth is not uncommon. These policy issues tend to raise unreasonable expectations regarding the role of TVET (Almeida et al. 2018) and there is some evidence that this may indeed be the case (Alaoui and Hammadi 2019). Such reliance and belief on the effectiveness of the TVET sector is not uncommon as governments have often viewed the TVET sector as a panacea for a myriad of policy changes faced by them. While TVET cannot help in addressing all the issues confronting Morocco, it can help play a role by supporting job-relevant skill formation to enhance the opportunity sets for first-time job seekers and youth and can support objectives of lifelong learning through continuous work-based learning opportunities.

II GENERAL EDUCATION AND TVET SYSTEM IN MOROCCO²⁵

32. This chapter is an overview of the current state of education in Morocco. The aim is to summarize recent improvements and current challenges in education in Morocco and briefly describe the overall structure of the education system, government TVET strategy, as well as the structure of initial TVET within Morocco's education system.

2.1 Recent improvements and challenges in education

33. Morocco has made education and training priority policy issues. Outcomes in the schooling sector have gradually improved over the years, even as schooling access, coverage, and efficiency continue to remain an issue, especially in the higher years of school.

34. The World Bank's Human Capital Index (HCI), measures the amount of human capital a child born today can expect to accumulate by the time s/he is 18 years. Of the five indicators that are used to calculate the HCI, the index uses the child's expected years of schooling (or attainment) and

²⁵ This description of the education system has drawn extensively from Freeman (2010).

harmonized test scores (as a measure of quality or achievement). The HCI finds that a child who enters school at the age of 4 in Morocco can expect to complete about 10.6 years of school by the 18th birthday (as described in Box 1). In terms of harmonized test scores, the HCI analysis illustrates that Moroccan children score 367 on a scale where a score of 300 represents minimum attainment and 625 represents advanced attainment. These harmonized scores illustrate that Moroccan girls outperform boys with the girls scoring 376 compared with boys scoring 359²⁶. The HCI reveals that although the expected years of schooling is on average 10.6 years in Morocco, adjusted for learning, the effective years of schooling or the quality adjusted years of schooling is about 6.2 years. Therefore, Moroccan children are effectively losing 4.4 years of schooling during their schooling lifetime.²⁷ The HCI reveals that a child born today in Morocco will only be 50 percent as productive when s/he grows up, as s/he could be if s/he had the full complement of education and health benefits.²⁸

35. The Trends in International Mathematics and Science Study for grade 8 mathematics and science is illustrated in Figures 18a and 18b. The figures clearly illustrate that of all participating countries, the MENA region is clustered toward the lower end of the score distribution. Morocco finds itself even at the bottom of the MENA cluster. While Morocco has done well in terms of improving overall access to schooling, there is a clear learning deficit in Morocco and this needs to be addressed urgently to support the country's developmental aspirations.

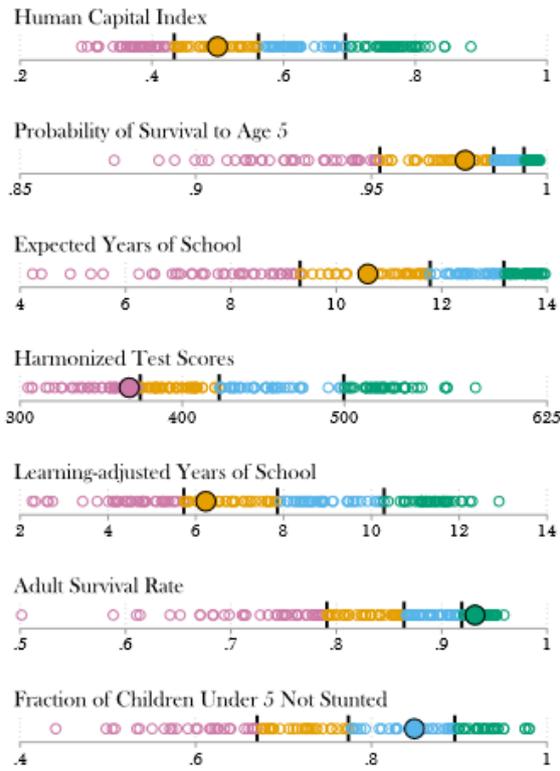
²⁶ World Bank (2018). Morocco HCI. https://databank.worldbank.org/data/download/hci/HCI_2pager_MAR.pdf

²⁷ Stochastic frontier analysis of the relationship between the HCI's harmonized test score and average per student spending per year, computed over G1 to G9 in over 93 countries, suggests that given Morocco's level of spending, the country's theoretical maximum student achievement is 470. However, Morocco achieved only 367 points on the HCI's harmonized test score.

²⁸ A full description of the HCI for Morocco can be found in https://databank.worldbank.org/data/download/hci/HCI_2pager_MAR.pdf.

Box 1. Morocco's HCI 2018

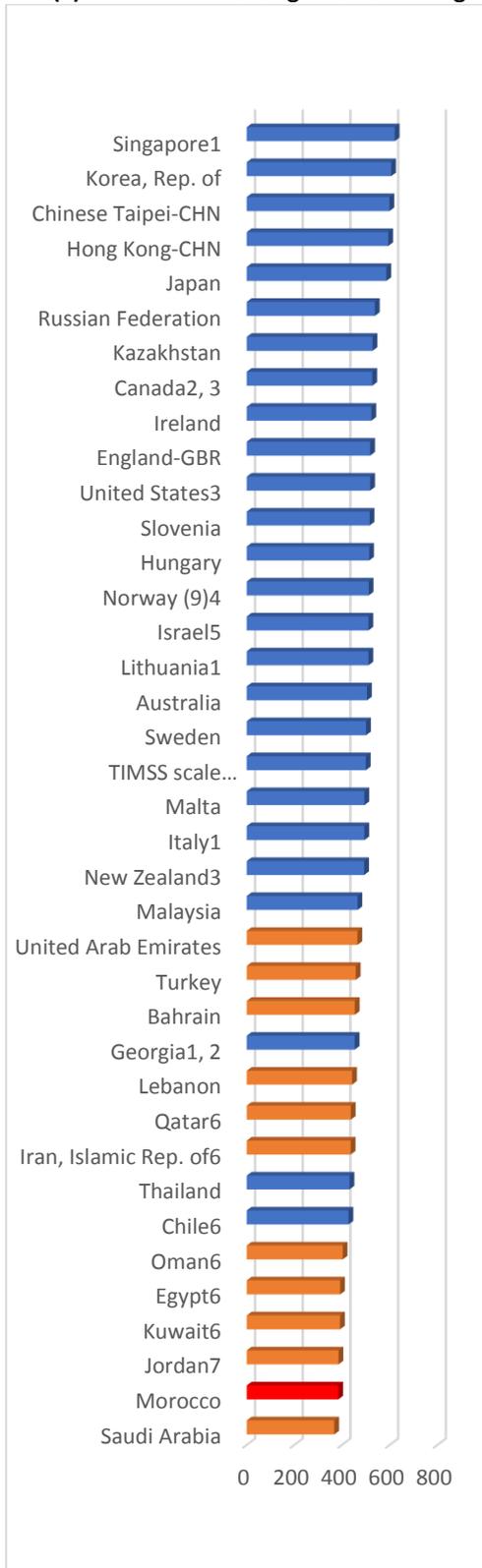
Figure 17. Human Capital Index



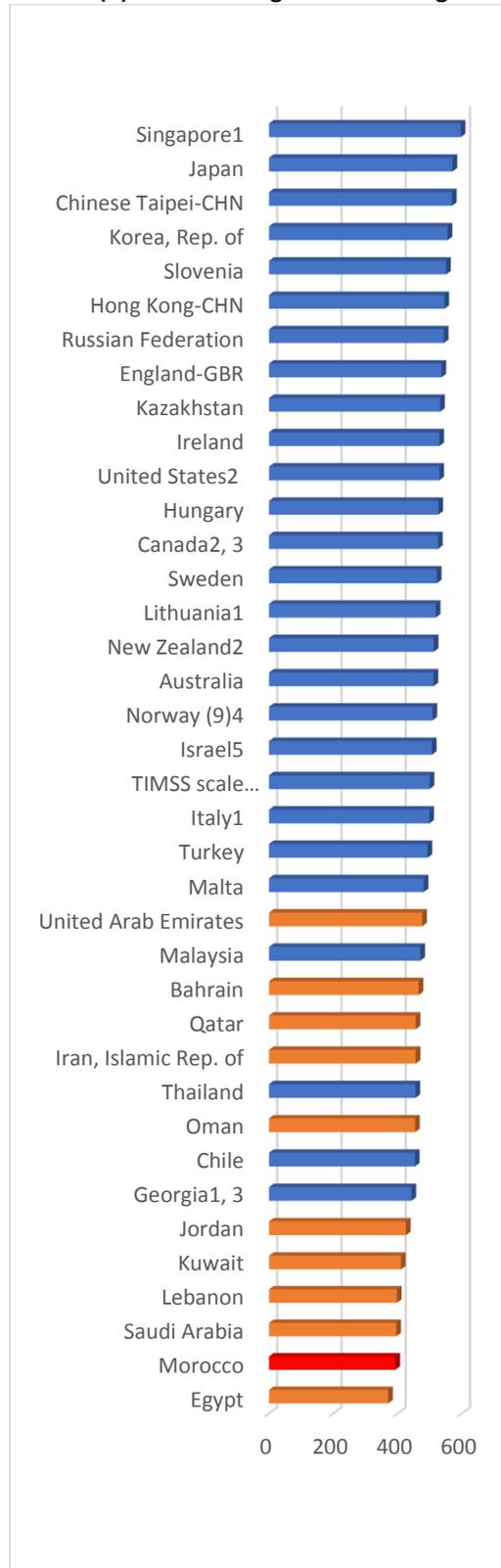
The HCI measures the amount of human capital that a child born today can expect to attain by age 18. The indicator illustrates the expected productivity of the next generation of workers compared to a benchmark where people get a full complement of education and health interventions. Five indicators help define the HCI: (a) the probability of survival to age 5, (b) a child's expected years of schooling, (c) harmonized test scores as a measure of quality of learning, (d) adult survival rate (fraction of 15-year-olds that will survive to age 60), and (e) the proportion of children who are not stunted. **A child born in Morocco today will be 50 percent as productive when s/he grows up** as s/he could be if s/he enjoyed a full complement of education and health interventions. The third and fourth lines of Figure 17 illustrate that a child born in Morocco today can expect to be in school on average for about 10.6 years and that Moroccan students score 367 on a scale where 300 represents minimum attainment and 625 represents advanced attainment. Even though children can be expected to be in school for over 10 years, evidence also illustrates that about a third of Moroccan 15-year-olds are not in school.

Figure 18. Grade 8 Math and Science Scores TIMSS

(a) Mathematics for grades 8: averages



(b) Science for grades 8: averages



Source: National Center for Education Statistics 2015.

2.2 Structure of Morocco's education system

36. There are nine years of compulsory schooling in Morocco, split into six years of primary schooling and three years of lower secondary schooling. These education levels are further split into cycles, with the first cycle consisting of four years beginning at age 4. The first two years of this cycle are considered as preschool, which is not compulsory though the general policy is to encourage participation. The primary level consists of six years, with the first two years being part of the basic cycle, followed by four years of an intermediate cycle. In primary school, students are expected to be prepared for further schooling, learn good study habits, acquire basic literacy and numeracy skills and a basic knowledge of Islam. Students who successfully complete six years of primary schooling are awarded a Certificate of End of Basic Studies or a Certificate of Primary Studies.²⁹

37. The lower secondary cycle follows the primary cycle and covers three years. During this cycle, the fundamentals acquired in the basic cycle are further consolidated; students are given problem solving skills; and they are gradually introduced to sciences, information and communication technology, history, and culture. Together the nine years are known as '*enseignement fondamental*' and students who successfully complete this cycle are awarded a Lower Secondary School Certificate.³⁰ This ends compulsory schooling and students who complete this are free to pursue further studies at the upper secondary school level or directly enter the workforce.

38. The final school cycle is the upper secondary education and covers three years. This is further split into two streams: a general stream which leads to the *Baccalauréat* and a vocational stream which leads to a *Baccalauréat Technique*.³¹ This three-year period offers general, traditional, technical, and vocational/professional pathways. During the first year of the program, students reinforce skills learned at the lower secondary level and this year is used to counsel students in their selection of appropriate pathways for the final two years of the cycle. At the end of three years, students appear for the baccalaureate examination,³² which assesses learning across all three years of the upper secondary cycle.

39. Performance in the publicly administered examinations at the end of the upper secondary cycle determines access to the tertiary-level programs. Additional criteria apply for entry into specific programs, in the form of entrance examinations and in terms of prerequisite subjects or specializations. There are several technical and vocational education and training pathways available to students in Morocco.

40. Entry into TVET happens in two different ways—first, across several entry points at the pre-baccalaureate stage, and second, at the post-baccalaureate stage. Entry at the first point is referred to as initial vocational training and at the second point is referred to as part of continuing education. This is illustrated in Figure 19.

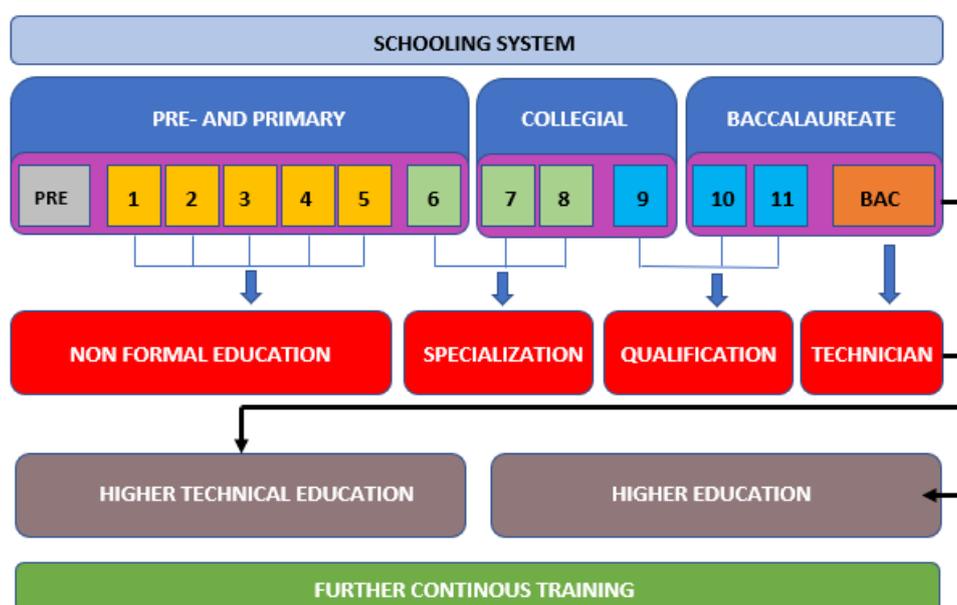
²⁹ *Certificat de Fin d'Etudes de l'Enseignement Fondamental* and *Certificat d'Etudes Primaires*, respectively.

³⁰ This is referred to as the *Certificat d'Enseignement Secondaire* or the *Brevet d'Enseignement Collegial*.

³¹ *Baccalauréat Technique* should not be confused with the recently introduced *Baccalauréat Professionnel*, which is a degree under the initial TVET stream.

³² Students in the different pathways take different exams to complete their *Baccalauréat*.

Figure 19. Schematic of schooling system in morocco



2.3 Government's strategy for TVET

41. The Strategy on Vocational Education and Training for 2021 (*Stratégie Nationale de la Formation Professionnelle*) brings together all partners to a shared and modern vision of skills development, centered on employability, more efficient governance, and use of resources.³³ The Employment Strategy 2025 not only focuses on active labor market measures but also on more comprehensive support, including skills development, updating, and upgrading.

