

TORINO PROCESS

EGYPT

2010





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List of abbreviations

CAPMAS	Central Agency for Public Mobilisation and Statistics
EOETE	Egyptian Observatory for Education, Training and Employment
ENCC	Egyptian National Competitiveness Council
ETF	European Training Foundation
EU	European Union
HRD	Human Resources Development
IDSC	Information and Decision Support Centre
ISCED	International Standard Classification of Education
MKI	Mubarak Kohl Initiative
NAQAAE	National Authority for Quality Assurance and Accreditation of Education
NQF	National Qualifications Framework
NSP	National Strategic Plan for Pre-University Education Reform
OECD	Organisation for Economic Co-operation and Development
SCHRD	Supreme Council for Human Resources Development
SMEs	Small and Medium Enterprises
TVET	Technical and Vocational Education and Training
VET	Vocational Education and Training

Foreword

The Torino Process is a review of vocational education and training (VET) policies and systems launched by the European Training Foundation (ETF) in all its partner countries in 2010. The aim of the exercise is to analyse the internal efficiency of VET systems and the contribution of VET policies and systems to broader policy objectives relating to sustainable economic and social development. The process involves the preparation of country reports, regional reports and an overall comparative summary report. The same methodology is used for all the countries; it is based on evidence gathering and developed using an analytical framework, the structure of which is reflected in this report.

The objective of the process is threefold:

- to support partner countries in their VET-related policy making decisions;
- to provide input for the ETF work programme in each country;
- to provide input for the programming cycle and processes of the European Union (EU).

The exercise will in principle be repeated every two years. After the initial experience in 2010, the review could thereafter become a guided self-assessment exercise if the participant countries consider it to be a useful tool.

In Egypt, letters were sent in early 2010 to the Ministers of Education, Industry and Manpower, and to the chairman of the Information and Decision Support Centre (IDSC), which hosts the Egyptian Observatory for Education, Training and Employment (EOETE), a body representing all the main stakeholders. The Ministers of Manpower and Industry appointed contact persons: Mohamed el Fateh, Advisor to the Minister of Manpower; and Mohamed Helal, Director of the Technical and Vocational Education and Training (TVET) Reform Programme. The chair of the IDSC, Magued Osman, authorised the EOETE to provide information and to coordinate discussions among the main stakeholders. In this way, a consultative, cooperative approach was implemented, based on working group discussions and a meeting held by the ETF in Cairo in April 2010.

The preliminary draft of the report was discussed and approved by a group of key stakeholders in a meeting hosted by the EOETE in Cairo on 16 June 2010. A second draft incorporating the comments of the participants at that session was prepared and submitted to internal peer review in the ETF. The third draft was then presented to a group of key stakeholders and discussed at a national dissemination workshop held in Cairo on 19 October 2010. This final version of the report reflects the comments and discussions held before October 2010 and the ETF wishes to thank all the Egyptian stakeholders who have participated in its preparation.

The aim of this report is to make a contribution to the ongoing debate within the Egyptian TVET community (national authorities, private sector and civil society together with international donors) on the current situation regarding the reform process and the future directions that must be taken if the TVET system is to fulfil the ambitious objectives and aspirations of Egyptian society.

Executive summary

The growing importance of TVET in Egypt is a fact few people would be able to contest. As can be seen from innumerable publications, strategic documents and Egyptian government statements at the highest level, VET (or TVET, as it is best known in Egypt), formerly a very underrated component of the education system, is now seen as a key element in the country's strategy for achieving many of its most ambitious objectives. As highlighted in the government's TVET Reform Strategy (Ministry of Education, 2009), the objectives of the TVET reform are many and far reaching in an effort to 'contribute effectively to the country's economic and social development, to the provision of the skilled labour needed by the labour market (both in terms of quantity and quality) and to the local, regional and global competitiveness of the country'.

