

Arab Republic of Egypt



WORKFORCE DEVELOPMENT

SABER Country Report
2014

Dimensions

1. Strategic Framework

Policymakers are well aware of the disconnect between what the education system offers and what the job market requires. Such a realization is yet to be translated into a clear vision and a strategic focus towards youth employability and lifelong learning. While the Egyptian government has prioritized workforce development (WfD) for the country's economic progress, there is little evidence indicating that WfD has actually been aligned with economic development plans. The roles and responsibilities of key stakeholders in WfD remain fragmented, with no visible leadership and no unified or agreed vision and strategy. The influence of employers and industry in shaping and implementing WfD priorities is still limited.

2. System Oversight

An accreditation entity has been established and a number of interventions have been conducted on a pilot basis. Yet, the quality assurance system related to WfD (including a national qualifications framework, standards, accreditation, certification, and assessments) lacks coherence, structure, transparency, and consistency in implementation, and it is not based on a well-communicated national system. Furthermore, financial management and results-based funding arrangements are weak, as evidenced by a disconnect between public funding and performance, and limited investment by the private sector.

3. Service Delivery

Employers provide only occasional input into training curricula, and their influence on the operations of state training institutions is limited. Such institutions lack autonomy and are not required to meet specific performance targets. However, there is considerable diversity in the provision of non-state training, with providers generally conducting relevant and well-structured programs, even though they are offered few incentives to meet quality standards and expand their operations. A culture of monitoring and evaluation—one aided by reliable and freely available data—is underdeveloped.

Status

Emerging



Emerging



Emerging



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Executive Summary

An Opportunity to Empower Egypt's Youth through Advancing the Skills Agenda

From the mid-2000s to 2011, the Egyptian economy grew at a rapid pace. Yet, this economic performance has not significantly improved the country's overall competitiveness, nor has this growth impacted the masses by providing more decent jobs. In 2004, the Government of Egypt embarked on a structural reform program of liberalization and privatization, which, combined with high oil prices, booming economies in the Gulf countries, and strong global economic growth, led to real GDP growth of over 7 percent per year between FY06 and FY08. The subsequent global financial, food, and fuel crises dampened economic growth in Egypt to an average of 5 percent in FY09 and FY10, still a strong performance by international standards. However, since 2011, the macroeconomic picture has deteriorated due to unresolved political tensions and policy inflexibility. The economy contracted sharply (4.2 percent year over year) in the January–March 2011 quarter, and averaged only 1.8 percent growth for FY11. Since then, it has grown at an annual rate of 0.3 percent. In addition to political and social imbalances prior to 2011, the high poverty rate and high youth unemployment triggered the final stream of protests that brought an unprecedented change in January 2011. Egypt's future stability is challenged unless real actions are taken to combat youth unemployment through effective workforce development strategies. Analysts claim that, without an accelerated economic recovery and a sustained growth rate of 7 percent or higher for a prolonged period, the country will not be able to create enough new jobs to employ the 850,000 new annual entrants to the labor market or reduce the current rates of unemployment. Although Egypt faces significant economic growth challenges, its diversified economy does provide some growth potential. However, addressing the structural deficiencies in its education and training system must be made a priority in order to achieve that potential.

Prioritizing the Next Steps for Impact

Workforce development (WfD) refers to efforts to enable employers to find appropriately skilled workers and individuals to access the training, support, and resources they need to acquire the skills for success in the labor market. It is concerned with modalities of

skills development from formal technical and vocational education (TVET), skills upgrading for the existing workforce in the form of continuing and professional education and on-the-job training (OJT), as well as targeted training for the unemployed and other disadvantaged populations. In an effort to establish a policy dialogue platform pertaining to workforce development, the World Bank has developed a new diagnostic tool, Systems Approach for Better Education Results-Workforce Development (SABER-WfD), to assess WfD systems and to aid stakeholders in the identification of factors preventing system improvement.

The SABER-WfD assessment rates Egypt at the **Emerging** level for all three SABER-WfD Dimensions of (1) strategic framework, (2) system oversight, and (3) service delivery.¹

Strategic Framework

The Egyptian government has recognized that the roles and responsibilities of key stakeholders in workforce development are fragmented, with no visible leadership and no unified or agreed vision and strategy. Thus, it has recently taken a number of positive steps towards overcoming these issues by establishing clear leadership structures that will facilitate setting a clear strategic direction for workforce development. These steps include decisions to (i) restructure and reactivate the Supreme Council for Human Resource Development (SCHRD) to supervise the development, funding and monitoring of human resource development and employment strategies that are closely linked to national social and economic priorities, and (ii) establish the National TVET Authority as an apex-level authority to manage TVET providers and provide leadership at the policy level. However, these bodies are not yet operational, and the decisions may be revisited in response to the 2014 Constitution.

A major weakness in this Dimension is the limited influence of employers and industry in shaping and implementing workforce development priorities. Employers' engagement in workforce development has been increasing gradually in recent years through, for example, the establishment of sector-based Enterprise TVET Partnerships (ETPs), company-based technical schools, and civil society-led training initiatives.

¹ System development is rated on a four-point scale against standardized rubrics based on available knowledge on global good practice for nine important Policy Goals that matter for WfD. See Figure 2 for a general description of the characteristics of each of the four levels of development.

However, these initiatives are still limited, unstructured, and inadequately regulated. The government needs to consider how to strengthen employer engagement, such as through legislation and both financial and non-financial incentives. The aim must be to establish a demand-driven modality with effective employer participation.

System Oversight

Poor financial management, resulting from a lack of procedures to ensure that funds are appropriately allocated to achieve system efficiency and equity, and weak quality assurance are major challenges that need to be urgently addressed. Critical weaknesses in funding arrangements include the failure to link public funding to performance, limited investment by the private sector, and the absence of any formal monitoring and evaluation of the impact of training programs on beneficiaries.

Legislation is required to: (i) promote investment in education and training by non-state providers; (ii) promote the autonomy of public institutions; (iii) diversify funding sources, by restructuring the current training levy to meet the needs of both employers and employees; and (iv) use funding mechanisms to create incentives for performance.

Positive developments in quality assurance are largely limited to the development of competency standards for three major sectors (manufacturing, tourism, and construction) through the National Skills Standards Project (NSSP). The National Authority for Quality Assurance and Accreditation in Education (NAQAAE) was established in 2005 as an accreditation body, but its scope is limited to formal education institutions, and does not include technical or vocational training. Thus, there is no comprehensive, clear and functioning system in place to establish nationally recognized certification and accreditation standards in TVET. This is mostly due to the lack of political will, coordination, and clear mandates for existing institutions. Training providers are not required to seek accreditation, nor are they provided with incentives to do so, particularly in the public TVET sector. In the absence of incentives, few technical schools apply to the NAQAAE for accreditation.

Service Delivery

The links between public training institutions and industry are sporadic, resulting in limited involvement by employers in curriculum design and the specification

of standards for training facilities. As regards private sector training institutes, there are some good programs that are well received by both students and employers, but the scope of these initiatives is very limited.

The performance of public training institutions is affected by several factors. In particular, they are: (i) not required to meet explicit performance targets; (ii) not evaluated according to clear performance indicators; and (iii) not granted autonomy by the government, thus affecting their ability to retain income, revise curricula, introduce new programs or recruit staff. As regards, non-state providers, incentives are needed to encourage them to meet quality standards.

At present, there is no culture of monitoring and evaluation (M&E), which would support accountability. M&E can provide feedback to the education and training system and thus improve the service providers' responsiveness to market needs along the lines of recognized and agreed quality standards. Egypt also needs to collect, share, and analyze data so as to identify trends in skills demand and supply, as well as gaps and mismatches.

The above summary reflects that a policy framework for workforce development in Egypt is sub-optimal and still evolving. The analysis reveals gaps in specific aspects of policies and practices related to setting a clear, strategic vision for workforce development, institutional fragmentation, and a disconnect between economic development priorities and workforce development strategy. Addressing all the gaps will require a sustained commitment and collaboration across all stakeholders including the government, private sector employers, civil society organizations, beneficiaries, and service providers.

1. Introduction

Workforce development (WfD) lies at the core of Egypt's youth-led January 2011 revolution; youth empowerment and the ability to find a decent job are linked to the three key demands of reasonable living standards, freedom, and social justice. Education reform and the promotion of employment and workforce development were accordingly set as the three top political agenda priorities for future Egyptian governments. There is a clear understanding of the link between the quality of education, notably technical and vocational education and training (TVET), and Egypt's economic, social, and political development. Along those lines, steps were taken in January 2013 to restructure the Supreme Council for Human Resource Development (SCHRD) and establish the National Council for Education and Scientific Research, as well as to establish the National TVET Authority (NTA) as stipulated in the 2012 Constitution.² As indicated earlier, this is likely to be revisited in light of the 2014 Constitution.

To inform policy dialogue on these important issues, this report presents a comprehensive diagnostic of the country's workforce development policies and institutions. The results are based on a new World Bank tool designed for this purpose. Known as SABER-WfD, the tool is part of the World Bank's initiative on Systems Approach for Better Education Results (SABER) that aims to provide systematic documentation and assessment of the policy and institutional factors that influence the performance of education and training systems.³ The SABER-WfD tool encompasses initial, continuing, and targeted TVET that are offered through multiple channels, and focuses largely on programs at the secondary and post-secondary levels.

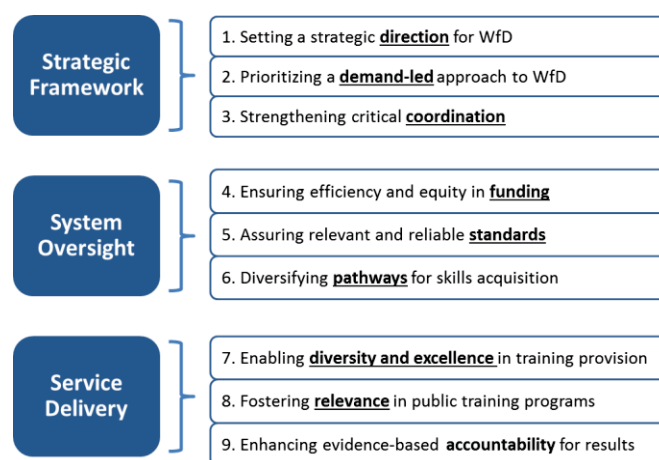
Analytical Framework

The tool is based on an analytical framework⁴ that identifies three functional Dimensions of workforce development policies and institutions:

- (1) *Strategic framework*, which refers to the praxis of advocacy, partnership, and coordination in relation to the objective of aligning WfD in critical areas to priorities for national development;
- (2) *System oversight*, which refers to the arrangements governing funding, quality assurance, and learning pathways that shape the incentives and information signals affecting the choices of individuals, employers, training providers, and other stakeholders; and
- (3) *Service delivery*, which refers to the diversity, organization, and management of training provision, both state and non-state, that deliver results on the ground by enabling individuals to acquire market- and job-relevant skills.

Taken together, these three Dimensions allow for systematic analysis of the functioning of a workforce development system as a whole. The focus in the SABER-WfD framework is on the institutional structures and practices of public policymaking and what they reveal about capacity in the system to conceptualize, design, coordinate, and implement policies in order to achieve results on the ground. Each Dimension is composed of three Policy Goals that correspond to important functional aspects of workforce development systems (see Figure 1). Policy Goals are further broken down into discrete Policy Actions and Topics that reveal more detail about the system.⁵

Figure 1: Functional Dimensions and Policy Goals in the SABER-WfD Framework



Source: Tan et al. 2013

² This report was drafted and the findings were disseminated to stakeholders prior to June 30, 2013. Following the events of June 30, 2013, a new constitution was put in place in January 2014. The 2014 Constitution does not make an explicit reference to TVET authorities, yet Article 20 on Technical education, professional training, states "The state commits to encourage and develop technical education and professional training and expand all types thereof in accordance with global quality criteria, in keeping with the needs of the labor market."

³ For details on SABER see www.worldbank.org/education/saber.

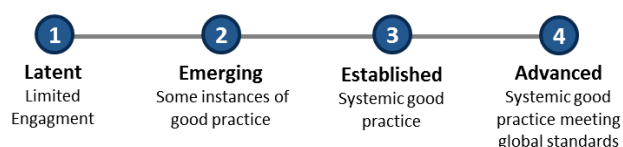
⁴ For an explanation of the SABER-WfD framework see Tan et al 2013.

⁵ See Annex 2 for an overview of the structure of the framework.

Implementing the Analysis

Information for the analysis is gathered using a structured SABER-WfD Data Collection Instrument (DCI). The instrument is designed to collect, to the extent possible, facts rather than opinions about workforce development policies and institutions. For each Topic, the DCI poses a set of multiple choice questions which are answered based on documentary evidence and interviews with knowledgeable informants. The answers allow each Topic to be scored on a four-point scale against standardized rubrics based on available knowledge on global good practice (see Figure 2).⁶ Topic scores are averaged to produce Policy Goal scores, which are then aggregated into Dimension scores.⁷ The results are finalized following validation by the relevant national counterparts, including the informants themselves.

Figure 2: SABER-WfD Scoring Rubrics



Source: Tan et al. 2013

The rest of this report summarizes the key findings of the SABER-WfD assessment and also presents the detailed results for each of the three functional Dimensions. To put the results into context, the report begins below with a brief profile of the country's socioeconomic makeup. This is followed by a summary of the SABER-WfD key findings and overall policy implications. A discussion of each of the three Dimensions and respective Policy Goals is then presented in the last three chapters of the report.

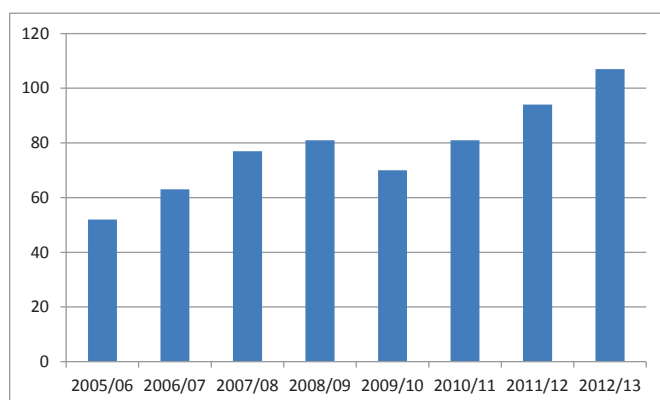
⁶ See Annex 3 for the rubrics used to score the data. As in other countries, the data are gathered by a national principal investigator and his or her team, based on the sources indicated in Annex 4; and they are scored by the World Bank's SABER-WfD team. See Annex 5 for the detailed scores and Annex 4 for a list of those involved in data gathering, scoring and validation and in report writing.

⁷ Since the composite scores are averages of the underlying scores, they are rarely whole numbers. For a given composite score, X, the conversion to the categorical rating shown on the cover is based on the following rule: $1.00 \leq X \leq 1.75$ converts to "Latent"; $1.75 < X \leq 2.50$, to "Emerging"; $2.50 < X \leq 3.25$, to "Established"; and $3.25 < X \leq 4.00$, to "Advanced."

2. Country Context

Despite strong economic growth in the years before the 2011 revolution, Egypt remained only modestly competitive; in the 2010/2011 Global Competitiveness Index (GCI). Egypt ranked 81st out of 133 countries and fell a further 26 places to 107th out of 144 countries in the 2012/2013 GCI (see Figure 3). This low ranking is mainly due to: (i) low labor market efficiency; (ii) the poor quality of education and training system performance that adversely impacts workforce development; and (iii) misalignment between economic development priorities and workforce development policies and practices. The January 2011 revolution brought about a significant change to Egypt's dynamics, offering a number of opportunities and challenges for future development. This has put even greater emphasis on social equity and youth empowerment, where addressing youth unemployment continues to be an urgent challenge and a socio-economic priority. However, continuing uncertainty is likely to adversely affect workforce development policies, as well as political, economic, and social development.

Figure 3: Egypt's Ranking in the Global Competitiveness Index



Source: GCI reports

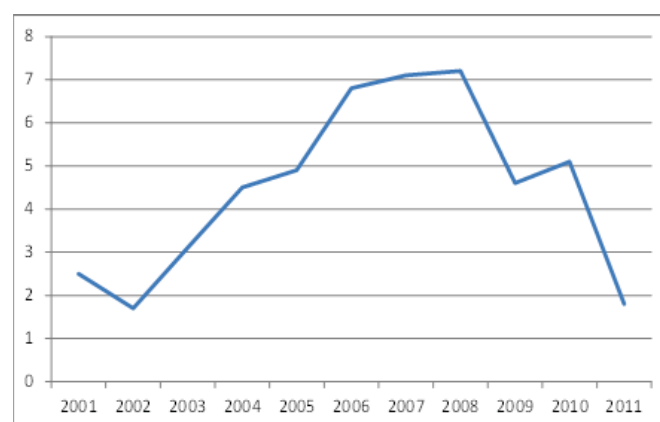
The current education system presents a mixed picture in terms of opportunities and funding. Every Egyptian is guaranteed the right to free public education. In addition, a well-prepared Basic and General Education Strategy that was developed in 2007 is now being adopted. As a result, significant progress has been made over the past 25 years, and according to UNESCO,⁸ in 2011 about 95 percent of eligible children were enrolled in primary school. However, the situation is different for

early childhood education, with evidence indicating that despite its proven impact on students, it remains underfunded and is available to only 20 percent of Egypt's young children. Egypt continues to rank in the bottom one-third of the International Association for the Evaluation of Educational Achievement's "Trends in International Mathematics and Science Study" (TIMSS). Discouragingly, the average score across all participating countries improved between 2003 and 2007 from 467 to 500, whereas Egypt's average score fell from 406 to 391. This is despite a national effort in the early 1990s, when the Egyptian government sought to improve education as a critical ingredient of a broader initiative to spur economic growth. Financial resources were committed to building new schools, broadening access, and increasing enrolment rates. Critics argue that, while the education budget increased, a relatively small portion reached the students, whose performance on international standardized testing has not improved.

The most significant changes in Egyptian education over the past 60 years can be seen at the tertiary level, with the number of public universities increasing from four to 18, and the establishment of 17 private universities. Within a generation, Egypt produced tens of thousands of doctors, engineers, and lawyers. However, although more than 2.5 million Egyptians are now attending university (nearly one out of every three university-aged Egyptians), this increase in the number of universities has not kept pace with the surge in applicants.

