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Technical Vocational Education and Training in Egypt

Part 1 Overview and Inventory

TECHNICAL ASSISTANCE FOR POLICY REFORM II
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DELOITTE CONSULTING LLP USAID/EGYPT
POLICY AND PRIVATE SECTOR OFFICE
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Contents
Abbreviations: ................................................................................................................................. 4
Introduction and Egyptian National Competitiveness ..................................................................... 5
Chapter 1: Technical Education ..................................................................................................... 13
  History of Technical Education in Egypt ..................................................................................... 13
  Current Situation of the Technical Education in Egypt ............................................................. 14
  Total number of technical schools from 2001/2002 to 2005/2006 ..................................... 15
  Secondary Technical education Types: ..................................................................................... 20
  MUBARAK - KOHL - INITIATIVE (M K I) ...................................................................................... 22
  The Don Bosco School: Successful Model for Technical Private Schools .......................... 27
  Chapter 2: Vocational training ..................................................................................................... 29
  General background: ................................................................................................................... 29
  Ministry of Manpower and Migration ....................................................................................... 31
  Ministry of Trade and Industry Training Center ......................................................................... 39
  Other Ministries Training Centers ............................................................................................. 48
  Chapter 3: Donor Funded programs ............................................................................................ 50
    New Mubarak- Kohl (MKI-VET-EP) ......................................................................................... 50
    TVET Reform Program ........................................................................................................... 53
  Chapter 4 International Cooperation ........................................................................................... 61
  Chapter 5: Education and Business Cooperation ......................................................................... 63
  Chapter 6 Summary and conclusion ............................................................................................ 66
## Abbreviations:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALMM</td>
<td>Active Labour Market Measures</td>
</tr>
<tr>
<td>ATP</td>
<td>Access Transfer and Progression</td>
</tr>
<tr>
<td>CGCP</td>
<td>Career Guidance Counseling and Placement</td>
</tr>
<tr>
<td>GOE</td>
<td>Government of Egypt</td>
</tr>
<tr>
<td>LMS</td>
<td>Labour Market Survey</td>
</tr>
<tr>
<td>LLL</td>
<td>Life Long Learning</td>
</tr>
<tr>
<td>TNA</td>
<td>Training Needs Assessment</td>
</tr>
<tr>
<td>ToT</td>
<td>Training of Trainers</td>
</tr>
<tr>
<td>MOE</td>
<td>Ministry of Education</td>
</tr>
<tr>
<td>MOHE</td>
<td>Ministry of Higher Education</td>
</tr>
<tr>
<td>PVTD</td>
<td>Productivity and vocational training department</td>
</tr>
<tr>
<td>VTC</td>
<td>Vocational Training Centre</td>
</tr>
<tr>
<td>STI</td>
<td>Staff Training Institute</td>
</tr>
<tr>
<td>TCC</td>
<td>Technical Competency Centre</td>
</tr>
<tr>
<td>IMC</td>
<td>Industry Modernization Centre</td>
</tr>
<tr>
<td>ITC</td>
<td>Industrial Training Centre</td>
</tr>
<tr>
<td>STI</td>
<td>Staff Training center</td>
</tr>
<tr>
<td>ITC</td>
<td>Industrial Training Council</td>
</tr>
<tr>
<td>MKI</td>
<td>Mubarak-Kohl initiative</td>
</tr>
<tr>
<td>RUDS</td>
<td>Regional Units for Dual System</td>
</tr>
<tr>
<td>ILO</td>
<td>International labor Organization</td>
</tr>
<tr>
<td>KAB</td>
<td>Know About business</td>
</tr>
<tr>
<td>GAEB</td>
<td>General Authority for Education Buildings</td>
</tr>
<tr>
<td>RMG</td>
<td>Ready-made Garment</td>
</tr>
<tr>
<td>RPL</td>
<td>Recognition of Prior Learning</td>
</tr>
<tr>
<td>PLC</td>
<td>Programmable Logic Control</td>
</tr>
<tr>
<td>CDA</td>
<td>Community Development Association</td>
</tr>
<tr>
<td>SCHRD</td>
<td>Supreme Council For Human Resource Development</td>
</tr>
<tr>
<td>MTI</td>
<td>Ministry of Trade and Industry</td>
</tr>
<tr>
<td>PMU</td>
<td>Project management Unit</td>
</tr>
<tr>
<td>BOT</td>
<td>Board of trustees</td>
</tr>
<tr>
<td>TAT</td>
<td>Technical assistance Team</td>
</tr>
<tr>
<td>TSS</td>
<td>Technical Secondary Schools</td>
</tr>
<tr>
<td>ETP</td>
<td>Enterprise TVET partnership</td>
</tr>
<tr>
<td>DACUM</td>
<td>Developing A Curriculum</td>
</tr>
<tr>
<td>VTC</td>
<td>Vocational Training Center</td>
</tr>
<tr>
<td>MOMM</td>
<td>Ministry of Manpower and Migration</td>
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</tbody>
</table>
Introduction and Egyptian National Competitiveness

In 2006/2007 the Egyptian economy achieved an above average rate increase, before it decreased in 2008/2009 because of the food and bank lending crisis. This is because of the conservative policies that government and central bank implemented in the Egyptian economy which enabled it to deal with the repercussions of global economic crisis and stand relatively stable. Therefore the international and national investments - that have already reached unprecedented figures in 2007 – suggest expectations that Egypt will continue to keep its position as one of the fastest growing economies in the world according to the projections of the International Monetary Fund.

It is credit for the government, to show great interest to invest in developing human skills and increase productivity as the required elements to achieve competitiveness in a new reforming world economy.

These projections remain dependant upon the efficiency of the management of the government and non-government organizations in providing all factors leading to improve levels of productivity to be the real guarantor of the continuity of economic progress. From this perspective the GOE allocated about extra 13,5 billion Egyptian pounds in 2009/2010 budget which represent 1.34% of the GDP in order to encourage the growth and the increase of general investment and to ensure social security and reduction of poverty and unemployment. The government also opened many areas for the private sector and NGOs to implement their activities in a democratic atmosphere, such as: National Human Rights Council

In the introduction of the sixth Egyptian competitive report, the honorary President mentioned that the Egyptian human resource development is a main challenge to raise the competitiveness of Egypt. The international competitive report for year 2008/2009 mentioned that higher education & training and labor market efficiency are considered as two main weak points that led to a decrease in Egypt’s ranking in the overall competitiveness indicator. Egypt’s rank decreased to the bottom scale among 134 countries was obvious because of increasing gap between the qualifications needed for modern labor market and the skills acquired by graduates from the technical education and vocational training systems. In addition, the low quality of outputs in terms of skill standards contributes to the disorder in matching between supply and demand.
<table>
<thead>
<tr>
<th>Pillar</th>
<th>Total # of points according to international competitive indicators 2007-2008</th>
<th>Total # of points according to international competitive indicators 2008-2009</th>
<th>% of change</th>
<th>Improvement ↑</th>
<th>Return ↓</th>
<th>Rank according to international competitive indicator 2007-2008 among 131 countries</th>
<th>Rank according to international competitive indicator 2007-2008 among 134 countries</th>
<th>Change in rank</th>
<th>Improvement ↑</th>
<th>Return ↓</th>
</tr>
</thead>
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<td>Pillar 1 institutions</td>
<td>4.19</td>
<td>4.25</td>
<td>5%</td>
<td>↑</td>
<td>Return ↓</td>
<td>51</td>
<td>52</td>
<td>-1</td>
<td>↓</td>
<td></td>
</tr>
<tr>
<td>Pillar 2 Infrastructure</td>
<td>3.54</td>
<td>3.74</td>
<td>20%</td>
<td>↑</td>
<td></td>
<td>62</td>
<td>60</td>
<td>2</td>
<td>↑</td>
<td></td>
</tr>
<tr>
<td>Pillar 3 Macroeconomic stability</td>
<td>3.74</td>
<td>3.56</td>
<td>-18%</td>
<td>Return ↓</td>
<td></td>
<td>124</td>
<td>125</td>
<td>-1</td>
<td>↓</td>
<td></td>
</tr>
<tr>
<td>Pillar 4 Health &amp; basic education</td>
<td>5.23</td>
<td>5.19</td>
<td>-4%</td>
<td>Return ↓</td>
<td></td>
<td>83</td>
<td>88</td>
<td>-5</td>
<td>↑</td>
<td></td>
</tr>
<tr>
<td>Pillar 5 Higher education &amp; training</td>
<td>3.68</td>
<td>3.56</td>
<td>-12%</td>
<td>Return ↓</td>
<td></td>
<td>80</td>
<td>91</td>
<td>-11</td>
<td>↓</td>
<td></td>
</tr>
<tr>
<td>Pillar 6 commodities market efficiency</td>
<td>4.03</td>
<td>4</td>
<td>-3%</td>
<td>Return ↓</td>
<td></td>
<td>76</td>
<td>87</td>
<td>-11</td>
<td>↓</td>
<td></td>
</tr>
<tr>
<td>Pillar 7 labor market efficiency</td>
<td>3.21</td>
<td>3.26</td>
<td>5%</td>
<td>↑</td>
<td>Return ↓</td>
<td>130</td>
<td>134</td>
<td>-4</td>
<td>↓</td>
<td></td>
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<tr>
<td>Pillar 8 financial market improvement</td>
<td>3.5</td>
<td>3.68</td>
<td>18%</td>
<td>↑</td>
<td>Return ↓</td>
<td>113</td>
<td>106</td>
<td>7</td>
<td>↑</td>
<td></td>
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<tr>
<td>Pillar 9 technology readiness</td>
<td>2.84</td>
<td>3.04</td>
<td>20%</td>
<td>↑</td>
<td>Return ↓</td>
<td>87</td>
<td>84</td>
<td>3</td>
<td>↑</td>
<td></td>
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<tr>
<td>Pillar 10 market volume</td>
<td>4.52</td>
<td>4.67</td>
<td>16%</td>
<td>↑</td>
<td>Return ↓</td>
<td>31</td>
<td>27</td>
<td>4</td>
<td>↑</td>
<td></td>
</tr>
<tr>
<td>Pillar 11 work improvement</td>
<td>4.08</td>
<td>3.93</td>
<td>-15%</td>
<td>Return ↓</td>
<td></td>
<td>67</td>
<td>77</td>
<td>-10</td>
<td>↓</td>
<td></td>
</tr>
<tr>
<td>Pillar 12 creativity</td>
<td>3.17</td>
<td>3.15</td>
<td>-2%</td>
<td>Return ↓</td>
<td></td>
<td>67</td>
<td>67</td>
<td>0</td>
<td>↓</td>
<td></td>
</tr>
</tbody>
</table>
Since investment in technical education and vocational training is one of the most important sources of socio-economic development, this issue took the attention of the political leaders in the president’s electoral program launched in 2006. And since that time, the government is working on improving a conducive business environment and encouraging internal investments in order to create jobs and increase chances for young people to work.

Despite all reform initiatives to improve the Egyptian education and training systems, the inherited aging and traditional teaching methods obstacle and slow down achieving the set objectives. The Egyptian law guarantees the right of free education for all kinds of education offered by governmental institutions, and the low fees collected from students is undervalued for the specific services such as health insurance, school activities, libraries, maintenance etc. According to the increasing number of students exceeding the country’s capacity for absorption in its institutions plus the lack of funding, led to negative results reflected on quality of outcomes.
The structure of the formal general education system is clear in many of its features in its similarity to many developed countries. The MOE is responsible for all kinds of Pre-university education (general education and technical education). The MOHE is responsible for all kinds of education above secondary education general and technical level. Egyptian universities are autonomous and managed by Supreme Councils (Public and Private) chaired by Minister of Higher Education. These bodies regulate the access of students to higher education and set rules for recognition and equivalence of qualifications obtained outside the formal systems.

It is worth mentioning Al-Azhar as an independent body, which has similar responsibilities for general and technical education through their own managed schools, colleges and university, which are provided in a religious context. It is easy to identify the qualifications of the graduates in different systems and level them on a map in order to compare them to the equivalent qualifications provided in other countries.

The clarity of pathways in general education and building of qualifications are not the same as in the system of technical education and vocational training. This could be attributed to the large number of entities that offer certified programs. The pre-university technical education is under the supervision of MOE, which provide technical diplomas for 3 and 5 years of study at post preparatory level. MOE supervises also all fixed programs offered by VTCs run by other training providers. The MOHE supervises the technical education in the technology collages which offer two or three years after secondary education. Other vocational training programs run by almost 26 Ministries and sometimes by other entities are too many to map. Private sector providers offer education and training programs outside the formal systems, and some of them provide qualifications similar to that offered by foreign bodies. This disorder is sought to be regulated when a National Qualifications framework is established.
Technical Assistance for Policy Reform II

General Education and Technical Education Pathways

Drop outs from the education system join different vocational, rural and handicraft training centers/units affiliated to different ministries and NGOs.
The above diagram shows a simple map that includes the official education systems (general and technical) with its different types and its relation with the labor market, the map also shows the path of moving from one level to another, but in fact it is vertical paths and the non-existence of horizontal paths doesn't indicate its simplicity as there are always rules that tie up the transition from one path to another if the student did not start form the first step of new level.

The main problem in the supply side is lack of coordination between the different education and training systems. Although, there is a Supreme Council for Human Resource Development established by a presidential decree no 229/2003, but still it is not functioning the way it was planned. Many HRD stakeholders do not recognize its existence, and they compete for winning the financial resources and technical support in achieving their specific HRD objectives. The main objective of the supreme council is to plan for human recourse development nationwide, and to coordinate between the different entities and follow-up the implementation within an agreed strategy.