The tradition in Egypt of separating the worlds of education and training has not helped to strengthen the TVET sector (which involves both modalities). In a society in which a university degree is seen as a path to a respected position in society and the constitution enshrines the right to free education for all, and in the context of a centrally planned economy in which the state had to provide jobs for all (particularly in the large public sector), TVET has traditionally been associated with low academic achievement, low skilled jobs, and limited possibilities for social advancement. Graduates from technical vocational education and from vocational training in Egypt are normally those who failed to make it through the examination-driven educational system. This has given rise in the TVET sector to a vicious cycle of low esteem, low performance and low quality. In a large country like Egypt undergoing a demographic transition, human resources represent enormous potential but the circumstances also place huge demands on the education and training system. The Egyptian educational system is so large that the objective of guaranteeing access to all (even those in remote, rural areas) has taken precedence over the challenge to provide relevant and quality education.

In recent years, the Egyptian economy has undergone a process of privatisation and macroeconomic restructuring under strong government leadership. This process has achieved important results in terms of increasing the country's productivity and macroeconomic performance. However, it has also given rise to imbalances in the labour market and considerable socioeconomic and political concern about growing unemployment and the expansion of the informal sector. While the university system continues to produce an excess of graduates (particularly in disciplines for which there is little demand in the labour market, such as the social sciences and certain areas of the humanities), the formal private sector has been complaining for the last decade about the difficulty of finding employees with the skills needed to ensure economic growth, both with respect to the number of candidates applying for jobs and, more particularly, the availability of candidates with the required skills. With the voice of the private sector gaining ground and being heard and economic studies highlighting Egypt's labour market inefficiencies and lack of competitiveness, TVET has slowly but steadily emerged as an increasingly crucial area for the development of the country's human resources and for the fulfilment of its socioeconomic aspirations.

There have been many achievements in the reform of the TVET sector in Egypt over the last 10 years. This has been due in particular to the work undertaken by programmes supported by the international donor community (both bilateral and multilateral) and initiatives launched by the Egyptian government. Programmes such as the MKI, the National Skills Standards Project, the Italian Don Bosco project and the EU-supported TVET Reform Programme are all milestones on the road to a more modern system. A particular focus of all these initiatives has been to strengthen the links between education and the labour market in an effort to improve both the quality and relevance of TVET in Egypt.

Over the last decade, the main stakeholders have also become more and more convinced of the need to work together to reform the country's TVET system. From a situation of radical separation (the education ministries on one side and all the sectoral ministries responsible for vocational training on the other, with the private sector representatives as clients of both), the policy makers and stakeholders have come together to dialogue. This process culminated in the preparation of the joint strategy for TVET reform approved in 2009 by the Prime Minister. This is, however, only a starting point. In an extremely fragmented institutional environment involving more than 30 institutions, it is not easy to find the leadership and coordination needed to implement the reform. In order to ensure a cohesive reform effort, key decisions are still needed on the preparation of a master plan and the creation of a national platform or body to steer and monitor the process.

The Egyptian government has recently embarked on an ambitious programme to reform pre-university education under the National Strategic Plan for Pre-University Education Reform in Egypt (NSP). The reforms proposed by the NSP encompass governance, financing (associated with decentralisation, another major development in the reform of the country's administration), quality assurance, curriculum, upgrading teachers' skills, and implementing a school-based approach. The NSP also reflects many of the developments taking place in other countries. However, to date this reform process has concentrated on general education and TVET continues to lag behind in terms of the prioritisation of resources for reform. Moreover, the fragmented nature of the TVET sector and especially vocational training, which in Egypt is not administered by the education ministries, brings many other players to the table, making TVET reform a more complicated undertaking.

One development with important implications for TVET was the recent decision at the highest level to set up a National Qualifications Framework (NQF) that will recognise and position all existing qualifications, implement recognition for prior learning, create vertical and horizontal pathways within the system, and work towards achieving the portability and transparency of Egyptian qualifications vis-à-vis other countries. The process of setting up an NQF, which is just as important as the framework itself, should also provide the basis for informed and influential participation of the private sector in key issues of the reform. The TVET stakeholder community has played an important role in laying the groundwork for this significant development. The adoption of an eight-level national framework and the introduction of the concepts of learning outcomes and competencies will have considerable impact on the hitherto isolated TVET system.

The reform of other segments of the education system, such as higher education, also has implications for postsecondary TVET as it gradually gains in importance and becomes an expanding segment closely linked to new technologies and the labour market demand for medium-skilled technical labour. Finally, TVET is also at the centre of current discussions between the Ministries of Education and Higher Education concerning the creation of vertical pathways linking technical and postsecondary education.