Policy Commitment

"Education and vocational training have been hot topics at the government council's weekly meetings at the request of King Mohammed VI. In addition to health and social disparities, King Mohammed VI has been calling on Head of Government Saad Eddine El Othmani's cabinet to make more efforts to ensure better education to guarantee students job opportunities after graduation. The King also urged the government to upgrade programs for vocational training, which he believes could increase employment. He notes 'Vocational training is a powerful lever for employment, provided it receives the attention it deserves and as long as it is given a new status as well as a broader scope'. He asked for a realistic approach that 'rigorously sets priorities according to the needs of the national economy and the labor market, and the social expectations and aspirations of Moroccans', according to a statement from the royal office."

Source : <https://www.moroccoworldnews.com>. March 1, 2019.

29. A key aim of the TVET reforms is to intensify the cooperation between TVET institutions and employers to determine the skills needed in different geographical areas of the country. For instance, the National TVET Strategy includes provision for creation of regional TVET commissions to coordinate TVET activities, build collaboration, manage specific regional programs, and evaluate effectiveness. The commissions are supposed to be partnership bodies comprising employers, employer associations, universities, trade unions, and the government.

³³ ETF: Morocco, April 2019 (www.etf.europa.eu/en/regions-and-countries/countries/morocco).

2.4 Initial TVET tracks and program modalities

42. The TVET system in the country has undergone continuous and regular reforms to improve its performance and ensure that it is indeed catering to the needs of employers and the labor market and that there is an effort to control the costs of such employment-focused training as a means of increasing access to these programs. Initial TVET is designed for the youth to acquire a first qualification to promote their integration in the work sphere. Most youth opting for initial TVET do so because they have difficulty meeting the entry requirement to tertiary education.

43. There are three main modalities of training in TVET: (a) residential training, (b) apprenticeship vocational training, and (c) dual training, as described below.

- **Residential training.**³⁴ This is delivered in both public and private institutes and includes an internship period as part of the training. The internship training is for one to two months during the year. This is the principal mode of training in terms of the total number of trainees enrolled.
- **Apprenticeship vocational training.**³⁵ As the name implies, this is an apprenticeship-based training program where students/trainees typically spend four-fifths or 80 percent of their training in a company or on work placement (practical training). The rest of the time is spent being trained at a vocational training center, where the students learn the theory and concepts needed for their training. This mode of training is particularly aimed at youth who do not meet rather high entry requirements to access the vocational education system, both in terms of age and educational prerequisites. This emphasis on practical training provides the trainees with the skills needed to assume work-related responsibilities. The relationship between the apprentice and the company is governed by a contract. Recent investments in apprenticeship-based vocational training were made in the automotive, food and catering services, and handicrafts sectors.³⁶
- **Dual training.**³⁷ Dual training involves spending 50 percent of training time in a firm/work placement and at least a third at a vocational training institute. The relationship between the trainee and the company director is again governed by a contract as in the case of apprenticeships.

44. Residential training is the mode of training preferred by most of the youth. Surprisingly, apprenticeship seems to be the least preferred form of training with less than 10 percent of the youth opting for this mode of training. This might be reflective of the desire for more theoretical training and an appropriate certificate after completion, which allows for further integration into higher education studies and/or perhaps the perceived low status of apprenticeship programs given the low prerequisites for entry to such programs. The fact that student preferences are strongest for training with the least attention given to practical aspects of the trade suggests that most TVET students might be aiming to achieve higher education qualifications using the TVET route as a stepping stone. This clearly contrasts the government's strategy aimed at increasing enrollment in work-based learning

³⁴ *Formation Résidentielle.*

³⁵ *Formation par apprentissage.*

³⁶ There have been considerable investments in vocational training infrastructure in recent years. A casual Google search illustrates recent investments in the mentioned sectors. Please refer to the following sites:

<https://www.morocoworldnews.com/2015/07/162401/three-global-automotive-suppliers-to-create-30000-jobs-in-morocco-by-2019/>; <https://moroccoonthemove.com/2014/09/19/king-dedicates-new-apprenticeship-training-center-handicraft-tetouan/>; and <https://www.ansamble.ae/actualites-offre-emploi/ansamble-morocco-partner-of-the-apprenticeship-training-center-project-details-23.html>.

³⁷ *Formation alternée.*

programs.³⁸ In the last few years, there does seem to be a significant change in this trend as more students are gravitating toward TVET options.

45. All the above three forms of training in Morocco lead to various qualifications or levels. There are four qualification levels: (a) Specialization (S), (b) Qualification (Q), (c) Technician (T), and (d) Specialized Technician (TS).³⁹ This is further described in Box 2. In addition to these four qualification levels, a fifth, known as the Certificate of Professional Aptitude (*Certificat d’Aptitudes Professionnelles* [CAP]),⁴⁰ is for apprenticeships. All four levels can be accessed through residential training, while the dual training leads to all except the Specialization qualification. The apprenticeship training leads to all but the Specialized Technician level, in addition to the CAP qualification.

46. Table 1 illustrates the prerequisites or entry requirements for each of these different levels within the Moroccan training system. It also illustrates the typical duration of the courses, ranging from about six months to two years, and the formal certification acquired at the end of each level.

Table 1. Levels of the TVET system

Level	Entry requirement	Duration	Degree ⁴¹
CAP	Read and write	Varies	Certificate
Spécialisation	CE6	6 months	Degree of SP
Qualification	CE9	12 months	Degree of QP
Technician	Bac-1	24 months	Degree of T
Specialized Technician	Bac	24 months	Degree of TS

Note: Bac = Baccalaureate; CE = .

³⁸ The aim of the TVET strategy to increase work-based learning (dual training and apprenticeship) to 50 percent in 2021 from around 30 percent in 2016 does not appear easy to meet, especially considering that the main operator in TVET (OFPPT) has discontinued apprenticeships (ETF 2017a).

³⁹ *Spécialisation (S), Qualification (Q), technicien (T) and technicien spécialisé (TS).*

⁴⁰ This is lowest level of the initial vocational training.

⁴¹ A full, though dated, listing of the qualifications that can be earned in Morocco can be found in https://www.hcp.ma/downloads/Nomenclatures_t11890.html or directly at https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=2ahUKEwj6jZuL29nIAhVBnY8KHWTArUQFjABegQIBhAC&url=https%3A%2F%2Fwww.hcp.ma%2Ffile%2F103334%2F&usg=AOvVaw13NQZLBXUT2of0bPrv1_CP.

Box 2. Levels in the Moroccan TVET system

Formal initial training is structured according to four levels with different access requirements, as illustrated in Figure 19.

- **CAP.** This is the lowest level of initial vocational training and is targeted at youth who have prematurely left the schooling system, having dropped out during the primary or secondary cycle. The training is nonformal and is not part of the continuous pathway structure as in formal education or training. It is aimed at ensuring that all members of society have the right to access education. This training brings one to the lowest rung of the formal training ladder, or *formation professionnelle*, the Specialization.
- **Specialization.** The entry requirement is through competitive examination for candidates having at least completed grade 6 of the primary cycle. After six months of training, the trainee may obtain a *Diplôme de Spécialisation Professionnelle* (DSP).
- **Qualification.** The entry requirement is through competitive examination or vocational guidance for candidates having completed at least grade 9 (lower secondary school) or specific access (*passerelle*) for candidates holding a professional specialization degree (DSP). This level leads to a *Diplôme de Qualification Professionnelle* (DQP).
- **Technician.** The entry requirement is through competitive exams for candidates having attended at least the last year of the baccalaureate cycle (upper secondary education) or specific access for candidates holding a professional qualification degree (DQP). The level is completed with a *Diplôme de Technicien* (DT).
- **Specialized Technician.** The entry requirement is through competitive exam for candidates holding a baccalaureate degree or specific access for candidates holding a Technician degree (DT). Pathways are possible with higher education through and the '*Licence Professionnelle*'. The diploma at this level is *Diplôme de Technicien Spécialisé* (DTS), which gives access to tertiary education.

47. In 2014/2015, the Secretary General of Vocational Training (*Département de la Formation Professionnelle* [DFP]) launched the professional baccalaureate through a joint initiative with the employers' confederation, General Confederation of Moroccan Enterprises (*Confédération Générale des Entreprises du Maroc* [CGEM]), the MNEFPESRS, and several large companies. The new qualification aims to improve links between upper secondary school and TVET, enhance articulation across levels, and attempt to minimize early school dropouts. The DFP focuses on a few key sectors and is referred to as the institution that offers technical pathways under six broad sub-specializations. These are described in Table 2.

Table 2. Specializations under the *Baccalauréat Technique*

Mechanical	Sciences and techniques Mechanical fabrication Foundries	Chemistry	Chemistry
Electrical	Electrotechniques Electronics	Economics	Economic sciences Accounting management Administrative management
Civil	Design and construction Studio arts Graphic arts and industries	Agriculture	Agricultural sciences

Source: Freeman 2010.

48. There is a set of training programs that are considered as non-university tertiary education or programs and are provided by *écoles*. Non-university tertiary-level TVET programs are offered at both public and private institutions and include advanced diploma programs which last two years, such as the Specialized Technician Diploma (DTS); the Higher Technician Certificate (*Brevet de Technicien*

Supérieur [BTS]),⁴² and the Specialized Technician Assistant (*Adjoint Technique Spécialisé* [ATS]). There is one TVET program available at the university level, which is a four-year program in higher professional education, culminating in a Diploma in Applied Engineering (*Diplôme d'Ingénieur d'Application*, [DIA]⁴³).

49. Following initial training, workers have the option of pursuing 'continuing education' as a means of upgrading their skills as needed for participation in the labor force. It also allows employees to maintain and continue their employment by demonstrating a higher level of professional skills and qualifications to match the constantly evolving needs of the workplace and benefit from career advancement. Continuing education allows companies to improve the productivity of their workforce and competitiveness of their firm through targeted training for their staff. Continuing education activities are typically funded by the vocational training tax or levy⁴⁴ (*Taxe de la Formation Professionnelle* [TFP]) in Morocco and includes

- Information and awareness on continuing education for organizations, professional chambers, and companies, especially SMEs;
- Studies and consulting to define a development strategy for companies and professional branches and determine related training needs in the area of continuing education; and
- Continuing education activities—development and implementation of training programs for employees.

50. Continuing education relies on two mechanisms to encourage companies to include it as part of their development strategies: (a) Advisory Support for Interprofessional Groups (*Groupements Interprofessionnels d'Aide au Conseil* [GIAC]) and (b) Special Training Contracts (*Contrats Spéciaux de Formation* [CSF]). Both are described in a section further below.

2.5 TVET system in numbers

51. This section takes a brief look at recent enrollments and graduates of TVET programs in Morocco. Most of the data in this section have been obtained from the annual report for the TVET sector illustrated in numbers.⁴⁵

52. Compared to the demand, access to TVET remains a major challenge. As the demand is twice as high as the number of places offering TVET, training operators select the best candidates, which deprives many young people of training. According to the European Training Foundation (ETF), participation in initial TVET continued to increase in 2015, especially in public sector, with the OFPPT training 70.7 percent of TVET graduates. Young people, especially girls and rural youth, have limited access to TVET institutions. The establishments (with the exception of those of agricultural nature) are mostly located in urban areas and very few have boarding facilities.

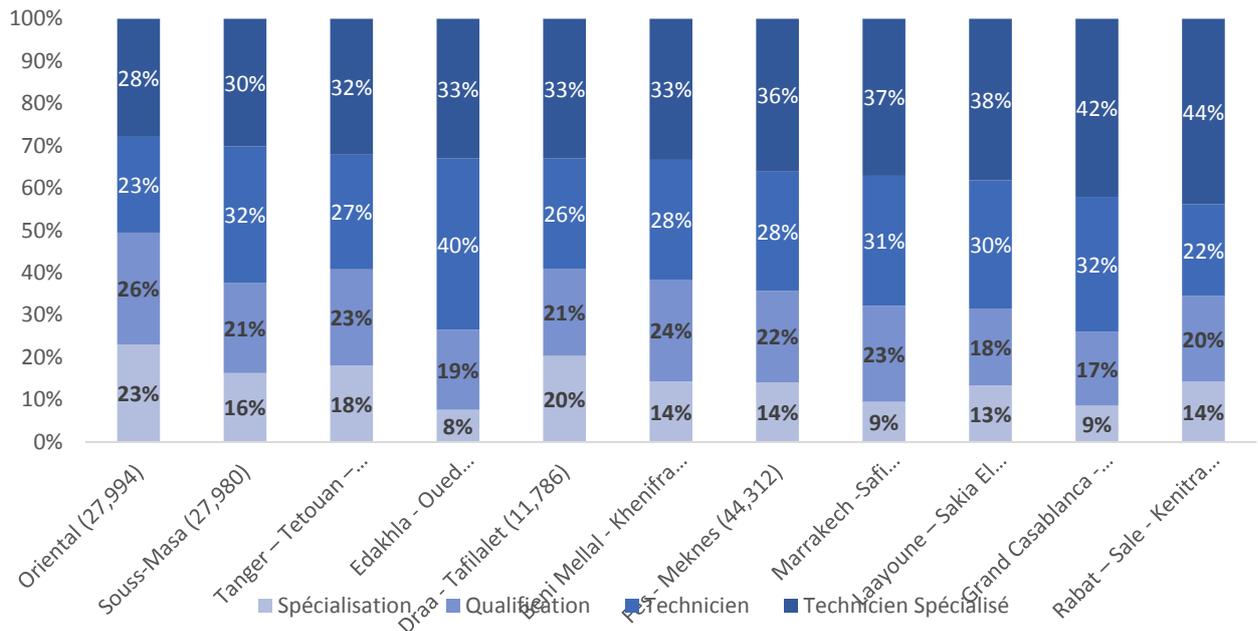
⁴² It aims to improve the adequacy of the training environment for employees in meeting the human resources needs in the sectors of education, industry, trade, and services. For more information on BTS, please refer to https://www.etudiant.ma/type_de_diplome/bts.

⁴³ Although this is not covered in this paper, information on engineering and technology education can be obtained in <https://www.9rayti.com/type-formation/ingenieur-detat>.

⁴⁴ The training levy tax is set at 2 percent for all sectors except for firms operating in the manufacturing industries, which are subject to a tax rate of 1 percent.

⁴⁵ *La Formation Professionnelle en Chiffres 2017/2018* which can be found at <http://www.dfp.gov.ma/publications/330-la-formation-professionnelle-en-chiffres.html>.

Figure 20. Regional distribution of TVET enrollment, by degree (school year 2017/2018)



Source : CSEFRS 2019.

Note: The number in brackets is the total number of enrolled TVET students by region.

53. The participation of women in the labor market in Morocco is traditionally low. Less than one in four are women (HCP 2018; Verme and Guennouni 2014) and only 16.6 percent of urban women were active in 2016. At the national level, 23.6 percent are economically active. However, with regard to initial TVET, the picture is more encouraging. On average, more than one-third of the trainees are girls. It is noteworthy that the share of girls increases with the level of education except for CAP, which is intended to cater to youth from poor families who did manage to complete primary education or enter formal secondary education.

Table 3. Women's enrollment in initial TVET per diploma courses in 2017/2018

	CAP	Specialization	Qualification	Technician	Specialized Technician	Total
Enrollment	10,425	70,678	91,633	112,580	147,691	433,007
% women	41.6	26.6	26.9	43.6	47.2	38.5

Source: CSEFRS 2019.

54. Table 4 illustrates enrollments in TVET programs by the mode of training as discussed earlier—residential, dual, apprenticeship training. As noted earlier, apprenticeships are the least favored mode of training for students with residential, in-center training clearly being the preference of most students. The table also illustrates that there is significant participation by girls and young women in these training programs.