Driven by the need for a sustainable economic growth, the GOE assigned a Ministerial Group for to follow-up HR developments and employment enhancement. The HRD Ministerial Group is currently working on a long term strategic plan to integrate the technical education and vocational training and gear their outcomes to current and future needs of the country. A 25 year plan is designed on eight main pillars, which can be summarized as follows:

1- Integration and coordination between education and training systems at its different types, phases and levels.
2- Improve the quality of educational and training process at the national level in order to reach the international standards.
3- Develop and apply effective labor market information systems.
4- Build strategic partnerships with the labor sectors in order to participate in developing and managing the educational and training process.
5- Allow for lifelong learning and training opportunities for all, regardless gender or community level.
6- Spread awareness - at the level of the individual, community and state - of the importance of technical and vocational types of work in the achieving and sustaining high rates of economic and social development.
7- Diversifying sources of funding for the TVET institutions.
8- Technical cooperation, research and development in the field of TVET at the national, regional and international levels.
<table>
<thead>
<tr>
<th>Stages</th>
<th>Gov</th>
<th>Private</th>
<th>Urban</th>
<th>Rural</th>
<th>Overall Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>girls</td>
<td>Total</td>
<td>Boys</td>
<td>girls</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre- primary</td>
<td>286566</td>
<td>256905</td>
<td>543471</td>
<td>107169</td>
<td>99803</td>
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<tr>
<td>primary</td>
<td>4363367</td>
<td>4083355</td>
<td>8446722</td>
<td>394404</td>
<td>366197</td>
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<tr>
<td>OCR</td>
<td>4227</td>
<td>65812</td>
<td>70039</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Girls friends</td>
<td>2358</td>
<td>18099</td>
<td>20457</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Prep</td>
<td>1893386</td>
<td>1846728</td>
<td>3740114</td>
<td>120651</td>
<td>104183</td>
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<tr>
<td>General Sec</td>
<td>343684</td>
<td>390638</td>
<td>734322</td>
<td>32542</td>
<td>30847</td>
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<tr>
<td>Industry</td>
<td>412704</td>
<td>250711</td>
<td>663415</td>
<td>1261</td>
<td>813</td>
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<td>Agriculture</td>
<td>96498</td>
<td>26984</td>
<td>123482</td>
<td>0</td>
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<tr>
<td>Commercial</td>
<td>133340</td>
<td>261957</td>
<td>395297</td>
<td>33116</td>
<td>35047</td>
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<td>Special education</td>
<td>23467</td>
<td>13728</td>
<td>37195</td>
<td>367</td>
<td>296</td>
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<tr>
<td>Total of all stages</td>
<td>7559597</td>
<td>7214917</td>
<td>14774514</td>
<td>689510</td>
<td>637186</td>
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Ref: MOE
### Number of schools and classrooms for all stages 2008/2009

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<thead>
<tr>
<th>Stage</th>
<th>Schools</th>
<th>Classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gov</td>
<td>Private</td>
</tr>
<tr>
<td>Pre-primary</td>
<td>6401</td>
<td>1514</td>
</tr>
<tr>
<td>Primary</td>
<td>15282</td>
<td>1584</td>
</tr>
<tr>
<td>OCR</td>
<td>3229</td>
<td>66</td>
</tr>
<tr>
<td>Girls friend</td>
<td>777</td>
<td>0</td>
</tr>
<tr>
<td>Prep</td>
<td>8470</td>
<td>1185</td>
</tr>
<tr>
<td>Gen Secondary</td>
<td>1730</td>
<td>602</td>
</tr>
<tr>
<td>Industry sec</td>
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<tr>
<td>Agriculture sec</td>
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<td>0</td>
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<tr>
<td>Commercial</td>
<td>545</td>
<td>204</td>
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<tr>
<td>Special education</td>
<td>840</td>
<td>19</td>
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</table>

Ref: MOE

### Higher Education

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<tbody>
<tr>
<td>No. of Universities</td>
<td>17</td>
</tr>
<tr>
<td>No. of Private Universities</td>
<td>14</td>
</tr>
<tr>
<td>No. of Industrial Institutes</td>
<td>12</td>
</tr>
<tr>
<td>No. of Commercial Institutes</td>
<td>19</td>
</tr>
<tr>
<td>Tourism &amp; Hotel. Institutes</td>
<td>4</td>
</tr>
<tr>
<td>Specialized Educational Inst.</td>
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<tr>
<td>No. of Technology Colleges</td>
<td>8</td>
</tr>
<tr>
<td>Above Intermediate Priv. Inst.</td>
<td>10</td>
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<tr>
<td>Colleges of Industrial Education</td>
<td>4</td>
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</tbody>
</table>

Ref: Ministry of Higher Education (2007)

### Al-Azhar - Enrollment 2006/2007

<table>
<thead>
<tr>
<th></th>
<th>Pre-University Education</th>
<th>Primary</th>
<th>Preparatory</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Institutions</td>
<td>3191</td>
<td>2656</td>
<td>1743</td>
<td></td>
</tr>
<tr>
<td>Total No. of Students</td>
<td>1100026</td>
<td>339446</td>
<td>282492</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>634311</td>
<td>211878</td>
<td>182341</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>465715</td>
<td>127568</td>
<td>100151</td>
<td></td>
</tr>
</tbody>
</table>

Ref: CAPMAS 2007
Chapter 1: Technical Education

History of Technical Education in Egypt

Current complexity found in Egypt’s technical education systems is a result of many unplanned changes and reforms which accumulated over the two past centuries. History records the establishment of the agriculture school in year 1829, and a year later the first industry school was established, and it was until 1911 when the first commercial school had been established. A commercial institute specialized in accountancy was established in 1942/1943 and later this institute was transferred to Ein Shams Faculty of Commerce.

In the early 50’s nine technical institutes were established to cope with Egypt’s Five Years Programs for Industrialization, and qualify technicians needed for State owned companies. In 1961 Ministry of Higher Education was established and took over the responsibility of these institutions from MOE. Some of these technical institutes were transformed to colleges of Engineering, and as a consequence the Manufacturing sector lost the main supplier of technicians and Master’s level.

In 1952 the industrial schools were classified into two types, the elementary industrial schools and the industrial technical secondary schools “three years” type. In 1978, the Ministry of Education started to expand some of the “three years” secondary technical schools to the “5 years” secondary technical schools. This upgrading intended to prepare master’s level technicians and trainers who will teach the practical programs in the 3 years technical schools.

It’s important to mention that there was 8 agriculture institutes until 1968/1969 and according to presidential decree no (1088) for year 1969 those institutes were transferred to faculties of agriculture.

But according to the country urgent needs of technicians and the increased demand on the technical education, a number of higher institutes and faculties were established
starting form 1988 and until 1995 such as the technology institute in Banha, 2 industry collages in Cairo and Beni Swief, the higher energy institute in Aswan, and in year 1994 the labor university was established.

It was only until year, when the Egyptian Government collaborated with the World Bank to start a series of projects to enhance education. Various “Education Enhancement Projects” such as EEP and SEEP focused on the reform of Basic and general education systems.

Recently, the number of technical industrial schools is decreased from approximately 1810 schools in 2005, to 1790 schools in 2009. Where as the number of the Commercial Schools was reduced from 976 in 2008 to 749 in 2009. The conversion of technical commercial to general secondary school was recommended by a World Bank Project SEEP.

The number of technical intermediate institutes are 45 institutes until year 2002/2003 (22 industrial, 19 commercial, 4 hotel and tourism and 1 social work)

**Current Situation of the Technical Education in Egypt**

The responsibility of technical education is shared by two ministries: MOE for up to secondary level and MOHE for post secondary level. More than 1.25 million students enrolled in 1790 technical schools, and more than 95,427 students enrolled in 45 middle technical institutes grouped into 8 technology colleges.

The Number of students enrolled in technical secondary schools represents about 62% of total number of students in general education schools. Technical education system run by MOE is branched in three sectors: Industrial, Commercial and agricultural. Also exists other equivalent technical education sectors run by other ministries such as nursing run by Ministry of Health and endorsed by MOE.

In 1994, MOE started to implement the German model for school and company dual education carrying the names of Mubarak and Kohl. The MKI system is run in 76 schools and currently enrolls about 19000 students, which represent 2.4% of total number of students in technical stream.
Graduates from all technical education streams are prepared to work directly in the labor market with the technical diploma certificate. This qualification level is classified as intermediate.

Graduates from technical education streams are allowed to continue higher education colleges if they fulfill the entry requirements. MOHE and the Supreme Councils of Egyptian Universities regulate the admission conditions and they set yearly the percentage of places that can be filled by technical diploma students. Access to higher education in the technical stream is open for all students coming from general as well as technical streams. Number of students is determined according to institutes’ capacity against score attained in the secondary level exams.

**Total number of technical schools from 2001/2002 to 2005/2006**

The number of technical school decreases as in year 2001/2002 the total number of technical schools was 1940 schools, compared to 1810 schools in year 2005/2006 and this is because of converting some of the commercial schools to general secondary schools (world bank project) it also indicates that the number of agriculture schools is the minimum compared to industrial and commercial as it is 9.5% from the total of the technical schools.

Comparing the total number of technical schools and general secondary schools, it is noticed that the number of general secondary schools is more than the technical according to the 2005/2006 statistics, although the number of technical students represent 61.28% of the secondary students, which has a negative impact on the quality of the technical education. The government of Egypt also follows the system of accepting low grade students in the technical schools, which increased the number of students in the technical schools and the following table presents the number of technical schools students from 2001/2002 to 2005/2006.

**Total number of technical schools students**

The number of technical students is decreasing as in 2001/2002 the total number of technical education students was 2149408 and in 2005/2006 the number decreased to 1961162 and another decrease to 1252431 students in 2008/2009, the percentage of technical education students was 64.89% in 2001/2002 decreased to 61.28% in year 2005/2006, and 61% in 2008/2009. In 2005/2006, 50.6% are in industry, 11.4% agriculture and 38% in commercial.
Girls in the technical education:

2005/2006 (References: national strategic plan and updated from MOE)

<table>
<thead>
<tr>
<th></th>
<th>Gov</th>
<th>Private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td>989,346</td>
<td>52,778</td>
<td>1,042,124</td>
</tr>
<tr>
<td>Girls</td>
<td>842,913</td>
<td>72,125</td>
<td>919,038</td>
</tr>
<tr>
<td></td>
<td>1,832,259</td>
<td>128,903</td>
<td>1,961,162</td>
</tr>
</tbody>
</table>

Ref: national strategic plan

This table indicates that the percentage of girls in the technical education is 46.86%, which is considered a high percentage, which ensure that the government is keen for girls education.

The students of the private technical schools present only 6.6% of the technical education students.

Number of Technical education teachers:

The technical education suffers from the shortage of technical and practical teachers, as the skilled teachers find a better chance in the private sector, and there is a shortage also in the specialized technicians for maintaining the equipment inside the schools.

The reason of the low level of efficiency of technical teachers, because they were not well prepared for the job they are doing which lead to the low level of the graduate and their low chances to join the labor market.

Number of teachers in technical education schools 2005/2006

<table>
<thead>
<tr>
<th>Specialization</th>
<th>Number of actual teachers</th>
<th>Shortage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>93,091</td>
<td>13,737</td>
</tr>
<tr>
<td>Agriculture</td>
<td>13,997</td>
<td>1,567</td>
</tr>
<tr>
<td>Commercial</td>
<td>39,918</td>
<td>1,708(exceeds)</td>
</tr>
<tr>
<td>Total</td>
<td>147,006</td>
<td>13,596</td>
</tr>
</tbody>
</table>

Ref: national strategic plan

The total number of technical education teachers is 147,006, which is not enough for 1,961,162 students or number of classrooms in the technical schools that reached 51,587 classrooms.
### Total number of students in technical schools according to school year 2008/2009

<table>
<thead>
<tr>
<th>Schools</th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 years industry</td>
<td>385138</td>
<td>245725</td>
<td>630863</td>
</tr>
<tr>
<td>5 years industry</td>
<td>28827</td>
<td>5799</td>
<td>34626</td>
</tr>
<tr>
<td>3 years commercial</td>
<td>149944</td>
<td>281661</td>
<td>431605</td>
</tr>
<tr>
<td>5 years commercial</td>
<td>16512</td>
<td>15343</td>
<td>31855</td>
</tr>
<tr>
<td>3 years agriculture</td>
<td>95687</td>
<td>26785</td>
<td>122472</td>
</tr>
<tr>
<td>5 years agriculture</td>
<td>811</td>
<td>199</td>
<td>1010</td>
</tr>
<tr>
<td>Total</td>
<td>676919</td>
<td>575512</td>
<td>1252431</td>
</tr>
</tbody>
</table>

Ref: MOE
Total number of technical schools for school year 2008/2009

<table>
<thead>
<tr>
<th>Schools</th>
<th>Governmental</th>
<th>Private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 years industry</td>
<td>822</td>
<td>9</td>
<td>831</td>
</tr>
<tr>
<td>5 years industry</td>
<td>32</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>3 years commercial</td>
<td>497</td>
<td>198</td>
<td>695</td>
</tr>
<tr>
<td>5 years commercial</td>
<td>48</td>
<td>6</td>
<td>54</td>
</tr>
<tr>
<td>3 years agriculture</td>
<td>174</td>
<td>0</td>
<td>174</td>
</tr>
<tr>
<td>5 years agriculture</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>1576</td>
<td>214</td>
<td>1790</td>
</tr>
</tbody>
</table>

Ref: MOE
Comparison between technical school students:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>413965</td>
<td>251524</td>
<td>665489</td>
<td>666062</td>
<td>384908</td>
<td>1050970</td>
</tr>
<tr>
<td>Commercial</td>
<td>166456</td>
<td>297004</td>
<td>463460</td>
<td>269964</td>
<td>518053</td>
<td>788017</td>
</tr>
<tr>
<td>Agriculture</td>
<td>96498</td>
<td>26984</td>
<td>123482</td>
<td>194265</td>
<td>56756</td>
<td>251021</td>
</tr>
<tr>
<td>Total</td>
<td>676919</td>
<td>575512</td>
<td>1252431</td>
<td>1130291</td>
<td>959717</td>
<td>2090008</td>
</tr>
</tbody>
</table>

Ref: MOE

![Graph showing the comparison between technical school students in different fields for 2008/2009 and 2004/2005.]
Secondary Technical education Types:

**Technical secondary schools:**
Is provided in three-year and five-year programs, includes schools in three different fields: industrial, commercial and agricultural. This type of education contains general theoretical subjects, technical theoretical subjects, technical practical subjects and practical training, students join technical secondary schools after finalizing and passing the basic education (3rd year preparatory). After passing the exams the student obtain a certificate called diploma and this certificate allows the graduates to either join the labor market or continue higher education after passing certain exams.