This report analyses the current vision for TVET in Egypt and highlights the main challenges and solutions currently being investigated. The picture that emerges is one of a numerically large sector of growing importance affected in recent years by many changes and innovative projects. What are needed at this point are decisions on which of these pilot projects and programmes should be integrated into the mainstream system and how the lessons learned can be incorporated into the national education reform.

The key reforms can be grouped into the following areas and objectives:

- The contribution of TVET to employment (responding to labour market needs) and an increasingly competitive economy.
- Changing the image of TVET in society.
- Building an integrated governance structure for the TVET system. This will entail a move away from a multiplicity of stakeholders towards coordinated implementation of the reform (a master plan, a national platform for TVET reform, and full participation of the private sector).
- Developing a more cohesive system. This aim will be furthered by the establishment of an Egyptian NQF, the creation of pathways within the education system, and the development of a life long learning system.
- TVET as a quality option: school-based approaches, experimenting with new systems of practical training, revision of curricula and specialities, accreditation and quality assurance, investment in teachers and trainers.

1. TVET in Egypt: current situation and vision for the future

Egypt's vision for TVET is reflected in the TVET Reform Strategy,, which was developed by a technical committee comprising the principle public actors and approved by the Prime Minister in August 2009. The aim of the strategy is to establish an integrated framework for developing a TVET system that can contribute effectively to the country's economic and social development, provide the skilled workers needed by the labour market (in terms of both quantity and quality), and enhance the country's local, regional and global competitiveness.

For the purpose of this report, the acronyms VET and TVET are used as synonyms, the latter being the term more often used in Egypt. These terms are used in a lifelong learning perspective and encompass all of the following segments: technical education at primary, secondary and postsecondary levels, vocational education, vocational training, continuing training and retraining. In Egypt, there is a traditional separation between technical and vocational education and vocational training in terms of both the concepts and the system. This separation appears to have been bridged to some degree by the approval of the TVET Strategy, which applies to all subsectors. However, the separation between education and training still persists at the level of implementation.

One aspect of the Egyptian TVET system that must be taken into account is the extreme complexity and fragmentation of the institutional framework, with more than 30 institutions involved in TVET¹. The importance of the recently approved TVET Strategy is that for the first time these institutions have worked together to draw up a strategic plan for the reform of the sector.

In the last decade, the TVET sector in Egypt has seen great changes. Innovative programmes, such as the MKI, the National Skills Standard Project, the Italian Don Bosco project and the EU-funded TVET Reform Programme, represent a bottom-up approach to implementing a series of reforms aimed at making TVET a relevant quality option. As a result, even though implementation of the 2009 TVET Strategy has not yet been started (a master plan is currently being prepared with the support of the EU TVET Reform Programme, but institutional arrangements for monitoring the reform are not yet in place), many of the priorities for reform are already at varying stages of implementation through the actions of these programmes.

The following are the main changes observed in recent years.

- Key actors have begun to work together in the reform of TVET despite the complexities of the institutional framework (for instance, the preparation and approval of the national TVET Strategy, also represents a common understanding of the main deficiencies and areas requiring improvement in the sector).
- The emergence of partnerships between public TVET providers and the private sector. This work was pioneered by the MKI and is currently one of the main components of the EU TVET Reform Programme implemented through the creation of local and sectoral Enterprise and Training Partnerships.
- Greater focus on the quality of education, reflected in the creation of the National Authority for Quality Assurance and Accreditation of Education (NAQAAE).
- Definition of ambitious strategies for the reform of pre-university education (the NSP and the TVET Reform Strategy) in an effort to mainstream the reform of general education and TVET.
- The creation of the first vertical pathways allowing mobility between technical secondary education and higher education, which have recently been agreed between the Ministries of Education and Higher Education. These changes will enhance the attractiveness of TVET by providing a route for students wishing to progress to higher education degrees.