Furthermore, in recent years the economy has not created enough new jobs to absorb the new university graduates. As a result, graduates have been forced to accept jobs unrelated to their field of study.

Figure 4: GDP Real Growth Rate (%)



Source: CAPMAS

⁸ UNESCO, UIS Statistics in Brief, Egypt 2011, www.unesco.org.

Table 1: Population in thousands and growth rate (2002-2012)

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Population	68,023	69,502	71,009	72,544	74,101	75,677	77,267	78,867	80,472	82,080	83,688
Growth rate (%)	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9

Source: US Census Bureau, International Database

Economic Reform and Growth. Since the 1990s, the government has introduced economic liberalization policies for private sector expansion through privatization and new business development activities. More notably, in 2004, a series of macroeconomic reforms were launched, supported by a favorable external economic environment. This generated a significant acceleration in GDP growth for four successive years (from 3.2 percent in FY04 to 7.2 percent in FY08) (see Figure 4) and offered an enabling environment for doing business. Egypt's economy showed a solid level of resilience to the 2008 international economic crisis; GDP growth reached 4.6 percent in FY09 and an average of 5 percent for FY 2009 and FY 2010. Moreover, throughout the crisis, the banking sector remained strong.

The situation since 2011, however, has been a different story. The disruption to commercial activity and the prolonged closure of the stock market in 2011 undermined investor confidence: GDP growth for FY2011 came in at 1.8 percent, which is much lower than the 7 percent forecast of the Ministry of Planning. According to the Central Bank of Egypt (CBE), 2012 GDP growth was 2.5 percent, while the 2013 forecast was 3.5 percent. Tourism revenues fell in 2011 by more than 33 percent according to the Ministry of Tourism; FDI dropped to US\$900 million in 2011 and, according to the CBE, international reserves fell sharply to the extent that, by early 2012, reserves were sufficient for only three months of imports, which is less than half of what was available before January 2011.

Although Egypt continues to face significant economic challenges, its diversified economy offers a range of policy options for decision makers. Its relatively balanced economy is diversified across agriculture (14.5 percent of GDP in 2012; industry (37.4 percent) and a significant services sector (47.9 percent).⁹ There are key potential growth sectors including agriculture and food

processing, manufacturing, pharmaceuticals, information technology and communications, energy and renewable energy, financial and business services, transport and logistics, as well as the wholesale/retail sector.¹⁰ The construction and tourism sectors are well established, but are more volatile to economic and political shocks, both nationally and internationally.

Poverty. For the past decade, Egypt's commitment towards combating poverty has been formalized in its development plans. In particular, the Sixth Five-Year Plan for Economic and Social Development (2007-2012) aimed to reduce poverty to 15 percent by 2012. According to the UNDP Egypt Human Development Report 2010, this goal, which is based on national poverty lines, takes into account that Egypt has already fulfilled its international commitment toward reducing extreme poverty (measured by US\$1 per day) by half. There was also a clear commitment from the Government of Egypt before January 2011 toward reducing regional disparities in poverty rates and living standards.

Demographics. With a population of over 83 million in 2012 (see Table 1), Egypt ranks as one of the most highly populated countries in the world; it is the most populous among Arab countries and the third largest in Africa. Almost a quarter of the population (23.5 percent or over 20 million people) is between the ages of 18 and 29, and the median age is 24.3 years. This youth bulge, which will widen in the short term, represents both an opportunity and a risk.

The opportunity is to develop a skilled population that is capable of generating income and lowering the dependency rates. The risks, as outlined in the UNDP Egypt Human Development Report 2010, focus on the situation of 18- to 29-year-olds: this is the time when youths transition from school to work, higher education, citizenship, marriage, and the establishment of independent households. These five transition periods, if well guided, will propel young human capital into becoming a significant factor in the growth and development of the country as a whole. On the other

⁹ CIA, The World Factbook, <https://www.cia.gov/library/publications/the-world-factbook/>.

¹⁰ Oxford Business Group, The Report: Egypt 2012.

hand, if badly managed, the consequences will be poorer skills and job outcomes, and thus prolonged periods of unemployment; a fragile understanding of citizenship; and potential social unrest and instability.

Employment. According to labor market experts, actual unemployment is likely to be substantially higher than the official figures and characterized as a combination of cyclical, frictional, and structural unemployment. In 2011, Egypt's labor force reached 27.7 million compared to approximately 21.3 million in 2005. It will continue to grow, with a current estimate of 850,000 new entrants to the labor market per year. The unemployment rate, which was almost 9.4 percent in 2009, rose to 13 percent by the end of 2012, with reports indicating that at least 75 percent of the unemployed in Egypt are young people (aged 15-29).¹¹ This increase in unemployment is largely due to the impact of the financial and economic crisis, and further deepened by the revolution.

Given the scarcity of formal jobs, many new entrants to the labor market are forced to work in the informal sector (in low-quality/low-pay jobs). This is mostly due to the mismatch between labor market needs and/or recruitment practices in the formal sector, and the skills of young workers. The government needs to understand the context of both the formal and informal sectors in order to develop policies and interventions that address the training and employment needs of all Egyptians. This requires contending with the fact that there is currently little data on a major employer – the “informal economy.”

The OECD/World Bank review of Higher Education in Egypt points to the phenomenon of ‘educated unemployment’ caused by an excess supply of university graduates over labor market demand and the overproduction of graduates in the social sciences.¹² At the same time, the labor market suffers from shortages of technical and mid-level professional skills, while TVET suffers from low status and lack of investment that is adversely affected by mismanagement of available resources. An inadequately educated workforce has been identified¹³ as one of the main obstacles to economic development and competitiveness, and skills shortages have been underlined as a deficit that needs

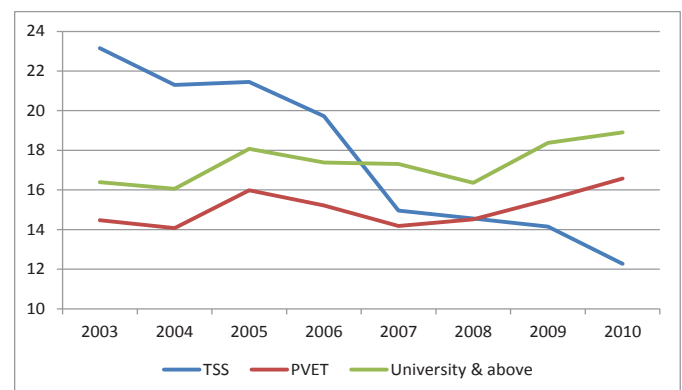
to be compensated for through educational and training policies.

If educational attainment is considered, the unemployment rate (of people aged over 15) is higher for technical secondary school (TSS) and university level graduates compared to those with other educational levels (including those who are illiterate and have less than intermediate level education). However, it is important to note that:

- (i) The unemployment rate among graduates of post-secondary vocational education (PVE) is relatively low compared to university graduates. But, in terms of numbers, the number of graduates of the PVE sector is very low compared to those of general education (university level or secondary level);¹⁴ and
- (ii) The unemployment rate among the TSS graduates has declined sharply between 2003 and 2010.

These facts provide policymakers with important evidence to prioritize the development of both secondary and post-secondary technical education (see Figure 5).

Figure 5: Evolution of Unemployment Rate (%) for TSS, PVET, and University & Above Levels



Source: PVET in Egypt, Country Background Report, 2011

Demand for skills. There is a weak link between the education and training system, and the labor market. This manifests itself as a mismatch between the skills needed by the job market and what is being produced by the education and training system. The mismatch is also driven by the lack of information available about the needs of the labor market, as well as limited vocational guidance and early counseling. For example, the number of agriculture technical secondary schools

¹¹ CAPMAS, 2012.

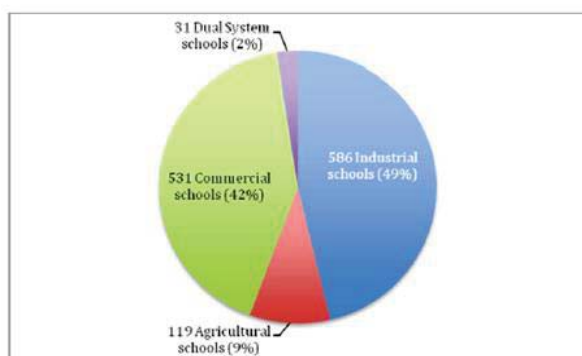
¹² OECD/The World Bank, Reviews of National Policies for Education: Higher Education in Egypt 2010.

¹³ See, for example, IFC Education for Employment Survey, 2010.

¹⁴ Strategic Planning Unit of the MOHE, PVET in Egypt, Country Background Report, 2011.

(TSSs) represents 9 percent of total TSSs (see Figure 6), while the agriculture sector employs 28 percent of the labor force (see Figure 7). This mismatch is further deepened by the fact that that agriculture TSSs accept candidates who have obtained comparatively lower grades in primary education. They are the last resort for students that have failed vocational preparatory schools and often offer training that does not align with job market requirements¹⁵ (see Figure 11 for an illustration of the different tracks within the Egyptian system).

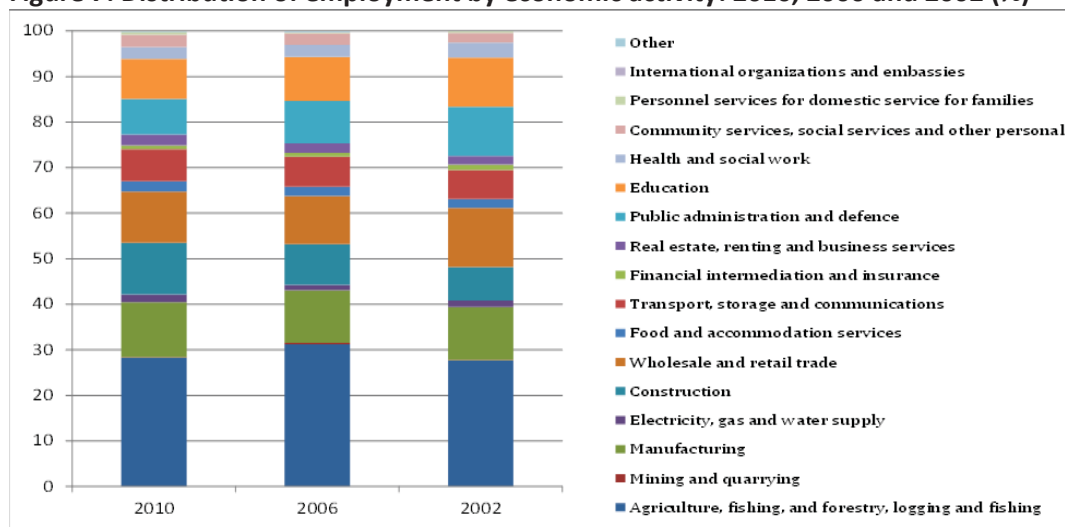
Figure 6: Number and Percentage of Different Types of Technical Secondary Schools



Source: Ministry of Education, Technical Education Strategy (2011/12-2016/17), September 2011.

A shortage of skilled labor, especially for level 2 (skilled) and level 3 (technicians), has created bottlenecks in the more dynamic sectors, as well as wage inequalities. Modernization of the industrial and service sectors has been primarily structured on an upgrading towards medium technology levels, leading to a growing demand for personnel with medium skill levels. This is accompanied by a growing demand for higher technical and managerial skill levels, but on a comparatively smaller basis. However, only one-third of the new labor market entrants are hired by the priority sectors,¹⁶ which include manufacturing, transport, communication, electricity and gas. The current shortages of middle level skills have contributed to major enterprises choosing to make capital intensive investments so as to decrease their labor requirements.

Figure 7: Distribution of employment by economic activity: 2010, 2006 and 2002 (%)



Source: PVET in Egypt, Country Background Report, SPU, MOHE, 2011

¹⁵ The pre-tertiary education system is divided into three main stages: six years of primary school; three years of preparatory school; and three years of secondary school. Those who obtain low grades at the end of the primary stage are forced to enroll in vocational preparatory schools. For the secondary school stage, students may follow the general track or the technical secondary schools track; the technical track tends to enrol a higher number of students who receive low scores at the end of the preparatory stage. They may also participate in the program offered by the Productivity and Vocational Training Directorate (PVT), which is an apprenticeship scheme affiliated to the Ministry of Trade and Industry.

¹⁶ Strategic Planning Unit of the MOHE, PVET in Egypt, Country Background Report, 2011.

Overview of Findings and Implications

This chapter highlights findings from the assessment of Egypt's workforce development system based on the SABER-WfD analytical framework and tool. The focus is on policies, institutions, and practices in three important functional Dimensions of policymaking and implementation—strategic framework, system oversight, and service delivery. Because these aspects collectively create the operational environment in which individuals, firms and training providers, both state and non-state, make decisions with regard to training, they exert an important influence on observed outcomes in skills development. Strong systems of workforce development have institutionalized processes and practices for reaching agreement on priorities, for collaboration and coordination, and for generating routine feedback that sustain continuous innovation and improvement. By contrast, weak systems are characterized by fragmentation, duplication of effort, and limited learning from experience.

The SABER-WfD assessment results summarized below provide a baseline for understanding the current status of the workforce development system in the country as well as a basis for discussing ideas on how best to strengthen it in the coming years.

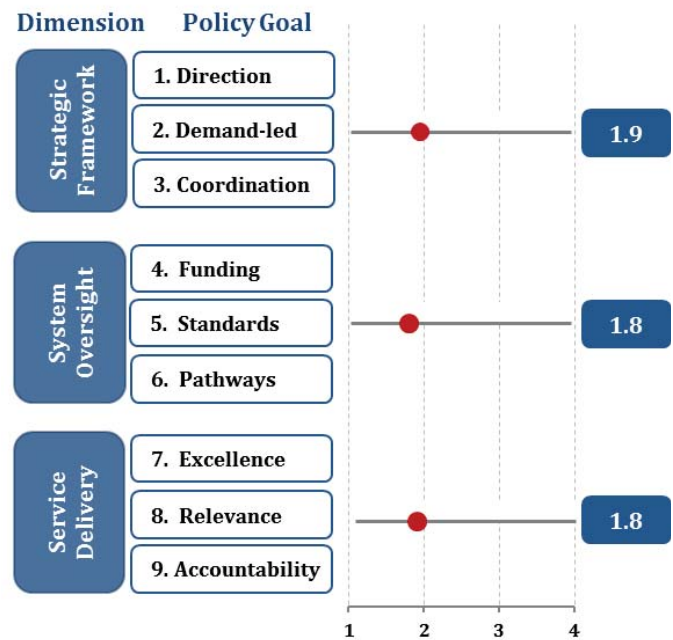
Overview of the SABER-WfD Scores

Figure 8 shows the overall results for the three Functional Dimensions in the SABER-WfD framework. The score for each functional Dimension is an aggregation of the scores for the underlying Policy Goals associated with it.¹⁷ The scores for Strategic Framework (1.9), System Oversight (1.8) and Service Delivery (1.8) are all rated at the Emerging level. Given that the scores for the three Dimensions are very similar and are situated in the first half of the Emerging category, this strongly suggests that Egypt's reform initiatives must take a holistic approach towards the workforce development system in order to have a concrete impact. A number of the challenges identified share common causes at the strategic level. Given the multi-sectoral nature of workforce development challenges, sustained strategic leadership can provide the system with a clear direction that makes coordination and accountability feasible at the levels of governance and service delivery. Thus, the evident lack

¹⁷ See Annex 5 for the full results.

of leadership and sustained commitment in the sector in Egypt suggests that addressing strategy level issues could have a cascading effect on those issues at the system as well as service delivery levels.

Figure 8: Egypt's Dimension-Level Scores



Note: See Figure 2 for an explanation of the scale on the horizontal axis.
Source: Based on analysis of the data collected using the SABER-WfD questionnaire.

Policy Implications

This report provides decision makers with four key observations to consider while reforming workforce development. First, the weaknesses and challenges identified using the SABER-WfD diagnostic tool are in line with previous assessments and reports. However, the SABER-WfD tool is driven by a more rigorous and detailed assessment that will facilitate efforts to move forward. Second, both the detailed data collection instrument and the rubrics used for scoring (Annex 3) reflect good practices adopted in more advanced countries in terms of effective policies and institutions. This opens up potential pathways to resolve the challenges at hand. Third, the reform of workforce development -related policies, systems, and delivery is a lengthy learning process that can only be realized through strong leadership and continuous and timely feedback to guide implementation and adjustments of policy actions. Fourth, the diagnosis offers concrete examples of pilot programs in the past 20 years that have addressed some of the challenges and yet have remained limited in scope and impact. Now is the time to revisit the elements of success in those ad-hoc

interventions, subject such pilots to rigorous evaluation, and replicate those that merit adoption on a nationwide scale.

Advancing the workforce development agenda can be undertaken progressively by adopting a step-wise approach. This requires recognition that the full set of SABER-WfD recommendations needs to be prioritized depending on country conditions, available resources, and national economic development plans. Driven by the diagnosis and the rubrics, the following six actions (two for each functional Dimension) are potentially an effective basis for policy dialogue with the government and relevant stakeholders to promote current workforce development policies, systems, and institutions.

Strategic Framework. Despite a number of positive developments in setting a clear strategic direction for workforce development in recent years, two key actions need to be considered by decision makers in Egypt to improve the strategic framework:

- **Establish an apex-level authority.** The country has the appropriate institutional structure in place and recently a decision was made to restructure the Supreme Council for Human Resources Development (SCHRD)¹⁸ to provide system leadership, supervise workforce development reform, and establish a TVET apex-level authority to oversee implementation. However, these arrangements are not yet operational, and may be revisited under the 2014 Constitution.

To ensure that the institutions involved in workforce development reform collaborate, and thereby avoid the pitfalls of the past, certain provisions need to be put in place and monitored: (i) development of a unified vision and strategy for workforce development in line with economic development priorities; (ii) clarification of the roles of the many agencies involved to improve coordination, as well as to enforce clear accountability based on agreed outputs; and (iii) establishment of monitoring and evaluation mechanisms with the objective of assessing impact and replicating and scaling up successful pilots.

¹⁸ The 2012 Constitution also stipulated the establishment of the National Council for Education and Scientific Research. This is likely to be revisited in light of the 2014 Constitution.

Going forward, the government could consider using the scoring of assessments like SABER-WfD as the basis for setting priorities and developing plans for a TVET apex-level authority, and for developing relevant performance indicators for all stakeholders in the system. Relevant institutions should be required to collaborate and align their plans with economic development priorities.