Most of the students who join the three years technical schools are students with low grades in third year prep so they join it against their wish or they choose it because of their low economic level (poor families) that doesn’t give them the opportunity to join higher education as they prefer to work early.

**Vocational secondary schools:**
The reason of establishing those kinds of schools, is to graduate skilled technicians and it accept students who passed basic education (3rd year prep) the duration of study is 3 years in the field or agriculture and industry, the total number of vocational schools is 256 industry schools with a total of 2112 classrooms, capacity of 22171 students, the number of agriculture schools is 56 with 404 classrooms and capacity of 14190 students, the vocational schools accept students with grades lower that the technical schools and it works in the afternoon shifts in the same building of the technical schools with the same administration, the same teachers and the same facilities. Which causing a big problem as the facilities is not enough for the technical school students and also it is not enough for the vocational school students, working with the same school administration and the same teachers and facilities is a big load for the school which affects the quality of education the students receive in both schools.

**Students Admission:**
The students do not choose the specializations that they prefer, they are obliged to join certain specialization according to the grades they get in 3rd year prep (El Edadia), or according to the capacity of the schools department, number of teachers regardless the Willingness and the ability of the students or the labor market needs.

Career guidance and counseling is not a method that the MOE depend on for the admission of the technical education students. Although some reform programs are trying to emphasize the career counseling and guidance methods like the TVET project and MKI project but still the process is not officially in the system of the MOE.
Specializations and subjects of technical schools
The number of specialties in technical education kept increasing with emerging needs of the economy till they reached about 112 in industry sector, 28 in commercial sector and 22 in tourism and hostelries and 37 in agriculture sector.

These specialized were clustered in main groups for the purpose of designing teachers’ tests.
MUBARAK - KOHL - INITIATIVE (M K I)

MUBARAK - KOHL System
The MKI system refers to an initiative started around 1994 to apply the German dual system to technical education in Egypt. Although this approach is quite well known and implemented in many forms, but carrying the name of the President gave it wider popularity. The system succeeded in establishing strong and vital partnership between the technical school and the factory. This is reflected in an education scheme in which a student spends two days per week in the technical school, mainly acquiring theoretical knowledge, together with four days per week in the factory, acquiring practical experience pertinent to his or her profession. Businessmen and Investors Associations were driven by growing needs for well-trained technical workers, and enthusiastically promoted this initiative in the new industrial cities, and later it spread to other cities. The partnership commits the factory to bear a small portion of the student’s educational expenses as well as providing students with a monthly stipend as an incentive. The main advantages gained from the implementation of the dual education system in Egypt can be summarized in the following:

- Emphasizing professions of significant importance to the Egyptian economy that meet the demand of industry.
- Being trade-oriented in the sense that both theoretical and practical education are aiming side by side to enhance students’ knowledge in the selected profession.
- Participating in the upgrading of education through enhancement of laboratory facilities, refining instructors’ knowledge and qualifications and introducing advanced pedagogic methods.
- Students enrolled in the dual system have approximately double practical training hours than students of the conventional system. Often, the students deal with modern equipment in the factories that may not be present within school premises.
- Students enrolled in the dual system have only 30% less theoretical lesson hours than students of the conventional system. This was possible through modernization of curricula and the presentation of some of the theoretical background needed during the practical lessons/training.
- The students of the dual system have good exposure and experience with industry, securing jobs after graduation. This is not the case for the graduates of the conventional system.

Experiences from the Project Initiation
To initiate the project, a supreme committee, headed by the Egyptian Minister of Education, was formed. Members of this committee include key figures of the industry, education experts,
and high-ranking representatives of ministries concerned with the project. A Project Policy Implementation Unit (PPIU) was set up next to a ministerial level that reports to the supreme committee and is directly under the control of the Minister of Education. The PPIU focuses on system planning and concept development and supports the supreme committee during the introduction of a new cooperative system. The PPIU pursues development tasks in the following fields:

- Securing the necessary funds for the success of the project.
- Establishing in-company vocational training in selected regions and sectors.
- Founding Regional Units of Dual System (RUDS) in designated pilot project areas. The existence of the RUDS insures the sustainability of the system.
- Launching in-school dual vocational education and training in selected regions or sectors.

**Admission to Mubarak-Kohl Schools:**

Students can join Mubarak-kohl school after finalizing and passing third year preparatory and according to certain criteria such as:

- The grades they get in third year preparatory;
- Passing a placement test in the school (written exam on Arabic language, Math, science, English language, art and IQ test);
- Passing the medical exam (Physical fitness appropriate to the profession the student is joining);
- The student must sign an agreement with factory or company for the practical training for three years.

The duration of the study is three years and the school year is considered as 11 months. The student has the right for 1 month vacation each year after the approval of the factory or the company that he/she attending the practical training in. Student spends two days per week in the technical school, mainly acquiring theoretical knowledge, together with four days per week in the factory, acquiring practical experience pertinent to his or her profession. Student has the right for 21 day off during the summer also after the approval of the factory or the company plus 7 days off before the mid year exam. Students get approved evaluation performance certificate after finalizing the practical training considered as Experience Certificate. Students who couldn’t pass first year only in Mubarak-Kohl schools are not allowed for second chance and they have the right to join another technical school.

**Current Status of MKI**

Since its start, the project has undergone significant growth as shown by the data in Table 1 and presented in Figures 1 to 3. This is evidenced by the increase in pilot
projects taking place throughout the country and the increase in number of personnel
involved in the various aspects of the project. For example, in 1995, there were only two
schools participating in the project compared to 79 in 2009. Such an increase must be
looked at not only in terms of absolute magnitude but also in terms of ratio. The
increase in number of dual system schools came in part as a result of the increase in the
number of industrial communities (cities) where the project was implemented, as well
as the increase in the number of vocations considered (3 vocations in 1995 compared to
38 vocations in 2009).

As a result of the previously mentioned increase, the number of dual system students,
in-school teachers, and in-factory trainers have all increased. For example, the number
of students has increased from 320 students in 1995 to 2,300 students in 1997. Also, the
number of teachers has increased from 36 in 1995 to 1900 in 2009. The following table
shows that the increase in numbers has been accompanied by an increase of upgrading
courses that took place either locally or abroad as well as the increase in the number of
short term and long-term experts participating in the project. It can also be noticed that
the increase in the number of upgrading courses is not a simple increase resulting from
the increase in the number of students or so. Rather, the ratio with respect to the
number of teachers and trainers has in itself increased, leading to a more significant
increase.

**Growth of MUBARAK – KOHL Initiative:**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of governorates</td>
<td>20</td>
<td>22</td>
</tr>
<tr>
<td>Total Number of cities</td>
<td>24</td>
<td>41</td>
</tr>
<tr>
<td>Total Number of schools</td>
<td>38</td>
<td>79</td>
</tr>
<tr>
<td>Total Number of vocations</td>
<td>18</td>
<td>31</td>
</tr>
<tr>
<td>Total number of teachers</td>
<td>1500</td>
<td>1900</td>
</tr>
<tr>
<td>Total number of students</td>
<td>100,000</td>
<td>12,460</td>
</tr>
</tbody>
</table>

Ref: MKI Fact sheet
Challenges to MKI
Through the above comparison we can notice:
- The project is expanding slowly
- The expansion in specializations and sites is not suitable with the increase of the students number
- The expansion of the project is depending on Small industrial and service entities

Assessment of the MKI
This program has been highly successful in achieving its main objective of producing qualified labor with skills deemed relevant to the job market. Unlike conventional vocational programs in Egypt, where students do not receive practical training, MKI students have in particular benefited from their apprenticeship and acquired experience from their exposure to real-work practices. The initiative has facilitated transfer of skills as apprentices have received training in both small and larger companies.

Nonetheless, the program has shortcomings that need to be addressed to improve its efficiency and effectiveness. Some students have not received training in their specialties; others are sometimes assigned messenger tasks and help clean factory premises. In construction, for example, students are faced with limited training opportunities, and companies are reluctant to provide them with construction materials to training purposes. Thus, students are allowed minimal training on site and learn almost exclusively by observation.

The MKI program uses German syllabi which are translated into Arabic and adapted to the Egyptian context. Some teachers in industry believe that the program misses important courses, such as math. They also complain of shortage of equipment necessary to teach certain parts of the curriculum. For teacher training, some were sent to Germany in the early stages to learn more about educational methods. While these training courses proved useful, the number of courses has declined in later stages despite continued need. Training abroad also acted as an incentive to join the program. In nursing, training was provided to trainers only and was carried out by German experts at the initial phases and by Egyptian experts at later phases.

Another serious limitation of the program is that outstanding students, who score high grades (75%), are entitled to join higher education. Hence, as many as 60% of the graduates join university upon completing the program, it is considered as the backdoor to join collages of higher education and to university. Sometimes they continue their studies in fields not related to their vocational specializations. In other words, it has
been used as a backdoor to university. This constitutes a serious leakage that limits the effective contribution of the program to the supply of qualified vocational skills.

The role of business people is critical for the success of the dual system. Initially, the launching of the program was pioneered by a few leading business people. This gave it a promising start. Subsequently, their enthusiasm seems to have faltered, restricting their role to providing training opportunities for apprentices, and leaving program promotion largely to Regional Units for Dual System, that are charged with organizing, managing and implementing dual training activities. Notwithstanding the latter’s efforts, business leadership initiatives are now largely missing. The sustainability of the program depends largely on adequate funding and active business support. Shortage of funds has limited the provision of equipment to some schools, kept students stipends and teachers’ salaries from rising, which are a cause of grievance.
The Don Bosco School: Successful Model for Technical Private Schools

Background:

The Salesian Don Bosco Technical Institute was established in 1926 with the aim of helping Egyptian teenagers holding a pre-university diploma to enter the job market. It has been regarded as a successful model, because of its combination of advanced practical training and modern educational techniques.

The Institute supports young people from different social backgrounds by providing educational and training courses based on student-centered approaches, including cultural, professional and social aspects.

According to the overall agreement between the Italian and Egyptian governments to promote technical, scientific and cultural cooperation between the two countries, the graduated Don Bosco students can be admitted either to Egyptian or to Italian Universities.

There are two Don Bosco schools in Egypt, one in Cairo and one in Alexandria and Recently the automobile company IVECO launched a new project in Cairo: a school for mechanical repair technicians for the motor industry in cooperation with the Don Bosco Salesian Institute. The purpose of the project is to keep future Egyptian mechanics up to date with the latest technologies available.

Students’ Admission:

Students can join the Bon Bosco schools after finalizing and passing 3rd year prep with score higher than the general secondary education, when the students are informed that they are accepted in the Don Bosco school, they attend an intensive Italian language course in the school during the summer (from June to Aug) as all the subject are taught in Italian language except for Arabic language and religion.

An interview is also done for the students and the parents.

The schools apply the formative assessment method to assess and exam the students except for the Arabic language as it is supervised by the MOE and follow the MOE assessment systems.

The technical school fees vary from three to five thousands Egyptian pounds per year which is something not common for the technical education in Egypt.
Courses:

The school offers 3 and 5 years courses in the technical education, in addition to vocational training courses for individuals during summer and evening in the following fields:

- Electric installation
- Automatic control
- Winding Electric Motors
- Turner
- Automatic washing machine maintenance
- Refrigerating and air conditioning
- Electric & oxygen welding
- Auto CAD
- Italian language

As for the vocational training it is offered in short courses from two to six months. These courses, given in Arabic and bring almost three thousand students every year for each of the Don Bosco schools. The Don Bosco offers jobs for the graduate students of the school, through the school based job referral center which has direct contact with companies and industries that work in the same field of the school’s specializations.

95% of the instructors are the institute’s own graduates, who have pursued their higher education outside before working as instructors. In addition, instructors attend technical training courses, when needed, in Egypt or abroad, with strong linkages to the industry to ensure coverage of theoretical and practical aspects of the training, as well as Pedagogical Courses and courses in Italian language.

The Institute offers incentives for those who excel by offering a 10% discount in tuition fees. Alternatively, IVECO appoints the top 16 graduates of the first cohort of alumni (automobile electricity or mechanics) at the Company. In addition, the Company shall pay the tuition fees of the top students in the first year. The better the score, the more tuition fees the Company shall bear.
Chapter 2: Vocational training

General background:

Vocational training is disaggregated among a big number of ministries, public & private sectors and many other entities that operate rather independently. Some VTCs provide fixed training programs up to 3 years such as PVTD, which offer certificates at the intermediate qualification level endorsed by MOE. Majorities of VTCs provide short-term programs and offer certificates acknowledging completion of the training program without any reference to standard skills level. Alongside, there are private training providers, which typically offer specialized courses for firms to qualify for specific international certificates such as ISO and TQM.