¹ These include the two education ministries (the Ministry of Education and the Ministry of Higher Education) and the ministries in charge of vocational training, which include Trade and Industry, Housing, Manpower and Emigration, Agriculture, Health, Culture, and Social Solidarity. There are also a number of agencies, such as the NAQAAE, the three sectoral training councils (Industrial, Building and Construction, and Tourism), and the Social Fund for Development, among others.

- The creation of three sectoral training councils (the Industrial Training Council, the Building and Construction Training Council, and the Tourism Training Council), with budget allocation and private sector representation.
- The development through the National Skills Standards Project of standards for three key sectors (industry, building and construction, and tourism) with the participation of the private sector.
- Agreement on the need to set up an Egyptian NQF, a proposal put forward by a National Task Force under the Executive Committee of the Supreme Council for Human Resources Development (SCHR) and endorsed by the Prime Minister at the end of 2009. In 2010, the NAQAAE was appointed by the Prime Minister to chair the participatory process for designing an Egyptian NQF.
- Decentralisation processes, which have been piloted in the education sector, including TVET.

The main priorities for TVET reform in Egypt are not defined in a single document. The TVET Reform Strategy has 12 pillars for action and these are not the same as the priority programmes of the NESP. Moreover, the views of key stakeholders sometimes differ. The following list is not arranged in order of priority, but it represents an attempt to group the priorities for TVET in Egypt as defined in the existing documents.

- To create a TVET system oriented towards employment and competitiveness by bringing the skills produced by the system into line with the real needs of the labour market. This involves developing a labour market forecasting system, defining the relevant core skills for key sectors, implementing relevant practical training, and ensuring real engagement on the part of the private sector.
- To improve the social and professional image of TVET, making it more attractive and emphasising its quality and relevance.
- To further define, coordinate and monitor the reform and governance of the TVET system by developing a master plan for the reform and by setting up a national platform or body to monitor its implementation.
- To develop and approve an NQF that will integrate all levels of education and ensure the recognition, transparency and portability of qualifications as well as the accreditation of prior learning. This process should involve the active participation of all stakeholders, including the private sector.
- To increase the number of pathways within the education and training system, to eliminate dead-end streets for TVET graduates, and to develop career guidance and counselling systems.

The main difficulties that Egypt is facing in trying to meet its priorities can be mentioned as follows:

- Fragmentation and multiplicity of stakeholders, lack of coordination and clear leadership for conducting the reform of the sector.
- The shortage of accurate labour market information in terms of needs, forecasting, and the skills required by business.
- The poor social image of TVET graduates and the national aspiration towards higher education.
- The difficulty of moving from pilot projects to mainstream reform. The current pilot initiatives need to be assessed so that choices can be made for the system as a whole.
- The continuing lack of private sector participation in TVET. Private sector participation is confined to pilot projects and programmes, and social partnership mechanisms are not yet fully developed or integrated into the system. Work will be required in the private sector to build the capacities needed for full participation in TVET.

- The low status and quality of teachers and trainers (quality, salaries, professional prospects and qualifications).
- The lack of mechanisms for financing the reform taking into account the large student population (for example, over two million students in secondary technical education).

2. External efficiency: addressing economic and labour market needs

TVET in Egypt faces three main economic challenges.