Table 4. Enrollment by type of training

Type of training	2016/2017		2017/2018	
	Numbers	%	Numbers	%
Residential training	299,337	70	322,988	70
Dual training	95,521	23	108,300	23
Apprenticeship training	30,457	7	31,412	7
Total	425,315	100	462,700	100
Gender (girls)	152,619	39		

Source: SEFP 2018.

55. The number of graduates of these training programs by mode of training is shown in Table 5 with a moderate increase of residential and dual trainees. Again, apprenticeship, which offers the best opportunity to acquire the practical skills associated with the trade, is seen to be the least popular.

Table 5. Graduates by type of training

Type of training	2016	2017
Residential and dual training	164,939	168,968
Apprenticeship training	17,154	17,365
Total	182,093	186,333

Source: SEFP 2018.

56. Table 6 illustrates the number of enrolled students across two school years in 2016/2017 and 2017/2018. It shows the level of importance given to TVET in Morocco in recent years, given the significant increases in enrollment across all levels between the two consecutive years. This is particularly true with the rather dramatic increases in enrollments in the *Baccalauréat Professionnel* program which was introduced in 2015 as a 'bridge' between initial TVET and the general 'mainstream' education system. The leap in enrollment for *Baccalauréat Professionnel* is an indication of the general strive toward higher education among Moroccan youth.

Table 6. TVET enrollment by level

Level	2016/2017		2017/2018	
	Number	%	Number	%
<i>Baccalauréat Professionnel</i>	14,304	2.9	74,100	11.6
Technicien spécialisé	136,781	27.3	161,180	25.3
Technician	112,815	22.5	120,619	18.9
Qualification	78,777	15.7	91,495	14.4
Spécialisation	52,598	10.5	62,713	9.8
<i>Certificat d'apprentissage (CAP)</i>	5,257	1.0	5,393	0.8
<i>Formation Qualifiante (OFPPT)</i>	100,978	20.1	122,000	19.1
Total	501,510	100.0	637,500	99.9

Source: SEFP 2018.

57. The number of graduates of these different levels of the TVET system also follows the same pattern as shown in Table 7. Most graduates leave the initial TVET system with a DTS or a *Baccalauréat Professionnel*, which opens pathways to tertiary education. It is also worth noting that while CAP accounts for not more than 1 percent of the enrollment in the initial TVET system, the short basic skills courses offered by the OFPPT are in high demand and make up one-fifth of the enrollment. This suggests that there is a significant interest in skills upgrading within the labor force.

Table 7. Graduates by level of training

Level	2016	2017
Technicien Spécialisé	47,298	48,303
Technicien	44,583	42,196
Qualification	39,413	41,133
Spécialisation	33,645	37,336
Total	166,955	170,985

Source: SEFP 2018.

Table 8. Number of graduates by level and region

Region	CAP	Specialization	Qualification	Technician	Specialized Technician	Total
Béni Mellal-Khénifra	586	2,806	3,072	2,661	2,982	12,107
Casablanca-Settat	130	6,803	8,231	13,076	14,520	42,760
Drâa-Tafilalet	277	2,200	1,241	1,049	1,283	6050
Eddakhla-Oueded Dahab	144	139	247	83	0	613
Fès-Meknès	585	6,169	6,157	4,462	4,822	22,195
Guelmim-Oued Noun	95	1,125	652	827	374	3,073
Laayoune-Saguia Al Hamra	1,051	609	790	858	0	3,308
Marrakech-Safi	157	3,619	4,695	4,634	4,842	17,947
Oriental	352	4,775	3,714	2,158	2,255	13,254
Rabat-Salé-Kénitra	995	9,400	8,079	5,903	10,425	34,802
Souss-Massa	3,358	3,498	3,377	2,500	0	12,733
Tanger-Tétouan-Al Hoceima	1,474	4,837	4,253	3,568	3,359	17,491
Total	9,204	45,980	44,508	41,779	44,862	186,333

Source: SEFP 2018.

58. Although the distribution of graduates is concentrated around Casablanca, Marrakech, and Rabat, it is quite well distributed across the country. Table 8 also shows that other than the CAP graduates, all other levels are well distributed across qualifications. Around 60 percent of all graduates in 2015 are in three sectors: metalworking and mechanics (21.6 percent), management and commerce (21.2 percent), and construction (16.7 percent).

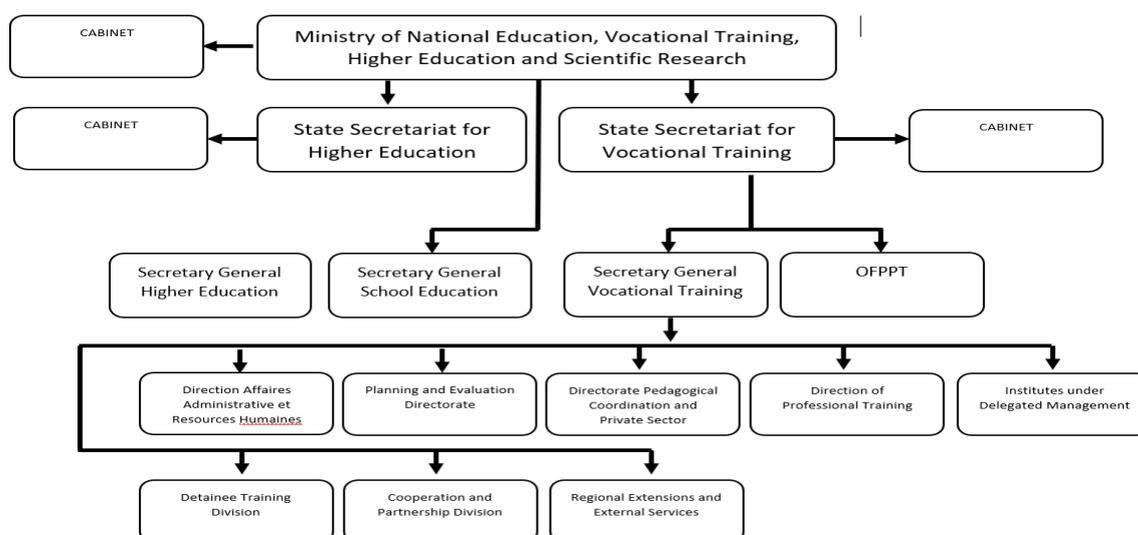
III DESIGN FEATURES AND IMPLEMENTATION CHALLENGES

59. This chapter is a more detailed review of the design and structure of the existing TVET system in Morocco. In particular, it describes the main TVET providers and management and governance issues and lays out regionalization efforts and spending and funding on TVET.

3.1 Fragmentated TVET governance structures

56. In this section, some key concerns on the governance and management of the TVET sector and its implications for labor market are reviewed. One of the main challenges facing the provision of TVET in Morocco is the high degree of fragmentation in the delivery of these programs across agencies, ministries, and other entities and associations in the country. Different TVET pathways fall under the aegis of different government agencies, governance and regulatory arrangements, quality control and certification mechanisms and are linked or articulated across these different systems of TVET provision. TVET services are provided in a disjointed manner making it more difficult to improve access to these programs, decreasing the efficiency with which they are delivered, and constraining the effectiveness of these programs. Over 10 government departments are responsible for the provision of vocational training at different levels.

Figure 21. Organigram of skills development



Source: DFP.⁴⁶

60. Although the DFP has overall responsibility for implementation of TVET policy, other ministries and agencies are in charge of course and curriculum development and delivery within their domains. Table 9 illustrates all the training providers by the department responsible for implementing programs at these institutions. The GoM has made a marked effort at harmonizing the training programs, though this has proven to be very difficult.

61. To improve program coordination, recent reforms led to the formation of the MNEFPESRS that is in charge of developing and implementing the government’s policy across the education and skills development/TVET landscape. By bringing all key agencies directly linked to the formation of skills in the country under one roof, the GoM aims to improve coordination and alignment across all levels and types of education in Morocco.

Table 9. Departments/agencies providing TVET in Morocco

Department ⁴⁷	Number of Institutions
OFPPT	362
Agriculture	49
Tourisme	15
Peches Maritime	13
Artisanat	57
Jeunesse et Sport	88
Interieur	1
Energie et Mines	2
Urbanisme	2
Equipement	4
Chambres Professionnelles	3
Instituts à Gestion Deleguee	6
Entraide Nationale	60
AREF ^a	15
Total Public	677

⁴⁶ <http://www.dfp.gov.ma/organigramme/>.

⁴⁷ Departments translated into English—Agriculture, Tourism, Marine Fisheries, Arts and Crafts, Youth and Sport, Interior, Energy and Mines, Urban Planning, Equipment, Professional Institutions, Autonomous, Public Service, Private, and Skills Councils.

Department ⁴⁷	Number of Institutions
Prive	1271
Associations	35
CFA-IE ^b	59
Total	2,042

Source : SEFP 2018.

Note: a. Académie Régionale de l'Éducation et de la Formation

b. Training Center by Inter-Enterprise Apprenticeship - Centres de formation par apprentissage intra-entreprise.

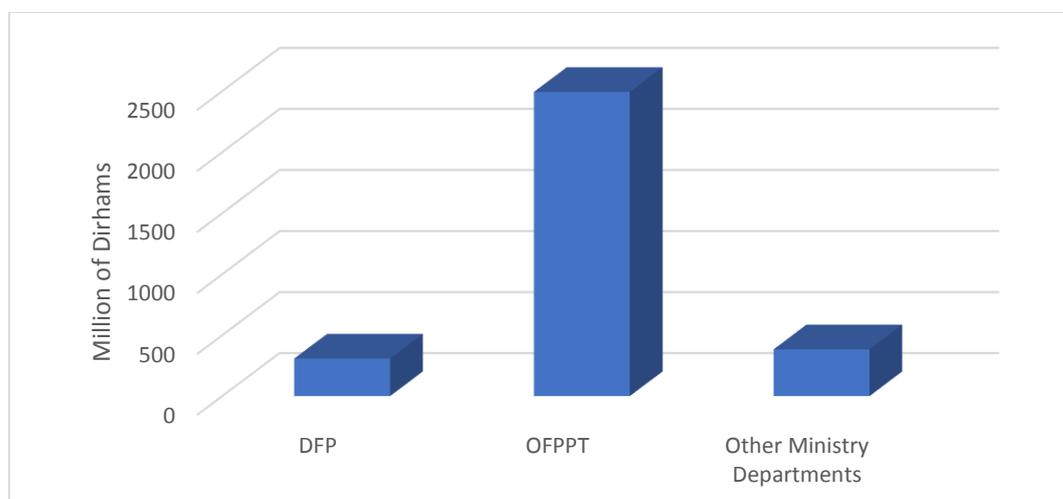
62. The DFP is responsible for developing the nation's policy on TVET. Its duties include the identification of vocational training needs and development and revision of training programs together with partners and concerned stakeholders. The DFP also helps provide quality control of services for the TVET sector. The DFP is supported in its responsibilities by the OFPPT.

63. Key stakeholder bodies involved in the governance of TVET, include the following:

- The National Evaluation Body (*Instance Nationale d'Évaluation* [INE]), which is part of the Higher Council for Education Training and Scientific Research (*Conseil Supérieur de l'Éducation, de la Formation et de la Recherche Scientifique* [CSEFRS]). INE is responsible for the evaluations of global, sectoral, or thematic and educational programs, including vocational programs.
- The Economic, Social and Environmental Council created in 2011, which includes a Committee on Employment and Industrial Relations.

64. Evidence of this effort to consolidate can be seen in the allocation of budgets to the TVET sector. This is illustrated in Figure 22, which shows the budget for the fiscal year 2016. This consolidation under the OFPPT has positive and negative implications—the negative implications are that the consolidation of all this control in one agency makes it difficult to bring together critical stakeholders into the process and leads companies to believe that resources they are contributing toward the vocational training tax are being used for initial vocational training and not as was originally intended to support in-house training. However, on the positive side, the OFPPT offers Morocco the opportunity to bring together an otherwise highly fragmented supply side by supporting standards development, quality assurance measures, standardized and modular curriculum, and teacher training and certification standards.

Figure 22. Budget allocation for TVET by department



Source: CSEFRS 2016.

3.2 Main TVET provider: OFPPT

65. The OFPPT is an autonomous agency under the aegis of the ministry. The OFPPT is nearing its 50th year of existence since being established in 1974. The OFPPT is the main public TVET operator in Morocco. It is guided by a Board of Directors representing employees, employers, and state. The OFPPT's mission has evolved over the years. The agency was initially expected to support continuous training for employees, which evolved to become a primary entity for addressing the youth crisis and promoting youth employability. More recently, the OFPPT was asked to also focus on offering training support to private enterprises to provide them with the needed skills and qualified workforce. The OFPPT states that all its training programs are developed with support and involvement of key industry professionals. There is a clear regional dimension to the skills puzzle in Morocco and the OFPPT aims to narrow the gap for those from disadvantaged areas and groups.

66. The OFPPT delivers training for industry/fabrication and services sector. Annually, the OFPPT trains about 500,000 youth (nonformal short-term training as well as initial training) in 320 different professions and produces on average 230,000 graduates per year. In terms of student intake, the OFPPT reported that it receives four applications for every place available (1 million applicants for 250,000 places in initial training). There are also 12,000 places for continuous training as well as possibilities of professional development courses upon request of the enterprise. The OFPPT undertook an ambitious development project and helped train over 650,000 young people, representing a 371 percent growth in the number of trainees.⁴⁸ This was accommodated by expanding the system by 119 new training institutions, raising the number of training institutions to 327, and increasing the training capacity to 310,000 trainees.

67. The OFPPT is a financially independent entity. All OFPPT projects are normally funded by the state's grants, the OFPPT own resources, and the tax revenues of vocational training. Some projects are carried out through sponsors' financing as part of bilateral and multilateral cooperation. OFPPT is financially autonomous with a MAD 3.4 billion budget equivalent to US\$351 million in 2018. About 60 percent will be covered by the TFP, while the remaining 40 percent will come from sources such as student administrative registration fees (MAD 600–800), consulting services, donors, part-time and fee-based training for external clients, and conventions/agreements with some of the regional councils.

68. Over time, OFPPT's mandate has expanded and today it operates out of about 360 centers and institutes countrywide. The office also signs numerous partnership agreements with agencies from around the world to further strengthen its professional networks and in the hope of exporting some lessons from the Moroccan experience to other countries around the world. The OFPPT is involved with direct training by offering training from the level of Specialization to Specialized Technician. Additionally, it supports curricular development and accreditation with private providers. Another enormous task of the OFPPT is its management of the TFP. If all these tasks were not enough, the OFPPT both directly and through contractual arrangements supports student counselling activities and job placement of graduates. Another major project conducted by the OFPPT focuses on the quality (certification, training reengineering, trainers' training, technical and educational support). The training program will also be extended to new sectors.