Several rounds of research and surveys evaluated the technical and vocational education and training in Egypt, and they mostly arrived to similar conclusion in terms of the systems weak performance and graduates’ irrelevant skills set. Even though there are sporadic islands of excellence, but they are few in number to have an impact that makes a change to the overall picture.

For these reasons, coherent and effective policy implementation in VET is hampered by the oversized institutional framework, with more than 28 different types of providers interfering in each other’s domain. It is the responsibility of the Supreme Council for HRD, which was established by a presidential decree to set Egypt’s HRD strategy and follow up the performance of the various implementers.

Ministry of Manpower and Migration in its role in chairing the SCHRD and its Executive Committee is responsible for the coordination between the involved partners in TVET and HRD. In order to do so and through the department of “Vocational Training & HRD” carry a yearly survey for the VTCs affiliated to Ministries, Public & Private Sectors and other entities providing vocational training in Egypt. Only 28 organizations and entities responded to the survey’s questionnaire. The result of the survey counted 938 VTCs and found that 467 centers belong to the governmental sector, 88 centers belong to Public Sector, 283 belong to Private Sector, and 329 centers belong to “Productive Families Program” NGOs supervised by Ministry of Social Solidarity. This count includes 59 technical schools which implement the dual education system “MKI”. Total number of trainees enrolled in 2007/2008 reached about 169298 trainee (143307 males and 25991 females) and number of graduates about 133742 males and 23392 females.
### No. of VTCs and Training Capacity

<table>
<thead>
<tr>
<th></th>
<th>No. of VTCs</th>
<th>Training Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Sector</td>
<td>467</td>
<td>59271</td>
</tr>
<tr>
<td>Public Sector</td>
<td>88</td>
<td>16858</td>
</tr>
<tr>
<td>Private Sector</td>
<td>44</td>
<td>10551</td>
</tr>
<tr>
<td>Productive Families</td>
<td>329</td>
<td>15462</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>928</strong></td>
<td><strong>102142</strong></td>
</tr>
</tbody>
</table>

### Number of VTCs affiliated to Ministries, Public & Private and other entities

<table>
<thead>
<tr>
<th>Ministry/ entity</th>
<th>Number of training centers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gov</td>
</tr>
<tr>
<td>1 Ministry of Trade and Industry(PVTD)</td>
<td>42</td>
</tr>
<tr>
<td>2 Ministry of Manpower and Migration</td>
<td>-</td>
</tr>
<tr>
<td>3 Ministry of Investment</td>
<td>-</td>
</tr>
<tr>
<td>4 Ministry of Electricity</td>
<td>-</td>
</tr>
<tr>
<td>5 Ministry of Housing</td>
<td>75</td>
</tr>
<tr>
<td>6 Ministry of social affairs</td>
<td>77</td>
</tr>
<tr>
<td>7 Ministry of transportation</td>
<td>21</td>
</tr>
<tr>
<td>8 Ministry of Health</td>
<td>2</td>
</tr>
<tr>
<td>9 Ministry of Military Production</td>
<td>1</td>
</tr>
<tr>
<td>10 Ministry of Petroleum</td>
<td>-</td>
</tr>
<tr>
<td>11 Ministry of Education</td>
<td>-</td>
</tr>
<tr>
<td>12 Ministry of Local Development</td>
<td>64</td>
</tr>
<tr>
<td>13 Ministry of Agriculture</td>
<td>5</td>
</tr>
<tr>
<td>14 Ministry of Awqaf</td>
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</tr>
<tr>
<td>15 Ministry of Water resources and Irrigation</td>
<td>7</td>
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<tr>
<td>16 Implementation Syndicate</td>
<td>-</td>
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<tr>
<td>17 General Authority for Agrarian Reform</td>
<td>12</td>
</tr>
<tr>
<td>18 Arab Contractors</td>
<td>-</td>
</tr>
<tr>
<td>19 Arab Organization for Industrialization</td>
<td>-</td>
</tr>
<tr>
<td>20 National Council for Youth</td>
<td>87</td>
</tr>
<tr>
<td>21 General Federation of Trade Unions of Egypt</td>
<td>-</td>
</tr>
<tr>
<td>22 Nassar Gold Industry</td>
<td>-</td>
</tr>
<tr>
<td>23 English welding institute</td>
<td>-</td>
</tr>
<tr>
<td>24 Arab Academy for science and technology</td>
<td>-</td>
</tr>
<tr>
<td>25 Suez Canal Authority</td>
<td>1</td>
</tr>
<tr>
<td>26 Ministry of Communication and IT</td>
<td>-</td>
</tr>
</tbody>
</table>
Ministry of Manpower and Migration

The MOMM is the official body responsible for facilitating and coordination between workers supply and demand and assisting in increasing the ability to of the labor force for employment. The ministry monitors the labor market mobility according to the internal and external demands.

The MOMM training centers primarily focus on special target groups such as dropout students and laid off workers, it also helps people who cannot get jobs because of their qualifications that are not appropriated and train them on certain occupations and professions that can help them to generate income.

MOMM manages a program of employment information system, and through this program it prepares labor market statistics that are published periodically, it also publishes monthly newsletter about vacancies and advertised in El Gomhoriya newspaper each week. The Ministry has established a Web site in which employers and job seekers can access; now it includes data on more than 2 million people.

MOMM organizes annual survey for data collection regarding the labor market needs, to identify employment distribution in the governmental establishments, business sectors and private sector. It also surveys the training facilities that other entities provide (governmental or non governmental) and classify them geographically and publish an annual news letter. It encourages private sector to establish training centers and it manages and supervises issuing license for private training centers.

The ministry plays an important role in activating the Supreme Council for Human Resources Development (SCHRD) through its executive committee chaired by Minister of Manpower and migration.

The executive committee includes representatives form the Government, businessmen, Trade unions and HR development organizations. Its function is to coordinate between different parties to agree on the training policies, to increase productivity and to follow up the different efforts. The committee developed a unified vision to match the educational and training outcomes to the labor market needs.

MOMM manages 653 employment offices working in all governorates, cities and villages, from 2002-2007, CIDA supported the upgrading of 25 employment offices, and later the MOMM was able to upgrade 100 employment offices with its own recourses depending on the experience it gained from the Canadian experts.

The upgraded offices provide career guidance and counseling for job seekers and register them in the database in order to nominate them for the needed occupations in the labor market.

The employment offices supervise the establishments and enterprises in their area in order to assure the compliance of the work law such as the working hours, health and safety, child labor and prevention of hazardous working environment.
The employment offices are also responsible for the implementation of skill measures and work license procedures. As a matter of fact the enforcement of the skill measures and work license are very limited due to several reasons such as the number of occupations subjected to the application of the law is very small compared to the number of occupations in the labor market. As the number of occupations that the MOMM has finalized their skills measures are 386 occupations only. Another reason is that most of the skill measures subjected to the application of the law are in level 1 (beginner worker) or level 2 (skilled worker). Also the system of testing lacks transparency and fairness which led to the loss of confidence in it by employers.

**MOMM Department of Vocational Training**

- **Vocational Training Department**
  - **Training Plan Unit**
  - **Training centers Affairs**
  - **M&E unit**
    - **Facilities Needs plans**
    - **Skill level measuring unit Career guidance**
    - **M&E unit Implementing training programs unit**
Types of training courses provided by MOMM training centers:

1- Apprenticeship training, this type of training targets drop out students ages between 12-18 years old and the duration of this training from 1 to 2 years according to the course type, this is a free course and the students don’t pay any fees to attend the course.

2- Vocational formation training, target dropout students ages between 12-20 years old and the duration of this training is 7 months, this type of course is free and students are paid a daily allowance 1.20 L.E per day plus a training uniform.

3- Basic training on electronic and mechanics occupations, this course targets 3rd year prep graduates, the duration of the course is 10 months.

4- Quick training on different occupations, target ages between 20 to 40 years old and the duration of the course is 4 months, it’s a free course and participants are paid daily allowance.

5- Rehabilitation training, target graduates from higher or intermediate education, the duration of the course from 3 to 4 months, it help participants to gain basic skills of certain occupation (welding, auto motive maintenance, readymade garment, etc.) that they need to start their own business or to work for others. This course is offered in 37 training centers in 19 governorates and covers 37 occupations plus English language courses and computer.
### Number and training capacity of MOMM training centers

<table>
<thead>
<tr>
<th>Gov</th>
<th>#</th>
<th>Training center</th>
<th>Specializations</th>
<th>Training capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cairo</td>
<td>1</td>
<td>Sharabiya</td>
<td>household appliances maintenance, Precision instruments, welding, Refrigeration and air conditioning, electronics, automotive, language lab, computer</td>
<td>105</td>
</tr>
<tr>
<td>Alexandria</td>
<td>2</td>
<td>Hadra</td>
<td>Car electric, metal Turner, radio and TV, Refrigeration and air conditioning, welding, décor</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>East</td>
<td>Machine operation, Precision instruments, plumping, language lab, household appliances maintenance, electricity</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Moharem Bek</td>
<td>Car mechanic, Refrigeration and air conditioning, Precision instruments, décor, household appliances maintenance, machine operation, welding, language lab, radio &amp; TV, plumping</td>
<td>135</td>
</tr>
<tr>
<td>Port said</td>
<td>5</td>
<td>Port Said</td>
<td>Welding, readymade garment</td>
<td>75</td>
</tr>
<tr>
<td>Damietta</td>
<td>6</td>
<td>New Damietta</td>
<td>Refrigeration and air conditioning, automotive, electronics, welding, cranes</td>
<td>75</td>
</tr>
<tr>
<td>Sharqiya</td>
<td>7</td>
<td>El Nahal</td>
<td>Welding, Refrigeration and air conditioning, electricity, automotive, machine operation, electronics, language lab</td>
<td>270</td>
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<tr>
<td></td>
<td>8</td>
<td>Sayadeen</td>
<td>Aluminum, household appliances maintenance, Carpentry Furniture, window &amp; door carpentry, language lab</td>
<td>120</td>
</tr>
<tr>
<td>Qaliobya</td>
<td>9</td>
<td>Khanka</td>
<td>household appliances maintenance, Aluminum, welding, Refrigeration and air conditioning, electricity, carpentry, language lab</td>
<td>150</td>
</tr>
<tr>
<td>Dakahliya</td>
<td>10</td>
<td>Manzala</td>
<td>Computer, car mechanics, carpentry, Refrigeration and air conditioning, electricity, radio &amp; TV, machine operation, household appliances maintenance, language lab</td>
<td>140</td>
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<tr>
<td></td>
<td>11</td>
<td>Aga</td>
<td>Carpentry Furniture, Refrigeration and air conditioning, electricity, household appliances maintenance, car mechanics</td>
<td>80</td>
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<tr>
<td></td>
<td>12</td>
<td>Semblaween metal</td>
<td>Machine operation, welding, Refrigeration and air conditioning, electric installation, household appliances maintenance, computer</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Meet Ghamr</td>
<td>Metal operation, computer, Refrigeration and air conditioning, household appliances maintenance, electric installation, car mechanics, Radio &amp; TV</td>
<td>110</td>
</tr>
<tr>
<td>Kafr El shekh</td>
<td>14</td>
<td>Fowah</td>
<td>Car mechanics, Agricultural machines &amp; tractors, welding, basic electric installation, Refrigeration and air conditioning, electronic, language lab</td>
<td>175</td>
</tr>
<tr>
<td>Gov</td>
<td>#</td>
<td>Training center</td>
<td>Specializations</td>
<td>Training capacity</td>
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<tr>
<td>-------------</td>
<td>----</td>
<td>--------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Monofiya</td>
<td>15</td>
<td>Ashmoun</td>
<td>Carpentry, Furniture, car mechanics, household appliances maintenance, computer, elevators, air pressure and oil control, Refrigeration and air conditioning, electricity, electronics, language lab</td>
<td>170</td>
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<tr>
<td>Giza</td>
<td>16</td>
<td>Bolak El Dakrou</td>
<td>Turnery, machine operation, car mechanics, welding, metal furniture, filings, aluminum, carpentry, electronics, Refrigeration and air conditioning, household appliances maintenance, language lab</td>
<td>320</td>
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<tr>
<td></td>
<td>17</td>
<td>Manshiya El Bakary</td>
<td>Décor, electricity, aluminum, metal furniture, welding, Refrigeration and air conditioning, electronics, language lab</td>
<td>120</td>
</tr>
<tr>
<td>Beni Sweif</td>
<td>18</td>
<td>East Nile</td>
<td>Turner, digital turner, packing, car and tractors mechanics, electronics, metal machine operation, Refrigeration and air conditioning, decor, household appliances maintenance, language lab</td>
<td>220</td>
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<tr>
<td>Minia</td>
<td>19</td>
<td>Minia</td>
<td>Electricity, household appliances maintenance, Refrigeration and air conditioning, electronics, language lab</td>
<td>75</td>
</tr>
<tr>
<td>Sohag</td>
<td>20</td>
<td>Sohag</td>
<td>Car mechanics, turner, printing, carpentry, metal furniture, welding, plumping, electricity, Refrigeration and air conditioning, household appliances maintenance, language lab</td>
<td>150</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>Tahta</td>
<td>Carpentry, Turner, plumping, electricity, welding, household appliances maintenance, Refrigeration and air conditioning, household, car mechanics</td>
<td>120</td>
</tr>
<tr>
<td>New Vally</td>
<td>22</td>
<td>Kharga</td>
<td>Automotive, turner, Refrigeration and air conditioning, welding, electricity, carpentry</td>
<td>90</td>
</tr>
<tr>
<td>Matroka</td>
<td>23</td>
<td>Kilo 7 Training center</td>
<td>Car mechanics, car electricity, electricity, welding, turner</td>
<td>90</td>
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<tr>
<td>North Sinai</td>
<td>24</td>
<td>Arish</td>
<td>Carpentry, machine operation, welding, Refrigeration and air conditioning, household appliances maintenance, language lab, electricity</td>
<td>200</td>
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<tr>
<td></td>
<td>25</td>
<td>Ber El Abd</td>
<td>Car mechanics, welding, Carpentry, household appliances maintenance, plumping</td>
<td>150</td>
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<tr>
<td>South Sinai</td>
<td>26</td>
<td>El Tor</td>
<td>Machine operation, carpentry, welding, Refrigeration and air conditioning, plumping, car mechanics, metal furniture, electricity, decor, electronics, language lab, ready-made garment</td>
<td>240</td>
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Mobile units