- Economic restructuring. The Egyptian government has spelled out a long term vision of development that includes the twin goals of achieving sustainable high growth and alleviating poverty and disparities in income. The five-year national development plan seeks to achieve growth by making more use of the private sector as a catalyst for development and by changing the government's role in managing the economy². Furthermore, the reduction of the traditionally important role of the public sector in employment will have a direct impact on the role of the private sector, which is increasingly becoming the engine of employment. Private sector activity places higher demands for skills on the TVET sector (particularly middle level and technological skills) than public employment, which tended to require traditional university degrees, often in the social sciences.
- An economy characterised by a large informal sector and the predominance of small and medium enterprises (SMEs). SMEs, and in particular micro enterprises, account for a very high share of the country's economy. (Private non-agricultural employment was estimated in 2006 to account for 46.5% of total employment.) This sector still functions with a high degree of informality (82% of SMEs are in the informal sector) (El Mahdi and Rashed, 2007). The challenges for the TVET system of this economic structure stem from the fact that SMEs do not participate in the design and management of the TVET system, and little is known about their skills needs. Furthermore, they tend to have scant funds to invest in human resources development (HRD) and find it difficult to articulate their needs in terms of skills.
- The country's low level of competitiveness in global markets. Despite strong growth in the years leading up to the global crisis (7.1% in the 2006/07 fiscal year and 6.9% in 2005/06)³ and the fact that the Egyptian economy has responded well to the crisis (particularly in the financial, fiscal and monetary sectors), the country ranks very poorly in the World Economic Forum's Global Competitiveness Index (70th out of the 133 countries evaluated), occupying a position far below other emerging middle income economies. The reasons for this can be found especially in the country's poor performance in the areas of HRD and labour market inefficiencies. (Egypt ranks 126th out of 133 participant countries in labour market efficiency.) While educational access has improved, the quality of Egypt's educational institutions ranks only 123rd out of 133 (ENCC, 2009 and 2010). The reports mentioned below point out that significant improvement in higher education and training (one of the pillars of the Global Competitiveness Index), which also includes TVET, would boost Egypt's competitiveness in the emerging knowledge economy. The problem of quality is also associated with the fact that the strategic sectors crucial to the country's economic growth have not been identified and it is in these sectors that TVET reform should be piloted.

To date, the TVET system, like the general education and higher education systems, has not successfully met these challenges, and the problems remain unresolved. With an official unemployment rate of 5.22% for men and 22.96% for women (CAPMAS, 2009a), Egypt is affected by a phenomenon called 'educated unemployment' (OECD and World Bank, 2010) characterised by rising unemployment among university graduates, particularly women in urban areas (Assaad, 2006) caused by an excess of graduates (especially in the social sciences) and the downsizing of public employment. At the same time, there is a shortage of potential employees with technical and middle level professional skills, while TVET suffers from low investment, quality and status. Private employers maintain that the education and training system is failing to produce people with the skills needed by the labour market in a context of growing competitiveness and increased productivity. The mismatch

² As summarised in the World Bank country overview of Egypt.

³ Data from Ministry of Economic Development.

between skills supply and demand in the Egyptian labour market appears to lie at the root of many labour market inefficiencies.

Furthermore, according to the 7th Egyptian Competitiveness report (ENCC, 2010) and the Central Agency for Public Mobilisation and Statistics (CAPMAS, 2008), nearly half of the country's workers are employed in the informal economy, a situation that gives rise to numerous bureaucratic problems, human resources challenges and financial hurdles and creates a large and vulnerable mass of unprotected employees.

One of the important factors that affects the ability of the TVET sector (and the education system in general) to meet labour market demands is the absence of a structured labour market information system. At present, numerous institutions are involved in gathering such information (CAPMAS, the Ministry for Manpower and Emigration, the sectoral ministries, and specialised agencies, such as the IDSC). A great deal of information is also generated by the projects and programmes run by international donors and the Egyptian government. There are, however, serious problems with the consistency, coherence and coordination of the data and with its analysis for policy purposes. Consequently, policy makers in charge of key decisions relating to educational reform have no quality information on the needs of the labour market, making it impossible for them to adequately match skills and needs or to forecast the future labour demands of the main economic sectors. In 2006, key stakeholders from all the institutions involved set up a labour market observatory to remedy this situation (the EOETE). This body is hosted by the IDSC at the Prime Minister's cabinet. All the key ministries, agencies, private sector bodies and non-governmental organisations are represented on the observatory steering committee. In 2008 and 2009 the EOETE surveyed labour market information sources in Egypt and worked on developing a methodology for forecasting labour market needs. The work of the observatory on the immense task it is charged with is, however, limited by the fact that it is not a formal entity with its own resources and mechanisms.

Another key factor in the sector's inability to respond to economic and labour market needs is the limited involvement of business interests. Current legislation provides for business participation in TVET, and important improvements have been made in the last decade, especially in the pilot programmes. Nevertheless, the critical mass of business involvement in TVET remains very small in comparison to the size of the sector. Another problem is how to take advantage of the mechanisms developed and the experience gained in the many and disparate pilot projects and how selected models can be integrated into the mainstream TVET system.