- **Establish a demand-driven approach to WfD through effective employer participation.** Recent years have witnessed a growing trend of employer engagement in workforce development. Examples include the establishment of sector-based ETPs,¹⁹ company-based technical schools, and civil society-led training initiatives. Nonetheless, considering the size of the country, these pilots are still limited, unstructured, and inadequately regulated.

To advance their potential, the diagnostic tool highlights certain actions that have proven effective in other countries. These include: (i) institutionalizing the involvement of employers (and other relevant stakeholders) through appropriate legislation in workforce development planning, oversight, and financing, and not just in implementation; (ii) developing appropriate incentives for the further engagement of employers; and (iii) promoting and regulating Public–Private Partnerships (PPPs) in education and establishing sustainability mechanisms for sector-based institutions.

Egyptian decision makers could take immediate and short-term actions to facilitate the institutionalization of employer engagement in workforce development by supporting sector-based institutions like the piloted ETPs, both institutionally and financially, as well as expanding them in priority sectors. This should follow a rigorous and independent assessment of ETPs' viability and value added. Furthermore, the government could develop both financial and non-financial incentives for employer engagement, in addition to restructuring the

¹⁹ The ETPs are independent organizations established with support from the EU-funded TVET Reform Program that started in 2005. They are employer-led organizations that establish formal links between employers and TVET providers at the sectoral and local level. Currently, there are ongoing discussions to house them under the board of the Industrial Training Council (ITC) to guarantee their financial and institutional sustainability. However, this had not been finalized at the time of drafting the report.

existing National Training Fund (training levy) in order for employers to receive direct benefits from the money put into the levy. This may include scaling up the funding mechanism to finance demand-driven training developed under the World Bank-supported Skills Development Project.

System Oversight. Based on the assessment, Dimension 2, which focuses on System Oversight, is the weakest element of the workforce development system in Egypt. The system has seen some positive developments and features, like the establishment of specialized quality assurance bodies, increased public expenditure on education and training after the revolution, and diversified pathways for technical and vocational education and training at the pre- and post-secondary levels. However, there are still fundamental challenges to be addressed to improve system oversight:

- **Adopt an effective quality assurance mechanism.** Initiatives like the National Skills Standard Project (NSSP)²⁰ and institutions like the National Authority for Quality Assurance and Accreditation in Education (NAQAAE)²¹ are positive and needed developments. However, they have proven to be insufficient in creating a fully functional quality assurance system that provides standardization, accreditation, and certification.

To reach this goal, this report highlights several actions that could be considered by policymakers: (i) developing a national qualifications framework (NQF) to provide a central mechanism for unifying occupational standards and encouraging the recognition of all forms of skills acquisition; (ii) improving labor market responsiveness to training provision and facilitating the monitoring and evaluation functions at all levels of the system; and (iii) improving all aspects of training

provision (developing standards and curricula, and training trainers) according to national standards.

- **Establish a performance-based funding mechanism.** One of the weakest features of the system is the financial management, including underdeveloped regulations in resource utilization. The system would require legislation that: (i) promotes investment in education and training by non-state providers; (ii) promotes the autonomy of public institutions; (iii) diversifies funding sources, including by restructuring the current training levy to meet the needs of both employers and employees; and (iv) uses funding mechanisms to create incentives for performance. Adopting this legislation should be complemented by a well-designed financial cost/benefit analysis tool.

The above two messages are interrelated and require the government to work on a comprehensive system for quality assurance and financial management. This will require direction, leadership, and clarity in the roles of all existing institutions in these two domains. The workforce development system oversight cannot improve under the current state of fragmentation, overlap, and piecemeal approaches.

Service Delivery. There are some good initiatives that are valued by both students and employers (for example, the diplomas awarded by the Don Bosco Institute),²² but the scope of such initiatives is very limited. Generally, training providers are still disconnected from the demands of the labor market and have limited tools to assess current or future trends for competencies. Several key actions are required to improve the Service Delivery Dimension:

- **Establish a culture of M&E to support clear accountability.** The existing institutions that attempt to conduct labor market research are underdeveloped and rarely reach policymakers or training providers with their information. This report recommends the development of an operational national labor market information

²⁰ The NSSP was implemented between 2000 and 2006 by the Egyptian Social Fund for Development. National Skills Standards with associated assessment systems were developed for three main sectors. The skills standards were developed in close cooperation with employers and, where they are still in use, appear to have a high level of credibility. The NSSP standards are now administered by the relevant sector council or federation (Industrial Training Council, Egyptian Tourism Federation, and the Egyptian Federation for Construction & Building Contractors).

²¹ Established in 2007, the NAQAAE is an independent quality assurance and accreditation body with administrative and financial autonomy linked to the prime minister. It plays a useful role in improving the delivery of education through a greater emphasis on accreditation mechanisms and processes. The NAQAAE only deals with formal education institutions and its mandate does not include vocational training centers.

²² The Don Bosco Institute, founded in 1926, is managed by the Italian Silesian Brothers. Rather than turn out old fashioned/second-chance diplomas, its three- and five-year diploma courses provide a path to employment, decent pay, and career progression, which are the very same elements lacking in the majority of the public TVET institutions. Its degrees are issued by the Italian government and recognized by the Egyptian Ministry of Education.

system (LMIS) to provide data collection and analysis of labor market trends. This can foster a culture of monitoring and evaluation (M&E) to advance workforce development. It can also provide feedback to the education and training system and thus improve service providers' responsiveness to market needs.

- **Establish a national system for vocational guidance and counselling.** In conjunction with the LMIS, a national system for vocational guidance and counselling at an early stage of the learners' schooling could be established as an integral element of a national strategy for improving the image and status of technical and vocational pathways, and addressing deep-rooted social and cultural misconceptions.

4. Aligning Workforce Development to Key Economic and Social Priorities

Workforce development is not an end in itself but an input toward broader objectives: boosting employability and productivity, relieving skills constraints on business growth and development, and advancing overall economic growth and social wellbeing. This chapter briefly introduces Egypt's socioeconomic aspirations, priorities and reforms before presenting the detailed SABER-WfD findings on the Strategic Framework Dimension and their policy implications.

Socioeconomic Aspirations, Priorities, and Reforms

In the wake of the political upheaval in January 2011, there are a number of socioeconomic priorities that need to be addressed by the government. Before 2011, economic growth was concentrated in selected segments of Egyptian society and did not trickle down to the middle and lower classes. In addition, the pre-2011 economic growth benefited larger companies to a much greater extent than small- and medium-sized enterprises (SMEs), which employ more than 90 percent of the non-agricultural workforce.²³ Furthermore, high poverty rates, including significant regional differences, rural/urban disparities, and high youth unemployment remain persistent challenges. Analysts claim that without a sustained growth rate of 7 percent or higher for a prolonged period the economy will not be able to create enough new jobs to employ the hundreds of thousands of new labor market entrants each year, let alone reduce the current unemployment rates.

Effective workforce development strategy will need to take into consideration the following structural issues:

- **Employment growth and labor market imbalances.** The Egyptian labor market is currently growing at a rate of approximately 850,000 entrants each year. The employment challenge is not limited to the number of jobs but also to the quality of these jobs. In the formal sector, where expectations remain high, only a limited number of job opportunities are being created. This is primarily due to the current capital-intensive structure of the Egyptian economy, where significant foreign and national investments have resulted in a decrease in labor

utilization in the more dynamic sectors. Of the millions of jobs created during the last decade, most are in the informal sector, which accounted for an estimated 75 percent of the jobs created between 1998 and 2006.²⁴ In 2006, the informal sector employed 58 percent of those in the private sector. Additionally, only one-third of all paid employees have legal contracts, of which 30 percent have social insurance and 21 percent have medical insurance.

- **TVET reform and the skills mismatch.** Numerous reports²⁵ and studies have highlighted the lack of adequate and needed skills as a major constraint to economic development. These reports specifically argue that there is a need to change the current mindset from one that views TVET as a marginal tool for easing pressure off tertiary education, to a means for aligning labor supply with industry's demand for skilled workers. Although TVET graduates constitute a large and growing group among new entrants into the labor market (63 percent of those leaving basic education pursue technical education), this type of education is not receiving adequate attention and investment. Furthermore, despite the fact that a university degree comes with a certain social cache to which many youth and their parents aspire, according to 2010 statistics, more than 900,000 university graduates cannot find work within their field of specialization.²⁶ If these imbalances are to change, national development plans and strategies must stress the importance of strengthening TVET and its various components and make them key instruments for meeting Egypt's workforce development and economic priorities, which include reducing unemployment, creating social equity, and enhancing the country's global competitiveness.

²⁴ Oxford Business Group, The Report: Egypt 2012.

²⁵ The 2006 Industrial Development Strategy – Industry: the Engine of Growth – speaks of the mismatch between the outputs of the education system and the needs of employers. The Arab World Competitiveness Report (2011-12) cites the workforce's poor quality of education as the fourth most problematic factor in doing business in the region. According to the UNDP's 2002 Arab Human Development Report, Egypt's overall quality of education was undermined by large class sizes and underqualified teachers, along with outdated curricula and pedagogical methods, and deteriorating infrastructure. The 2013 World Bank/IFC Doing Business Report highlights Egypt's low ranking.

²⁶ Strategic Planning Unit of the MOHE, PVET in Egypt, Country Background Report, 2011.

²³ CAPMAS, 2006 census.

Current and Proposed Reforms

Although the government appointed in August 2012 is yet to develop and communicate a comprehensive strategy for workforce development that is aligned with future economic development plans, there are several initiatives that are worth mentioning at this stage.

Governance: At the time of conducting the SABER assessment and drafting this report, two important decrees were being drafted within the Prime Minister's Office as a result of several months of discussions and research. The first is a decree articulating the process for restructuring and reactivating the Supreme Council for Human Resource Development (SCHRD) that has been dormant since its establishment in 2000. The proposal is for the Prime Minister to head the SCHRD and supervise the development, funding and monitoring of human resource development and employment strategies that are closely linked to national social and economic priorities. The second decree outlines the establishment of a National TVET Authority (NTA) that would be responsible for managing all TVET providers to resolve the system's current fragmentation through providing much needed leadership at the policy level. In addition to these two decrees, the 2012 Constitution stipulated the establishment of a National Council for Education and Scientific Research (NCESR) that will have oversight of education reform. It remains unclear how these institutions will function or interact.

TVET Reform: The government is clearly committed to undertaking comprehensive TVET reform to combat unemployment and improve the country's competitiveness. This was declared in a national conference organized by the Shoura Council (Upper House of Parliament) in November 2012, and relevant ministries are following up on the respective recommendations until the NTA is established and operational. The process would potentially lead to a unified national TVET strategy to replace the many strategies currently being developed by different authorities (Ministry of Education [MOE], Ministry of Higher Education [MOHE], and the TVET Reform Program). Furthermore, the government is currently negotiating with the European Union a grant (€50 million) for technical assistance to support TVET reform (known as the TVET II Program). The objective of the TVET II program is to carry out a structural reform of the governance, quality, and relevance of TVET as well as of

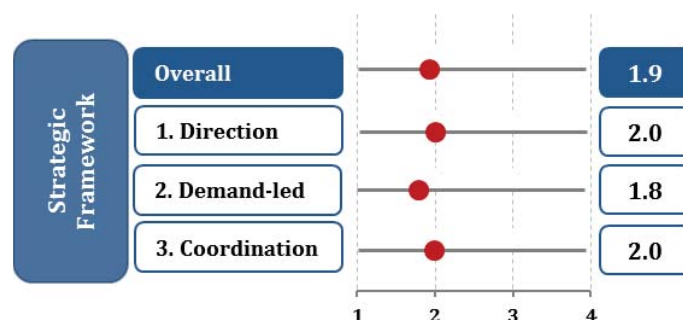
the policies and initiatives fostering the school-to-work transition.²⁷

Active Labor Market Programs: A National Program for Training for Employment was launched in July 2012. It is coordinated by the Ministry of Manpower and Migration (MOMM) and the Ministry of Planning and International Cooperation (MOPIC), and implemented by the Industrial Training Council (ITC).²⁸ It aims to train and employ up to 800,000 job seekers per year through a comprehensive process of: (i) identifying employers' needs and vacancies; (ii) selecting candidates; (iii) training the candidates according to the national skills standards developed to date; and (iv) achieving employment for the candidates in decent jobs.

SABER-WfD Ratings of the Strategic Framework

Based on data collected by the SABER-WfD questionnaire, Egypt receives an overall rating of 1.9 (Emerging) for the Strategic Framework Dimension (see Figure 9). The role of workforce development in realizing Egypt's socioeconomic aspirations materializes through actions to advance the three underlying Policy Goals. The overall score is the average of the ratings for these Policy Goals: (i) setting a strategic direction for workforce development (2.0); (ii) fostering a demand-driven approach (1.8); and (iii) strengthening critical coordination among the actors at the leadership level of decision-making (2.0). The explanation for these ratings and their implications follow below.

Figure 9: SABER-WfD Ratings of Dimension 1



Note: See Figure 2 for an explanation of the scale on the horizontal axis.
Source: Based on analysis of the data collected using the SABER-WfD questionnaire.

²⁷ In light of the 2014 Constitution, it is unclear what the sector's governance structure will look like.

²⁸ The ITC was established in 2006 as the Ministry of Trade and Industry's human resource development and training arm, providing subsidized training for private sector companies in order to modernize industry and its labor force.

Policy Goal 1: Articulating a Strategic Direction for WfD

Leaders play an important role in crystalizing a strategic vision for workforce development appropriate to the country's unique circumstances and opportunities. Their advocacy and commitment attract partnership with stakeholders for the common good, builds public support for key priorities in workforce development, and ensures that critical issues receive due attention in policy dialogue. Taking these ideas into account, Policy Goal 1 assesses the extent to which apex-level leaders in government and in the private sector provide sustained advocacy for workforce development priorities through institutionalized processes.

Egypt scores at the **Emerging** level on this Policy Goal, reflecting fragmented leadership from the government and limited, ad-hoc advocacy from the business community. Despite the political commitment, Egypt still lacks a high-level champion that consistently advocates for workforce development-aligned policies.

The lack of a well-defined and consistent leadership for workforce development is due to the involvement of numerous players, resulting in the absence of sustained advocacy at the highest government level. This has caused most reform interventions to remain as pilots, with no champion to replicate or scale up successes, or to create a critical mass of change. A classic example is the Mubarak-Kohl Initiative (MKI), which initially received attention from both the Egyptian government and Germany's GIZ (the donor), as they were showcasing the dual system²⁹ as a model. However, once the German funding stopped and alternative priorities were identified, the initiative did not receive the required attention or budget, although it still operates in 150 schools and Egypt's 2012 technical education strategy recommends the expansion of dual education.

The business community provides some leadership for workforce development in Egypt, but their efforts are sporadic and focus on advancing sectoral agendas. Key examples include: (i) the ITC, which is the main funder of training in the manufacturing sector, subsidizing training for the

private sector and recently implementing a training for employment initiative targeting the employment of

100,000 youth; (ii) the Tourism Training Council, which, in collaboration with the Ministry of Tourism and the Egyptian Tourism Federation, trains and manages mobile trainers, who are certified by the American Lodging Federation and travel across Egypt training hotel staff—they have trained over 200,000 workers in the sector; and (iii) the Construction Training Council, which is piloting training in the construction sector according to the National Skills Standards. However, their advocacy is not consistent and is not necessarily representative of national priorities. Some workforce development champions have taken specific steps towards strategic workforce development priorities, with recent examples including: (i) a group of business people established the Egyptian Hope Bank to provide quality-assured trainees through a formal awarding process; and (ii) individual employers (including Americana Co., Arab Contractors, BTM, MCV, and Arafa Group) established technical schools within their organization in collaboration with the MOE. These interventions have limited coverage in the context of Egypt's workforce development system, especially as the Egyptian Hope Bank is not yet operational.

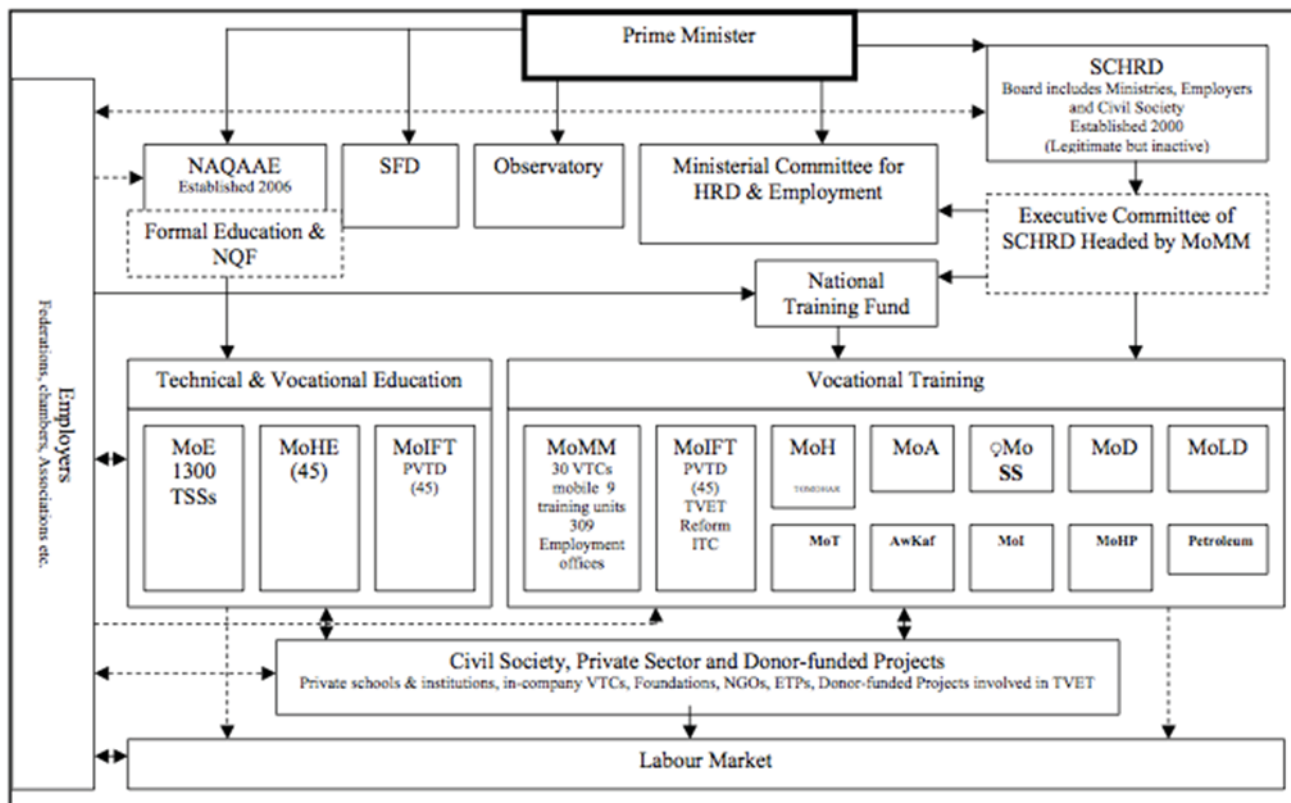
Policy Goal 2: Prioritizing a Demand-led Approach to WfD

Effective advocacy for workforce development requires credible assessments of the demand for skills, engagement of employers in shaping the country's workforce development agenda, and incentives for employers to support skills development. Policy Goal 2 incorporates these ideas and benchmarks the system according to the extent to which policies and institutional arrangements are in place to: (i) establish clarity on the demand for skills and areas of critical constraint; and (ii) engage employers in setting workforce development priorities and in enhancing skills-upgrading for workers.