<table>
<thead>
<tr>
<th></th>
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<th>Specializations</th>
<th>Training capacity</th>
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<tr>
<td>1</td>
<td>Dakahliya</td>
<td>Dekernes</td>
<td>household appliances maintenance, welding</td>
<td>30</td>
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<tr>
<td>2</td>
<td>Qalubiya</td>
<td>Beltan</td>
<td>Mechanics Turner</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>Kafr el sheik</td>
<td>Zafrana</td>
<td>Mechanics Turner</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Monofiya</td>
<td>Bagor</td>
<td>Electric Installation</td>
<td>15</td>
</tr>
<tr>
<td>5</td>
<td>Behira</td>
<td>Damanhour</td>
<td>Mechanics Turner</td>
<td>15</td>
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<tr>
<td>6</td>
<td>Fayoum</td>
<td>Kom Oshim</td>
<td>Mechanics Turner</td>
<td>15</td>
</tr>
<tr>
<td>7</td>
<td>Sohag</td>
<td>Tama</td>
<td>Plumping, electricity</td>
<td>30</td>
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<tr>
<td>8</td>
<td>New Valley</td>
<td>El Dakhla</td>
<td>Car electricity</td>
<td>15</td>
</tr>
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<td>9</td>
<td></td>
<td>Dakhla</td>
<td>Welding</td>
<td>15</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>Valley prision</td>
<td>Hosehold</td>
<td>15</td>
</tr>
<tr>
<td>11</td>
<td>Matrouh</td>
<td>Marsa matrouh</td>
<td>Turner</td>
<td>15</td>
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</tbody>
</table>

Difficulties and constrains: (case study)

Through field visits to some of the MOMM training centers, (sharabiya- Cairo, East & Moharam bek In Alex) it was noticed that the training centers are located in very poor areas, the trainers are not exposed to the modern industry methods, as some of them did not visit any factory or industry for the last ten years.
The training material that the MOMM provide to the training centers are very old, the trainers depend on themselves to develop training materials but it is only some handouts. Although some of the training centers are well equipped, but still the number of participants that join the training courses are very low, as the only way the training centers announcement for training courses is hanging small adverts in the neighborhood area, it was noticed also that there is a big lake of trainers for example, the language labs are now working as computer labs because there is no language instructors in the training centers, the computer training offers office training except internet because there is no internet connection in the centers. The welding workshop in sharabiya center is closed because the center failed to find participants to join the course.
Other services provided by Ministry of Manpower and Migration:
Skill Test and Work License

The labor law no. 12 issued in 2003 organizes the workers and business owners’ relations regarding rights and duties by setting mechanisms promoting formality of Egypt’s labor market. The law stated within its third book, chapter 4, the obligation on each worker to apply for a working license from the concerned administrative authority. The law states that it is prohibited for any employer to employ any worker, who does not carry a valid working license. The Ministry of Manpower and Migration, in consultation with the relevant authorities: Federation of Labor Unions, Ministry of Interior, Ministry of Social Solidarity and Ministry of Finance set the procedures, regulations and conditions for issuing this license and distribution of its revenues. Candidate worker pays L.E. 40 to enter a skill level test as a prerequisite for obtaining the license which has a validity of one year.

The operational procedures to acquire the work license can be summarized as follows:

A decree would be issued by the general Director of the Manpower and Emigration Directorate on the government level determining the committee for issuing working licenses to be sent to all manpower local offices

The local offices for manpower will receive the application for working licenses with the required documents such as L.E 40, official certificate of vocational skill level, copies of ID, criminal status, educational certificate, certificate from labor union

The local offices of manpower registers all applications and, then sends them to Directorate for Manpower and Emigration on the governorate level to arrange personal interviews with the applicants through the committee of issuing working licenses. The mentioned committee would examine the applicant skills and issues the require licenses in maximum period of 2 weeks after the interview

The committee would resend the licenses to the local offices for manpower to deliver it to the applicants

The local office should prepare a monthly list for all workers who acquired the working licenses and send to the Directorate.

The Directorate should prepare a statistical list every three months

The Directorate of manpower and Emigration is the authorized entity to collect the fees for issuing the licenses and deliver them to the financial Directorate affiliated to the Ministry Of Treasury
The general administration for training affairs within the Ministry of Manpower and Emigration would technically supervise and monitor the whole process through field visits, reports and periodical statements while the general administration for vocational training would monitor the implementation in the field.

Despite the existence of 950 local offices where workers of all vocations including construction can apply for their working licenses, the number of workers who applies for the working licenses is far less than the expected since the issuance of the law.

There are several reasons for this problem, the first one is the bureaucratic procedures and involvement of several entities until the licenses are issued, However, the most important issue that there is no real obligatory reason for workers to get the licenses as long as there is no practical penalties on employers who hire the workers. Although the law has set a fine for each informal worker to be charged on the employer, this fine is rarely applied.

Accordingly, there is need to improve the mechanism of enforcing the registration of workers to decrease the magnitude of the informality problem. The previous challenges within this issue calls for nontraditional interventions to enforce the registration of labor force, in order to enable the Egyptian labor force to comply with the international standards. Given the magnitude of the problem, it is expected that such interventions might enforce more to enter the formal market of the employment in the coming five years through complying with the law’s conditions and procedures. Such interventions can be described as follows:

- Develop the institutional framework required for ensuring the enforcement of formalization process of workers through minimizing the number of involved authorities in issuing the working licenses and registration. In order to simplify the process for registration among the workers, it is proposed to apply the concept of one shop- one day registration instead of applying in one place and being tested in another one and then get the licenses after at least two weeks from another place. There will be a need to lessen the procedures for registration and examination to be in the local offices within different governorates, where the worker can pay registration fees, submitting the required documents, being tested to define his skill standard level and receive his licenses in one day. This concept can reduce the whole bureaucratic procedures currently being applied and encourage the formalization of informal labor force.
Ministry of Trade and Industry Training Center

Productivity and Vocational Training Department (PVTD)

The (PVTD) is functioning under the umbrella of the Ministry of Trade and Industry. Its VTCs are geographically established in most of the major cities and areas of industrial zones all over Egypt. PVTD is presently operating 42 training centers all over Egypt and is in charge of other 24 training centers/stations inside companies. The training is organized in an adjusted Dual System and lasts generally three years. More than 1,800 teachers and trainers are responsible for over 25,000 trainees. Other 1,700 staff members are in charge of the development, administration and organization of training.

In addition to the regular training, PVTD operates the Staff Training Institute (STI) and the Technical Competency Center (TCC) where continuing and upgrading training is offered for staff of PVTD and for other national and international private and public organizations and institutions.

Objectives of PVTD:

Since it was established in 1971, the Managerial Consultancy Institute has been working on achieving the following objectives:
- Knowledge and skill development of managers.
- Transfer of experience and new information related to managerial systems and their implementation.
- Skill development of counselors working in firms.
- Providing managerial consultancy services.
Through: Management Training
- Consultancy Services
### Number of PVTD Training centers

<table>
<thead>
<tr>
<th>Government</th>
<th># of training centers</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cairo</td>
<td>6</td>
<td>Dar El Salam- Wady Hoof- El Zahra- Abas- Amerya- Metal shobra</td>
</tr>
<tr>
<td>Giza</td>
<td>5</td>
<td>El Saf- Hawamdy- Manial Shiha- Embaba printing- automotive</td>
</tr>
<tr>
<td>Qalubiya</td>
<td>4</td>
<td>Mazalat- Automotive maintenance – shobra el Khma metal- maintenance shobra el Khima</td>
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<tr>
<td>Alexandria</td>
<td>8</td>
<td>Metal electricity machines Victoria- Hagar Nawatya metal- Moharam Bek metal electricity automotive – Lambrozo printing</td>
</tr>
<tr>
<td>Damietta</td>
<td>1</td>
<td>Damietta metal</td>
</tr>
<tr>
<td>Port said</td>
<td>1</td>
<td>Port Said</td>
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<tr>
<td>Suez</td>
<td>1</td>
<td>Suez</td>
</tr>
<tr>
<td>Sharkiya</td>
<td>2</td>
<td>Zakazik- 10th of Ramadan</td>
</tr>
<tr>
<td>Gharbiya</td>
<td>2</td>
<td>Tanta- Kafr El Zayat</td>
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<tr>
<td>Dakahiliya</td>
<td>1</td>
<td>Mansoura</td>
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<td>Kafr El Sheikh</td>
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<td>Aswan</td>
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<td>Aswan- Komombo</td>
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<td>Total</td>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>

**In addition to: three competence training centers in Cairo and one staff Training center (STI)**

### PVTD Training Courses

**Three year courses:**

Very similar to the three years course provided by technical secondary school, students join the course after finalizing and passing 3rd year prep (edadia) according to the grades they get, in addition the PVTD make some interviews to the students and medical exam.

Graduates gain a certificate called Diploma of apprenticeship, which is classified as an intermediate qualification level. They enjoy the same rights to continue higher education as the graduates from TSS. MOE approves and supervises the theoretical contents of the main subjects delivered by PVTD teachers such as the Arabic language and culture subjects. The course includes practical training in the field especially in the third year; the students spend 5 days per week in the field (industries and companies) and 1 day only in the PVTD training centers.
Two years advanced courses:

Advanced professional courses are found in the competence center located in “Amerya/Cairo” named the technology competence center (TCC). Entrance to this center is graduates from either PVTs training centers or secondary technical schools. They can join such courses against certain fees, the range of the fees is from 500L.E. to 1500L.E per semester and the duration of each course is 4 semesters.

Short term training courses:

The PVTs provides short term training courses for different target groups such as faculty of engineering students, technicians working in industry and individuals for fees. These kind of courses are very successful especially those of the IMC (Industry Modernization Center) and the ITC (Industry Training Center), which fund up to 80% of the cost of the courses.
PVT D Structure

The PVT D contains two levels of departments, central departments and general departments as follows:

I-Central Department for consultancy and continuous education institute
1. General department for implementing industrial engineering programs
2. General department for implementing productive programs
3. General department for designing and developing programs
4. General department for implementing management systems programs
5. General department for industrial projects consultation
6. General department for management consultancy
7. General department for economic consultancy
8. General department for industrial engineering consultancy

II-Central department for district training affairs
1. General department of El Canal, Sina and 10th of Ramadan
2. General department of upper Egypt district
3. General department of lower Egypt (Wagh Bahary) district
4. General department of west Alexandria district
5. General department of east Alexandria district
6. General department of Giza district
7. General department of north Cairo
8. General department of south Cairo

III-Central Department of Vocational Training affairs
1. General department for technology competence center (TCC)
2. General department for Audio visual aids center
3. General department for programs and specifications.
4. General department for testing
5. General department for Instructor Training institute (staff Training institute STI)
6. General department for experimental Amirya metal center

V-General departments:
1. General department for PVT D director affairs
2. General department for administration system
3. General department for finance inspection
4. General department for law affairs
5. General department for planning and monitoring
6. Security general department
7. General department for administrative and finance affairs
The Central Department for consultancy and continuous education institute aims to achieve the following objectives:

- Capacity building for managers and specialists
- Improving the implementation skills
- Exchange experience and knowledge
- System primary implementation
- Providing consultancy services in different fields such as administrative training, primary implementation and consultancy services.

The Central Department of Vocational Training affairs carries out all relevant activities of Training process at vocational training centers affiliated to PVTD spread at 14 governorates through its General administrations.

The Central department for district training affairs supervises 8 districts that implement the vocational training courses in the PVTD training centers for the PVTD students or the short training courses provided for companies or industries.

General administration for Testing prepares the panels of Test progress all over the vocational training centers affiliated to P.V.T.D., company centers and training stations, in addition. It also prepares bulletins, instructions and duties regarding officials of exam panels, It also prepares Timing for Training year exams Time Tables, all prints required for exams, revising the right of student to administration for the first, second and Third year exams in the light of the act of apprenticeship system of vocational Training centers

General administration for Audio Visual aids production center, provides audio visual aids to clarify the practical skills and theoretical knowledge which enables the student to absorb Training and educational process.

General administration of El Amerya experimental training center, experiment Theoretical and practical developed programs before generalization of the application on the other vocational Training centers affiliated to training Zones.