There is currently no national system in place to mainstream private sector involvement apart from a few formal arrangements, such as representation on the boards of trustees of some schools and technical colleges and the implementation of a dual system model in a group of technical secondary schools as a result of the MKI experience. The importance of the issue is illustrated by the existence of numerous programmes piloting different models for private sector participation in TVET. One of the most important of these is the EU TVET Reform Programme, which has set up 12 sectoral Education and Training Partnerships and a considerable number of local partnerships, all of which link TVET institutions and private sector organisations. A number of Egyptian joint initiatives have also been implemented by different ministries (for example, the Ministry of Education and the Ministry of Higher Education) in collaboration with private companies. The next questions are how to take advantage of the wealth of lessons learned in all of these projects, how to assess the different ways of involving the private sector in TVET, and how to make the policy decisions on which pilot projects should be integrated into the mainstream national system.

Policy making in TVET remains almost exclusively in the hands of the government. The tripartite bodies provided for in current legislation (such as the SCHR, which was set up under Labour Law 2003) are not functioning in practice. Ongoing discussions about the need to set up a national platform to steer and monitor the TVET reform process and about the development of an Egyptian NQF should open up possibilities for creating a structure that will provide a framework for private sector participation in TVET decision-making.

As yet, Egypt has no proper system for providing continuing training in and for enterprises and no systemic training or retraining for the unemployed (ETF, 2009a). A number of public institutions provide in-service training opportunities, but not in an organised systemic way. On-the-job training is left to the initiative of individual companies and very often leads to attendance certificates rather than a real qualification or a genuine educational opportunity. The 2003 Labour Law set up a training fund under the auspices of the Ministry of Manpower. This body had started to raise funds from employers and employees when it was confronted with the possibility of potential unconstitutionality. The

question of how to make the fund operational is currently being investigated. No specific surveys on continuing training have been carried out in Egypt.

There are three main factors preventing the TVET system from meeting expectations.

- The lack of reliable and integrated labour market information that would provide policy makers with the data they need to forecast labour market needs and thereby match skills to needs.
- Insufficient involvement of the private sector in terms of both critical mass and the absence of any mechanism for mainstreaming the valuable experience gained by pilot projects in the field. There is no national forum where representatives of the private sector sit down with the government to have formal discussions and participate in decisions on the future of TVET in Egypt.
- The absence of a national system for continuing training, an area that is by and large left to private initiatives.

The following are some of the principle actions already contemplated or needed to deal with these challenges.

- Ongoing discussions about the creation of a master plan and a national platform for the implementation, coordination and monitoring of TVET reform in Egypt, in which the private sector would have a key role.
- The preparation of a National Strategy for Competitiveness in Egypt (currently being drafted by the Egyptian National Competitiveness Council [ENCC]). It has been decided that HRD is one of the key pillars of competitiveness and that the strategy will confirm the key sectors in which TVET reform could be piloted.
- Mainstreaming some of the mechanisms for bringing together TVET centres and businesses, which are being piloted in projects such as the MKI and the EU TVET Reform Programme through the ETPs. The different models will have to be assessed and decisions made on the optimum candidates for mainstreaming.
- Reinforcing existing mechanisms for employer participation, for example by generalising the school boards of trustees or by taking advantage of the decentralisation process (currently solely administrative) to involve local communities and local employers in TVET and education in general.
- Support for the EOETE to enable this body to carry out its intended functions and in particular to develop a labour market forecasting system designed specifically for the Egyptian context and to systematise existing sources of labour market information in Egypt. This work should be fostered, continued, and put into practice to provide data for policy makers.

3. External efficiency: promoting equity and addressing social demands for education and training

The following are the main social challenges that shape the demand for training.

- Illiteracy (26.3% of the total labour force in 2009 according to CAPMAS).
- Demographics. With a total population of over 80 million people and more than two million students enrolled in technical vocational education alone, Egypt's demographic profile represents both an opportunity for the country and a challenge for an education and training system under constant pressure to meet the objectives of access and quality.
- Educated unemployment (OECD and World Bank, 2010). Labour force surveys show that the higher the educational level of male workers, the less likely they are to be employed by the public sector (ETF, 2010e and CAPMAS, 2010). Furthermore, while youth unemployment (15 to 24 years of age) accounted for 63.1% of the total in 2009 (CAPMAS, 2009a), a severe mismatch between the supply and demand for medium and technological skilled workers has led employers to complain that they are unable to find the skills they require among TVET graduates. This contradiction is due in part to the aspiration among Egyptians to obtain higher degrees rather than technical qualifications. According to the 7th Egyptian Competitiveness report, the country ranks very poorly in efficient use of talent (ENCC, 2010).