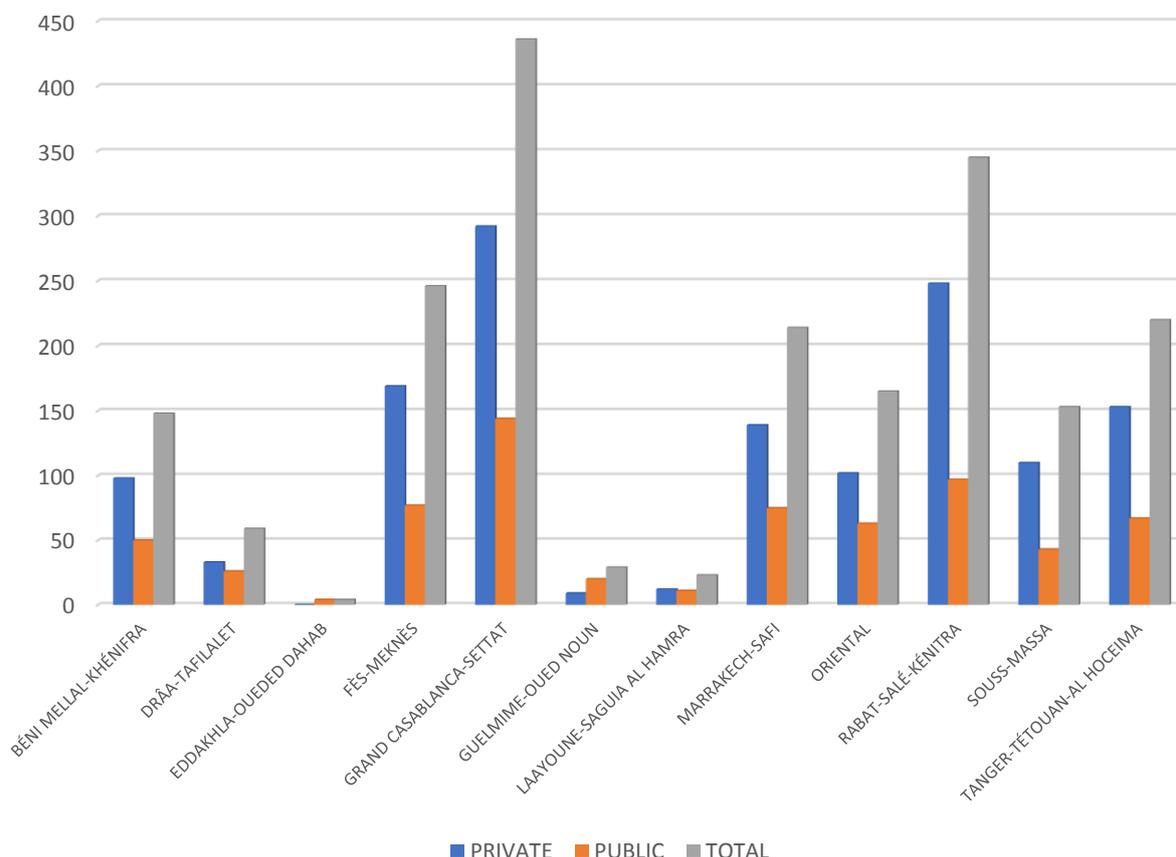
3.3 Public versus private TVET provision

69. Private sector institutions dominate the Moroccan TVET landscape in terms of the number of establishments in the country. There are more private than public TVET institutions. In 2017/2018, of

⁴⁸ In 2010, the OFPPT adopted a new development plan whose objective is to train more than a million of trained youth by 2016.

the total of 2,042 institutes in the country, 677 operated in the public space and 1,365 operated in the private space. Tables 10 and 11 show that institutions too are well distributed across major administrative regions of the country though once again Casablanca, Marrakech, and Rabat account for a larger share of the institutions compared to other regions. While private institutions are expected to be in areas where the student catchment areas are large, an effort to develop equitable access to public training providers seems to have paid off as can be seen from Figure 23.

Figure 23. Number of institutions by ownership category and region



Source: SEFP 2018.

70. Although the number of non-state TVET institutions is almost twice that of the number of public ones, enrollment in public TVET institutions represents about 80 percent of total trainees, with private institutions accounting for the remainder. Of the total number of graduates, public institutions account for nearly 75 percent of total graduates with private training providers supporting the training of the remaining 25 percent. This indicates that the average size of private training institutions is significantly smaller than public ones.

Table 10. Enrollment by ownership of TVET institutions (2017)

Type	Numbers	Percent
Public	342,536	79
Private	90,471	21

Table 11. Graduates by ownership of TVET institutions (2017)

Type	Numbers	Percent
Public	138,857	75
Private	47,476	25

Source: SEFP 2018.

71. Even though training institutions are well distributed across the landscape of the country, public and private institutions appear to cater to two different groups of trainees. Public TVET institutions are well financed and resourced both in terms of facilities and trainers. They provide training courses which require substantial investments and specialized expertise. There is also a growing number of training institutes that have been established under public-private partnerships (PPPs). The Vocational Training Strategy for 2021 aims at increasing the role of the private sector in TVET provision. Key elements of the strategy include

- The development of Delegated Management Institutes (*Institutes à Gestion Délégée* [IGD]) with professional branches in sectors with a strong value added and considered as a priority for the national economy;
- The support to companies creating apprenticeship training centers within the enterprises; and
- The promotion of creation of training centers in partnership with nongovernmental organizations (NGOs) and local municipalities, for interns coming from a low-income household.

72. The Vocational Training Strategy for 2021 also considers other forms of PPPs to be put into effect, such as

- The development of mixed institutes (*établissements mixtes*) with a public-private co-investment and a private mode of management;
- The development of a contract system (based on specification requirements) with private TVET institutes that are accredited, including the institutes targeting disadvantaged populations⁴⁹ to achieve the national objectives of TVET;
- Public-private collaboration in TVET in the form of CFA-IE, where the state subsidizes some of the student fees; and
- OFPPT centers which are co-managed with the private sector.

73. Private training providers are typically small and offer those programs that do not require heavy investments in infrastructure. There are essentially two types of private training providers—accredited and nonaccredited. Nonaccredited training providers are typically small and offer training aimed at supporting self-employment in the economy. While private training providers do need an authorization to work in the training sector, they do not need to be accredited and many nonaccredited training providers deliver nonformal courses, which fall under the initial vocational training to support self-employment across various trades. Some examples of courses in this area include hair stylists, tailors, and so on. Approximately two-thirds of all private training providers are nonaccredited.

⁴⁹ Low-income, living in poor and/or rural areas.

74. Accredited private training providers are usually part of the formal training system and work closely with the OFPPT and the DFP in the delivery of their courses. Entry into OFPPT-supported public institutions is based on the passing of an entry-level assessment known as the concours.⁵⁰ Prospective trainees who fail to pass this assessment often opt to follow courses in these accredited, private training providers. This segmented structure for the provision of TVET results in little overlap between the public and private training providers and hence little competition between these groups of providers.⁵¹

3.4 Regionalization of TVET

75. Policy development, formulation, and program implementation in the TVET sector are particularly challenging. This is because of the need to ensure careful articulation across general schooling and higher education and also to ensure that TVET programs are well aligned with the needs of the labor market. This implies that a wide range of stakeholders are needed to support program development. This challenge increases multifold when spatial dimensions are introduced into the picture. Managing national, regional, and local programs becomes inherently difficult given the range of local realities that needs to be addressed, in addition to all the complexities associated with the TVET sector.

76. The TVET sector in Morocco seems to have the right balance between central, regional, and local control. The Vocational Training Strategy for 2021 provides for regionalization. The numerous other strategies in place to address youth unemployment, female labor force participation rates, access to education and skills development, and so on, also support decentralized service delivery. While decentralization has been a long-standing goal, the impetus to decentralize has grown stronger since the Arab Revolution. These TVET reforms have also received strong support from the King of Morocco including advanced regionalization to support institutions and decision-makers at the local levels to be able to make decisions that support the local labor market and help improve the links between policy and delivery. In the TVET sector, this has resulted in central control over course and curricular development, combined with decentralized provision, and has led to the establishment of regional TVET commissions.

77. However, in practice, TVET regionalization has made slower progress than expected due to inadequate human resources to run a more decentralized system and organizational conservatism and inertia, mostly on the part of the OFPPT. As a result, identification of regional skills needs and alignment of the supply of TVET to the local demand and opportunities continues to remain a serious challenge.

78. As part of the effort to further development of decentralized centers for economic growth and incentivize the private sector, the GoM has launched a new program, the *Cités des Métiers et des Compétences*⁵² (CMC) with the aim of developing and implementing training services to potential workers in all regions of the country. CMCs are expected to be a major change in how training services are offered and will be implemented through institutions that are multifunctional and cater to several sectors. The CMC model is expected to (a) bring together numerous actors in a particular area or

⁵⁰ More information on entry requirements to the OFPPT-offered courses can be found at https://takwine.ofppt.ma/ERP_OFPPPT/Filieres.aspx.

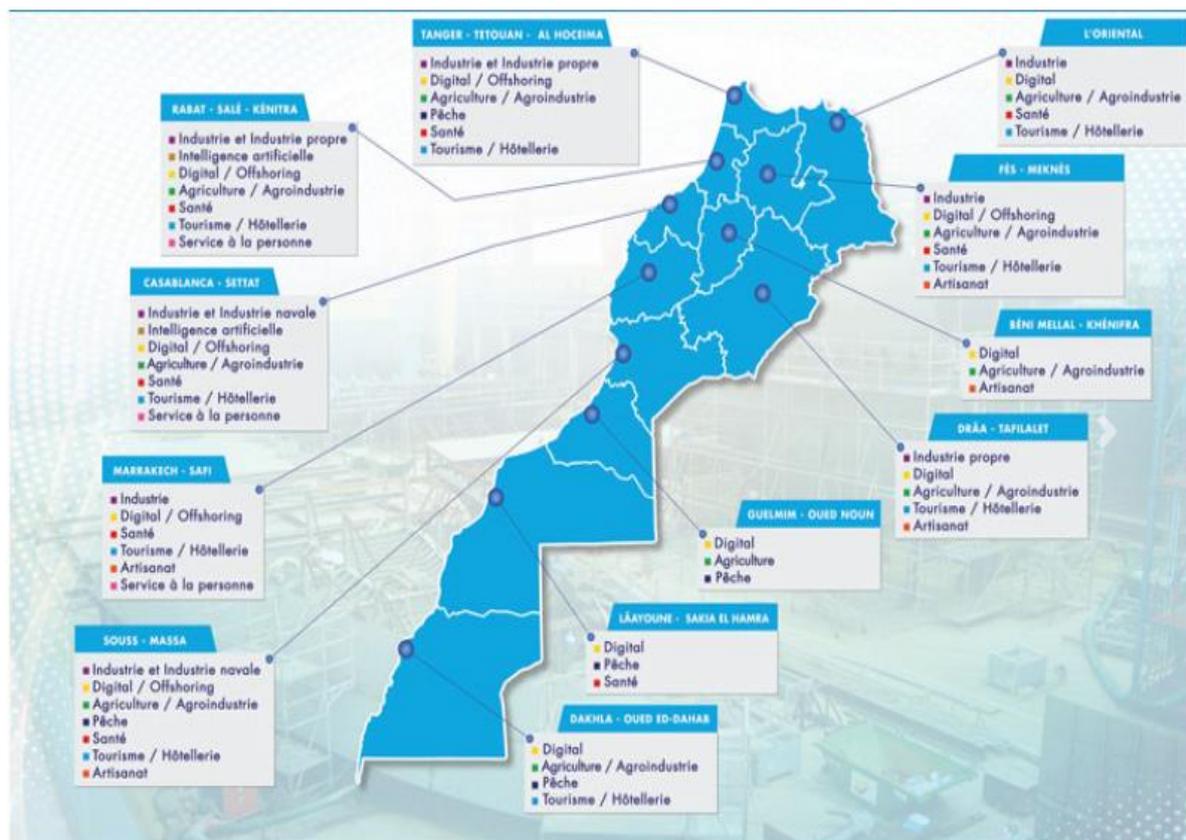
⁵¹ There are also other TVET institutions that fall outside of these two broad categories and are operated by NGOs or faith-based organizations. While commercial TVET providers mostly cater to urban youth from middle-income families, the NGOs tend to concentrate on skills relevant in a rural context with special attention to poor households and women.

⁵² The CMC model is a tried and tested approach to skills development programs in many countries. The first CMC was established in 1993 in Paris and gave rise to this brand. Since then the concept has spread to other countries around the world and this network is now found in nine countries: Belgium, Chile, France, Germany, Italy, Mauritius, Portugal, Spain, and Switzerland. The model has also been copied in other countries, though often in form more than function. For more information, refer to <http://reseaucitesdesmetiers.com/eng/index.php>.

region of the country, (b) undertake a shared diagnosis and agree on the interventions of greatest priority, and (c) pool available resources to support local residents in their efforts to build their professional life. Although the basic structures and designs of CMCs are common and are based on an agreed upon charter, however, the fact that they reflect the local characteristics of the region where they are located gives them unique features. The most important aspect of the CMC model is the fact that local relationships and partnerships drive much of the program. The CMC model encourages and incentivizes private sector leadership and leadership by regional public bodies.

79. CMCs are expected to help bridge the gap between school and work for youth of the region and support the economic development of the region by enhancing regional competitiveness. CMCs are also expected to identify future skills needs in the region in which they are based and support skills development in occupations of the future. Financing for the CMC will be jointly covered by contributions from the central and regional governments and the OFPPT. The exact financing needs for CMCs is expected to be around US\$500 million. CMCs will be designed to train several thousand trainees per year across a wide variety of skills including tourism and hospitality, construction, health, agriculture and agro-industries, fisheries, handicrafts, industrial and manufacturing activities, off- and on-shoring, and management and commerce. The first CMC is being planned for Agadir and is expected to be operational in 2021 and will be the first of dozen CMCs planned across the country including in Rabat, Sale, Kenitra, Nadir, and Laayoune by 2021, with all the others being constructed by 2023 (AbiNader 2020⁵³). Figure 24 illustrates planned CMC development activities.

Figure 24. Planned CMC Activities



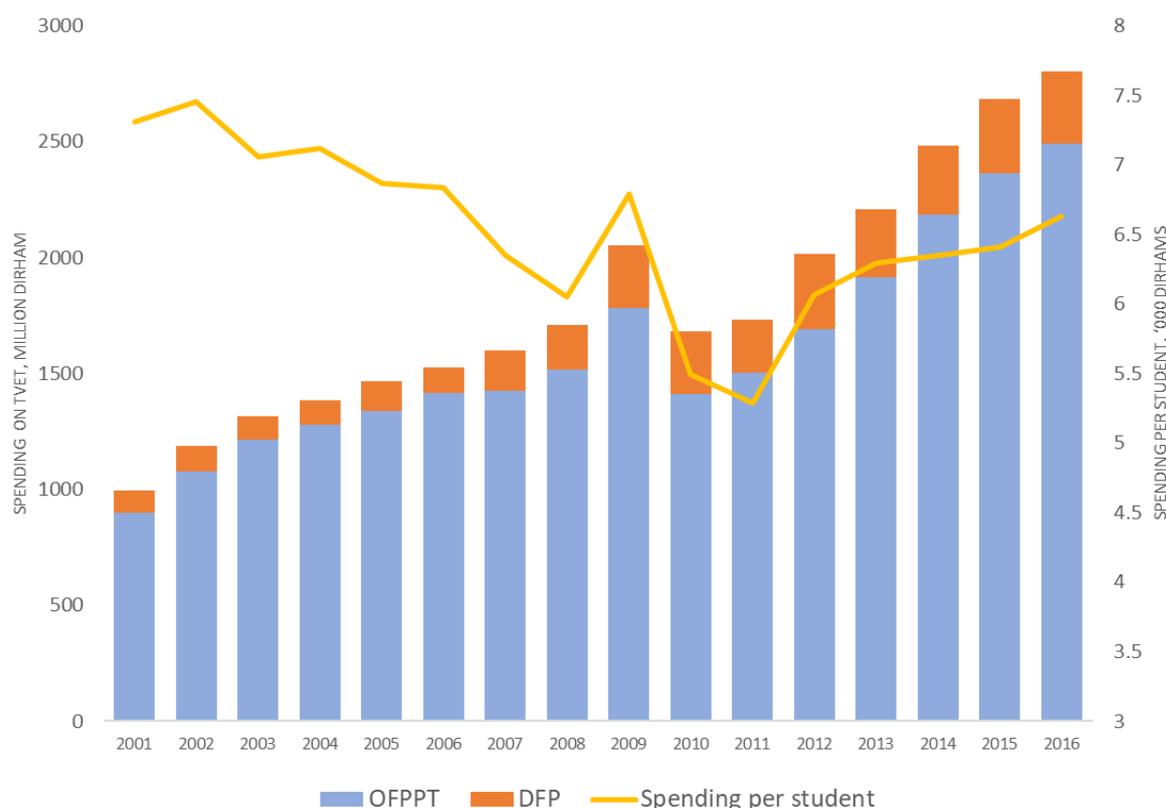
Source: Le Matin 2019.