General administration for programs and Specifications prepares the practical & Theoretical programs of industrial Vocations Through different skill analysis of each vocation and it also identifies the relevant Theoretical Knowledge

The Central Department of Vocational Training Affairs supervise number of general administrations, but the most important administrations it supervise are the staff training institute (STI), Technology Competence Center (TCC), Amerya experimental Center and the programs and specifications department.
**Staff Training Institute (STI):**

The STI qualifies instructors for vocational training centers and provides training services for others; in addition, it holds training courses for all other training and supervision cadres.

It was established in 1964 as a result of an agreement between GOE and the International Labor Organization (ILO); in 2003 an agreement was signed between GOE, the EU-financed TVET reform program and the Industrial Training Council (ITC), cooperation with Capacity Building International (Inwent) to improve the STI.

The STI is operatively and legally autonomous training institute. It provides basic and further training directed to the needs of businesses and state vocational schools in Egypt and the Arab region.

The STI's main focus is basic and further training for PVTD training staff, from public and private educational institutions. This is part of the modernization process within the PVTD, enabling the PVTD to professionalize its position as a provider of basic and further training. On the basis of an agreement between the Ministry of Finance and the Court of Auditors, a Special Account was set up for the TCC and the STI in order to achieve partial financial autonomy for both institutes.

The establishment of the Special Account allowed a state educational provider within the area of responsibility of the Ministry of Trade and Industry to directly reutilize three quarters of all TCC and STI revenues, making these available to the management of both institutes for the first time. The Special Account is thereby exemplary for the PVTD and other public training providers.

**STI Training Courses**

**Methodology Training:**

- TOT methodology
- Developing teaching aids
- Micro training
- English Language
- Computer

**Technical Training:**

- Mechanics, machine operation, air condition, Jigs and fixtures
- CNC
- Heat treatment material testing
- Welding (gas, Arc, argon...)

Technical Assistance for Policy Reform II
• Sheet metal
• Electricity (electrical installations, winding)

Technology competency center (TCC)

It was established March 1996 with co-fund between GOE and Germany represented by GTZ, it started functioning in October 1996. The GTZ provided the technical assistance and some equipment and machines and the Ministry of trade and industry presented by the PVTD provided the buildings and the management.

The TCC training system:

The TCC training courses are flexible according to the labor market needs, the training courses are divided into modules, each course contain 20% theoretical basics in the field of automatic operations and 80% practical training.

The TCC contains labs and workshops in the following fields:

• Oil-ROM control system (Hydraulic and electro hydraulic)
• Air compress control system (Pneumatic and electro pneumatic)
• Electronic and electric system
• Close-circuit control system
• Personal Computer applications
• CNC – CAD
• automated production control system

TCC Training Courses

Vocational Training:

The TCC capacity is 200 trainees / year, students graduated from general secondary science section or technical secondary mechanics or electricity section can join these courses, the duration is 2 year. The graduates get a technical diploma in automatic technology control system equal to the certificate that the same graduates gets from Germany.

Advanced Training:

Advanced training provides training courses for companies and industries to improve the skills of the technicians. It also provides short training courses for faculty of engineering students that helps them to improve their skills in the field of the implementation of automatic technology control system.
Specialized Training:

The TCC provides special training programs for the managers to introduce the automatic technology control system and its different use in industry

<table>
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Ref: PVTDPVTD
**Other Ministries Training Centers**

Observations and Comments on other ministries training centers

**Ministry of Electricity:**

The ministry of Electricity supervise and manage 17 training centers, located all around the country but the main role of those training centers is to train the employees who work in the electricity companies supervised by Ministry of Electricity such as Electricity production company, The Egyptian company for transmitting electricity, Electricity Distribution Company training centers and UHV Research Center.

Those training centers do not provide vocational training courses for students “except summer training courses for faculty of engineering students or technical institute students”, except that the training they provide is either for the staff who work in the electricity companies or upon request against fees for companies and private sector.

The types of training is ordinary training courses included in the ministry annual training plan or special training courses according to the request of companies. It also provide technical assistant and consultancy services.

**Ministry of Social Affairs**

The Ministry of Social Affairs owns 77 training centers and supervises 325 training centers located in NGOs or CDAs; most of the training provided is short training in sewing and embroidery.

**Ministry of petroleum**

The Ministry of petroleum supervises and manages 8 vocational training centers located in different public petroleum companies; the main task of such training centers is to train the workers of the companies that the training centers located in or other companies that work in the same field in addition to vocational training as follows:

- Dropout students ages between 13-18 years old and the duration is 7 months
- Basic training for students who passes basic education (3rd year prep) and ages between 14-20, the duration of the course 10 months
- Quick training, target the jobseekers age between 20-45 years old and it improve their skills according to the job market needs; the training duration is 4 months.
- Rehabilitation training, target graduates from schools, institutes and colleges and it enable them to gain skills needed for certain occupations in order to join the labor market, the duration of this course is 4 months.
But unfortunately those courses (vocational training for students) are not functioning at all because of the lack of budget and resources

**Ministry of Investment:**

Ministry of investment supervise and manage 47 training centers located in public companies that work in different fields like textile, transportation, electricity, insurance companies, holding companies and tourism. And the purpose of these centers is to train the employees who work in each company only.
Chapter 3: Donor Funded programs

New Mubarak-Kohl (MKI-VET-EP)

Short Description of the Project

The project’s target group is youth between the ages of 20 and 24 years who represent nearly 50% of all jobless people in Egypt. Those who have little chance of acquiring work experience add to unemployment and social instability. Despite this, there are an increasing number of vacant positions which cannot be adequately filled. The essential contributing element to this situation is Egypt’s vocational education system, which is not oriented to the requirements of the economy and the needs of the youth and thus there is a mismatch between supply and demand. Information about the job market is hardly accessible and the way in which vacancies are dealt with by official employment services are considered inefficient. There are no programs to guide youth from the school or from unemployment to taking up gainful employment. In the Egyptian vocational education and employment system, young people lack the opportunities to develop knowledge, abilities, skills and proficiencies; and to gain information which help them in the transition from school or unemployment to a productive employment. However, the professional and technical domain, require not only knowledge, abilities, skills and proficiencies but characteristics such as personal initiative, search strategies or personal performance, which are also essential part of the concept of interactive employability.

The total duration of the project is 7 years from 07/2007 until 06/2014. The overall goal of the project is to improve the interactive employment ability of youth through developed qualifications and job market institutions. The project will be implemented in three governorates represent Upper, Lower and Urban locations. Three ministries are involved: Ministry of Education, Ministry of Manpower & Migration and Ministry of Trade & Industry. Ministry of International Cooperation plays the coordinating role. The funding is equally shared by the two governments.

The project has several components which may be summarized as follows:

1. **Pilot project for promotion of employability and employment of youth.** Partners from the public sector, private economy and the civil society are supported in arranging an assessment of qualification requirements for youth. They will be assisted in providing target group oriented non-formal vocational and advanced training needs with direct employment relevance.
2. **Institutional sustainability of the previous MKI.**
   This refers to further development of services offered to the organization structure, the RUDS / HRD&SC as well as the NC-HRD. Negotiate with MOE and other training providers to support RUDS / HRD&SC steer the cooperative/dual technical education in agreement with enterprises to introduce professions in which women can have a real opportunity for employment.

3. **Quality management.**
   Based on the previous achievements of the M&E system, developed by previous MKI, the project will introduce a comprehensive quality management system for processes and results.

4. **Institutionalization of the qualification of Tutors.**
   Achievements refer to the structuring and standardization of experiences regarding tutoring of learning processes for youth in developing an interactive employability. To develop the concept of advanced training for multipliers.

5. **Structuring of employment market information.**
   This component will start in the second phase of the project. It is intended to establish employment market information network between actors to evaluate and follow up progress.

6. **Policy consultations.**
   Contributions of this project are the professional inputs by German Consultants to help in policy formulation, support the networking between involved actors and moderators of dialogue processes.

   The initiative is managed through a Board of Trustees with the following representation: Ministry of International Cooperation; Ministry of Trade and Industry through the Industrial Training Council ITC ; Ministry of Education; Ministry of Manpower; and Private Organization such as Investors’ Association Union, Federation of Construction and Building Contractors; representation from Civil Society: CEOS, El Mahrousia, YAPD. In addition, there are also representatives from Information and Decision Support centers.

   The project is implemented in three governorates (Dakahlia, Quena, 6th October city) the project budget is 5.7 million euro funded by EU and 54.3 million Egyptian pounds funded by the GOE to be spent in 4 years.

   The agreement was signed in 2006 and the implementation of the project started in 2008.
The difficulties facing the project that the local fund the GOE should pay was not included in the ministries budget and the lack of enthusiasm among some of the project parties to participate in the implementation of the responsibilities and the inability of the German side to overcome this obstacle due to poor coordination mechanisms between those parties.
Technical Assistance for Policy Reform II

TVET Reform Program

Short discretion about the project:

The TVET Reform Program is designed to assist the reform of the technical and vocational education and training (TVET) system in the Arab Republic of Egypt from 2005 until 2011. It was established following the conclusion of a Specific Financing Agreement (SFA) between the Arab Republic of Egypt and the European Community. The SFA entered into national law by virtue of a Presidential Decree, which was approved by the People’s Assembly and published in the Official Gazette of the Egyptian Government, al-Waqa’i’ al-Misriyya, with a Decree from the Minister of Foreign Affairs. Jointly funded by the Government of Egypt and the European Commission, the intervention represents a notable investment from both parties towards the country’s human resource development and the fostering of a knowledge economy. Developing a skilled workforce and enhancing the competitiveness of Egyptian enterprises are seen as fundamental concerns if Egypt is to adequately meet its commitments under the Barcelona Process and the European Neighborhood Policy Action Plan. 646,000 students, almost two-thirds of the total number of students enrolled in secondary school, are currently engaged in technical and vocational education. Furthermore, an estimated 1.1 to 1.6 million new entrants to the labor market per annum will present an additional challenge in terms of their employment and training needs. The Government of Egypt intends to create 750,000 job opportunities per annum while retraining 100,000 workers annually. To address these challenges, the TVET Reform Program implements activities that promote a departure from the historically top-down, centralized, fragmented, and supply-led TVET field. A bottom-up, decentralized, harmonized, and demand-driven TVET system has been presented as a viable alternative by the TVET Reform Program

Results expected of the TVET Reform Program:

- Decentralized and demand-driven Enterprise-TVET Partnerships are established, functioning and providing key information that contributes to the reform of the TVET system
- Capacities of TVET institutions and private sector enterprises to define and deliver practical skills development are improved;
- Key building blocks of a reformed national TVET system (including, inter alia, National TVET Policy Coordination) are progressively made operational and ready for system-wide implementation
The Three Components of the TVET Reform Program:

Component 1: Development of decentralized and demand-driven TVET institutions
Designed to support the establishment of Enterprise-TVET-Partnerships (ETPs) in selected economic sectors and localities/regions, activities related to Component 1 involve the implementation of reforms at the micro/operational level. These activities centre on linking the services of private and public TVET institutions to the human resource needs of private sector enterprises.

Component 2: Improvement of the quality of TVET delivery
Designed to develop and provide high quality, demand-driven, competency-based Training, activities related to Component 2 focus on reforms at the meso/organizational level and were implemented shortly after the commencement of activities related to Component 1. These activities centre on the improvement and modernization of skills development in TVET institutions and private sector enterprises, and the introduction of alternative forms of training including cooperative education.

Component 3: Development of national regulatory and support institutions for a Decentralized and demand-driven TVET system
Component 3 was designed to ensure that the experiences, expertise, and human and institutional capacity developed by the TVET Reform Program are capitalized upon and mainstreamed into the national TVET system reform process. Activities related to Component 3 target reforms at the macro/policy level. These activities centre on the promotion and maintenance of a broad stakeholder consensus on the formulation of a TVET system reform policy and the establishment of a national regulatory framework and support structures for the TVET system.

Organizational structure of T-VET Reform Program:

Supreme Council for Human Resource Development (SCHRD): Chaired by H.E. the Minister of Manpower and Migration, the SCHRD is mission-bound to define national policy related to the planning and development of manpower and training. Council members include representatives of relevant ministries as well as bodies representing employers and labor.

Tri-Ministerial Committee (TMC): Chaired by H.E. the Minister of Manpower and Migration, the TMC is responsible for the overall guidance of the TVET Reform Program. H.E. the Minister of Trade and Industry, H.E. the Minister of International Cooperation
and H.E. the Minister of Manpower and Migration are the sole members of the Committee.

**Board of Trustees (BOT):** Responsible for supervision of the TVET Reform Program’s **Program Management Unit (PMU),** the BOT is chaired by a representative of the MOTI, and includes representatives of other relevant ministries and entities. **Program Management Unit (PMU):** The PMU is the executive body of the TVET Reform Program. **Technical Assistance Team (TAT):** An integral part of the TVET Reform Program, divided into a number of Technical Assistance contracts financed by the EC, the TAT is attached to the PMU. **Sectoral Enterprise-TVET Partnerships (ETPs):** Sectoral ETPs are Public-Private Partnerships made up of a technical and administrative secretariat and a decision-making Board of Directors. The latter constitutes elected representatives of stakeholders, with approximately two thirds from private sector enterprises and one third from TVET service providers. In general, sectoral ETPs are closely linked to the structure of their respective sectoral chambers and federations. **Local Enterprise-TVET Partnerships (ETPs):** Local ETPs are cross-sectoral Public-Private Partnerships established at the local/regional level by sectoral ETPs according to geographically relevant industrial clusters. Similar in structure to sectoral ETPs they are made up of a technical and administrative secretariat and a decision-making Board of Directors. The latter also constitutes elected representatives of stakeholders, with approximately two thirds from private sector enterprises and one third from TVET service providers. Local ETPs deepen the decentralization process and encourage greater bottom-up participation through the implementation of demand-led TVET Reform Program activities at the micro/operational level.