Egypt scores at the **Emerging** level for Policy Goal 2. It has taken some positive, yet modest steps by conducting occasional assessments of national economic prospects and skills implications within a few key sectors and by institutionalizing the engagement of employers in setting workforce development priorities. However, a true demand-led approach has not been adopted and there are few incentives to encourage employers to upgrade their workers' skills.

²⁹ A dual system offers students a learning modality that combines theoretical study in school and practical application on the production line in companies/factories.

Figure 10: TVET Landscape



Source: Author's construction

The government and other workforce development stakeholders have conducted occasional assessments of the country's economic prospects and skills implications for a few sectors based on limited data sources. Examples include assessments related to the Industrial Development Plan of 2006, the National Sustainable Tourism Strategic Plan drafted in 2009, and the Export Development Plan of 2010. The government and workforce development stakeholders have also specifically identified critical skills constraints in priority economic sectors on the basis of ad-hoc assessments. In light of the findings of these assessments, some workforce development key stakeholders have taken specific action in relation to strategic workforce development priorities, such as interventions within the industry and tourism sectors to reform existing courses or develop new ones. However, there are no holistic and consistent mechanisms to make the workforce development landscape truly demand-led.

Best practice stipulates that employers routinely and consistently help to define workforce development priorities and address the skills implications of major policy and investment decisions. In advanced systems, government often provides a range of incentives for

skills upgrading in the formal and informal sector, including, in some cases, a levy-grant scheme or other forms of earmarked funds to encourage formal sector employers to train employees. All this is systematically reviewed for impact; adjustments are made to the programs following the reviews, with an explicit focus on skills and productivity. In Egypt, however, employers help define workforce development priorities on an ad-hoc basis and make limited contributions to address the skills implications of major policy/investment decisions. Sporadic employer engagement occurs through ETPs, which are employer-led organizations modeled after the UK Sector Skills Councils; these bring employers' voice to TVET policy dialogue, but robust institutional and financial support is lacking. Individual companies are also engaged in workforce development, as they take part in curriculum development or establishing sector-based technical schools. However, overall, Egypt lacks a coherent set of incentives to encourage employers in both the formal and non-formal sectors to become engaged in skills upgrading. To date, incentives are limited to individual initiatives in the manufacturing sector sponsored by the ITC or undertaken in

collaboration with international partners.³⁰ Additionally, Egypt's training levy³¹ is not functional after the levy scheme was challenged through several lawsuits. At the time, employers claimed that collecting a levy based on companies' net profits is double taxation and thus unconstitutional.

Policy Goal 3: Strengthening Critical Coordination for Implementation

Ensuring that the efforts of stakeholders involved in workforce development are aligned with the country's socioeconomic priorities is an important prerequisite of strategic coordination. Such coordination typically requires leadership at a sufficiently high level to overcome barriers to cross-sector or cross-ministerial cooperation. Policy Goal 3 examines the extent to which policies and institutional arrangements are in place to formalize roles and responsibilities for coordinated action on strategic priorities.

Egypt scores at the **Emerging** level for Policy Goal 3. The lack of clarity on workforce development roles and responsibilities has led to weak coordination on strategic priorities and fragmentation of the TVET system. Despite the establishment of an appropriate body in 2000 to coordinate workforce development priorities, it is inactive, with the result that the current mechanisms for coordination are purely ad-hoc.

Legislation and agreements amongst stakeholders exist to promote coordination, but they are not fully operational. Despite the numerous committees and workshops, strategic coordination efforts are not functional and rarely lead to tangible progress. The TVET system is highly fragmented with over 30 active institutions and bodies that operate in isolation (see Figure 10 above). For example, the Productivity and Vocational Training Directorate (PVTD)—the vocational educational delivery arm of the Ministry of Industry and Foreign Trade (MOIFT)—grants diplomas that are equivalent to the MOE's technical secondary school diplomas, yet there is limited coordination and synergy in the standards adopted to reach similar credentials/qualifications.

Coordination currently occurs only through ad-hoc mechanisms, even though all stakeholders recognize the importance of coordination in a sector that involves a web of stakeholders with diverse interests and roles. In addition, there is a lack of clarity on the roles and responsibilities of the various government stakeholders, while non-government workforce development stakeholders have no legally defined roles and responsibilities. It has become evident that an institutionalized body needs to be established to facilitate sustained coordination. The institution previously designated to take on this role is the Supreme Council for Human Resource Development (SCHRD), which includes on its board representatives from relevant ministries, employers, and other institutions. However, it has been inactive since its establishment in 2000, and has thus failed to fulfill its role of setting workforce development strategies and policies. In turn, the implementation and monitoring of strategic workforce development measures is conducted largely on an ad-hoc basis.

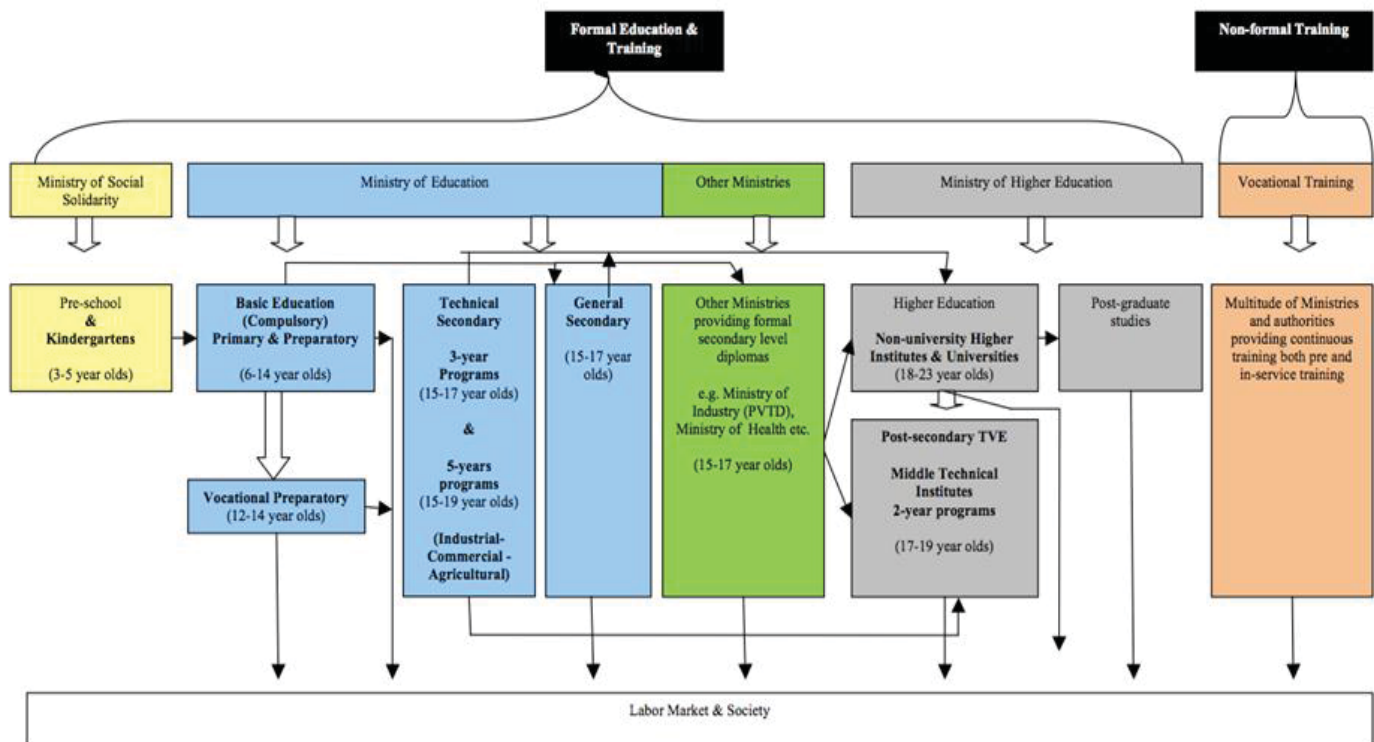
Implications of the Findings

Egypt's workforce development system could benefit more extensively from the wealth of initiatives that have been implemented either on a pilot or sector basis, or even championed by employers. This includes organizations like the ITC, firms that have collaborated with the MOE (for example Americana, Arab contractors, Orascom for Hotels), sectoral organizations like the Egyptian Tourism Federation, and a major forthcoming initiative to establish the Egyptian Hope Bank that would serve as a training and employment charity—a de facto "Labor Bank."

Workforce development is a vital component of ongoing dialogue around Egypt's development strategy. At the time of writing this report, serious discussions were taking place towards: (i) the establishment of a National Council for Education and Scientific Research (NCESR), though it is yet to be decided who would chair it; and (ii) the reactivation of a restructured SCHRD, to be chaired by the prime minister. If and when activated, these structures are a potentially important means for institutionalizing and sustaining leadership for workforce development in Egypt. This development could follow India's example, where the government recently created three new structures to set a strategic direction for workforce development and coordinate policy development and implementation on key priorities: (i) the National Council for Skills

³⁰ For example, the World Bank Skills Development Project, which closed in 2010 and was considered a successful initiative, predominately focused on the technical training of in-service workers. It was launched in 2004 as a six-year pilot project implemented by the Ministry of Trade and Industry and supported by the World Bank.

³¹ Laid out in the Labor Law of 2003.

Figure 11: Pathways through the Formal Education and Non-formal Training System by Responsible Ministry

Source: Author's construction

Development, chaired by the prime minister; (ii) the National Skill Development Coordination Board, chaired by the deputy chairman of the Planning Commission; and (iii) the National Skill Development Corporation, headed by an eminent private sector industrialist. In India, the roles of these bodies are clearly defined in relation to the country's strategic agenda, which is centered on an ambitious target of equipping 500 million people with job-relevant skills.

The development of a strategic agenda for workforce development in Egypt will require a well-informed understanding of the nature of the country's unique skills challenges. In this regard, key policymakers face significant information gaps on training provision and skills demand. Potential sources for addressing these gaps include the yet-to-be established National TVET Authority (NTA), which would bring all training providers under one umbrella organization. This apex-level leadership could exercise its convening power by bringing these parties together and enabling them to contribute to regular and credible assessments of the country's economic prospects and their implications for skills. Countries such as Ireland have developed arrangements that move beyond reliance on informal employer feedback or basic industry and labor force surveys. In 1997, Ireland established the Expert Group

on Future Skills Needs to advise on strategic directions for skills development based on multiple sources including: employers, research institutions, and training providers. In addition, Skillnets, an industry-led training network created in 1999, ensures training programs are aligned with industry needs. The establishment of these institutions has helped Ireland to address information gaps that hinder strategic decision-making and coordination.

Transforming workforce development in Egypt can follow a similar trajectory to the successful reforms undertaken in other countries. This entails focusing first on incremental, but tangible progress on the ground to establish momentum. Apex-level leadership can drive this agenda by implementing an action plan designed to deliver quick wins. This could include making full use of recent initiatives that have been considered successful. Implementation of such a plan would facilitate learning across the system and serve as a basis for scaling up viable options. Costa Rica provides an example of this process. In 1996, the president led a successful bid for Intel, a global computer chip manufacturer, to locate the firm's newest plant in Costa Rica. Part of the winning package involved the introduction of new courses in technical training offered by existing training institutions. In subsequent years, the country has

continued to align its education and training programs to meet the needs of the broader information technology (IT) sector. Today Costa Rica's IT sector is a leading sector of the economy, growing from 4 percent of exports in 1997 to nearly 19 percent in 2009.

The country benefited from a combination of two critical factors at the strategic level: (i) apex-level leaders' recognition of the centrality of aligning skills development with broader national development objectives, and (ii) leaders' sustained attention to implementation of workforce development in a strategic area and the assured coordination among key stakeholders. The outcome was the subsequent emergence and growth of the IT industry cluster.

5. Governing the System for Workforce Development

An important function of workforce development authorities is to facilitate efficient and effective skills acquisition by individuals, and to enable employers to meet their demand for skilled workers in a timely manner. The objective is to minimize systemic impediments to skills acquisition and mismatches in skills supply and demand. This chapter begins with a brief description of how the workforce development system is organized and governed before presenting the detailed SABER-WfD findings on System Oversight and their policy implications.

Overall Institutional Landscape of Education and TVET

Organizational and Governance Structures

TVET in Egypt encompasses technical education at the preparatory (grades 7–9), secondary, and post-secondary vocational education (PVE) levels; vocational education; vocational training; and continuing training. Figure 11 outlines the current structure of the formal Egyptian education system. The system is made up of the two Education Ministries—MOE and MOHE—with another 17 ministries also active in vocational and technical training: the Ministries of Industry and Foreign Trade, Housing, Manpower and Migration, Agriculture, Health and Population, Culture, Tourism, Transportation, Electricity and Energy, Civil Aviation, Defense, Interior, Irrigation, Finance, Local Development, Endowments (Awkaf), and Social Solidarity. In addition, a number of agencies are involved in TVET, such as the SCHRD, NAQAEE, the sectoral Training Councils (Industrial, Building and Construction, Tourism), and the Social Fund for Development (SFD).³²

There is a traditional separation between technical education and vocational training. In 2009, there was an attempt to bridge the separation through the development of a comprehensive, multi-stakeholder TVET strategy. But it was never approved due to: (i) fragmentation among the stakeholders involved, which made it difficult to agree on a unified strategy; and (ii)

the resignation of the minister of education, who chaired the committee and was responsible for presenting the strategy to the prime minister, and the new minister not pushing the strategy. The strategy launched by MOE in September 2011 also sought to address this divide, but the lack of functional links between technical and vocational education and general education persists. Recently, however, a systemic initiative has been launched by the MOE and MOHE to create vertical transition pathways from Technical Secondary School (TSS) to post-secondary TVET, as well as to develop a bachelor's degree program (and later on a diploma or master's program) in technology following the three-year certificate in technical education.

Financing Skills Development

Public institutions enroll 93 percent of pre-university education students, rendering the government the main source of financing for education and TVET at large. Public expenditure on education³³ reached EGP33.7 billion (US\$5.02 billion) in FY08, representing 12 percent of total public expenditure. The ratio of public education expenditure to GDP decreased from 5.3 percent in 2000 to almost 3.7 percent in the two years before the revolution. Average public expenditure per student in Egypt in purchasing power parity terms was estimated to be (constant 2005 international dollars) 282, 405, 394, and 902 in primary, preparatory, secondary, and tertiary education, respectively, all of which are below corresponding values in comparable countries in the region or with similar demographic or developmental characteristics.³⁴ It is reported that the real expenditure on education may be almost double this figure of EGP33.7 billion by including private tutoring expenditures paid by families. It is estimated that combined private tutorial costs may equal the budget of the MOE.³⁵ Not all families have the resources to pay for private lessons, introducing a potential source of inequality in access to education and jobs related to family income.

Technical secondary education receives a lower level of expenditure per student compared to general secondary education. This is despite the greater costs

³² SFD was established in 1991 as a socio-economic safety net to combat unemployment, alleviate poverty, improve living conditions and help attain comprehensive socioeconomic development. To this end, SFD is entrusted with supporting micro and small enterprises by providing an integrated package of financial and non-financial services for start-ups.

³³ The 2014 Constitution, Article 19 states that "The state commits to allocating a percentage of government spending that is no less than 4 percent of the GDP for education. It will gradually increase this until it reaches global rates."

³⁴ Countries include Chile, India, Jordan, Malaysia, Peru, and the Philippines.

³⁵ ENCC/TVET Reform Programme/ETF, Building a Competitiveness Framework for Education and Training in Egypt 2010.

Table 2: Comparison between Expenditure in Technical and General Secondary Education

	Total Budget (2005/06) EGP (billion)*	% of Sec. Ed. budget	Total # of Students (2005/06)**	Average expenditure per student (EGP)	% of students (2005/06)
Technical Secondary	2.743	60%	1,974,391	1,389	62%
General Secondary	1.828	40%	1,239,189	1,475	38%

Sources: *Education for All: Mid-term Evaluation 2000-2007, **PVET in Egypt, Country Background Report, 2011

associated with technical education, given the equipment, maintenance, raw materials, and lower student-teacher ratios usually required for technical courses. Table 2 describes expenditure differences between technical and general education.

Under the 2003 Labor Law (Law No.12/2003), vocational training was to be financed directly by the National Training Fund (training levy) through contributions from employers (1 percent of employers' net profit). The training fund, however, ceased collecting funds shortly after its establishment due to a constitutional issue related to the claim of double taxation on employers' profits. However, line ministries, most notably the Ministries of Tourism, Industry, and Housing, subsidize numerous training initiatives through training councils, while non-governmental organizations (NGOs) also subsidize employment initiatives.