⁵³ <https://moroccoonthemove.com/2020/02/10/facing-high-public-employment-morocco-continues-to-build-support-for-small-and-medium-enterprises-jean-r-abinader/>.

3.5 Financing of TVET

80. Morocco has a matured system for the financing of TVET, which is funded through a mix of sources, including the national budget, development partners,⁵⁴ the TFP, and direct contributions by beneficiaries in the form of tuition and related expenses.⁵⁵ The GoM spends over a quarter (approximately 27 percent) of its annual budget on education. This amounts to approximately 5.3 percent of GDP. The budget for the training sector over the last nearly two decades increased by about 300 percent from about MAD 994 million in 2001 to over MAD 3.18 billion in 2016,⁵⁶ growing annually at about 8.1 percent per year (CFEFRS 2019). The same report also illustrates that the budget allocated for vocational training is about 0.5 percent of GDP, excluding the TFP. The TFP accounts for about two-thirds of the national budget for TVET (World Bank 2018a). The figure also illustrates that while total spending for TVET has been increasing in Morocco, the spending per student continues to remain relatively low. Supporting program qualities will require Morocco to increase its spending per student from its current levels.

Figure 25. Annual budgetary allocations to the DFP and OFPPT



Source: CFEFRS 2019.

81. One of the most important pieces of legislation in the Moroccan continuing education context is the TFP, which was initially introduced in 1974 and is a program aimed at supporting skills formation in the country. Resources are gathered by the National Social Security Fund (*Caisse nationale de*

⁵⁴ International development partners have been an important source of financing to this sector. The main players in this space include the EU; the Millennium Challenge Corporation; and countries such as France, Germany, Belgium, and Canada; and other multilaterals such as the Islamic Development Bank, United States Agency for International Development, and the African Development Bank Group.

⁵⁵ Households also spend significant amount of resources on vocational training and this is estimated to be between MAD 8,000 and MAD 16,000 per year per trainee.

⁵⁶ This is equivalent to about US\$88 million and US\$324 million in nominal terms and US\$97 million and US\$292 million in real terms.

sécurité sociale [CNSS])⁵⁷ and then channeled to the OFPPT. Once again, the institutional structures in the context of Morocco are impressive and have been in place for nearly five decades.⁵⁸

82. The TFP is a 1.6 percent levy on total payroll or the gross wage bill and is channeled through the OFPPT into the training environment. The levy is imposed on all public and private organizations that employ more than 10 employees and therefore affects only a small number of firms and organizations. Only about 14 percent of the companies in the country or approximately 25,000 companies have more than 10 employees. In 2015, about 189,600 companies were registered with the CNSS. They employed a total of about 3.1 million workers. A sizeable majority of these companies, about 83 percent, employed less than 10 employees and were not subject to the levy. The total size of the levy in 2016 amounted to about MAD 2.86 billion.

83. Companies subject to this tax, in theory, can use this for their training plans and for other analytical products to help plan their training needs. The fact that these resources are largely earmarked through the OFPPT has historically been a source of friction within the training sector. There are several reasons for this: (a) the TFP is seen as private resources by those companies that contribute to the TFP, though a significant chunk of the resources is used for initial training; (b) operational and financial rules on the use of the TFP need further clarification; and (c) the public training systems' responsiveness to labor demand need to be enhanced. By government decree, 70 percent of the levy is earmarked for financing initial training programs provided by a network of TVET institutions under the OFPPT's jurisdiction, while the remaining 30 percent is used for financing the skills development needs of companies through what is referred to as 'continuing education'.

84. To address some of these concerns, key reforms have been enacted, as we noted earlier, through the establishment of the GIACs and the CSF. First, training center governance has been improved by creating Steering Committees for each training center, which brings together public providers, private sector representatives,⁵⁹ and social partners. Second, there has been a concern that procedures in place have been too rigid to support in-house training for private sector participants, thereby undermining the effectiveness of the system. Less than 1.2 percent of companies under the CNSS are covered by the CSF and for well over a decade, the number of beneficiaries of the system per year never exceeded 1,500. This compelled the GoM to introduce flexibility in the use of the TFP by introducing the CSF aimed to realign the use of the TFP with the needs of continuing training and to provide incentives for the retraining of company workers. Although the CSF too is managed by the OFPPT, there is an independent public-private committee, which manages its operations.

85. The GIAC and the CSF help expand access to training opportunities for SMEs and meet their training needs. The procedures to access these resources have been streamlined several times to make it easier to access these resources. Even these recent reform efforts to streamline CSF procedures have not necessarily made things easier or had an impact on trainee numbers. The management and governance of the 30 percent of the TFP which support continuous training still needs further revisions.⁶⁰ Ineffective collection and reimbursement procedures have also been

⁵⁷ The CNSS is a compulsory program for employees of industry and the private sector. It is a safety net program that supports workers during times of illness, job loss, disability, and even maternity.

⁵⁸ Payroll levies of this type have been around for quite some time.

⁵⁹ With the mandate to support development of training programs, modify curricula, improve examinations and assessment systems, and diversify the course offerings.

⁶⁰ One of the criticisms by CGEM and the MSMEs association is that most SMEs workers do not have access to the training funds as one of the eligibility criteria is that at least 10 staff must be employed to be able to benefit from these training funds. Furthermore, the costs of training in small firms tend to be exorbitantly high making training less attractive for these firm. Many enterprises find OFPPT and its training network to be rather ineffective in delivering training programs. They also observe that these training programs barely meet to the needs of the labor market.

criticized as they hinder the allocation of funds to the point that some business leaders are still not informed that their companies can reimburse a share of their employee training expenses.

86. More recently, the OFPPT has implemented even more streamlined procedures to access CSFs by creating within each OFPPT Regional Office a technical committee to study training proposals and to establish a reimbursement amount. The technical committee is represented by staff of the Ministry of Finance and the OFPPT, in addition to employer and employee stakeholders. These revised procedures are likely to widen access to businesses and make the use of the CSF system easier for companies and businesses.

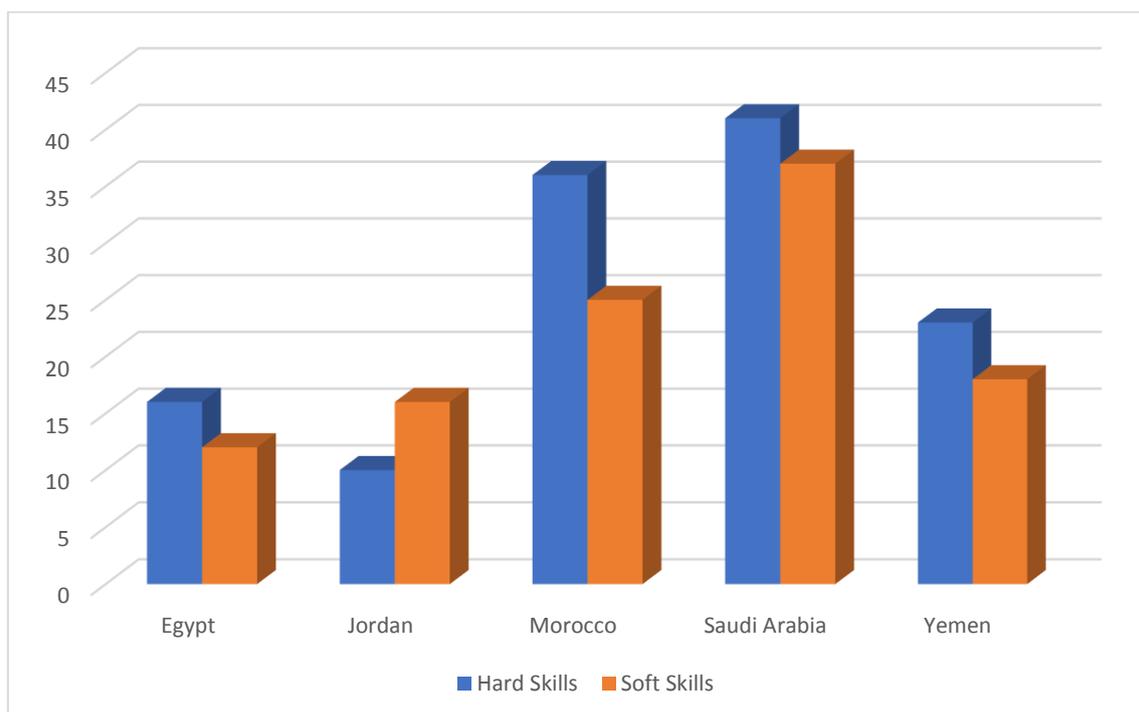
3.6 Relevance of TVET programs

87. TVET has made significant progress, especially following the investment efforts made during the last 15 years. Although there is some evidence that employers are not fully meeting their needs with the skills available in the workforce, much more research is needed to understand the depth and breadth of this issue.

88. Furthermore, in the context of Morocco and other countries in the MENA region, being a *TVET student is synonymous with academic failure*. Vocational programs are *the last resort of students* who fail to perform well in general academic or schooling programs. If Morocco wishes to use the education and skills sector to spur economic growth and competitiveness while simultaneously promoting anti-poverty and inclusive policies, the quality of the programs being offered must be a central aspect of these policies. Morocco recognizes that to remain competitive, its citizens need to acquire a broad education that enhances their ability to engage in lifelong learning. This can be achieved by ensuring that all Moroccan children acquire critical twenty-first century skills but at the same time receive core technical skills that can be continuously upgraded.

89. However, quality remains the main challenge in the Moroccan TVET system. Employers are not satisfied with the technical experience of technical school graduates and recognize that recent graduates need significant investments in further training. The skills needed by employers obviously differ by sector of the economy, but even with the necessary and requisite technical skills in an area, employers are now looking for people who can multitask, have the emotional intelligence and the interpersonal skills to deal with clients, and can work with others in the workplace. Figure 26 shows the high degree of dissatisfaction that employers have with graduates of TVET programs and on the nature of the skills that employers are seeking.

Figure 26. Employer satisfaction level by TVET graduate skills



Source: UNICEF/ILO 2016.

57. Employers in Morocco believe that reforms are needed to improve the quality of TVET programs. Quality assurance in the education sector plays a crucial role in helping develop such an environment where education and training programs are on par with what is offered in more advanced economies and which contribute to the improved effectiveness, efficiency, and performance of these systems. However, quality assurance systems in Morocco are still at a nascent stage and while this is true for all parts of the education spectrum, this is particularly true in the context of professional or vocational training programs and perhaps even more true for training that takes place through the GIAC and the CSF as well as other workplace training programs. The responsibility for quality assurance rests with the State Secretariat for Vocational Training (*Secrétariat d'Etat chargé de la Formation Professionnelle* - SEFP). It is in charge of 'development, maintenance, and quality of the TVET curriculum'.⁶¹ One of the key functions of this office is to support quality assurance through the accreditation of private training providers.

58. To date, given the absence of large-scale or administrative data in Morocco, the understanding of skills gaps or mismatches remains overall limited. As a result, policy makers should first and foremost invest in improving the quality of basic education, which sets the foundation of knowledge and the base on which TVET students build.

3.7 Role of social partners

90. The complexity of the TVET sector requires numerous entities to work together to be able to deliver a program that is meaningful, of high quality, relevant to the needs of the labor market, pitched to the right set of trainees, and once training is completed, assist the trainees through the next stage where they will seek to become employed or start their own business, and so on. This requires many stakeholders and actors to be constantly working together to deliver successful outcomes including trainees, parents, trainers, communities, institutions, employers, industry, and governments at all levels. In the context of Morocco, where firm size is typically small, the binding constraint on the

⁶¹ https://unevoc.unesco.org/pub/tvet_country_profile_-_morocco.pdf

growth of these firms is probably not on the skills margin but with issues such as access to finance, the ease of doing business, tax policies, infrastructure, corruption, and other external factors. Such firms would be reluctant or incapable of participating as a social partner. However, for larger firms or for those industries with numerous participants and which require high degree of skills, the skills are likely to be a binding constraint to growth and participation as a social partner for these firms would be in their self-interest, as it would be a means of ensuring a steady supply of skilled labor.

91. Morocco has developed a policy of involving social partners in the political dialogue with the government on TVET and related issues. Social partners are directly involved in the management and financing of the continuous training and are quite often consulted on new developments, particularly the CGEM.⁶² The CGEM is a private body that represents Moroccan businesses of all sizes and 95 percent of its members are SMEs. The CGEM is on the OFPPT's Board of Directors. Trade and worker or labor unions⁶³ are also represented on the OFPPT's board.

92. In the section related to training offerings for continuing TVET, it was mentioned that two institutions, the GIAC⁶⁴ and CSF,⁶⁵ play an important role in engaging social partners. The GIAC has been established by professional bodies or industry associations with the aim of supporting companies to plan for their continuous training and help provide support for each of these companies, with specific attention given to SMEs and industries. The primary objective of the GIAC is to promote on-the-job training or workplace training. This mechanism was established in 2000 and aims to support the demand for continuing training from companies and support them in the assessment of their skills needs. The GIAC supports these companies by (a) helping disseminate information on opportunities for in-service training, (b) helping companies conduct training needs assessments, and (c) developing training plans to support company growth.⁶⁶ For example, one main trade area includes construction and public works. The GIAC is now a platform that hosts over 500 construction companies. Even though construction and public works sectors have grown significantly in the last decade to ensure continued strong support in this sector, it is important to ensure that the skills needed within the sector for the current and future workforce are well developed.

93. The CSF on the other hand is the joint responsibility of three stakeholders: the state, companies, and employees. The CSF also aims to support on-the-job training in Morocco with a specific focus on SMEs. It supports continuous training for employees of companies to ensure that they remain competitive in the marketplace. Companies make a request for training action to the OFPPT, which makes available access to financing which has been raised as a result of the partnership between OFPPT and the companies. The companies who wish to access support through this mechanism are expected to establish an *access certificate* to the CSF system. More information on the

⁶² The CEGM was created 72 years ago. It is the conduit through which the private and public sectors interact. It has over 90,000 members and, as the private sector body, represents and promotes member companies to the government. The main objective of the CGEM has been to promote the role of the company in the nation's process of economic development. Further information on the CEGM can be found in <http://www.cgem.ma/upload/030720180942.pdf>.

⁶³ There are numerous such unions including Morocco's Workers Union or *Union Marocaine du Travail* (UMT), General Union of Workers of Morocco or *Union générale des travailleurs de Maroc* (UGTM), Democratic Confederation of Labor or *Confédération démocratique du travail* (CDT), Democratic Federation of Labor or *Fédération démocratique du travail* (FDT), and the National Union of Labor or the *Union nationale du travail* (UNTM). Refer to further information at <http://globalbusinesscoalition.org/gbc-members/morocco-general-confederation-of-moroccan-enterprises-cgem/> for references to other important bodies involved in the training sector.

⁶⁴ Intersectoral Advice Associations (GIAC).

⁶⁵ Training Special Contracts.

⁶⁶ The industry bodies or councils developed till date including (a) mechanical/metallurgical/electronic industries; (b) leather-textile; (c) tertiary sector; (d) marine fisheries; (e) food; (g) construction; (h) tourism/hospitality; (i) transport logistics; and (j) technologies.

use of this mechanism to obtain support to meet training needs can be found in the manual⁶⁷ which describes the procedures on contracts under the CSF.

94. However, social partners, trade unions, industry skills councils, and other such bodies find it difficult to mobilize human, financial, and organizational resources needed to fully participate in TVET management as envisaged by the legislation.