**Targets of TVET Reform program:**
1. Reform of the Technical Secondary Schools (TSS)
2. Establish Centers of Competence
3. Defining a legal precedent: Public-Private Partnerships as a new organizational structure for Egypt (Establish sectoral and Local ETP)
4. Developing curriculum and training packages
5. International Study Visits
6. Training Of Trainers

**Reform of Technical secondary schools:**
100 TSS are selected for the phased implementation of reforms. Reforms include pedagogic and technical training of teachers and instructors, training of schools’ administration and management, rehabilitation of physical infrastructure,
procurement of equipment, upgrading of existing curricula and introduction of new curricula, introduction of training packages/modules, institutionalization of career and vocational guidance and counseling, and participation of private sector enterprises in cooperative education.

Implementation of the 100 TSS Project involves a partnership between the TVET Reform Program, the MOE and the ITC, wherein the TVET Reform Program and ETPs engage in the technical aspects of reform. The first phase of the project, targeting 26 TSSs and 27 occupations for reform, has been a major activity of the TVET Reform Program to date.

Establish Centers of Competence

CoCs are designed to turn fragmented, centralized TVET institutions into sector-specific, semi-autonomous TVET service providers that are strategically located near geographical concentrations of relevant industries. Each sectoral ETP has adapted the original CoC model proposed by the TVET Reform Program to the needs of its respective sector. To this end, plans have been developed for the establishment of at least one CoC per sector in the upcoming fiscal year. Depending on local circumstances, CoCs will be located in the following regional/industrial zones: 10th of Ramadan, Alexandria, Cairo, Damietta, Giza, and Mahalla Kobra.

Defining a legal precedent: Public-Private Partnerships as a new organizational structure for Egypt (Establish sectoral and Local ETP)

The Specific Financing Agreement (SFA) reached in 2002 by the Arab Republic of Egypt and the European Community created a series of landmark legislative decisions with potentially positive implications that may extend far beyond the TVET field. While the entrance of independent and decentralized Public-Private Partnerships (PPPs) into the Egyptian legal framework is presented here as a historical matter rather than a legal opinion, it provides a background to the new possibilities afforded to organizations by virtue of the TVET Reform Program.

In order for international agreements to become part of Egypt’s state legislation and have the power of a law according to the constitutional legislator, they must be signed/concluded, ratified and published according to the legal requirements of the Arab Republic of Egypt. In signing Presidential Decree No. 326 of 2003 on 29 April 2003 in Brussels, H.E. the President utilized his authority under Article 151 of the Egyptian Constitution to conclude the agreement with the European Community and communicate the agreement and its contents to the People’s Assembly. The requisite ratification of the agreement was achieved with the People’s Assembly’s approval on 10 February 2004. The agreement was published in the Official Gazette of the Egyptian Government, al-Waqa’i’ al-Misriyya, following the Minister of Foreign Affairs’ Decree No. 42 of 2004, thereby concluding the requirements to enter the SFA No. EGY/AIDCO/2002/0557, also known as Assistance to the Reform of the Technical and
Vocational Education and Training System in the Arab Republic of Egypt (TVET), and its contents into law.

With clear and specific mention made in the agreement of Enterprise-TVET Partnerships as decentralized partnerships between enterprises and public and private TVET service providers, PPPs have been explicitly recognized as a legal organizational structure, opening the possibility for other organizations to be developed based on the precedent set by the TVET Reform Program.

What does an ETP do?

For private sector enterprises:
- Assessing training needs
- Establishing in-company training centers
- Training in-company trainers and tutors
- Coordinating or managing the training of workers in cooperation with approved TVET service providers and according to market needs
- Training workers directly and/or coordinating their training
- Consultancy/technical assistance services
- Drafting demand-driven curricula, occupational standards, training packages/modules, and skills standards in partnership with private sector enterprises
- Arranging work placements for students in private sector enterprises
- Developing and sourcing training materials, inclusive of training aids and equipment
- Awareness raising workshops on value-added training
- Creating manuals of implementation and procedure of the training process

For TVET service providers:
- Auditing TVET service providers capacities
- Comprehensive upgrades of Technical Secondary Schools and Vocational Training Centers
- Training master trainers, trainers and teachers directly and/or coordinating their training
- Orientating TVET system trainers and teachers to partnerships with private sector enterprises
- Drafting demand-driven curricula, occupational standards, training packages/modules, and skills standards
- Arranging work placements for students in private sector enterprises
- Developing and sourcing training materials, inclusive of training aids and equipment
- Consultancy/technical assistance services
- Awareness raising workshops on value-added training
- Creating manuals of implementation and procedure of the training process
Local Enterprise-TVET Partnerships
The TVET Reform Program established eight local ETPs in Aswan, Alexandria, Gharbeya, Luxor, Menoufeya, Port Said, Sharkia, and South Sinai. These cross-sectoral partnerships aim to serve areas where a concentration of various industries currently exists alongside TVET service providers. The 12 sectoral ETPs collaborate to provide technical assistance to local ETPs.

Developing a curriculum and training packages (DACUM)
Through sectoral ETPs, the TVET Reform Program developed 30 curricula. Drawing private sector enterprises into the curriculum development process has introduced a degree of relevancy previously unseen in TVET service provision. Consequently, the TVET Reform Program has begun to create a paradigm shift from supply-led, syllabus based curricula to demand-driven, holistic educational processes. Cooperative education, in which students complement their theoretical school-based education with practical enterprise-based training, has now become a central feature of the revised curricula and related training packages for upgraded Technical Secondary Schools (TSSs).

The DACUM process
The DACUM process takes the following steps:
1. Identification of veteran workers to sit on DACUM panels, as well as the neutral facilitator, recorders, and observers.
2. Definition and description of the job by workers.
3. Placement of jobs within the organizational structure.
4. Identification of duties (generally five to 12 major job areas) and the job tasks associated with each duty. A task is defined as a work activity that has a definite beginning and end, is observable and measurable, consists of two or more definite steps, and leads to a product, service, or decision. The model DACUM duty or task statement includes a verb, modifier and a noun.
5. Identification of the sub-tasks associated with each task of their jobs (duties).
6. Identification of the areas of knowledge, skills, and traits that a successful worker in this occupation should possess to perform the job.
7. Review, editing and validation of job profiles by other panels of workers and a panel of managers.
8. Prioritization of tasks and the identification of crucial and frequently performed tasks, as well as those where marked training needs exist for new and veteran workers.

The DACUM process provides useable data in a timely fashion and provides a positive learning experience for workers who serve on the panels. The data collected from DACUM panels can also provide the basis for the development of survey based research on workers and managers, as well as job observation (or shadowing), although the latter is very labor intensive. On the whole, the DACUM process is a quality tool that helps an agency or organization to involve workers in the collection of data that can be used to
improve worker performance and expand management information regarding the work that is being performed.

Complementing the introduction of new and revised curricula for TSSs, in excess of 110 training packages for short courses have also been prepared by ETPs and approved by the MOE. These training packages offer greater choice to students through a wide selection of short-term modules with diversified career opportunities. A selection of over 140 diverse skills standards ranging from skill levels 1 to 3 have also been developed by the ETPs, approved by the MOE and chambers and federations of industry, and are now on offer to job-seekers and workers so that they may receive certification in jobs that match their desired occupation.

International Study Visits
TVET Reform Program has provided over 40 decision makers with unrivalled opportunities to engage international best practice first-hand through international study visits to 10 countries in the European Union and the Mediterranean region. During the eight different study visits which have taken place to date, a select group of decision makers were invited to over 65 TVET-related institutions including government departments and agencies, chambers and federations of industry, centers of competence and technical transfer, public and private training providers, and research institutes. Participants were chosen to create an international network that will support efforts to reform the TVET system, particularly through the provision of access to valuable
While the applications of such a network are potentially limitless, support for the following thematic areas was encouraged:

• Set-up of career guidance and counseling systems;
• Creation of innovative employment promotion programs;
• Planning and implementing sectoral centers of competence;
• Planning and implementation of cross-sectoral training funds;
• Arrangements for training of master trainers and training of trainers;
• Strengthening the management of TVET institutes;
• Curriculum development for new trades.

Training of Trainers
In order to ensure sustainability for the reforms, didactical and technical skills training of teachers, tutors, trainers and master trainers has been central to the work of the TVET Reform Program. Since 2005, a total of more than 2,600 trainers have received didactical training with sectoral and cross-sectoral themes from the TVET Reform Program through ETPs, as well as through the TVET Reform Program’s Training Sessions Program. More specifically, sectoral ETPs trained in excess of 980 teachers and tutors and 1,430 trainers and master trainers who received certification from the PMU and sectoral chambers and federations of industry.
In only one month of operation, the Training Sessions Program has also trained 175 trainers in subjects that have included occupation standardization, accreditation and certification; centers of competence management; training of master trainers, trainers and tutors; and job-seeker guidance and vocational counseling. Depending on the course(s) taken, participants will receive joint certification from the PMU and the National Agency for Vocational Education and Training (Bulgaria), the Finnish Institute for Educational Research (Finland), Fontys University (The Netherlands), and/or the Counseling and Human Resources Development Association KAR-DER (Turkey). Workshops organized by the TVET Reform Program have also provided TSS administrators and curriculum development committees with opportunities to transfer knowledge of new curriculum development approaches and processes including the Developing a Curriculum (DACUM) process. In order to implement these changes, 300 trainers also received training in the DACUM process.
Chapter 4 International Cooperation

Cooperation protocol with South Korea

South Korea provided fund with one million dollars to improve the workshops and machines of Luxor industry mechanic school, the protocol was signed and the machines were installed in April 2008

International Cooperation with Government of Finland

Finland provided a loan with 5.2 million euro for the following:

a- Improve the languages labs: 65 technical industry and commercial, and 20 tourism schools will be provided with modern language labs that will improve the students language skills especially in listening and conversation which will enable them to use the modern technology and give them a chance to join the international market.

b- Upgrade industry technical school labs and workshops (electricity and automotive)

Provide 9 industrial technical schools with modern labs and equipments in the field of electricity and automotive as these 2 specializations are considered important specializations for the job market needs.

International Cooperation with Government of Austria

A loan with 4 million euro to provide and install:

- 15 workshop equipped with CNC machines and computer lab connected to the machines
- 20 modern electric welding workshops

A tender is in the process to procure the machines
Cooperation with ILO to implement (Know about Business) program (KAB)

The purpose of KAB is to improve the youth skills to face the work challenges and self employment, KAB consist of 9 modules each module is between 80 and 120 studying hours, the ILO intents to spread KAB all around Egypt on different levels (technical education, intermediate technical education and higher education).

The ILO and the MOE started to pilot the KAB program in school year 2008/2009 in MK schools and expanded to 50 schools in the school year 2009/2010. It is important to mention that a mechanism was developed to absorb 120 extra hours (3 hours / week) especially for the dual education. Currently a study is in process to see the possibility to include the KAB in the technical education curriculum.
Chapter 5: Education and Business Cooperation

A number of direct partnerships were established between technical schools and large corporations concerning the implementation of the dual system. These corporations can also cooperate in running the school and establish a system for giving incentives to school staff and students. A number of protocols were signed concerning this issue such as:

**Arab Contractors protocol:** This protocol was signed between the Arab contractors company and 5 schools, the protocol also included establishing new specialties in each school that will be functioning starting from school year 2010/2011

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<th>Specialties</th>
<th># classrooms</th>
<th># accepted students</th>
<th>New specialties</th>
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<tr>
<td>1 New Nassr city industry</td>
<td>automotive, construction, plumping and drainage system, electric machines maintenance</td>
<td>8</td>
<td>160</td>
<td>مساحة</td>
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<tr>
<td>2 El Salam Architect school</td>
<td>Décor and paint, construction and finishing, plumping and drainage system, metal welding and forming, furniture carpentry</td>
<td>8</td>
<td>160</td>
<td>مساحة</td>
</tr>
<tr>
<td>3 Ismailia Heavy duty machines</td>
<td>Heavy duty machines, metal welding and forming</td>
<td>5</td>
<td>100</td>
<td>Elevators</td>
</tr>
<tr>
<td>4 Assyut mechanical school</td>
<td>Auto motive and heavy duty machines, plumping and drainage system, architect, mechanics, welding and forming metal</td>
<td>8</td>
<td>160</td>
<td>Aluminum , elevators , الندات المعدنية</td>
</tr>
<tr>
<td>5 Shatby mechanics school (Alex)</td>
<td>Automotive, electric machine and installation refrigerator and air conditioning, mechanics, metal welding and forming</td>
<td>9</td>
<td>225</td>
<td>الندات المعدنية</td>
</tr>
</tbody>
</table>
**Holding company for water and waste water protocol**

A protocol was signed between ministry of education and ministry of housing represented by Holding company for water and waste water to establish number of technical schools specialized in plumping and drainage system, that will enable graduates to efficiently apply modern methods in the field of operating and maintain water and waste water stations.

Each school should contain modern equipment and computer lab, the school will be 3 years course with three specialties (operating and maintenance of Holding company for water and waste water - operating and maintenance of waste water system, Processing and quality control of water and waste water. and In 2008/2009 Mostarod water school was opened.

In 2009/2010 Beni Sweif water school, Behira water school were opened.

According to the request of ministry of housing and Holding company for water and waste water this initiative will be circulated in all governorates (29 schools).