SABER-WfD Ratings on System Oversight

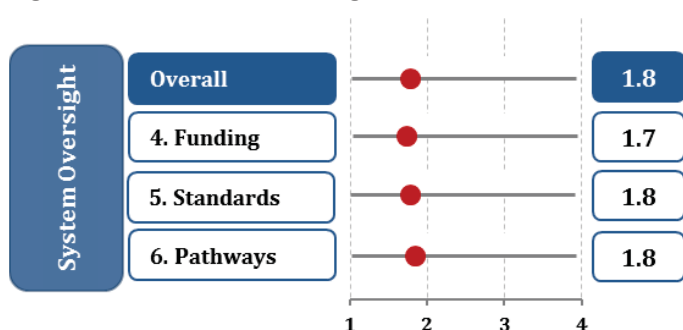
Based on data collected by the SABER-WfD questionnaire, Egypt's system receives an overall rating of 1.8 (Emerging) for System Oversight (see Figure 12). The SABER-WfD framework identifies three pertinent Policy Goals corresponding to oversight mechanisms for influencing the choices of individuals, training providers, and employers. The overall score is the average of the ratings for these underlying Policy Goals: (i) ensuring

efficiency and equity of funding (1.7); (ii) assuring relevant and reliable standards (1.8); and (iii) diversifying pathways for skills acquisition (1.8). The explanation for these ratings and their implications follow below.

Policy Goal 4: Ensuring Efficiency and Equity in Funding

Workforce development requires a significant investment of resources by the government, households, and employers. To ensure that these resources are effectively used, it is important to examine the extent to which policies and institutional arrangements are in place to: (i) ensure stable funding for effective programs in initial, continuing, and targeted VET; (ii) monitor and assess equity in funding; and (iii) foster partnerships with employers for funding workforce development.

Egypt scores at the **Latent** level for Policy Goal 4. On the positive side, efforts to establish closer links with employers through the establishment of ETPs are beginning to show results at sector and local levels. In addition, several ministries have established partnerships with sector federations and are funding programs that are aligned with market needs. However, critical weaknesses include the failure to link public funding to performance, limited investment by the private sector, and the absence of any formal monitoring and evaluation of the impact of training programs on beneficiaries.

Figure 12: SABER-WfD Ratings of Dimension 2

Note: See Figure 2 for an explanation of the scale on the horizontal axis.

Source: Based on analysis of the data collected using the SABER-WfD questionnaire.

Funding for workforce development in Egypt is mostly based on historical expenditure data, with no links to performance and no consideration of national socioeconomic priorities. In general, there are no formal reviews of the impact of funding on training program beneficiaries. Additionally, there is limited investment by the private sector in workforce development at the national level. However, some recent positive developments include: (i) increases in education and training budgets; (ii) efforts to decentralize the management of budgets to the governorate level; and

(iii) several ministry-driven efforts to fund training in partnership with sector federations and in alignment with market needs. An example is the Ministry of Tourism, which has been funding training in the sector over the past 10 years. This initiative is managed by the Egyptian Tourism Federation and has to date resulted in the training of around 140,000 workers.

There are no regular and timely formal reviews of the impact of funding on the beneficiaries of training programs. As a result, public TVET providers in Egypt fall into a vicious cycle of low quality and low esteem because employers do not associate these public providers with good quality services, while providers continue to provide supply-driven programs. In the absence of the necessary tools, the government is unable to assess performance, and thus cannot justify increases in the limited financial resources for such programs and improve their quality. Generally, budgeting processes in Egypt are based on the previous year's budget, and allocations do not take performance indicators into account. Exceptions include budgeting decisions for continuing vocational education and training (CVET) programs, which utilize quantitative indicators³⁶ such as monitoring and evaluation of outcomes to determine allocations. Examples include ITC's training for employment and skills upgrading program, as well as projects implemented with international partners such as the Skills Development Project (SDP) that was supported by the World Bank and ended in 2010, where monitoring and evaluation of outcomes was an integral part of the planning and budgeting process.

There has been progress in facilitating sustained partnerships between training institutions and employers. Egypt has recently begun to encourage formal partnerships between TVET providers and employers at the institutional, sector, and regional levels. Examples include employer-led ETPs that aim to advance the skills agenda at the sector and local level. Currently there are 12 such sector-based ETPs and 15 local ETPs in different governorates. Additional examples of new, formal partnerships include linkages between industry leaders and the MOE to establish in-company technical schools to provide a sustained source of graduates with relevant skills.

³⁶ Indicators include basic statistics on the number of people trained, number of companies that benefited or participated in the program, and the budget spent.

Policy Goal 5: Assuring Relevant and Reliable Standards

The workforce development system comprises a wide range of training providers offering courses at various levels in diverse fields. An effective system of standards and accreditation enables students to document what they have learned and employers to identify workers with the relevant skills. For Policy Goal 5, it is therefore important to assess the status of policies and institutions to: (i) set reliable competency standards; (ii) assure the credibility of skills testing and certification; and (iii) develop and enforce accreditation standards for maintaining the quality of training provision.

Egypt scores at the **Emerging** level for this Policy Goal. Some progress has been made in developing competency standards, but to date the number of sectors covered is limited. In addition, there is no system in place to establish nationally recognized accreditation standards for training providers, and no incentives for them to become accredited.

Egypt lacks a comprehensive, clear, and functioning system in terms of national standards, accreditation, and certification in TVET. Box 1 presents a number of institutions and initiatives that are active in quality assurance of training delivery in Egypt, but they operate in silos and have a weak impact. Vocational training, in particular, is largely unregulated and there is inconsistency in terms of standards adopted for curricula development, training of trainers and teachers, delivery, and testing. The NAQAAE, which currently has the mandate to develop a national qualifications framework (NQF), has initiated the process in the tourism sector in close cooperation with the Egyptian Tourism Federation and the Tourism ETP. But the NQF is yet to be fully developed, approved, and implemented on a national scale.

Separately from the work currently being done on the NQF, in the past 12 years Egypt has demonstrated progress in defining competency standards through the National Skills Standards Project (NSSP) in three major sectors: manufacturing, tourism, and construction. These standards have evolved over the years and informed the development of the Egyptian Vocational Competency-based Qualifications (EVCQ), which are being piloted with providers such as the Productivity and Vocational Training Directorate (PVTD)³⁷ and

³⁷ The PVTD, affiliated to the Ministry of Industry and Foreign Trade, offers formal three-year diplomas that are recognized by the MOE.

expanded to include an increasing number of occupations.³⁸ The NSSP, however, lacks a comprehensive menu that includes most industrial and service sectors, and is yet to be formally and nationally recognized through legislation.

Box 1: List of Key Institutions Active in Quality Assurance, Standardization, Accreditation, and Certification

- National Authority for Quality Assurance and Accreditation in Education (NAQAAE) **under the Prime Minister**
- National Qualifications Framework (NQF) **currently under the NAQAAE**
- National Skills Standards Project (NSSP) **currently under ITC, Egyptian Tourism Federation and the Ministry of Housing**
- Egyptian Accreditation Council (EGAC) **under the Ministry of Industry and Foreign Trade (MOIFT);**
- Sectoral Chambers **under the Federation of Egyptian Industries**
- Enterprise-TVET Partnerships (ETPs) **under the MOIFT**
- Technical secondary schools and vocational training centers **under the MOE and many other ministries**
- Licensing Department, **under the Ministry of Manpower and Migration (MOMM)**
- Egyptian Organization for Standardization (EOS), **under the MOIFT**

Occupational skills testing is generally underdeveloped in Egypt, with no nationally recognized, functioning system. The 2003 Labor Law mandates that the Ministry of Manpower and Migration (MOMM) license all workers applying for a new work permit, but the system appears to be dysfunctional. The cost of the whole process of issuing the certificate (including testing) is EGP40 (US\$6), and it is the responsibility of the individual to pay. Tests are predominantly based on theory, with the exception of the dual system.³⁹

³⁸ When the NSSP project ended in 2006, it had developed around 150 skills standards in three sectors; these have since been expanded to 300 EVCQs by ITC.

³⁹ The dual system, formerly known as the Mubarak-Kohl Initiative (MKI), is considered the first initiative to link technical education with employers. Launched in the mid-1990s, the dual system model of cooperative technical education aims to enhance the market relevance of TSS graduates' qualifications. Typically, it allows students the opportunity to study theoretical material in schools and to practice in the workplace/on the production line for four days a week. Around 85 percent of these students receive immediate job offers. As of May 2009, the system has been adopted by 31 TSSs in cooperation with 1,900 companies, to train about 22,000 students. However, this segment represents only 2 percent of the total

Generally, obtaining a technical education certificate does not translate into better wages or opportunities for promotion.

In terms of accreditation, the NAQAAE was established in 2005 as an accreditation body, with a de facto limited scope to cover formal education institutions only (including technical education), and does not include technical or vocational training. To date, there is no system in place to establish nationally recognized certification and accreditation standards. Training providers are not required to seek accreditation, nor are they provided with incentives to do so, particularly in the public TVET sector. In the absence of incentives, few technical schools apply to the NAQAAE for accreditation (26 TSSs out of the 2530 institutions are accredited by NAQAAE). This is in part driven by lack of awareness at the school level of the link between quality assurance and responding to market needs, as well as the challenge in meeting the quality standards with the resources available to schools. Some institutions, however, such as the Amereya Technical Cluster Complex in Cairo⁴⁰ and the Technology and Vocational Institute,⁴¹ have sought international accreditation for some of their programs through international awarding organizations like Edexcel in the UK. Institutions do so to add credibility to their certificates, thereby potentially enhancing their students' employability and access to job opportunities in the labor market. Yet, again, this remains limited in scope and ad hoc in nature.

Policy Goal 6: Diversifying Pathways for Skills Acquisition

In dynamic economic environments, workers need to acquire new skills and competencies as well as keep skills up to date throughout their working lives. They are best served by a system of initial and continuing education and training that promotes lifelong learning by offering clear and flexible pathways for transfers across courses, progression to higher levels of training, and access to programs in other fields. For those already in the workforce, schemes for recognition of prior learning are essential to allow individuals to efficiently upgrade their skills and learn new ones. Policy Goal 6 therefore evaluates the extent to which

number of students enrolled in technical education. The initiative involved extensive technical cooperation from GIZ in partnership with the Government of Egypt.

⁴⁰ Established by the Education Development Fund.

⁴¹ Affiliated with the Arab Academy for Science Technology and Maritime Transport.

policies and institutions are in place to: (i) enable progression through multiple learning pathways, including for students in TVET streams; (ii) facilitate the recognition of prior learning; and (iii) provide targeted support services, particularly among the disadvantaged.

Egypt scores at an **Emerging** level for Policy Goal 6. Under the existing arrangements, the pathways for skills acquisition are very limited, but various initiatives are now being launched to address this issue, though they are not yet operational. These include a bachelor's degree for technology, easier access to a higher degree for those already working, and transition pathways from TSS to post-secondary TVET. While skills certificates are recognized by the various ministries and are legally required to be accredited by NAQAAE, employers are not yet convinced of the relevance of such graduates to their needs in the job market.

Despite an adequate number of institutions and programs covering diverse disciplines and levels, as well as the piloting of different delivery models, the system is characterized by limited flexibility in the ability to re-enter formal education and limited opportunities for progression within vertical pathways. Formal recognition of prior learning has not yet been introduced, which prolongs training time and increases costs for the government and employers, and discourages trainees from learning new skills or upgrading existing ones.

Opportunities exist for TSS graduates to receive further education and training through two-year private or public technical colleges, but of the 500,000 who graduate annually, only 16.5 percent pursue this option. Furthermore, an estimated 5 percent of TSS graduates enter university based on academic achievement; however, they typically pursue non-technical disciplines unrelated to prior study.

The MOHE examined the possibility of providing a more direct pathway into tertiary education that would lead to bachelor or post-graduate degrees in technical disciplines. A more systemic initiative is now being launched by the MOE and MOHE to create transition pathways from TSS to post-secondary TVET, as well as to create a bachelor's degree program (and later on diploma or master's programs) in technology following the three-year certificate in technical education. Also, the technical education system is planning to facilitate the access of students already in the labor market back into the system to obtain a different or higher degree, although some of the programs are still pending

approval by the Government of Egypt. Large numbers of students in the TVET system aspire to achieve higher education degrees and non-technical work, as indicated by focus group participants in a 2011 World Bank study.⁴² The focus group participants recommended that long-term cultural and social antagonisms towards TVET graduates need to be addressed, perhaps through the strong influence of drama/television/movies, rather than direct promotional campaigns (such as advertisements).

All ministries recognize certificates granted by MOE and MOHE, but there is a gap between this recognition and the value of certification from the standpoint of employers and other end users. The value of certification is further compromised due to the limited processes in place for ensuring quality and external validation. Although the law stipulates that all formal education institutions regulated by the MOE and MOHE must be accredited by NAQAAE, the law is not enforced and rarely influences the programs that institutions deliver to trainees. Furthermore, there is no NQF or system for transferring credit across institutions, and mechanisms for the recognition of prior learning are virtually non-existent (with the exception of some universities).

The government supports a limited menu of services for further occupational and career development managed by a variety of ministries (such as the MOMM, Ministry of Industry, and Ministry of Housing). These services are delivered nationwide in local stand-alone service units with very little coordination. These programs are rarely reviewed or assessed for impact and therefore there is limited information available to improve their capacity to meet employer needs. The Ministry of Social Solidarity supports on an ad-hoc basis training programs that target disadvantaged populations (such as single mothers, school dropouts, street children, or disabled people). These programs are rarely reviewed and evaluated for impact and often do not receive sustained attention from employers.

Implications of the Findings

In Egypt, public expenditure for workforce development is subject to intense competition with other socioeconomic policy priorities. Efforts to sustain an adequate level of public expenditure for workforce development can be bolstered by: (i) a better

⁴² The World Bank, Background Paper on Assessing Responsiveness of Education and Training Systems to the Demand for Skills, 2011.

understanding of current expenditure trends, and (ii) a clear strategy and mechanisms for continuous M&E. Public budget allocations for workforce development are defined, but the M&E strategy would support the identification of additional resources, including fees paid by trainees or their sponsors, as well as contributions from employers, NGOs, and donors. These additional resources could materialize in the form of direct financial contributions or as other essential inputs, including equipment, raw materials, and the services of industry experts. Lessons could be drawn from the SDP, which piloted a demand-driven funding mechanism to finance technical training, with well-defined, competitive flows of funding being coupled with a rigorous M&E mechanism.

On quality assurance, Egypt lacks a coherent framework for certifying the knowledge and competencies of the training program graduates. There is a lack of coordination among stakeholders to define recognized standards for certifying workers and there is little momentum around establishing a unified national standards system. Establishing a functional quality assurance framework is further complicated by the large number of workers within the informal economy (estimated at 58 percent of those employed in the private sector). To manage this challenge, Egypt can look to the Indian government's nationwide Modular Employable Scheme, which codifies standards for skills acquisition and certification for a wide spectrum of jobs, many of them in the informal sector. The Egyptian Hope Bank, a recently established NGO, is embarking on an initiative to certify workers in some sectors according to internationally recognized standards. This would be in partnership with UK institutions in order to enhance job seekers' employability and address the gaps in the market. Such civil society initiatives are instrumental in addressing market gaps. Yet, their impact will likely remain limited in scope if they have to operate in the absence of a recognized, formal National Qualifications Framework (NQF).

An NQF is one approach to providing the infrastructure for defining pathways for lifelong learning and skills acquisition. Interest in NQFs has grown in recent years and more than 100 countries worldwide are now reportedly at various stages of building their own. In addition to the mandate given to NAQAAE to develop the NQF and conduct pilot work in the tourism sector, Egypt is participating in a related effort with support from the European Training Foundation (ETF). Driven by labor mobility among several countries in the region

(Jordan and Morocco), and three North Mediterranean countries (Spain, France, and Italy), the effort pilots development of a joint NQF within two sectors (construction and tourism).

For Egypt to progress in this Dimension, consideration could be given to competency-based testing to certify qualifications in more skilled and semi-skilled occupations. Measures should be taken to better manage the cost of testing and certification; establish robust testing protocols; conduct random audits to verify certifying bodies; and adopt a testing approach that focuses on practice rather than theory. These measures would improve the relevance of the system and enhance employers' assessment of its outputs. Bearing in mind that it took Singapore four decades to move from "Emerging" to "Advanced," progress is a lengthy process that requires sustained leadership and commitment.

Though pathways and opportunities to upgrade and acquire new skills exist, there is a lack of clarity and flexibility for individuals navigating these pathways. The public perception of TVET further complicates the context. It has traditionally been associated with low academic performance, limited social possibilities and low skilled jobs. In a society marked by strong aspirations towards obtaining a university degree (regardless of its use in practical life or value in the labor market), it is essential that coherent action be taken on multiple fronts to improve the public's perception of TVET. Egypt can learn from the experience of Singapore, which, over a prolonged period of time, took specific actions to enhance the image of TVET. Following an extensive review of the system, Singapore upgraded TVET from post-primary to the post-secondary level, raising TVET's profile as an option for higher learning and skills upgrading. This action was complemented by the establishment and development of the Institute of Technical Education (ITE), an apex-level organization for managing TVET that provides high quality training within cutting-edge facilities. As Egypt embarks on similar initiatives of establishing a National TVET Authority and creating technical pathways for TSS students to move to higher education, it is important to recognize that this is a lengthy exercise. However, creating such institutions and programs is not sufficient and will not automatically address all the challenges. Rather, it can be regarded as a building block upon which a clear vision and multiple integrated efforts by all stakeholders can take hold to: resolve fragmentation, enhance quality assurance

mechanisms, ensure adequate funding, and give TVET a central role within the broader economic development agenda.

A common characteristic of advanced workforce development systems is regular assessment and timely review of the impact of funding on a range of training and labor market outcomes. To respond to ever evolving economic and technological conditions and skills needs, Egypt's workforce development system requires timely and actionable information. Central to this are functional labor market information systems that provide the analytical basis for adjusting or terminating programs according to labor market needs. While Egypt lacks a formal labor market information system (LMIS), organizations like the Central Agency for Public Mobilization and Statistics (CAPMAS), the Education, Training and Employment Observatory, and the information unit within the Ministry of Manpower have the capacity to carry out this role, albeit on an ad-hoc basis, and without formal links with training providers. As a promising development, ITC with the technical support of USAID has recently begun the process of piloting a comprehensive LMIS for the manufacturing sector, which could provide lessons to inform a path forward and subsequently be scaled up across the workforce development system.