3.8 Summary: Key issues facing TVET Institutions in Morocco

95. This section summarizes the key challenges confronting the TVET system in Morocco.

- (a) One of the main challenges facing the provision of TVET in Morocco is the high degree of fragmentation in the delivery of training programs across agencies, ministries, and other entities and associations in the country. Different TVET pathways fall under the aegis of different government agencies, governance and regulatory arrangements, quality control and certification mechanisms and are linked or articulated across these different systems of TVET provision.
- (b) Managing national, regional, and local programs becomes inherently difficult given the range of local realities that needs to be addressed, in addition to all the complexities associated with the TVET sector. In practice, the strong push for TVET regionalization has made slower progress than expected due to inadequate human resources to run a more decentralized system and organizational conservatism and inertia, mostly on the part of the OFPPT. The OFPPT has grown into an enormous organization and may be unintentionally crowding out some important reforms needed by the sector. As a result, identification of regional skills needs and alignment of the supply of TVET to the local demand and opportunities continues to remain a serious challenge.
- (c) Social partners, trade unions, industry skills councils, and other such bodies play a key role in identifying the skills needs, defining job qualifications, and delivering and/or overseeing training services. However, in many cases social partners find it difficult to mobilize human, financial, and organizational resources needed to fully participate in TVET management as envisaged by the legislation.
- (d) The variety of training methods (residential, alternating, and apprenticeship⁶⁸) allows the supervisory bodies to adapt their training offer to different contexts but each of these modes still faces innumerable difficulties that substantially limit their performance. For example, the residential mode does not allow learning in a work situation, while the other two modes allow for workplace training but suffer from the low involvement of professionals because of their low motivation, lack of guidance on involvement of companies, and the lack of room for renewal and adjustment of these modes.
- (e) Several tools have been developed, tested, implemented, or are being rolled out to improve the quality of training and ensure their adaptation to the needs of the labor market: competency-based training, labels of excellence, general competition and best artisan contest, and so on. The identification of repertoires of jobs qualifications (*répertoire emplois métiers* - REM) and standards of jobs competencies (*répertoire des emplois compétences* - REC), which started in 2004, does not yet exist for all professional branches and industries. Although these measures have proved their effectiveness in other international contexts, the

⁶⁷ <https://ifmia-sa.ma/Manuels%20CSF/Manuel%20CSF.pdf>

⁶⁸ Described in the next section.

TVET system is struggling to generalize its use to have a profound impact on the system as a whole.

- (f) The qualifications and the pedagogical and professional upgrade of the trainers/instructors are at the heart of the question of the quality of training. Apart from the training of trainers' efforts carried out by some operators, the trainers are recruited without prior training qualifying them to practice the profession and are often newly graduated laureates. The professional background of the trainers is essential for exercising profession even if TVET resorts to individual contractors. The training of trainers and the certification of their skills remain limited.
- (g) Many public TVET institutions suffer from outdated equipment, obsolete facilities, and shortage of learning material.
- (h) The supply of private institutions remained stagnant and limited to the sectors requiring the least investment. Moreover, more than 66 percent of private institutions are not accredited and raise questions about the quality of their training and the value of the diplomas they deliver.

96. Based on interviews with four TVET centers in November 2019 in Casablanca, Morocco, the following are the challenges facing TVET institutions.

Acquisition of labor-market-relevant skills

- Meeting labor market demands with TVET has been a challenge for many countries. Good practice examples balance between providing youth with transferable skills that support occupational mobility and lifelong learning and providing them with occupation-specific skills that meet the labor market's immediate needs (OECD 2011). To this end, employers need to be more engaged in curriculum development and workplace learning opportunities to ensure that the skills taught correspond to those needed in the workplace.
- **In Morocco, engagement with the private sector (with the objective to place students in workplace training) is mostly based on ad hoc initiatives and personal relationships.** The OFPPT is piloting the setup of *Conseil de gestion de l'établissement* (CGE) in approximately 50 TVET centers that is foreseeing private sector participation in a more systematic way. There are some initial promising results, but the initiative has not been evaluated.
- Generally, there is a need to institutionalize links with industries as the number of employers who provides workplace training or internships to students remain limited.
- The private sector also does not participate in the development of curricula.
- **Teacher training remains theoretical and teachers have few or no opportunity to spend time within the workplace.** Teachers can take several days per year for training (depending on level and field of study); however, there is no clear guideline regarding training within the workplace. This contributes to the disconnect between what is taught in the classroom and what students are expected to know once they are employed.

Monitoring and evaluation of the TVET system

- There is no monitoring and evaluation system in place. Data collection is not systematic (for example, students report on their employment status when they pick up their diploma) and there is a lot of attrition.
- In 2014, the GoM established the Observatory of Jobs and Competencies (*l'Observatoire des métiers et des compétences*), which is a tripartite body monitoring labor market trends in Morocco. It has been operational since April 2017. The observatory is responsible for monitoring and analyzing the evaluation of the labor market, carrying out studies, and providing data likely to guide and to supervise employment policies. At the regional level, the observatory is mandated to assist regional structures to undertake assessments of employment and skills trends within their area. The implementation of this institution has faced multiple difficulties, an absence of a culture of information sharing between institutions, complex institutional links, and weak analytical capacity.

Autonomy, financing, and relationship with authorities

- Most decisions concerning curricula, teacher hiring, financing, and so on, are decided at the national level (OFPPT). The TVET centers have limited autonomy and resources.
- There is also the perception that TVET lacks agility. It can take several years for a course that is considered relevant by the private sector/employers to be taken up by TVET.

IV RECOMMENDATIONS AND AREAS FOR DISCUSSION

97. This section provides a glimpse into areas in the Moroccan TVET system where additional reforms could be undertaken to help improve the effectiveness and efficiency of the TVET system further. This is not to say that reforms have not been undertaken till date. If there is one impressive feature of the Moroccan TVET system, it is the fact that it has not hesitated to undertake reforms on a fairly regular basis.⁶⁹ This section is approached in two ways:

- (a) **Direct recommendations.** Reform areas that can be identified directly or which can be considered as being on the front burner and referred to in this note as *direct recommendations*. These include, among others, the continued development of competency-based assessment systems, the need to strengthen the overall systems for data gathering and monitoring of programs, and the need for rigorous evaluations of program effectiveness and for an evaluation system that has an arm's-length relationship to the day-to-day functioning of the key institutions.
- (b) **Areas for discussion.** Reform areas where further policy dialogue, discussion, and consultations with the relevant stakeholders are warranted and where more data are needed to rigorously analyze sector outcomes. As noted earlier, significant reforms have already been undertaken in the Moroccan TVET system—so this second set refers to those reforms that have taken place but could be considered as representing partial reforms. And for the country to reap the full benefits of these reforms, they must not only be sustained but also *deepened*.

⁶⁹ This culture of undertaking reforms is not recent and extends back several decades. For example: Introduction of the Training Levy (1974), Vocational Training Reform (1984), Contract Training with Professional Associations (1987), Special Training Contracts (1996), OFPPT Reorganization (2003), *Cites des Métiers*/decentralization (2019/2020).

4.1 Direct recommendations

4.1.1 Adopt CBAs to training

98. Many training programs in Morocco continue to employ objective-based approach to training,⁷⁰ which is based on the trainee acquiring the necessary ‘knowledge’ in a particular area. In this approach, trainees typically *know* the topic or the subject, but this does not immediately imply that workers know how *to do* the task. The CBA differs in that the training or pedagogical method that is applied is to ensure that the worker can actually *perform* the task and not merely *know* about the task through their training. Over the last three decades, CBAs have become the mainstay of well-functioning TVET systems around the world such as in Australia, New Zealand, the United Kingdom, Malaysia, and the Philippines. The CBA naturally aligns itself with the tenets of TVET and skills development in emphasizing skills development, flexible approaches, and lifelong learning in workforce development. For example,

- Australia’s TAFE⁷¹ institutions have been implementing such approaches for over three decades. However, the approach has constantly been researched, evaluated, and modified over this time (Booth 2000; Smith 1999); and
- Such reforms have not been limited to high-income countries. The Technical Education and Skills Development Authority (TESDA) is the premier agency in the Philippines in charge of TVET programs and has a wide range of offerings.⁷² TESDA uses CBAs to its TVET programs that have a battery of competency-based standards, curriculum, training and assessments (Budhrani et al. 2017).

99. Evaluations of more than a decade into Australia’s widespread use of the CBA revealed that while all acknowledged the importance of the approach, few training providers understood how best to implement these programs and how to modify the training curriculum to appropriately link it to the assessments that were to follow. Evaluations of the CBA revealed that particular concerns were raised about both the assessment quality and the issue of subjective bias in assessment judgements. Even recent assessments have revealed that TVET providers and practitioners are still not clear about the key features of the implementation of CBA programs.

100. Morocco has been gradually experimenting with CBAs for several decades now. For example, Canada has helped pilot CBA in institutions covering key economic sectors, such as tourism, textiles, handicraft and artisanal products, and agriculture. Current bilateral programs between Canada and Morocco envisage further collaboration on this front and the use of the CBA is expected to be expanded to the whole TVET sector, with a specific focus on women and girls.⁷³ There are few available studies on the changes that have taken place in the TVET sector in Morocco through the adoption of these measures and it is important that independent, systematic evaluations of the effectiveness of this reform measure be undertaken. If the Australian evidence is also reflective of the state of understanding of CBAs in the Moroccan TVET system, it would be important for the OFPPT as the main TVET policy body in the country to undertake or support the needed studies and analysis to

⁷⁰ Also referred to as Content-centered approach.

⁷¹ Technical and Further Education (TAFE)

⁷² Including post-basic, post-secondary programs aimed at producing middle-level skilled and skilled workers.

⁷³https://www.international.gc.ca/world-monde/issues_development-enjeux_developpement/priorities-priorites/where-ou/morocco-maroc.aspx?lang=eng

understand how best to respond to the needs of training providers to promote and universalize the CBA in Moroccan TVET programs.⁷⁴

Main recommendations

101. **Support the gradual universalization of CBA programs in the Moroccan TVET sector.** It would be important to prepare the system for these changes as their adoption will involve changes in the functioning and management of vocational training at the central, provincial, and local levels and will require significant upgrading of human resources at all levels to manage this transition. Additionally, given the new approach that is being proposed, a comprehensive upgrading of trainers on this new approach would be needed. The time frame for such reforms to be put into place would be in the medium term.

4.1.2 Strengthening monitoring and evaluation

102. In 2014, the GoM established the Observatory of Jobs and Competencies, which is a tripartite body monitoring labor market trends in Morocco. It has been operational since April 2017. The observatory is responsible for (a) monitoring and analyzing the evaluation of the labor market, (b) carrying out studies, and (c) providing data to guide and supervise employment policies. The CGEM operates the observatory. At the regional level, the observatory is mandated to assist regional structures to undertake assessments of employment and skills trends within their area. The implementation of this has faced multiple difficulties, for example, an absence of a culture of information sharing between, within, and across institutions; complex institutional links; and a weak analytical capacity. The new National TVET Strategy has suggested a more comprehensive system to monitor and evaluate skills development programs. This integrated system gathers system-wide information; establishes data observatories across branches, regions, and sectors; conducts surveys, establishes employment observatories, and so on, to identify trends and demands for skills in the country. It is critical that such tools for planning, monitoring, and evaluation be used to illustrate the key programs and key development targets. However, it is expected that the same challenges will persist and unless there is a change in culture across all relevant agencies, the TVET and skills development systems in Morocco will continue to be plagued by decision-making that is not based on hard evidence.

103. Efforts to carry out rigorous labor market assessments and provide relevant information about existing and future market needs and employment opportunities should underpin all analyses in terms of job growth, educational attainment in the workforce, likely compensation, and the probability of securing jobs in the labor market. Recent advances in technology have made it easier to process large volumes of data to help improve the effectiveness of policy making. However, many agencies across the globe have not yet started to make use of the opportunities offered by the information and data revolution. The constraints to using such data are still embedded in poorly formulated confidentiality guidelines and laws; a culture that treats data and information as power and does not share this within and across agencies; fragmented data collection efforts; and no way to integrate these across regions, businesses, or households.⁷⁵ There are some countries that have begun to embrace the use of *big data* to advance policy goals. For example, Chile is able to track a student's academic progress through the student's life and then monitor post-schooling labor market activities by using a unique national/personal identifier, the *Rol Unico Tributarios* (RUT).

⁷⁴ Morocco too states that the education and skills development sectors follow the competency-based training approach (*approche par compétence*) since its introduction by Canada in 2008. However, it is not clear if this extends across the education and training sector or is still being piloted in some areas.

⁷⁵ This is not peculiar to Morocco but is true for most countries across the world. Data of high quality even today remain sequestered in specific governmental agencies or organizations and curtail the use of data for decision-making.

Main recommendations

104. The OFPPT (together with important stakeholders such as HCP, the National Agency for Employment and Skills Promotion (*Agence Nationale de Promotion de l'Emploi et des Compétences* [ANAPEC]), the Ministry of Employment and Social Affairs (*ministère de l'Emploi et des Affaires sociales* [MEAS]), CGEM, and DFP) has the opportunity and incentive to take the lead in collecting, collating, analyzing, and disseminating relevant information on the importance of skills development in terms of labor market outcomes. The main recommendation is to develop an open data policy to govern the data that will be gathered, collated, analyzed, and disseminated. It would be important to ensure that any guidelines or regulations adopted by the OFPPT is discussed thoroughly with all key stakeholders before final decisions are taken. It is also important for the OFPPT and other key institutions mentioned here to ensure that all such activities are carried out under the umbrella of any national policies that may exist in the Kingdom.

4.2 Areas for discussion

4.2.1 Quality framework for TVET

105. The aim is to help link elements of quality assurance at the provider level with some sort of a national reference framework for quality. Morocco has worked hard to establish national-level quality frameworks, for example, the Moroccan National Qualifications Framework⁷⁶ (*Cadre National Marocain de Qualification* [NQF]) and the National Framework for Certification (*Cadre National des Certification* [CNC]).⁷⁷ The CNC is a tool by which certificates and certifications can be regulated in an objective manner. This is a fundamental requirement for any education and skills sector, so that employers can assess an individual's skill sets based on his/her certification. Well-defined objectives and transparent criteria for certification allow the labor market, employers, and society to locate any individual in his/her training system and/or labor market system. This will facilitate signaling to employers and the portability of the certificate. While this seems like a trivial issue, it is not and it is an area where a significant amount of work is being done globally.

106. The CNC will function in tandem with the NQF, which has eight levels and six descriptors defined therein. The CNC was established in Morocco through another partnership between Morocco and the European Union (EU) signed in 2008. The CNC helps provide an understanding of certification and diplomas across Morocco and the EU and is likely to help improve mobility in both directions. The NQF came into force in 2013 and was updated and revised in 2015. A supra body, the NQF Commission is chaired at high levels of the government. Morocco has approved the structure of the NQF, the management and governance of the NQF, and a road map for implementation.⁷⁸

107. Additionally, Morocco has also worked with a program known as the *Démarche qualité en formation* (Quality Training Pathways). The purpose of this program is to strengthen incentives at the institution level to improve the effectiveness and efficiency of training. The program trains personnel at the institute level on the importance of quality management, helps understand and implement quality management systems in their institutes, and finally uses self-assessment procedures to gauge improvements along specific dimensions. Such an approach would be a prerequisite for any accreditation process.

108. Finally, the NQF in principle helps improve articulation across levels and sectors. Countries such as New Zealand, Scotland, Ireland, Chile, and the United Kingdom have used their quality

⁷⁶ https://connections.etf.europa.eu/wikis/home?lang=en#!/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Morocco%20-%20NQF%20inventory

⁷⁷ <https://Int.ma/maroc-adopte-cadre-national-de-certification/>

⁷⁸ <https://unesdoc.unesco.org/ark:/48223/pf0000260363>

frameworks as a way to strengthen and improve articulation within and across the education and training system. The CSEFRS, in a recent discussion paper (CSEFRS 2019) recommends the integration of TVET in general education.⁷⁹ The NQF system would be useful in helping redesign the TVET system and create more pathways for students to demonstrate skills and achieve success and help support this reform goal.