**Americana group protocol**

A protocol was signed between the MOE and Americana group to establish a new specialty for fast-food restaurants. Students can join this specialty starting from third year sec in the 5 years tourism schools, students attend the practical training in Americana group fast-food restaurants according to a curriculum developed by experts in the field, faculty of hotel and tourism (Helwan Uni) and approved by the MOE.

American groups pay bonus to students, 300 L.E for 3rd year students, 350 L.E for 4th year students, 400 L.E for 5th year students. This bonus increases 8% every three years.

American group provide insurance against accidents for the students during the practical training period, it also provided the schools with modern equipment and help in renovations, and enable the school to work as productive unit.

The graduate students have the priority to work in American group fast-food restaurants, inside Egypt or in the Middle East region.

**Industry Training Council (ITC)**

Cooperate with the ITC to renovated and upgrade 100 technical secondary schools (3 years system), in phase 1, 26 schools are finalized through GAEB.
Cooperation with MOHE and Ministry of Trade and Industry to establish Amerya technology compound, with a budget of 60 million Egyptian pounds funded by education development fund supervised by the prime minister office. The compound includes a technical industry school (3 years system), technology college and advanced technology college (2 years system) and a training center provide approved certificates from Edexcel British company until level 8 (PHD).

Protocol with Schneider electric Egypt to upgrade the electricity workshop of Galal Fahmy advanced school in order to meet the needs of the new developed curriculum especially in the field of PLC.

Protocol with MCV “Manufacturing Commercial Vehicles company, to build a new school in Sharkeya follows the dual system of MKI in the field of vehicles manufacturing, the schools is opened in 2008/2009.

Protocol with Wagih Abaza Company to provide Metwaly Sharawy industry school with equipment and machines needed in the students practical training in the field of vehicles manufacturing, in addition to three new cars.

Protocol with Louis Beshara Company to establish a technical school inside the factory in the field of RMG, the school includes 7 different specialties and work with the dual system.
Chapter 6 Summary and conclusion

Technical Secondary Schools:

- The MOE and MOHE are the two ministries responsible for technical Education
- Number of students enrolled in technical secondary schools represents about 62% of total number of students in general education schools
- The number of industry schools present the higher number of technical schools
- Number of technical Education students is decreasing due to the conversion of technical commercial to general secondary school was recommended by a World Bank Project, the total number of TSS students in 2005/2006 was 1961162 and in 2008/2009 is 1252431 students
- The students joining the technical secondary schools are not allowed to choose the specialty, they are obliged to join certain specialty according to grades, school capacity
- The number of girls joining the technical education is reasonable 46.86%
- There is little coordination between MOE and Ministry of Trade and Industry regarding the occupation needed in the labor market
- Students in technical schools do not get enough practical training due to the lack of resources and the low capacities of the teachers.
- There are some successful initiatives related to technical secondary schools such as the international and national cooperation but they are not enough
- The Don Bosco schools is a very successful example for private technical education school
Abstract of an assessment report produced by the National Specialized Councils

The technical education committee is one of the National Specialized councils, it consist of specialized experts in the field and their job is to prepare reports and studies and submit them to the president’s office. The council provides advice to the government decision makers. In one of the reports on the national strategy for technical education the factors affecting the technical education in Egypt are given as follows:

**External factors:**

- The gap between the technical schools graduates and the labor market needs leads to the graduates skills and specializations are not applicable with the labor market needs and as a result of that the percentage of unemployment among technical education graduates increases especially in the commercial education sector.

- The non existence of a national sources that provide a database on the labor market needs and on the current and expected changes, in addition to that the limited resources and the weakness of making surveys and the limited role the private sector play in providing information, also there isn’t any entity follow up or keep track of the graduates and their types of job after graduation.

- There is no coordination between the MOE and MOHE as the responsible entities of the technical education and the 26 ministries and entities responsible for the vocational training.

- The specification of occupation is not finalized yet, and even the finished occupations are not implemented yet.

- The culture of continuous training is not very popular in the Egyptian society especially in the field of technicians and there is no frame line nation wide for the continuous training either for improving skills or apprenticeship training.

- The community doesn’t appreciate the technical vocational and education training graduates.

- The salaries and wages are related according to the kind of education and certificate gained and not related to the skills needed for the job (jobs offered by government).

- The geographical and sector variations in the labor market, as the needs change from one governorate to another at the same time there are no local graduates.
available for the jobs. and this because there is no coordination between the national technical education system and the industry, this is very obvious in the field of agriculture, as the need of industry for the technical agriculture graduates is very low, although agriculture is considered a basic sector (42% of the national income) but it produce limited number of job vacancies reaches 5% only.

- the rules and regulations that the MOE is restricted with (eg law 139 and its annexes)

**Internal factors:**

- Most of the students who join the three years technical schools are students with low grades in third year prep so they join it against their wish or they choose it because of their low economic level (poor families) that doesn’t give them the opportunity to join higher education as they prefer to work early. The students doesn’t choose the specializations that they want, but they are forced to join certain specialization according to the grades they get in 3rd year prep (El Edadia), or according to the capacity of the schools department, number of teachers regardless the willingness and the ability of the students or the labor market needs. The class density in some schools is 50 students which doesn’t give the students a proper chance for a practical training in the workshops or labs which affects their skills in addition to that most of the students are weak in science, math, Arabic and foreign language

- Although the teachers are considered an important factor in the education process, the technical education teacher suffers from the decease of income and social levels and his/her limited authority in assessing the students limit their roles.

- The culture subject teachers in the technical schools are either fresh graduates without enough experience or punished secondary teachers leaded them to technical schools.

- The low income of the technical schools teachers, made all the teachers work in other jobs sometimes those jobs are apart from their specialties
Vocational Training:

- When comparing the PVTD training centers to MOMM centers, the PVTD training centers are more advanced due to the allocated extra funding they get from ITC and TVET project.
- The system of vocational training is complicated, due to the many entities that offer this kind of training with the lack of coordination among each other.
- The MOMM training centers need upgrade and the trainers need to improve their skills.
- More than 26 ministries own and run training centers, but the most important ministries that provide vocational training for learners are Ministry of Trade and Industry, as represented in PVTD and MOMM.
- The PVTD provides technical education certificate (Apprenticeship) equivalent to the certificate that the MOE provides for TSS students.
- The SCDHR needs to be more proactive.
- When studying the other ministers training centers such as ministry of Electricity, Petroleum and Investment, it was noticed that the training those centers provide is targeting the employees who work in the holding companies that report to those ministries and it is very specific for the specializations of each company or ministry except for some summer training for students from faculty of engineering in the ministry of electricity.

Others:

- The MOMM is the only entity responsible for issuing the skill measures and work licenses.
- The skill measures and work license are very limited due to several reasons such as the number of occupations subjected to the application of the law is very small compared to the number of occupations in the labor market, as the number of occupations that the MOMM finalized its skills measures are 386 occupations only, the other reason is most of the skill measures that are subjected to the application...
of the law is in level 1 (limited skills worker) or level 2 (skilled worker) another reason is the system of testing, it lacks transparency and impartiality which led to the loss of confidence in it by employers.

- The testing process for skill measures and work licenses is very complicated and long and need to be reconsidered.
- Mubarak-Kohl program proved its success as a dual system, until it reached saturation because of the limited no. of schools and capacity of enterprises to offer to the system.
- The new Mubarak-Kohl program is not functioning with its full potential - as it was expected- because of lack of cooperation from some of the partners.
- The TVET Reform program made good progress in establishing education and business partnerships (12 Enterprise Training Partnerships), but they are in danger from the sustainability perspective.

Highlight from the ASSESSMENT OF THE PROGRESS OF TVET REFORM IN EGYPT

(ABSTRACTED FROM ETF ASSESSMENT REPORT 10-25 MARCH 2009)

- The progress in TVET reform in Egypt, the TVET environment and its relevance for project implementation
- Revising the main features of the TVET background in Egypt, and the most outstanding changes during the last year, it is possible to reach the conclusion that some of the factors that were present during the project design and the early stages of project implementation are still influencing the environment of the project. However, in parallel to those, there are a number of new developments or parameters that can offer new possibilities and opportunities for the implementation of the project, in particular of component 3, the systemic reform.
- Among the “continving features” of the TVET system having an impact in the project environment and in the implementation since the early phases, it is possible to mention the following:
  - The absence of an overall integrated strategy for Human Resources Development (HRD) in the country, and for the TVET sector in particular, is critical for the success of any reform initiatives. In the beginning of 2009, however, some new initiatives have been launched in this respect that will be illustrated later on in this section.
- The traditional pervading separation between education and training in Egypt, in terms of conception, roles, policies and institutions, while TVET is cross cutting. Admitting the specificities of each of the sectors, it is clear that for the development of the human capital in the country this division has to overcome by a life long learning strategy that integrates all the elements. The TVET project, given the cross cutting nature of TVET, faces this challenge, while it has to pioneer this concept by building the proper links not only with the world of industry and training, but also with that of education.

- The absence of clear leadership for TVET issues in the GoE, with fragmentation and a multiplicity of actors involved results in different strategies and plans being put in place by different Ministries and institutions, while the TVET program, by its nature has to deal with all those actors. The TVET program is under the arm of the Ministry of Industry but by the nature of its mandate it has to build close links with other Ministries (MoE and MoMM) and other institutions (like the Training Councils, NAQAAE).

- This fragmentation results as well in a dispersion and multiplication of functions and roles among institutions (e.g. for a topic like national qualifications, standardization and accreditation, there are at least six or seven main initiatives in place implemented by different Ministries and bodies. Again the TVET project by its nature has to deal with all these actors, with the not easy function to empower national reform for the whole TVET sector).

- Despite this difficult environment, during 2008 and the beginning of 2009 some new developments have taken place (or are in progress at the moment of drafting this report), which may provide new opportunities for the TVET program, particularly now that the project is putting more emphasis in the implementation of component 3, the reform of the TVET system. Among these new factors it is possible to mention the following:

  - There is a certain revitalization of the role of the Supreme Council for Human Resources Development (SCHRD), which had stopped functioning since 2002 and is the “policy umbrella” for the project according to the Financing Agreement. Although the SCHRD has never been an executive body, according to the 2003 Labor Law it is still the only body where all relevant TVET stakeholders meet and are represented (including representatives from the private sector and the civil society). The Minister of Manpower and Migration (MOMM) in her condition of Chairperson of the SCHRD has recently undertaken a reactivation of the role of the SCHRD, starting by a re-nomination by
the Prime Minister of members of the Executive Committee and a re-
elaboration of a new agenda for this body. First meetings of the EC took
place during 2008, with a strong emphasis on issues related to policy
reform, like the setting up of a National Qualification System (NQF) in
Egypt. In parallel, a Ministerial Committee dedicated to HRD issues
meets occasionally under the Prime Minister, and chaired by the
Minister of Military Production. The TVET program has good links with
both bodies, which can enhance the opportunities of the project to
make an impact at policy reform level.

- The Ministry of Education (MOE) is embarked in the implementation of
  an ambitious National Strategic Plan for reform of the education system
  (partially supported by the European Union through a direct budget
  support intervention). This reform encompasses also the reform of
technical education and it creates a link with the mission of the TVET
reform project. The working links between the project and the MOE
have been intensified in the last two years and there is scope for closer
cooperation and articulation of the on going reform processes.

- Despite the above mentioned lack of an overall integrated strategy for
  Human Resources Development in Egypt, there seems to be
momentum now for an effort to set up a strategy for technical
vocational education and training, following the approval of a Prime
Ministerial Decree asking key Ministries and actors to work jointly in its
formulation during the first half of 2009 under the leadership of MOE.
Although it is still early to say what the results of this work will be, the
fact that the TVET program is involved in this group is a good
opportunity for presenting the outcomes of the project and influencing
the policy level, and increase visibility of the results and the added
value of the project. In addition, the TVET reform program, together
with the Skills Development Project (SDP), was put from the beginning
under the “policy umbrella” of the Policy Statement for education and
training approved by GOE in 2002. The policy statement was re-
discussed in 2006 and reconfirmed as the existing overall policy for
TVET reform in the country. However, it is lacking an action plan or
tools for monitoring its implementation. The Committee has thus an
opportunity to avoid “starting from scratch” in the formulation of a
strategy for reform and the TVET program is well placed to promote the
elements in the Policy Statement that are compatible with the
achievements of the project. This Committee could eventually be
considered as the “platform for reform” which the TVET program is
supposed to animate from its design.
Following the evolution of the last two years, the three Training Councils (ITC for industry, Building and Construction and Tourism) are becoming more active at institutional level. The TVET program is represented in the Executive Boards of all of them and has close links with ITC, which is in charge of monitoring the different projects and initiatives in the field of industrial training. At the same time, there are links with the Councils through the ETPs present in the different sectors. ITC has been revising its mandate and scope of action in the last months and it is expected that by 1st of May it will restart some of the pending operations. As argued later on in this report (section on Achievements and component 2), it would be important that ITC would continue to finance some of the initiatives that can have a wider impact on the reform of the system, such as the “100 schools” project. It will be also important for the project to tie up with the planned reform of PVTDs.

There seems to be increased visibility of the potential of the ETPs (both at national and local level). This allows for the project to be seen in connection with other important reform issues, such as decentralization processes, for instance.

In conclusion, it can be argued that, although the environment for TVET reform in Egypt still presents some unchanged features throughout the years that make it difficult to progress on the issue of strategic reform, it is also true that there are new openings that can allow the TVET project to better achieve its objectives. There are new partners and a growing awareness of the key issues for reform. This comes in a crucial moment for the project, particularly regarding the implementation of component 3 and the sustainability issue. The TVET project will be in need of high political support (both by the EC and the Egyptian side) and increased visibility in order to achieve its objectives.