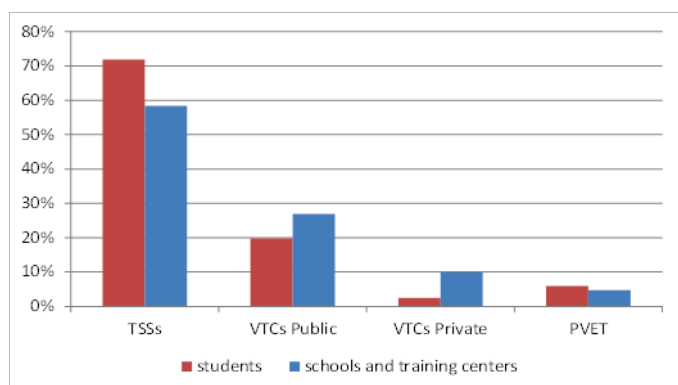
6. Managing Service Delivery for Results on the Ground

Training providers, both non-state and government, are the main channels through which the country's policies are translated into results on the ground. This chapter therefore provides a brief overview of the composition of providers and the types of services available in the system before presenting the detailed SABER-WfD findings on Service Delivery and their policy implications.

Overview of the Delivery of Training Services

Vocational Education at the Secondary Level. The MOE is by far the largest TVET provider in the system, administering approximately 1,300 industrial, commercial, agricultural, and dual-system technical secondary schools (TSSs), and enrolling 72 percent of all TVET students (see Figure 13). This amounts to more than 1.5 million students enrolled in the three-year technical diploma or five-year advanced technical diploma tracks.⁴³ Table 3 shows the number of students in the different tracks of technical secondary education

Figure 13: Percentage of Students & Schools and Training Centers by Type of TVET (2009/10)



Source: Various sources, including MOE Technical Education Strategy and PVET Country Background Report, 2011.

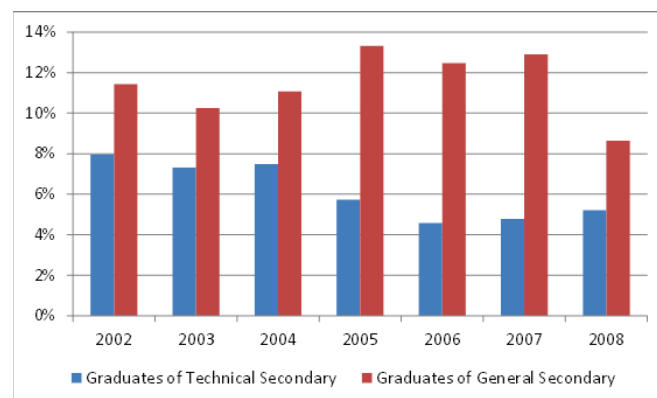
Table 3: Number of Students in Technical Secondary Education by Track, (2000/01-2009/10)

	2000/ 2001	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010
Industrial Secondary	845,571	933,689	983,760	1,048,495	1,054,597	1,002,103	909,241	686,729	970,060	958,020
Agricultural Secondary	203,071	225,750	252,657	251,261	249,867	224,193	186,455	141,317	123,484	123,562
Commercial Secondary	870,505	975,427	951,730	882,416	784,940	748,095	706,276	519,470	475,197	472,952
Total of Technical Secondary	1,919,147	2,134,866	2,188,147	2,182,172	2,089,404	1,974,391	1,801,972	1,347,516	1,568,741	1,554,534

Source: Ministry of Education, Technical Education Strategy, 2011.

from 2000/01 to 2009/10. It is worth noting that the decline in commercial TSSs is driven by MOE's directives to convert some of these schools to general secondary schools. Most technical secondary school graduates enter the labor market directly, with only an estimated 5 percent entering post-secondary vocational education (PVE) (see Figure 14).

Figure 14: Percentage of Students in PVET Admitted as Graduates from Technical and General Secondary Education



Source: PVET in Egypt Country Background Report, 2011.

Technical secondary education students have two alternative tracks: a three-year program that is equivalent to three-year general secondary education; and a five-year vocational program that grants a degree equivalent to that awarded by post-secondary vocational education and training (PVET) that is affiliated to the MoHE (see Figure 11).

The PVT under the MOIFT administers a three-year apprenticeship scheme, after which graduates receive a diploma recognized by the MOE as equivalent to the technical secondary school diploma. The program is delivered in approximately 45 vocational training centers (VTCs) across the country,

⁴³ MOE, Technical Education Strategy Report, 2011.

enrolling about 25,000 students. In addition to this program, the PVTD offers short courses for public and private sector employees and job seekers. There is, however, a general lack of awareness about these short courses, which have traditionally serviced the public sector.

Vocational Education at the Post-Secondary Level. There are 45 middle technical institutes integrated into eight regional technical colleges administered by the MOHE. These institutes provide post-secondary vocational education, and they all deliver two-year programs. The MOHE also developed a draft proposal in June 2011 to establish a number of community colleges in some rural and disadvantaged areas, based on the American model.⁴⁴

Vocational Training. Additionally, entry-level vocational training is provided for approximately 480,000 trainees a year in about 823 vocational training centers managed by a variety of sectoral ministries. Of these VTCs, 600 are public and operated directly by their respective affiliated ministry. Of the 600 public VTCs, 317 are formal training centers offering technical diploma programs (a minimum of one year), and 283 are non-formal training centers offering short technical courses (less than one year). These centers served around 69,500 trainees in formal training and 359,500 in non-formal vocational training during the academic year 2009/10. The 223 private sector VTCs include four formal training centers and schools and 219 non-formal training centers. In 2010, they provided training for around 700 trainees in formal programs and 51,500 in non-formal courses. Most of these short, non-formal courses target disadvantaged groups, particularly women, disabled people, and unemployed youth. They are often delivered within community-based centers, run by local NGOs, and are heavily subsidized by the government. Many centers focus on providing training to informal sector workers to enhance their ability to generate income. Most of the participants are in what is known as the Productive Families Scheme, a program administered by the Ministry of Social Solidarity but implemented through NGOs.

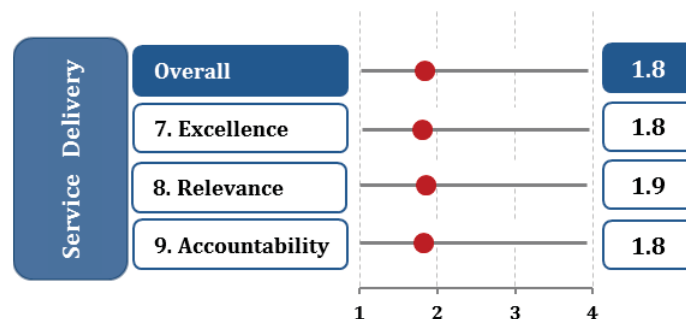
Private TVET Providers. There are a limited number of privately owned or managed TVET providers, particularly in specialized or highly technological areas, as well as a growing number of private sector

companies establishing in-house training units. The common factors that characterize this type of provision is the management of the schools or centers, the limited number of students per class or workshop, the ability to maintain a consistently high quality of instruction, and the strong links with employers. Other forms of training include industry attachments or cooperative education (for example, the dual system and apprenticeship schemes), and in-service training and re-training of employed and unemployed workers in the labor force. Some not-for-profit foundations are also providing training to promote youth employment.

SABER WfD Ratings on Service Delivery

Based on data collected by the SABER-WfD framework Egypt receives an overall rating of 1.8 (**Emerging**) for the Service Delivery Dimension (see Figure 15). This score is the average of the ratings for the underlying Policy Goals: (i) enabling diversity and excellence in training provision (1.8); (ii) fostering relevance in public training programs (1.9); and (iii) enhancing evidence-based accountability for results (1.8). The explanation for these ratings and their implications follow below.

Figure 15: SABER-WfD Ratings of Dimension 3



Note: See Figure 2 for an explanation of the scale on the horizontal axis.
Source: Based on analysis of the data collected using the SABER-WfD questionnaire.

Policy Goal 7: Incentivizing Diversity and Excellence in Training Provision

Because the demand for skills is impossible to predict with precision, having a diversity of providers is a feature of strong workforce-development systems. Among non-state providers, the challenge is to temper the profit motive or other program agendas with appropriate regulation to assure quality and relevance. Among state providers, a key concern is their responsiveness to the demand for skills from employers and students. Striking the right balance between institutional autonomy and accountability is one approach to address this concern. Policy Goal 7 takes

⁴⁴ EDF, Proposed Strategy for Human Resource Development in Education, Learning and Training, 2011.

these ideas into account and benchmarks the system according to the extent to which policies and institutional arrangements are in place to: (i) encourage and regulate non-state provision of training and (ii) foster excellence in public training provision by combining incentives and autonomy in the management of public institutions.

Egypt scores at the **Emerging** level for Policy Goal 7 (1.8). There is some diversity in the scope of public and private training, potentially enabling the system to better respond to the shifting demand for skills and facilitating innovation in service delivery. However, the system lacks (i) incentives for non-state providers to enter the market; (ii) a formal quality assurance modality to govern non-state providers; and (iii) procedures for government review of policies on encouraging and supporting non-state training provision.

The score for this Policy Goal takes into account that there is diversity in non-state training provision. Providers include private sector companies and NGOs as well as for-profit organizations (see Box 2). Based on the interviews leading to this report and the associated validation workshop, the quality of private training provision (although not formally assessed) is positively perceived by employers. However, the quality of public education and public training does not address learners' expectations and does not meet labor market requirements (with the exception of very small initiatives like the two schools of Don Bosco in Cairo and Alexandria). Although the regulations for setting up as a private or not-for-profit training provider make it a relatively simple process, non-state providers constitute only about 10 percent of total TVET institutions.⁴⁵ There is a lack of government policies⁴⁶ providing financial and non-financial incentives for non-state entities to provide education and training. The exception is the Industrial Training Council, which provides non-financial incentives in support of the implementation of the EVCQs, including technical assistance and capacity building for non-state vocational training centers. Most private sector initiatives broadly fall under the large firms' corporate social responsibility activities. A recent

example of this is an initiative by a private sector company SAMCRETE: Sami Saad Group, which established a vocational training center called the National Academy for Science and Skills (NASS). Other examples include organizations such as the Agha Khan Foundation, Plan, and Save the Children, which offer community-based training (including technical and vocational training) within target communities. However, few measures are in place to regulate and ensure the quality of non-state provision.

As for public provision, the government does not grant autonomy to public training institutions, nor does it require them to meet explicit performance targets. While targets are indeed set for public institutions, they are not evaluated according to structured or clear performance indicators. In return, they receive limited rewards for achieving the agreed targets. The performance criteria and the reward system are vague and inconsistent across the different ministries. Typically, defined targets and incentives are associated with short-term projects in partnership with international donors, such as the Skills Development Project (SDP) supported by the World Bank and the GIZ Dual System (formally known as the MKI). Public training institutions are expected to achieve a set of targets for enrollment and other budget-related indicators of institutional performance. They have limited financial and management autonomy to retain income, revise curricula, introduce new programs, or recruit staff, all of which are centralized.

A few public providers are permitted to have broad authority over admissions, operations, and staffing. Additionally, a few public institutions are allowed to generate and retain revenues—namely the PVTD and the Training Organization of the Ministry of Housing and Reclamation (TOMOHAR)—and maintain a governing board. Training institutions use ad-hoc processes for introducing and closing new programs; these decisions are made centrally and are informed by a limited assessment of the needs of employers and of implementation constraints (such as funding or capacity).

⁴⁵ This figure does not include private sector training providers that target non-technical trainees. Private sector training providers targeting white collar employees in management positions are by far the majority of providers in the market.

⁴⁶ There is no existing legislation or initiatives that provide any financial or non-financial incentives for private sector entry into TVET and there is no history of cooperation between private and public TVET providers.

Box 2: List of Key and Recent Non-state TVET Providers

Egypt has a large number of diverse TVET providers. This box lists the key non-state providers that have been active, are currently active or are about to start operations:

- Don Bosco Institute, run by the Italian Silesian Brothers since 1926.
- EL Gouna Hotel School, a joint venture between an Egyptian institute and a German partner, providing a three-year diploma founded by a leading tourist investor, Orascom Tourism Development.
- National Academy for Science and Skills (NASS), a private sector VTC founded at the end of 2012 by SAMCRETE - Sami Saad Group of companies.
- German Egyptian Welding Center, a private sector VTC specializing in welding training with proven high quality, as perceived by stakeholders.
- Hedo Welding Academy, a well-established private sector VTC, part of the HEDO Group of companies.
- General Motors Academy, a Canadian-developed 15-month automotive program for TSS graduates who are partially funded by the Industrial Training Council (ITC).
- Masr El Khair Foundation, offering education and training support for the disadvantaged and unemployed including TVET scholarships.
- Sawiris Social Development Foundation funds a high-profile competition among NGOs that have the capacity to source and train unemployed youth on vocational and industrial skills for employment. The 2010/2011 budget of EGP32 million was awarded to 28 NGOs with the target being to train and employ around 14,000 youth.
- Egyptian Hope Bank, a local NGO established after the revolution by a group of business people with a large budget to provide industrial training and employment services for youth.
- Egyptian Business Development Association (EBDA), an NGO established after the revolution and which started a large program of training for employment with a current pilot in the construction sector.
- TAMKEEN Project, launched in November 2012 as a partnership between the ITC and Cidarbridge—a Dubai-based venture capitalist—with investments of 300 million euros over seven years; it aims to train and employ 1 million youth according to international standards, targeting employment both locally and in the Gulf. The first phase targets 25,000 trainees.

Policy Goal 8: Fostering Relevance in Training Programs

Public training institutions need reliable information on current and emerging skills demands in order to keep their program offerings relevant to market conditions. It is therefore desirable for public training institutions to establish and maintain relationships with employers,

industry associations, and research institutions. Such partners are a source of information about skills competencies as well as expertise and advice on curriculum design and technical specifications for training facilities and equipment. They also provide opportunities for workplace training for students and continuing professional development for instructors and administrators. Policy Goal 8 considers the extent to which arrangements are in place for public training providers to: (i) benefit from industry and expert input in the design of programs and (ii) recruit administrators and instructors with relevant qualifications and support their professional development.

Egypt is evaluated at the **Emerging** level of development for Policy Goal 8. Limited and sporadic links exist between public training institutions and industry, with limited involvement of employers in curriculum design and the specification of standards for training facilities. However, there is no evidence of any regular and systematic links between training and research institutions. In addition, the overall process for in-service training and continuing professional development is ad-hoc and limited in scope.

Employers and federations are represented in boards such as the SCHRD, sectoral and local ETPs with governors, and in some ad-hoc technical committees that address policy issues. Also, employers participate in the boards of public policy institutions like training councils (for example, ITC). Formal links, albeit limited in scope, do exist between the MOE and employers. Examples include: (i) the dual education system and the Regional Units of the Dual System (RUDS), which are local units headed by local investor associations; (ii) formal agreements between the MOE and individual companies to adopt schools within their factories; and (iii) the sectoral ETPs where the composition of the respective Boards include the Head of the Technical Education Department as well as employers to ensure responsiveness to the sector's needs. Such a platform contributes to the exchange of market information and thus potentially more demand-driven training programs.

Most institutional reforms have focused on curricula development. This is still insufficient to ensure effective and relevant training provision. It should be complemented with qualified instructors and administrators as well as appropriate facilities, equipment, and access to raw materials, which are the most costly items. As for the role of industry in the specification of facility standards, this occurs on a

limited scale through protocols associated with specific programs, such as the Alternance Education scheme and the dual system. Generally, however, the involvement of industry in facility standards is yet to be formalized, and so it remains as a sporadic linkage within donor-funded interventions.

The TVET system has not yet been successful in improving its image, as compared to other types of education and continuous development options. As a result, many students opt to pursue other pathways. The TVET system thus enrolls a disproportionate number of dropouts from general education, largely because it is one of the few options available to those who perform poorly in national exams but nonetheless wish to continue their education. There are a few exceptions to this, where parents and students see direct links between education, training, and employment opportunities; such students are mainly studying in the MKI dual system, Don Bosco, and, to a much smaller extent, the recent Alternance Education scheme introduced by the EU-funded TVET Reform Program. The quality of these graduates is generally higher and they receive early workplace experience, which prepares them well for entry into the labor market, but they represent a very small fraction (1 to 2 percent) of the new labor market entrants every year.

While currently limited in scope, Egypt is moving in the right direction in terms of establishing formal links between some training institutions and industry. This will potentially lead to an improvement in the overall modality of service delivery. Examples include: (i) the establishment of sector-based institutions that serve as formal links between employers and TVET providers; (ii) industry attachments for TSS students through the dual system; and (iii) the recent establishment of schools in partnership with the MOE and individual companies in leading industries, such as Arab Contractors, El Araby Group, Americana, BTM, Arafa Group, MCV, and General Motors. The impact of these schools has yet to be examined.

If initial evaluations are favourable, it would be worthwhile for Egyptian policymakers to look into the potential of replicating these examples on a wider scale. They could represent a stepping stone towards better links with employers and a practical tool in reinforcing the role of TVET as a driving force for creating a knowledge-based economy. However, there are challenges to be addressed, including the need for strong leadership, a commitment by decision makers to

carry out radical reform and mainstream successful pilot projects, the granting of more autonomy to public training providers, as well as greater coherence and coordination among stakeholders including the private sector.

Putting in place measures to ensure that principals and instructors have exposure to industry can also help increase the relevance and quality of TVET. There is an established recruitment system for all public training providers' staff, including instructors. However, these procedures are focused primarily on ensuring that instructors have the appropriate academic qualifications and do not give adequate consideration to years in industry, work experience, or teaching experience. While in-service training is offered through, for example, MOE's Professional Teachers Academy,⁴⁷ and the Staff Training Institute (STI) affiliated with the PVTB, the overall process (including funding) for in-service training and continuing professional development is best described as ad-hoc and limited in scope. There are, however, isolated examples demonstrating good practice in this regard; the EU-funded TVET Reform Program has trained 8,500 trainers and administrators serving three major sectors (manufacturing, tourism, and construction) and offered over 150 decision makers and practitioners an opportunity to gain exposure to good practice in TVET through numerous study visits in Europe over the past six years (2007-2013).

In advanced workforce development systems, the costs per instructional hour per trainee in TVET are often several times higher than those in academic programs at comparable levels of instruction. In Egypt, this is different; the average expenditure per student in public technical education is less than general secondary education⁴⁸ (EGP 1,389 and EGP 1,475 respectively).⁴⁹ This is relatively lower than some non-state providers. For example, the average cost per student at El Gouna Tourism Technical School is around EGP 11,000 (US\$1,642) per year. To offset some of this cost and to expose trainees to a real production environment, established workforce development systems use competency-based modular curricula that include on-the-job training through industry attachments and apprenticeships as part of the qualification process.

⁴⁷ Although its mandate includes all teachers in the system of pre-university education, little has been done to develop the skills of teachers and instructors in the technical education stream.