Discussion areas

109. While efforts have been made to develop the NQF, it is yet to become a tool that students, workers, employers, and training providers use regularly to benefit them. It is critical that the newly minted NQF be broadly accepted, objective, and credible. It implies that the concerned authorities should be able to place programs, courses, and qualifications within the framework in a credible manner. The specific recommendations on this matter include the following:

- This democratization of the role of the qualifications framework is critical if students, training providers, and employers are to benefit from this powerful tool.
- It is important that the Moroccan NQF undertakes a referencing process as planned with other important frameworks, for example, the European Qualifications Framework.⁸⁰
- With the rapid rise of micro-credentials and nano-credentials, and other shorter form credentials, it would be important that the Moroccan NQF be able to accommodate courses and studies of different duration but at similar levels of complexity. This would imply that the NQF should not only have a vertical structure as is currently depicted in Morocco but also have a horizontal dimension to the NQF. Numerous countries have now undertaken such steps—these include Denmark; Hong Kong SAR, China; Ireland; New Zealand; and Scotland. This allows learners to be able to source learning from different modalities and build up their credentials into a full qualification or award.

⁷⁹ If integration of TVET in general schooling implies ways by which articulation can be improved and which students could move freely between TVET and general education programs, this would indeed be a significant reforms. However, if TVET integration in general schooling refers to introducing TVET technical courses in lower grades in Morocco, this might be an issue that should be weighed further.

⁸⁰ European Framework for Lifelong Learning.

Box 3. The emergence of alternative credentials

The term ‘alternative credentials’ has been coined recently and is being used to draw contrasts with more traditional credentials conferred at the completion of study programs—which can be diploma courses; bachelor’s, master’s, and doctoral degrees; or other qualifications. Alternative credentials are not considered as stand-alone qualifications. Three popular alternative credentials in the marketplace include certificates, digital badges, and micro-credentials. These alternative credentials can be awarded at all levels of schooling, although these popular forms have mostly been geared toward the post-secondary level.

- **Certificates.** Certificates are conferred upon the completion of organized learning activity and may or may not constitute academic credits toward a degree program. Certificates can be offered by a variety of training providers, including academic institutions, professional/industrial bodies, product vendors, and so on. The manner in which a student is assessed at the end of this training program can also vary—being asked to complete specific projects, demonstrate competence in the tasks, and complete an examination.
- **Digital badges.** Digital badges are an indicator of one’s accomplishments or skills and are in that sense similar to badges that have been conferred for many years in other walks of life—such as boys and girls scouts and PADI diving badges. However, as the name suggests, digital badges can be shown by an individual, assessed by others, and confirmed or verified online. Unlike the certificates, which tend to be more structured and require some means to demonstrate competence, digital badges can be awarded for a variety of reasons—for demonstrating competence as in the case of certificates but also for merely participating in an activity, such as taking part in an online tutorial program or something similar.
- **Micro-credentials.** Credentialing is simply an approach used to confirm or verify that an individual, team/group, institution, or other relevant entity have met some prescribed standards established by an authorizing entity. How the authorizing entity came to be such an entity is not a relevant concern. A degree conferred by a university is a credential, a certificate that identifies an individual as a tennis coach is a credential, and a badge that recognizes one’s skills in food management is a credential. Credentials have typically been associated with longer-term periods of study; however, the recognition that longer-term periods of study simply reflect the aggregation of multiples of smaller-scale learning efforts has led to diminishing the concept of credentials. Given the breadth in definitions of micro-credentials, there are many definitions in use.
- There is considerable overlap between these three types of credentials. Some alternative credentials may be classified as part of a formal education program; others as a nonformal education program (or part of a nonformal education program); and still others can be obtained through informal learning activity.

Source: Adapted from The Emergence of Alternative Credentials, OECD Education Working Paper No. 216, March 10, 2020.

4.2.2 Strengthening private provision

110. The CSEFRS also recommends the enhanced role and involvement of the private sector in the development of the TVET system to improve the quality, effectiveness, and efficiency of these programs. While the decentralization agenda seems to dominate the discourse around TVET and skills development reforms in Morocco, other agencies are driving the role of private sector players in the process. For example, the Moroccan Federation of Private Professional Education (*Fédération Marocaine de l'Enseignement Professionnel Privé* [FMEP]),⁸¹ an umbrella association that brings together numerous other associations of private training providers, is advocating for a strengthened role of the private sector in the skills development process.

111. The FMEP brings together the Moroccan Association of Private Establishments for Professional Education (AMEP), Moroccan Association of Private Paramedical Training Institutes

⁸¹ In French, *La Fédération Marocaine de l'Enseignement Professionnel Privé* (FMEP) is an umbrella association created to bring together associations of private vocational training providers.

(AMIPFOP), Professional Association of Technical and Commercial Education (APECT), Association of Private Vocational Teaching Establishments (APEP), Conference on Accredited Schools (CEA), and the Union of Free Education and Training in Morocco (UEFLM).⁸² Private providers in Morocco require their course content and curriculum to be approved by the appropriate ministry or body before they can offer these courses to students. This is a licensing procedure that attempts to ensure that institutions have the buy-in of professional bodies in the areas that they cover and on which they provide training. While this is a positive development, it is important to ensure that the institutional structures in place help facilitate further development of the subsector and do not impose overly restrictive rules and regulations that could stifle the independence of training providers.⁸³

112. Some specific measures have been proposed to increase private sector involvement in TVET and this includes the following:

- Introduce incentives⁸⁴ for companies to take part in skills development, for example, through apprenticeships and internships.
- Review the state-enterprise partnership model to incorporate more requirements into quality of training provided and conditions for learning trainees within companies.
- Set up a system for supervising and monitoring training courses that take place in companies.
- Engage the TVET institutions in charge of training and the participating companies in the certification of the training by granting them a broader functional autonomy.
- Strengthen the system assessment of skills acquired to improve the quality of the training offered.

113. The role of the private sector in the provision of TVET has been identified in many countries, irrespective of the system of TVET adopted. In countries such as Germany, which is based on the dual system, it is well understood that to help the TVET sector meet the requirements of the private sector, private sector representatives need to play a critical role in the following: (a) shaping TVET policy; (b) defining skills needs; (c) supporting curriculum development; (d) establishing occupational and workforce standards; (e) implementing TVET programs; and (f) developing assessments of trainee performance. In some of the best-performing TVET systems, the development of the TVET system is headed by a specialized TVET or TVET-related agency, which helps bring under one umbrella

⁸² In French, *Association Marocaine des Etablissements Privés d'Enseignement Professionnel* (L'AMEP, ~ 170 EFPP members); *Association Marocaine des Instituts Privés de Formation paramédicale* (L' AMIPFOP ~ 40 EFPP members); *Association Professionnelle de l'Enseignement Technique et Commercial* (L'APECT, ~ 100 EFPP members); *Association des Etablissements d'Enseignement Professionnel privé* (L' APEP, ~ 100 EFPP members); *Conférence des Ecoles Accréditées* (La CEA, ~ 50 EFPP members); and *l'Union de l'Enseignement et de la Formation Libre au Maroc* (L'UEFLM ~ 130 EFPP members). Refer to

<https://translate.google.com/translate?hl=en&sl=fr&tl=en&u=http%3A%2F%2Fdfp.gov.ma%2Fformation-professionnelle-privee%2Fassociations-partenaires.html>.

⁸³ For example, if an institution is set up to run as a CISCO Networking Academy to teach skills on networking, cyber security, and so on, the licensing procedure should not be impeded by the failure to obtain the appropriate clearance from say the Ministry of Telecommunications.

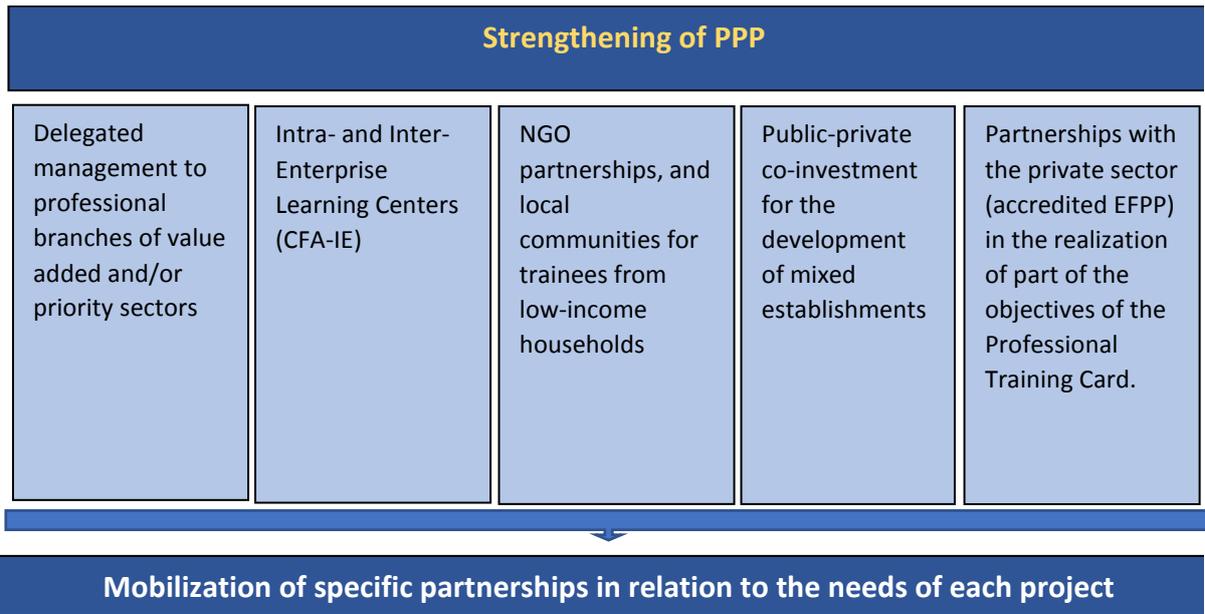
⁸⁴ Incentives cover a wide range of options and include both pecuniary and non-pecuniary incentives. For example, flexible career advancement options can be linked to employee skill upgrade programs and at the other end of the spectrum, skills development could also be mandated by management for all employees (for example, employees requiring to undertake diversity training or sexual harassment training) A number of instruments have been used to support lifelong skills upgrade during one's career and this includes access to subsidized training or student/trainee loans to access commercially available and recognized training, training funds to support both initial training and continuous training, tax incentives for skills upgrade, and in more recent times, individualized learning plans and learning accounts.

individuals representing trainees, employers, industry leaders, sector skills councils or industry skills councils, chambers of commerce, trade and staff unions, civil society, and other critical stakeholders.

Discussion areas

114. The involvement of the private sector to drive TVET policy and related activities is beginning to take hold in the context of the TVET sector in Morocco. The National TVET Strategy clearly identifies this objective, as shown in Figure 27.

Figure 27. Strengthening the Private Sector’s Role in TVET



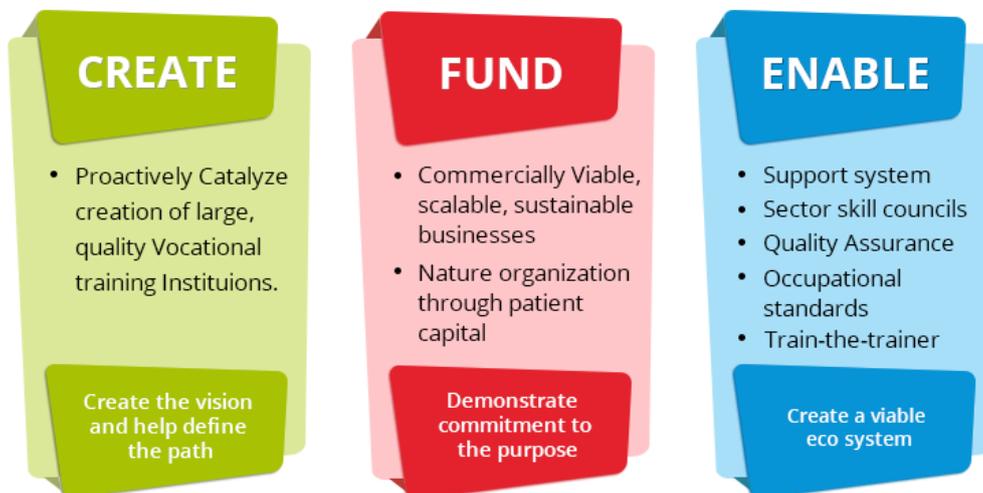
115. However, further steps are needed to ensure that the reforms are complete and do not leave Morocco at a partial reform stage. The roles of the public and private sector have to be clearly identified and delineated. In countries where these reforms have been successful, the private sector or its representatives typically have a controlling share of the responsibilities.

Box 4. The National Skills Development Corporation

India represents a good example of how rapid changes are possible in helping establish a firm foothold for the private sector in the development of skills of the people in the country. In a country famous for the heavy-handed role of the government in many facets of life, less than 12 years ago India decided to reformat its skills development infrastructure and institutions and established the National Skills Development Corporation (NSDC). At that time, India did not have an established qualifications framework. It had few industry bodies or sector skills councils, and the role of the private sector through a PPP was a distant reality. This situation has however been completely transformed in the last 12 years with the establishment of the NSDC as a not-for-profit public limited company in 2008. The Ministry of Finance established the NSDC as a PPP with the newly formed Ministry of Skills Development and Entrepreneurship holding 49 percent of share capital of the NSDC and the private sector holding the controlling stake of 51 percent of the share capital. The NSDC is expected to catalyze skills development by financing enterprises, industries, organization, and so on while developing appropriate models to support and strengthen private sector initiatives. The NSDC acts as a catalyst for new sources of revenues especially for those sectors where missing market or weak market mechanisms make it difficult to attract private financing. Through the NSDC-funded affiliation program (see Figure 28), the NSDC is able to

- Catalyze the creation of sustainable and quality skills training institutions across the country;
- Support and coordinate private sector initiatives for skill development through appropriate PPP models and strive for significant operational and financial involvement from the private sector;
- Play the role of a ‘market-maker’ by bringing financing in sectors where market mechanisms are weak or missing;
- Prioritize initiatives that can have a multiplier or catalytic effect on capacity and quality of skilling in India; and
- Provide for a differentiated approach for ‘for-profit’ entity and ‘not-for-profit’ entity.

Figure 28. NSDC-funded affiliation



116. This also opens up an opportunity to help expand the role of the private sector in management and implementation of TVET programs across the country through the CMC program currently being implemented in Morocco. While the CMC currently focuses on establishing 28 new training centers across Morocco, the real impact of the CMC will be observed as the learnings from these new institutions—their governance models, new approaches to institutional management, program monitoring and evaluation, and outcome-oriented planning—are slowly used to transform the existing TVET institutions under the OFPPT and other line ministries. Strengthening the involvement of the private sector at all TVET institutions will be critical to improve the labor market outcomes for trainees from these institutions.

117. How best to develop the role of the private sector as noted earlier would be an important point of discussion with the OFPPT. This would help identify critical steps to be undertaken to reform the existing system to one in which the private sector plays a critical role in the delivery of TVET programs.

B.3 All-of-government approach

118. Skills development in the country is a means to an end. For skills development to be useful and relevant to needs of the Morocco economy, three key issues will need to be addressed. These include (a) more rapid economic growth, (b) growth that is labor intensive to be able to absorb excess labor and help lower the rate of unemployment and particularly youth unemployment, and (c) ensure that economic growth can be sustained over years.

119. Solutions to the complex problems of youth unemployment, female labor force participation rates, slow economic, and structural transformation require a holistic approach and the involvement of multiple actors. The Ministry of Education or the OFPPT or other stakeholders in charge of developing the supply side of skills are not the sole actors.⁸⁵ Medium-term development plans need to be developed in coordination with the country's growth vision, its industrial and infrastructural development plans, together with the skills needed to support the country's medium- to long-term objectives.

120. This all-of-government or holistic approach would have to bring together human capital and skills development policies; labor market and human capital policies; industrial, economic, and employment strategies under one holistic approach. For example, while changes to the supply side will help improve the efficiency with which TVET programs are implemented and skills developed, an issue of equal concern is that the ties between the TVET and skills development sector and employers, institutions, industries, labor unions, and so on, are weak to nonexistent. The new PPP model discussed earlier has been developed to address this concern. Notwithstanding these new initiatives of the government, there is a need to improve the links between the supply side and the demand side for TVET graduates in Morocco and across all levels of training.

121. Key strategies and policies of the GoM should work together seamlessly to deliver on these objectives. These include (a) the National Employment Strategy, (b) industrial policies, and (c) skills development strategies and policies.

122. The National Employment Strategy (2015–2025) aims to create 200,000 jobs every year during this period with a specific emphasis on the supporting youth unemployment and increasing female labor force participation. Several ministries and agencies are expected to work together, coordination, liaise, and eventually plan and deliver the enabling environment for creating more and better jobs that can be accessed by Moroccan citizens. This coordination exercise is expected to cover several different areas: (a) job creation through sectoral strategies (for example, agriculture, infrastructure development, and tourism) and (b) macroeconomic strategies (for example, exchange rate policies, bilateral and regional trade agreements, and pay reforms). A key element of the government's strategy is the National Employment Promotion Plan (2018–2021). This includes a new social initiative referred to as the 'Moumk'In' to support the empowerment of young people.⁸⁶ Moumk'In will develop tools for job seekers to help educate them on opportunities in the marketplace and support socioemotional skills development for participation in the labor market. Additionally, this initiative

⁸⁵ This is even more true given how fragmented the supply side of TVET provision appears to be in the context of Morocco. This is not unusual and the same pattern is seen from country to country. As noted earlier, many countries use tools such as the NQF to achieve a certain degree of coherence and coordination across various players in the sector.

⁸⁶ <https://www.morocoworldnews.com/2018/04/245432/government-launches-moumkin-initiative-to-develop-youth-empowerment/>

aims to support regional centers of employment and skills development. These regional centers will support pilot programs aimed at improving youth employability and entrepreneurship programs to support self-employment initiatives. These centers will also support regional employment observatories and develop close ties with regional chambers of commerce and civil society.

123. Similarly, job creation and the skills needed to sustain such growth are closely linked to the government's industrial policy. As noted earlier, it is critical that the development of such industrial policies be closely linked to an understanding of the existing set of skills in the country. If Morocco does not adopt an all-of-government approach, it risks moving down an industrial development path for which it is not yet ready.⁸⁷

Box 5. National Agency for Employment and Skills Promotion

The National Agency for Employment and Skills Promotion (*L'Agence Nationale de Promotion de l'Emploi et des Compétences* [ANAPEC]) aims to bring job seekers and employers closer through active intermediation in the labor market. It was established in 2001 and is registered as a public service company. It consists of a centralized management unit and nearly 80 decentralized agencies. By providing information on available opportunities and maintaining a registry of job seekers, ANAPEC functions as a clearinghouse for employment and helps match job seekers and employers.

Earlier reviews of ANAPEC's performance were not positive. For example, in 2009, ANAPEC had identified 27,678 vacancies, registered 517,000 job seekers, and managed to match 4,355 job seekers to jobs. This amounts to 0.84 percent of all job seekers and perhaps more importantly failed to match or fill nearly 85 percent of open jobs. The profile of those who had registered would seem to be the main category of interest for the GoM—41 percent women, 18 percent below 24 years of age, 33 percent university graduates, 33 percent graduates from professional training, and 30 percent with a secondary diploma. Only 3 percent of all unemployed registered with the agency had lower than secondary level schooling, perhaps also reflecting the fact that lower educational attainment limits the effectiveness of such strategies for the most vulnerable members of society.

The agency had a budget of US\$100 million that year with 547 staff, of which 343 were frontline staff in direct contact with job seekers and located in 74 branches across the country. This implies that each frontline staff facing job seekers managed to recruit 10 individuals a year or about 1 every month. More recent studies have reconfirmed these earlier findings and there is corroborating evidence that very few job seekers in Morocco even know of ANAPEC's existence, let alone its role and functions (EMNES 2017). ANAPEC currently implements four programs: *Taehil*, *Idmaj*, *Moukawalati*, and *Tahfiz*.

Source: World Bank 2013.

Discussion areas

124. Such a holistic approach is likely to have direct implications for the skills mix needs in the country. For example, the IAP (2014–2020) has focused on eliminating three constraints of the Moroccan economy: (a) access to finance for the development of the industrial economy; (b) access to critical inputs, such as land and other integrated platforms; and (c) building up the human resource capacity of the country to support key sectors. The IAP placed emphasis on a select number of sectors: automotive, aerospace, textile and leather, chemical and parachechemical, heavy goods vehicles and bodywork, construction materials, and the pharmaceutical industry.

⁸⁷ Refer to the Hausmaan and Hidalgo's Atlas on Economic Complexity for further treatment of this issue.

V CONCLUSIONS

125. The report looks at the role of the TVET sector in addressing key policy priorities of the GoM. Morocco is confronted by significant economic headwinds and has established well-defined strategic objectives focusing on steady economic growth, structural transformation, economic competitiveness, unemployment and youth unemployment. The common theme that underlies all of these strategic issues is the focus on job creation. In an attempt to address these issues, the GoM has made concerted efforts to streamline the education and skills development systems in the country and ensure that these are well aligned with the needs of the labor market, industries, and employers. In particular, the GoM has placed overwhelming emphasis on the development of the TVET sector. There seems to be a widespread belief in the government, and in the broader stakeholder community, that TVET programs have the unique ability to help bridge the gap between skills formation and development with the demands/needs of the labor market. The GoM has made rapid increases in the allocation for the TVET subsector and in increasing the supply-side, however there is a need to balance this expansion with a focus on the quality and relevance of TVET programs.

126. The paper illustrates that despite the growing outlay for TVET, Morocco still does not obtain the outcomes it desires. Morocco's TVET sector is hampered by a range of issues including: poor general education outcomes; governance and institutional structures that need further reforms to support skills development; a need to enhance the role and involvement of the private sector in the design, planning, and delivery of TVET programs; ensure that the fiscal resources allocated for education and training is appropriately aligned with the needs of the labor market; strengthen quality assurance and control mechanisms; and improve teacher training and student assessments in developing competency-based systems. A constant feature of the Moroccan TVET system has been a willingness to undertake significant reforms. This approach will help the GoM achieve its stated goals in this sub-sector. As each of these issues are addressed, the Moroccan training system can begin to deliver the skills needed by the country now and in the future.

127. The report delves into some detail on a few of the aforementioned issues, including: (a) applying CBA to training, (b) monitoring and evaluating for evidenced-based decision-making, (c) strengthening the quality framework for TVET, (d) enhancing the role of the private sector, and (e) adopting an 'all-of-government' approach to address these key concerns by involving all critical stakeholders in the process of delivering training.

128. The regionalization agenda dominates the Moroccan TVET policy landscape at this point in time. It is clear that the CMC model is likely to alter the landscape for training provision and in the process, help improve the quality, relevance, and labor market outcomes for those who go through these programs. The CMC programs are expected ensure that all stakeholders are engaged, have the ability to contribute to the functioning of these TVET institutions, direct and guide academic content, and identify critical regional skills gaps and areas of importance. The National TVET Strategy aims to understand how best the system can move from its current - centralized management system to one which is locally or regionally managed and responds better to the needs of employers in these settings. These revised governance settings are expected to function under a set of pillars:⁸⁸ (a) ensure better coordination and implementation of the national education and training policy, (b) ensure that TVET governance is participatory in nature and not driven by centralized decision-making, (c) define appropriate roles for decision-making and strengthen the role of regional management in the provision of training, (d) strengthen PPPs, and (e) make efficient use of stakeholder strengths.

129. The role of the private sector is becoming more and more important in the delivery of these services. Organizations such as the National Federation of Private Vocational Education are bringing

⁸⁸ Often referred to as the five pillars.

private sector players to a decentralization agenda noted earlier. This includes both public providers and private enterprises which offer in-house training to their employees and who lead the demand side for skilled workers. In addition to such private sector enterprises, the aim is to also hear from all the key stakeholders in the training and employment space, including sector-specific associations and industry skills bodies, workers and employers unions, chambers of commerce, and so on. By casting the partnership net widely, the GoM aims to support a cohesive, coordinated, and coherent policy on TVET and in the process support the private employment goals of the Moroccan workforce.

130. While this review study was useful in identifying a few areas for review, more work is needed to be able to provide contextualized and granular advice on the sub-sector's performance. We proposed three studies in the not too distant future – which would provide necessary inputs needed to design the reforms needed by the Moroccan TVET sector. These include the following three: (a) an efficiency study of the overall sector given the ever-increasing flow of students and trainees to TVET programs in Morocco; (b) using the World Bank developed Training Assessment Project (TAP) a detailed analysis of the functioning of the sector and can be obtained and would give granular data on the functioning of the system, and finally, (c) establishing a system of longitudinal tracer studies that can track student progress in the labor market at specified points in time after the completion of their programs.

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ANNEX 1: OPERATING IGDS IN MOROCCO

There are currently 10 operating IGDS, which have been created in partnership with private professional organizations (national and international). Apparently, there are no plans to open more IGDS before a comprehensive evaluation of the system has been conducted. Most IGDS are located with the sector-specific special economic zone for which they provide tailor-made training courses. A clear example of this was the opening of the *Institut des Métiers de l’Aéronautique* in 2011. The center situated next to Mohammed V International Airport in Casablanca and the aeronautics - focused Midparc Casablanca Free Zone offers both initial and advanced skills training. An expansion project completed at the beginning of 2017 allowed for the school to increase its yearly capacity from 800 to 1,200 students in training programs and add 300 spots for continuing education. This was done to meet 2020 goals of adding 23,000 technicians to the aeronautics segment, which would be double the 11,500 total workers reported in 2016. IGDS are primarily considered means to attract foreign investors in need of a highly skilled, specialized workforce. The principle is that the state covers all costs of establishing and running the institute, including salaries, learning materials, maintenance, and so on. Typically, the management is outsourced to the association of private enterprises within the sector. The state has no role in day-to-day management, and the institutes are free to define the contents of the training according to the specific needs of the partners.

Sector	Institute	Partners	Established in
Aeronautical	<i>Institut des Métiers de l’Aéronautique (IMA) de Casablanca</i> IMA received support from the French Development Agency, AFD	GIMMAS UIMM/Bombardier French Union of Metal Industries	2011
Automobile	<i>Institut de Formation aux Métiers de l’Industrie Automobile (IFMIA) de Tanger Med</i>	Renault	2011
	<i>Institut de Formation aux Métiers de l’Industrie Automobile (IFMIA) de Casablanca</i>	AMICA Koica (Corée)	2013
	<i>Institut de Formation aux Métiers de l’Industrie Automobile (IFMIA) de Kénitra</i>	Consortium Industriel Espagnol/AMICA	2014
	<i>Institut de Formation aux Métiers de l’Industrie Automobile (IFMIA) de TFZ</i>	AMICA	2016
Textile/Leather	<i>École Supérieure de Création et de Mode (ESCM) de Casablanca</i>	AMITH/ESITH	2013
Renewable Energy	<i>Institut de Formation aux Métiers de énergies renouvelables et de l’efficacité énergétique (IFMREE) d’Oujda</i>		2015
	<i>Institut de Formation aux Métiers de énergies renouvelables et de l’efficacité énergétique (IFMREE) de Tanger</i>	FIMME, FENELEC, MAZEN, ONEE	2017
	<i>Institut de Formation aux Métiers de énergies renouvelables et de l’efficacité énergétique (IFMREE) d’Ouarzazate</i>		2018
Transport and Road Safety	<i>Institut de formation dans les métiers du transport et de la sécurité routière</i>	Fédérations du secteur du transport	2018

ANNEX 2: EMPLOYMENT PROMOTION PROGRAMS IN MOROCCO

Measures	Objectives	Targets Populations	Benefits Granted	Regulatory Framework
Improve Employability				
TAEHIL Program, 2006	<ul style="list-style-type: none"> - Job seekers acquire the necessary skills to hold an identified job position and develop employability skills - Employers conduct recruitment for positions they have difficulty finding candidates with the required skills 	<ul style="list-style-type: none"> - ANAPEC-registered job seekers with at least high school education are selected by employers as a recruitment action - Any company, local, regional, or sectoral trade association under private law 	<ul style="list-style-type: none"> - State contribution to the financing of training for an average of MAD 12,000 per participant per year 	<ul style="list-style-type: none"> - Procedures manual 'Employment Initiatives' - The Act 51/99, which established the creation of ANAPEC - The ANAPEC/State Progress Contract for 2006–2008
TAEHIL Program, 2006 Qualifying or Retraining Training Program	<ul style="list-style-type: none"> - Aimed at young graduates with difficulties of integration and aims to adapt their profile to the needs of the job market and therefore facilitate their integration into the workforce 	<ul style="list-style-type: none"> - ANAPEC-registered job seekers with a vocational training certificate or a bachelor's degree in need of reorientation training to develop skills demanded by the region's key sectors 	<ul style="list-style-type: none"> - State contribution to the funding of training to the tune of MAD 10,000 per participant 	<ul style="list-style-type: none"> - Manual of 'Employment Initiatives' Procedures - Law 51/99 established the creation of ANAPEC - The ANAPEC/State Progress Contract for 2006–2008 - The joint circular for the establishment of regional employability improvement committees
Support Self-Employment				
MOUKAWALATI, 2006, Entrepreneurship Promotion Program	<ul style="list-style-type: none"> - This program supports self-employment through the creation of microenterprises. It aims to support the creation of microenterprises in line with the regional economic fabric to support sustainability. 	<ul style="list-style-type: none"> - The project holder under this scheme is a graduate with one of the following: (a) certificate of education from basic education at least and (b) qualifying training provided by one of the specialized training, the list of which is set by regulation. 	<ul style="list-style-type: none"> - Pre- and post-project creation support for project leaders - State supports each project with up to MAD 10,000 - Provide guarantees for 85% of bank credit - Interest-free advance representing 10% of the investment within the limit MAD 15,000 reimbursable in six (6) years, of 	<ul style="list-style-type: none"> - Manual of 'Employment Initiatives' Procedures; - The support provided as part of the MOUKAWALATI program based on Law 51/99 establishing the creation of ANAPEC and the State Progress/ANAPEC Contract, which provides for ANAPEC to cover support costs of up to MAD 10,000 per project.

Measures	Objectives	Targets Populations	Benefits Granted	Regulatory Framework
			which three years (3) grace.	
Promote Salaried Employment				
IDMAJ Integration Program (2006)	- This program supports the transition of young people from school to work through internships in companies. Recent graduates use this as a first business experience through this program, while businesses accommodate recent graduates without having to bear excessive wage costs.	- Job seekers with a higher education degree, bachelor's degree, or equivalent or diploma vocational training	- Participating companies are exempt (for 24 months) from employer and wage contributions due to the CNSS and the TFP for internship allowance, set between MAD 1,600 and MAD 6,000 - Exemption from tax under the internship allowance, up to MAD 6,000, paid to trainees - Above exemption is continued for one additional year in case they succeed in ensuring that the trainee is employed.	- Procedures manual 'Employment Initiatives' - Law 1-93-16 (March 23, 1993) setting out incentives for companies organizing vocational training courses, as amended and supplemented by Law 13/98 and Law 39/06 - Finance Act 2006 (Article 59, paragraph 16)