⁴⁸ Please see Table 2 in Chapter 5.

⁴⁹ US\$207 for technical education and US\$220 for general education.

While attractive, this option is often difficult to mainstream in countries like Egypt with a large base of small- and medium-sized enterprises that are less motivated to participate. This is why most of these schemes take place in large companies.

Policy Goal 9: Enhancing Accountability for Results

Systematic monitoring and evaluation of service delivery are important for both quality assurance and system improvement. Accomplishing this function requires gathering and analysing data from a variety of sources. The reporting of institution-level data enables the relevant authorities to ensure that providers are delivering on expected outcomes. Such data also enable these authorities to identify gaps or challenges in training provision or areas of good practice. Additionally, periodic surveys and evaluations of major programs generate complementary information that can help enhance the relevance and efficiency of the system as a whole. Policy Goal 9 considers these ideas to assess the system's arrangements for collecting and using data to focus attention on training outcomes, efficiency and innovation in service delivery.

Egypt scores at the **Emerging** level for Policy Goal 9 because accountability is currently affected by the lack of monitoring and evaluation of training outcomes, the absence of data on labor market outcomes, and the failure of ministries to conduct any program impact evaluations.

The Egyptian workforce development system lacks clear key performance indicators and adequate mechanisms for M&E. Only public training providers are required to collect and report administrative data, which are occasionally used to assess the performance of individual institutions. These are mostly basic data elements driven by the requirements of internal auditing and the annual government budgeting process, and are not necessarily related to technical assessment for improvement or for promoting innovation in education delivery.

Available data on labor market outcomes are limited to a few ad-hoc skills-related sectoral surveys or evaluations of specific programs. There is no evidence that this is done at periodic or regular intervals and it is not commissioned or led by a ministry, but mostly driven by donor-funded programs such as those operating with the MOE (GIZ-MKI) or the Ministry of

Industry (for example, the World Bank-supported SDP and EU-Funded TVET Reform project). Overall, the

situation is characterized by (i) limited public access to sectoral surveys and program evaluations; (ii) the lack of pressure by local communities for publication of school reports and results; and (iii) the lack of appropriate legislation to enforce accountability in terms of rewards and reprimands. Moreover, there is no evidence or reports to suggest that any of the ministries engaged in workforce development conduct any type of impact evaluations independently of their related programs, apart from the donor-funded ones.

Implications of the Findings

In the area of service delivery, a range of pilot operations and non-state institutions are providing relevant training programs and credible qualifications, but such positive achievements are limited.

The responsiveness of public training institutions to the demand for skills is constrained by the lack of incentives for achieving results and the lack of management autonomy. Accordingly, service providers—especially public ones—do not have an incentive to set and meet performance targets. Furthermore, data on indicators, such as repetition, graduation rates, employer and trainee satisfaction, and job placement rates, based on accurate tracer studies, are virtually non-existent; if enforced, this would enhance the overall system's relevance and responsiveness.

Efforts to enhance the relevance of training are further complicated by the lack of formal mechanisms for training institutions to engage employers in curricula development and equipment specification. Instances of such collaboration do exist in Egypt, for example, Americana Co. in Egypt developed an initiative with Helwan University⁵⁰ while Fresh Group has an intensive in-house training program for its authorized distributors, but with no formal links to a training provider. Most importantly, the training provider benefits from the opportunity to involve its faculty in organizing and teaching the courses developed in conjunction with employers. This involvement enhances the competence of its administrators and instructors in the design and delivery of industry-relevant training programs.

⁵⁰ Americana Co., in partnership with Helwan University, developed an "education path" alongside its internal career path. To meet the challenges of sourcing qualified recruits, Americana Co. has adapted its industry training practice by moving practical training in-house, so that the college delivers the theory and Americana Co. does the practical training in its restaurants.

A number of countries have experimented with market-driven incentives for more responsive training provision. Kenya exemplifies this experimentation, with the launch of a large-scale demand-led training voucher program for workers in the informal sector. The intervention has demonstrated promising results with regard to increased competition, the provision of training tailored to the unique needs of informal sector workers, and evidence of expanded course offerings by both public and private providers. Where providers compete for a share of the training market, they are more likely to customize their services to better respond to market needs, and thus meet individuals' and employers' requirements; this was a lesson learnt from the SDP. Although financial incentives are important, they are insufficient to maintain quality standards.

Egypt can draw on the experience from South Korea where the Korea University of Technology and Education (KUT) and Samsung exemplify all three facets of the delivery of highly relevant training content in a high-tech industry: (i) KUT hosts the Employee Vocational Education Program, which offers short courses to Samsung's own workers as well as those from the firm's subcontractors; (ii) KUT provides the premises and the teachers; and (iii) Samsung takes the lead in defining course curricula, provides the equipment, and lends in-house experts to co-teach the courses. This type of collaboration benefits all parties. KUT benefits from having access to Samsung's resources and expertise, Samsung gains from having workers and subcontractors who can meet its product specification and quality standards, and its subcontractors gain from being able to retain or expand their business with the company.

In relation to the autonomy of public training providers, legislation exists for promoting the establishment of management boards. However, these remain advisory in nature and thus have limited authority, particularly with regard to financial decision-making and the right to retain revenue. Examples of good practice in the establishment of empowered boards include community colleges in the United States, or the establishment of management boards in Mozambique and Pakistan. Egypt needs to make legislative changes that allow for institute-level autonomy pertaining to (i) the introduction and termination of programs, (ii) the generation and retention of income, and (iii) the financial incentives that can be given to instructors.

In order for a workforce development system to move forward, it is essential to have arrangements in place to ensure accountability. Prioritizing the accountability of the Egyptian workforce development system for results through effective M&E will require overcoming key capacity deficits and a lack of appropriate tools for measuring and improving quality. In Egypt, data on workforce development are often limited in quality, scope, timeliness, and accessibility, and there is a clear need to cultivate a culture of collecting, sharing, and analyzing data to discern trends in skills demand and supply, as well as gaps and mismatches. From the perspective of those overseeing the workforce development system, training providers need to establish strong links between training and labor market indicators, in addition to ensuring that data reporting requirements are in place. This would enhance data availability related to programs' cost effectiveness and level of success in equipping trainees with the skills desired by employers. Driven by institutional-level data collection, it would be possible to create an integrated database for tracking activities in the workforce development system as a whole. This would offer individual providers with information to verify the relevance of their programs, evaluate performance, and improve their services.

Thus, in addition to fostering accountability, M&E is critical for identifying good practice, testing new interventions, and replicating innovative workforce development service delivery.

Annex 1: List of Acronyms

CAPMAS	Central Agency for Public Mobilization and Statistics
CBE	Central Bank of Egypt
DCI	Data Collection Instrument
EBDA	Egyptian Business Development Association
EGAC	Egyptian Accreditation Council
EGP	Egyptian Pound
EOS	Egyptian Organisation for Standardization
ETF	European Training Foundation
ETP	Enterprise TVET Partnership
EU	European Union
EVCQs	Egyptian Vocational Competency-based Qualifications
FDI	Foreign Direct Investment
FEI	Federation of Egyptian Industries
FY	Fiscal Year
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
HRD	Human Resource Development
IFC	International Finance Corporation
ILO	International Labour Organization
ITC	Industrial Training Council
ITE	Institute of Technical Education
KUT	Korea University of Technology and Education
LMIS	Labor Market Information System
M&E	Monitoring and Evaluation
MKI	Mubarak-Kohl Initiative
MOE	Ministry of Education
MOHE	Ministry of Higher Education
MOIFT	Ministry of Industry and Foreign Trade
MOMM	Ministry of Manpower and Migration
MOPIC	Ministry of Planning and International Cooperation
NAQAEE	National Authority for Quality Assurance and Accreditation in Education
NASS	National Academy for Science and Skills
NGO	Non-Governmental Organization
NQF	National Qualifications Framework
NSSP	National Skills Standards Project
NTA	National TVET Authority
PMU	Project Management Unit
PPP	Public-Private Partnership
PVE	Post-secondary Vocational Education
PVET	Post-secondary Vocational Education and Training
PVTD	Productivity and Vocational Training Directorate
RUHDs	Regional Units for Human Development
SABER	Systems Approach for Better Education Results
SCHRD	Supreme Council for Human Resources Development
SDP	Skills Development Project
SFD	Social Fund for Development
SME	Small and Medium-sized Enterprise
STI	Staff Training Institute
TIMSS	Trends in International Mathematics and Science Study
TOMOHAR	Training Organization of the Ministry of Housing and Reclamation
TSS	Technical Secondary School
TVET	Technical Vocational Education and Training
VET	Vocational Education and Training
VTC	Vocational Training Center

Annex 2: The SABER-WfD Analytical Framework

		Policy Goal		Policy Action	Topic	
Dimension 1	Strategic Framework	G1	Setting a Strategic Direction	Provide sustained advocacy for WfD at the top leadership level	G1_T1	Advocacy for WfD to Support Economic Development
					G1_T2	Strategic Focus and Decisions by the WfD Champions
		G2	Fostering a Demand-Led Approach	Establish clarity on the demand for skills and areas of critical constraint	G2_T1	Overall Assessment of Economic Prospects and Skills Implications
					G2_T2	Critical Skills Constraints in Priority Economic Sectors
				Engage employers in setting WfD priorities and in enhancing skills-upgrading for workers	G2_T3	Role of Employers and Industry
					G2_T4	Skills-Upgrading Incentives for Employers
					G2_T5	Monitoring of the Incentive Programs
		G3	Strengthening Critical Coordination	Formalize key WfD roles for coordinated action on strategic priorities	G3_T1	Roles of Government Ministries and Agencies
					G3_T2	Roles of Non-Government WfD Stakeholders
					G3_T3	Coordination for the Implementation of Strategic WfD Measures
Dimension 2	System Oversight	G4	Ensuring Efficiency and Equity in Funding	Provide stable funding for effective programs in initial, continuing, and targeted vocational education and training	G4_T1	Overview of Funding for WfD
					G4_T2	Recurrent Funding for Initial Vocational Education and Training (IVET)
					G4_T3	Recurrent Funding for Continuing Vocational Education and Training Programs (CVET)
				Monitor and enhance equity in funding for training Facilitate sustained partnerships between training institutions and employers	G4_T4	Recurrent Funding for Training-related Active Labor Market Programs (ALMPs)
					G4_T5	Equity in Funding for Training Programs
					G4_T6	Partnerships between Training Providers and Employers
		G5	Assuring Relevant and Reliable Standards	Broaden the scope of competency standards as a basis for developing qualifications frameworks	G5_T1	Competency Standards and National Qualifications Frameworks
					G5_T2	Competency Standards for Major Occupations
				Establish protocols for assuring the credibility of skills testing and certification	G5_T3	Occupational Skills Testing
					G5_T4	Skills Testing and Certification
				Develop and enforce accreditation standards for maintaining the quality of training provision	G5_T5	Skills Testing for Major Occupations
					G5_T6	Government Oversight of Accreditation
					G5_T7	Establishment of Accreditation Standards
					G5_T8	Accreditation Requirements and Enforcement of Accreditation Standards
		G6	Diversifying Pathways for Skills Acquisition	Promote educational progression and permeability through multiple pathways, including for TVET students	G5_T9	Incentives and Support for Accreditation
					G6_T1	Learning Pathways
				Facilitate lifelong learning through articulation of skills certification and recognition of prior learning	G6_T2	Public Perception of Pathways for TVET
					G6_T3	Articulation of Skills Certification
				Provide support services for skills acquisition by workers, job-seekers and the disadvantaged	G6_T4	Recognition of Prior Learning
					G6_T5	Support for Further Occupational and Career Development
Dimension 3	Service Delivery	G7	Enabling Diversity and Excellence in Training Provision	Encourage and regulate non-state provision of training	G6_T6	Training-related Provision of Services for the Disadvantaged
					G7_T1	Scope and Formality of Non-State Training Provision
					G7_T2	Incentives for Non-State Providers
				Combine incentives and autonomy in the management of public training institutions	G7_T3	Quality Assurance of Non-State Training Provision
					G7_T4	Review of Policies towards Non-State Training Provision
					G7_T5	Targets and Incentives for Public Training Institutions
					G7_T6	Autonomy and Accountability of Public Training Institutions
		G8	Fostering Relevance in Public Training Programs	Integrate industry and expert input into the design and delivery of public training programs	G7_T7	Introduction and Closure of Public Training Programs
					G8_T1	Links between Training Institutions and Industry
					G8_T2	Industry Role in the Design of Program Curricula
					G8_T3	Industry Role in the Specification of Facility Standards
				Recruit and support administrators and instructors for enhancing the market-relevance of public training programs	G8_T4	Links between Training and Research Institutions
					G8_T5	Recruitment and In-Service Training of Heads of Public Training Institutions
		G9	Enhancing Evidence-based Accountability for Results	Expand the availability and use of policy-relevant data for focusing providers' attention on training outcomes, efficiency and innovation	G8_T6	Recruitment and In-Service Training of Instructors of Public Training Institutions
					G9_T1	Administrative Data from Training Providers
					G9_T2	Survey and Other Data
					G9_T3	Use of Data to Monitor and Improve Program and System Performance

Annex 3: Rubrics for Scoring the SABER-WfD Data

Functional Dimension 1: Strategic Framework				
Policy Goal	Level of Development			Advanced
	Latent	Emerging	Established	
G1: Setting a Strategic Direction for WfD	Visible champions for WfD are either absent or take no specific action to advance strategic WfD priorities.	Some visible champions provide <i>ad-hoc</i> advocacy for WfD and have acted on few interventions to advance strategic WfD priorities; no arrangements exist to monitor and review implementation progress.	Government leaders exercise sustained advocacy for WfD with occasional, ad-hoc participation from non-government leaders ; their advocacy focuses on selected industries or economic sectors and manifests itself through a range of specific interventions; implementation progress is monitored, albeit through <i>ad-hoc</i> reviews.	Both government and non-government leaders exercise sustained advocacy for WfD, and rely on routine, institutionalized processes to collaborate on well-integrated interventions to advance a strategic, economy-wide WfD policy agenda; implementation progress is monitored and reviewed through routine, institutionalized processes.

Functional Dimension 1: Strategic Framework				
Policy Goal	Level of Development			Advanced
	Latent	Emerging	Established	
G2: Fostering a Demand-Led Approach to WfD	There is no assessment of the country's economic prospects and their implications for skills; industry and employers have a limited or no role in defining strategic WfD priorities and receive limited support from the government for skills upgrading.	Some ad-hoc assessments exist on the country's economic prospects and their implications for skills; some measures are taken to address critical skills constraints (e.g., incentives for skills upgrading by employers); the government makes limited efforts to engage employers as strategic partners in WfD.	Routine assessments based on multiple data sources exist on the country's economic prospects and their implications for skills; a wide range of measures with broad coverage are taken to address critical skills constraints; the government recognizes employers as strategic partners in WfD, formalizes their role, and provides support for skills upgrading through incentive schemes that are reviewed and adjusted .	A rich array of routine and robust assessments by multiple stakeholders exists on the country's economic prospects and their implications for skills; the information provides a basis for a wide range of measures with broad coverage that address critical skills constraints; the government recognizes employers as strategic partners in WfD, formalizes their role, and provides support for skills upgrading through incentives, including some form of a levy-grant scheme , that are systematically reviewed for impact and adjusted accordingly.

Functional Dimension 1: Strategic Framework

Policy Goal	Level of Development			
	Latent	Emerging	Established	Advanced
G3: Strengthening Critical Coordination for Implementation	Industry/employers have a limited or no role in defining strategic WfD priorities; the government either provides no incentives to encourage skills upgrading by employers or conducts no reviews of such incentive programs.	Industry/employers help define WfD priorities on an <i>ad-hoc</i> basis and make limited contributions to address skills implications of major policy/investment decisions; the government provides some incentives for skills upgrading for formal and informal sector employers; if a levy-grant scheme exists its coverage is limited ; incentive programs are not systematically reviewed for impact.	Industry/employers help define WfD priorities on a routine basis and make some contributions in selected areas to address the skills implications of major policy/investment decisions; the government provides a range of incentives for skills upgrading for all employers; a levy-grant scheme with broad coverage of formal sector employers exists; incentive programs are systematically reviewed and adjusted ; an annual report on the levy-grant scheme is published with a time lag .	Industry/employers help define WfD priorities on a routine basis and make significant contributions in multiple areas to address the skills implications of major policy/investment decisions; the government provides a range of incentives for skills upgrading for all employers; a levy-grant scheme with comprehensive coverage of formal sector employers exists; incentive programs to encourage skills upgrading are systematically reviewed for impact on skills and productivity and are adjusted accordingly; an annual report on the levy-grant scheme is published in a timely fashion .

Functional Dimension 2: System Oversight

Policy Goal	Level of Development			
	Latent	Emerging	Established	Advanced
G4: Ensuring Efficiency and Equity in Funding	The government funds IVET, CVET and ALMPs (but not OJT in SMEs) based on <i>ad-hoc</i> budgeting processes, but takes no action to facilitate formal partnerships between training providers and employers; the impact of funding on the beneficiaries of training programs has not been recently reviewed .	The government funds IVET, CVET (including OJT in SMEs) and ALMPs; funding for IVET and CVET follows routine budgeting processes involving only government officials with allocations determined largely by the previous year's budget ; funding for ALMPs is decided by government officials on an <i>ad-hoc</i> basis and targets select population groups through various channels; the government takes some action to facilitate formal partnerships between individual training providers and employers; recent reviews considered the impact of funding on only training-related indicators (e.g. enrolment, completion), which stimulated dialogue among some WfD stakeholders.	The government funds IVET, CVET (including OJT in SMEs) and ALMPs; funding for IVET is routine and based on multiple criteria, including evidence of program effectiveness; recurrent funding for CVET relies on formal processes with input from key stakeholders and with a lag ; funding for ALMPs is determined through a systematic process with input from key stakeholders; ALMPs target diverse population groups through various channels and are reviewed for impact but follow-up is limited ; the government takes action to facilitate formal partnerships between training providers and employers at multiple levels (institutional and systemic); recent reviews considered the impact of funding on both training-related indicators and labor market outcomes; the reviews stimulated dialogue among WfD stakeholders and some recommendations were implemented.	The government funds IVET, CVET (including OJT in SMEs) and ALMPs; funding for IVET is routine and based on comprehensive criteria, including evidence of program effectiveness, that are regularly reviewed and adjusted ; recurrent funding for CVET relies on formal processes with input from key stakeholders and timely annual reporting ; funding for ALMPs is determined through a systematic process with input from key stakeholders; ALMPs target diverse population groups through various channels and are reviewed for impact and adjusted accordingly; the government takes action to facilitate formal partnerships between training providers and employers at all levels (institutional and systemic); recent reviews considered the impact of funding on a full range of training-related indicators and labor market outcomes; the reviews stimulated broad-based dialogue among WfD stakeholders and key recommendations were implemented.

Functional Dimension 2: System Oversight

Policy Goal	Level of Development			
	Latent	Emerging	Established	Advanced
G5: Assuring Relevant and Reliable Standards	<p>Policy dialogue on competency standards and/or the NQF occurs on an ad-hoc basis with limited engagement of key stakeholders; competency standards have not been defined; skills testing for major occupations is mainly theory-based and certificates awarded are recognized by public sector employers only and have little impact on employment and earnings; no system is in place to establish accreditation standards.</p>	<p>A few stakeholders engage in ad-hoc policy dialogue on competency standards and/or the NQF; competency standards exist for a few occupations and are used by some training providers in their programs; skills testing is competency-based for a few occupations but for the most part is mainly theory-based; certificates are recognized by public and some private sector employers but have little impact on employment and earnings; the accreditation of training providers is supervised by a dedicated office in the relevant ministry; private providers are required to be accredited, however accreditation standards are not consistently publicized or enforced; providers are offered some incentives to seek and retain accreditation.</p>	<p>Numerous stakeholders engage in policy dialogue on competency standards and/or the NQF through institutionalized processes; competency standards exist for most occupations and are used by some training providers in their programs; the NQF, if in place, covers some occupations and a range of skill levels; skills testing for most occupations follows standard procedures, is competency-based and assesses both theoretical knowledge and practical skills; certificates are recognized by both public and private sector employers and may impact employment and earnings; the accreditation of training providers is supervised by a dedicated agency in the relevant ministry; the agency is responsible for defining accreditation standards with stakeholder input; standards are reviewed on an ad-hoc basis and are publicized or enforced to some extent; all providers receiving public funding must be accredited; providers are offered incentives and limited support to seek and retain accreditation.</p>	<p>All key stakeholders engage in policy dialogue on competency standards and/or the NQF through institutionalized processes; competency standards exist for most occupations and are used by training providers in their programs; the NQF, if in place, covers most occupations and a wide range of skill levels; skills testing for most occupations follows standard procedures, is competency-based and assesses both theoretical knowledge and practical skills; robust protocols, including random audits, ensure the credibility of certification; certificates are valued by most employers and consistently improve employment prospects and earnings; the accreditation of training providers is supervised by a dedicated agency in the relevant ministry; the agency is responsible for defining accreditation standards in consultation with stakeholders; standards are reviewed following established protocols and are publicized and routinely enforced; all training providers are required as well as offered incentives and support to seek and retain accreditation.</p>

Functional Dimension 2: System Oversight

Policy Goal	Level of Development			Advanced
	Latent	Emerging	Established	
G6: Diversifying Pathways for Skills Acquisition	Students in technical and vocational education have few or no options for further formal skills acquisition beyond the secondary level and the government takes no action to improve public perception of TVET; certificates for technical and vocational programs are not recognized in the NQF; qualifications certified by non-Education ministries are not recognized by formal programs under the Ministry of Education; recognition of prior learning receives limited attention; the government provides practically no support for further occupational and career development, or training programs for disadvantaged populations.	Students in technical and vocational education can only progress to vocationally-oriented, non-university programs ; the government takes limited action to improve public perception of TVET (e.g. diversifying learning pathways); some certificates for technical and vocational programs are recognized in the NQF; few qualifications certified by non-Education ministries are recognized by formal programs under the Ministry of Education; policymakers pay some attention to the recognition of prior learning and provide the public with some information on the subject; the government offers limited services for further occupational and career development through stand-alone local service centers that are not integrated into a system; training programs for disadvantaged populations receive ad-hoc support.	Students in technical and vocational education can progress to vocationally-oriented programs, including at the university level ; the government takes some action to improve public perception of TVET (e.g. diversifying learning pathways and improving program quality) and reviews the impact of such efforts on an ad-hoc basis; most certificates for technical and vocational programs are recognized in the NQF; a large number of qualifications certified by non-Education ministries are recognized by formal programs under the Ministry of Education, albeit without the granting of credits ; policymakers give some attention to the recognition of prior learning and provide the public with some information on the subject; a formal association of stakeholders provides dedicated attention to adult learning issues; the government offers limited services for further occupational and career development, which are available through an integrated network of centers ; training programs for disadvantaged populations receive systematic support and are reviewed for impact on an ad-hoc basis.	Students in technical and vocational education can progress to academically or vocationally-oriented programs, including at the university level ; the government takes coherent action on multiple fronts to improve public perception of TVET (e.g. diversifying learning pathways and improving program quality and relevance, with the support of a media campaign) and routinely reviews and adjusts such efforts to maximize their impact; most certificates for technical and vocational programs are recognized in the NQF; a large number of qualifications certified by non-Education ministries are recognized and granted credits by formal programs under the Ministry of Education; policymakers give sustained attention to the recognition of prior learning and provide the public with comprehensive information on the subject; a national organization of stakeholders provides dedicated attention to adult learning issues; the government offers a comprehensive menu of services for further occupational and career development, including online resources , which are available through an integrated network of centers ; training programs for disadvantaged populations receive systematic support with multi-year budgets and are routinely reviewed for impact and adjusted accordingly.

Functional Dimension 3: Service Delivery

Policy Goal	Level of Development			
	Latent	Emerging	Established	Advanced
G7: Enabling Diversity and Excellence in Training Provision	There is no diversity of training provision as the system is largely comprised of public providers with limited or no autonomy ; training provision is not informed by formal assessment, stakeholder input or performance targets.	There is some diversity in training provision; non-state providers operate with limited government incentives and governance over registration, licensing and quality assurance; public training is provided by institutions with some autonomy and informed by some assessment of implementation constraints, stakeholder input and basic targets.	There is diversity in training provision; non-state training providers, some registered and licensed, operate within a range of government incentives, systematic quality assurance measures and routine reviews of government policies toward non-state training providers; public providers, mostly governed by management boards, have some autonomy; training provision is informed by formal analysis of implementation constraints, stakeholder input and basic targets; lagging providers receive support and exemplary institutions are rewarded .	There is broad diversity in training provision; non-state training providers, most registered and licensed, operate with comprehensive government incentives, systematic quality assurance measures and routine review and adjustment of government policies toward non-state training providers; public providers, mostly governed by management boards, have significant autonomy; decisions about training provision are time-bound and informed by formal assessment of implementation constraints; stakeholder input and use of a variety of measures to incentivize performance include support, rewards and performance-based funding.

Functional Dimension 3: Service Delivery

Policy Goal	Level of Development			
	Latent	Emerging	Established	Advanced
G8: Fostering Relevance in Public Training Programs	There are few or no attempts to foster relevance in public training programs through encouraging links between training institutions, industry and research institutions or through setting standards for the recruitment and training of heads and instructors in training institutions.	Relevance of public training is enhanced through informal links between some training institutions, industry and research institutions, including input into the design of curricula and facility standards; heads and instructors are recruited on the basis of minimum academic standards and have limited opportunities for professional development.	Relevance of public training is enhanced through formal links between some training institutions, industry and research institutions, leading to collaboration in several areas including but not limited to the design of curricula and facility standards; heads and instructors are recruited on the basis of minimum academic and professional standards and have regular access to opportunities for professional development.	Relevance of public training is enhanced through formal links between most training institutions, industry and research institutions, leading to significant collaboration in a wide range of areas; heads and instructors are recruited on the basis of minimum academic and professional standards and have regular access to diverse opportunities for professional development, including industry attachments for instructors.

Functional Dimension 3: Service Delivery

Policy Goal	Level of Development			
	Latent	Emerging	Established	Advanced
G9: Enhancing Evidence-based Accountability for Results	There are no specific data collection and reporting requirements, but training providers maintain their own databases ; the government does not conductor sponsor skills-related surveys or impact evaluations and rarely uses data to monitor and improve system performance.	Training providers collect and report administrative data and there are significant gaps in reporting by non-state providers; some public providers issue annual reports and the government occasionally sponsors or conducts skills-related surveys; the government does not consolidate data in a system-wide database and uses mostly administrative data to monitor and improve system performance; the government publishes information on graduate labor market outcomes for some training programs.	Training providers collect and report administrative and other data (e.g., job placement statistics, earnings of graduates) and there are some gaps in reporting by non-state providers; most public providers issue internal annual reports and the government routinely sponsors skills-related surveys; the government consolidates data in a system-wide database and uses administrative data and information from surveys to monitor and improve system performance; the government publishes information on graduate labor market outcomes for numerous training programs.	Training providers collect and report administrative and other data (e.g., job placement statistics, earnings of graduates), and there are few gaps in reporting by non-state providers; most public providers issue publicly available annual reports, and the government routinely sponsors or conducts skills-related surveys and impact evaluations; the government consolidates data in a system-wide, up-to-date database and uses administrative data , information from surveys, and impact evaluations to monitor and improve system performance; the government publishes information on graduate labor market outcomes for most training programs online .

Annex 4: References and Informants

References:

- Adams, Arvil V. (2010). The Mubarak Kohl Initiative – Dual System in Egypt: An Assessment of its Impact on Schools to Work transition, GiZ.
- African Development Bank Group (2009). 2007-2011 Egypt Country Strategy Paper Mid-Term Review Progress Report.
- African Development Bank Group (2012). Egypt - Competitiveness Report 2010 update.
- Badrawi, Hossam (2012). Education the Chance for Salvation.
- Bauer, Waldemar and El Fateh, M (2012). Decentralized Education and Training for Employment. TVET Reform Programme.
- British Council (2011). Apprenticeship Best Practice in Egypt Scoping Mission Report.
- Brønden, Carsten and El Fateh, M (2012). Developing Modern TVET Governance, Including Instruments, Governance Infrastructure and TVET Finance. TVET Reform Programme.
- CAPMAS website. www.capmas.gov.eg.
- CAPMAS (2011). Quarterly Bulletin Labour Force Survey First Quarter 2011.
- CAPMAS (2011). Egypt in Figures.
- Dehnbostel, Peter and AbouZeid, M (2011). National Occupational Standardisation, Accreditation and Certification System. TVET Reform Programme.
- Education Development Fund (2011). Proposed Strategy for Human Resource Development in Education, Learning and Training.
- El-Ashmawi, Ahmed (2009). Reform of 100 Technical Secondary Schools Progress Report, TVET Reform Programme.
- El-Ashmawi, Ahmed (2011). Background Paper on Assessing Responsiveness of Education and Training Systems To the Demand for Skills in Egypt, World Bank, unpublished.
- Egyptian National Competitiveness Council (2009). 6th Egyptian Competitiveness Reports.
- Egyptian National Competitiveness Council (2010). 7th Egyptian Competitiveness Reports.
- Egyptian National Competitiveness Council (2012). 8th Egyptian Competitiveness Reports.
- ENCC/TVET Reform Programme/ETF (2010). Building a Competitiveness Framework for Education and Training in Egypt.
- Entrepreneurs Business Forum Egypt (2010). Enabling Entrepreneurship in Egypt.
- ETF (2011). Identification Report for new EU Intervention in TVET in ARE, unpublished.
- ETF (2011). Skills Matching For Legal Migration In Egypt.
- ETF (2010). Torino Process Report-Egypt.
- ETF (2010). Review of Secondary Education in Egypt, unpublished.
- ETF (2007). Assessment of the progress of TVET Reform in Egypt and impact of the EU TVET Programme.
- ETF (2008). Assessment of the progress of TVET Reform in Egypt and impact of the EU TVET Programme.
- ETF (2009). Assessment of the progress of TVET Reform in Egypt and impact of the EU TVET Programme.
- ETF (2010). Assessment of the progress of TVET Reform in Egypt and impact of the EU TVET Programme.
- ETF (2010). "Education and Business in Egypt."
- ETF (2009). Human Capital and Employability in the 14 Partners of The Union for The Mediterranean (UfM).

- EU-funded TVET Reform Program (2009). Interim Report, TVET Reform Programme 2005-2009.
- EU-funded TVET Reform Program (2009). Concept development for the Reform of TSS–Implementation of Alternative Training System.
- EU-funded TVET Reform Program (2009). Alternance Training.
- EU-funded TVET Reform Program (2010). Lessons Learnt Report, unpublished.
- EU-funded TVET Reform Program (2007). Basic Features of the Labour Market.
- EU-funded TVET Reform Program (2012). Draft TVET Master Plan.
- Frey, Karl (2012). National TVET Reform Policy Platform, National TVET Authority and Decentralised TVET Organisation. TVET Reform Programme.
- GIZ (2010). Fact sheet Dual System (MKI-DS) in Egypt.
- GIZ (2012). Concept Design for Employment Promotion Programme (EPP), Egypt Mission Report.
- GIZ (2012). Vocational Education, training and Employment Programme (MKI-vetEP) Presentation
- Government of Egypt/Ministerial Committee for Human Resource Development and Employment (2009). TVET National Strategy.
- Government of Egypt/Technical Committee for Reactivating the Supreme Council for Human Resource Development (2013). Draft Decree for reactivating the SCHRD.
- Government of Egypt/Ministry of Education (2013). Draft Decree for establishing the National TVET Authority (NTA).
- Government of Egypt/ILO (2010). Egypt Youth Employment National Action Plan.
- Hanson, Mike and El-Ashmawi, A. (2012). Sector-Based HED-TVET Development and its Significance for the Future Development of TVET in Egypt. TVET Reform Programme.
- Hassanain, Dalia (2010). Gendering Decent Work: Obstacles to Performativity in the Egyptian Work Place, American University in Cairo.
- IFC/Islamic Development Bank Group (2010). Education for Employment: Realizing Arab Youth Potential.
- ILO (2010). Skills for green jobs in Egypt.
- Kinch, Thomas and El-Meligy, H. (2012). TVET Management Information and Knowledge Management System. TVET Reform Programme.
- Ministry of Education (2007). National Strategic Plan for Pre-University Education Reform in Egypt, 2007/08-2011/12.
- Ministry of Education (2011). Technical Education Strategy (2011/12 – 2016/17).
- Ministry of Higher Education (2011). PVET in Egypt, Country Background Report, unpublished.
- Ministry of Higher Education (2011). Introducing Community Colleges Egyptian Higher Education.
- Ministry of Trade and Industry (2006). Egypt Industrial Development Strategy.
- Ministry of Trade and Industry (2010). Export Development Strategy.
- NAQAAE (2010). Education in Egypt Report. www.naqaae.org
- OECD/World Bank (2010). Reviews of National Policies for Education: Higher Education in Egypt 2010.
- Oxford Business Group (2012). The Report: Egypt 2012.
- UNDP/Institute of National Planning, Egypt (2010). Egypt Human Development Report 2010.
- World Bank (2000). Report of the Education, Training & Employment Sub-Committee.
- World Bank/SDP (2002). Labour Market and Training Needs Analysis.
- World Bank/IFC (2013). Doing Business 2013, Arab Republic of Egypt.

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Annex 5: SABER-WfD Scores

		Policy Goal		Policy Action		Topic	
Dimension 1	1.9	G1	2.0	Provide sustained advocacy for WfD at the top leadership level	2.0	G1_T1	1
						G1_T2	3
		G2	1.8	Establish clarity on the demand for skills and areas of critical constraint	2.0	G2_T1	2
						G2_T2	2
				Engage employers in setting WfD priorities and in enhancing skills-upgrading for workers	1.7	G2_T3	2
						G2_T4	2
						G2_T5	1
		G3	2.0	Formalize key WfD roles for coordinated action on strategic priorities	2.0	G3_T1	2
						G3_T2	2
						G3_T3	2
Dimension 2	1.8	G4	1.7	Provide stable funding for effective programs in initial, continuing and targeted vocational education and training	2.0	G4_T1	info
						G4_T2	2
						G4_T3	2
						G4_T4	2
				Monitor and enhance equity in funding for training	1.0	G4_T5_IVET	1
						G4_T5_CVET	1
						G4_T5_ALMP	1
				Facilitate sustained partnerships between training institutions and employers	3.0	G4_T6	3
		G5	1.8	Broaden the scope of competency standards as a basis for developing qualifications frameworks	2.0	G5_T1	2
						G5_T2	2
				Establish protocols for assuring the credibility of skills testing and certification	2.0	G5_T3	2
						G5_T4	2
				Develop and enforce accreditation standards for maintaining the quality of training provision	1.4	G5_T5	2
						G5_T6	info
						G5_T7	1.67
						G5_T8	1.3
						G5_T9	1.3
		G6	1.8	Promote educational progression and permeability through multiple pathways, including for TVET students	2.0	G6_T1	3
						G6_T2	1
				Strengthen the system for skills certification and recognition	1.5	G6_T3	2
						G6_T4	1
				Enhance support for skills acquisition by workers, job-seekers and the disadvantaged	2.0	G6_T5	2
						G6_T6	2
Dimension 3	1.8	G7	1.8	Encourage and regulate non-state provision of training	1.6	G7_T1	3
						G7_T2	1.5
						G7_T3	1
						G7_T4	1
				Combine incentives and autonomy in the management of public training institutions	2.0	G7_T5	2
						G7_T6	2
						G7_T7	2
		G8	1.9	Integrate industry and expert input into the design and delivery of public training programs	1.8	G8_T1	2.5
						G8_T2	2
						G8_T3	1.75
						G8_T4	1
				Recruit and support administrators and instructors for enhancing the market-relevance of public training programs	2.0	G8_T5	2
						G8_T6	2
		G9	1.8	Expand the availability and use of policy-relevant data for focusing providers' attention on training outcomes, efficiency and innovation	1.8	G9_T1	2
						G9_T2	1.5
						G9_T3	2

Annex 6: Authorship and Acknowledgements

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The **Systems Approach for Better Education Results (SABER)** initiative produces comparative data and knowledge on education policies and institutions, with the aim of helping countries systematically strengthen their education systems. SABER evaluates the quality of education policies against evidence-based global standards, using new diagnostic tools and detailed policy data. The SABER country reports give all parties with a stake in educational results—from administrators, teachers, and parents to policymakers and business people—an accessible, objective snapshot showing how well the policies of their country's education system are oriented toward ensuring that all children and youth learn.

This report focuses specifically on policies in the area of workforce development.

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