The education and training system has made considerable efforts in recent years to achieve universal access to primary education and to expand access to secondary education, including TVET. Given the demographic pressure, this represented a major challenge in terms of expansion, and greater access has only been achieved at the cost of quality and relevance.

The higher education sector also needs to expand, but the cost of financing this operation is extremely high, particularly in view of the demographic pressure. Unemployment and underemployment among higher education graduates is high (12.1% for men and 25.2% for women; CAPMAS, 2009b). High graduate unemployment is due in part to a surplus of social sciences graduates and a reduction in public sector employment. Recent moves indicate that increasing the attractiveness and relevance of postsecondary TVET could be the key to expansion of the sector. This was indicated by the World Bank and the Organisation for Economic Co-operation and Development (OECD) in a recent report on higher education in Egypt (OECD and World Bank, 2010).

The TVET system has not been yet successful in improving its image compared to other types of education and career options. Students attending TVET are normally those excluded from general secondary education by the system of examinations and marks. TVET graduates have low social status, a very important consideration in the Egyptian social system.

The poor quality of TVET education and the doubtful relevance of the skills acquired are also responsible for the high unemployment rates among TVET graduates. Furthermore, TVET has until now been in some ways a dead-end street because the lack of pathways within the system made it essentially impossible to move from TVET back into general education. Likewise, the present system allows only a tiny percentage of TVET students to progress to university. This is now starting to change following recent discussions between the Ministries of Education and Higher Education.

TVET does not yet have a sufficiently attractive image in Egyptian society to make it a first choice. It is seen as an inferior second choice for those who fail to gain access to general education (and subsequently higher education) in an exam-driven system. In recent years, however, many donors and the Egyptian government have invested in pilot reform programmes aimed at improving the attractiveness of TVET by creating stronger links with the private sector and therefore greater possibilities for employment. The most important of these projects are the MKI, the EU TVET Reform Programme, and the Italian Don Bosco initiative. The MKI currently operates inside the Egyptian system in a group of schools where the dual system is being used. The EU TVET programme has set up Education and Training Partnerships to bring together enterprises with education and training providers. A number of other initiatives involving private companies are being run by three ministries: Education, Higher Education, and Industry. The results of these pilot projects have not yet been fully assessed or mainstreamed, but considerable work has been done. Links with real companies that can

guarantee jobs to graduates make these initiatives very attractive. The three existing sectoral training councils (for the industrial, building and construction and tourism sectors) are also implementing programmes to increase the attractiveness of TVET in order to meet the labour demand in their respective sectors.

A more systemic initiative has recently been launched jointly by the Ministry of Education and the Ministry of Higher Education to create transition pathways from technical secondary school to post-secondary TVET and to create a Bachelor in Technology degree (and later a diploma or Masters) to follow the three-year certificate in technical education. The technical education system is also planning to facilitate access to students already in the labour market who wish to return to education to study for a different or higher degree. These measures are shown in the diagram in Annex 1, although some are pending approval.

The Egyptian state is obliged by the constitution to create conditions that will ensure universal access to education and, in principle, education is free for all citizens. However, in light of the poor quality of education it offers and its lack of relevance to current labour market demand, it is difficult to say whether the present system actually achieves the stated objectives of facilitating access to employment and active citizenship.

Over the years, a system of private tuition has developed in parallel with the public education system (although this is less common in TVET). This has created a privately funded parallel system with implications for the efficiency of the public system and for equality of opportunity.

Some sectors of Egyptian society are questioning whether all levels of education (including higher education) should be free for everyone, and whether the inefficiencies of the system are not creating other inequities. The debate is now open on ways of concentrating public funding on segments of the system more essential to ensuring equity.

The following are some of the actions currently planned to meet these challenges.

- Investment in TVET to make it a quality, first choice option (as per the TVET Strategy). This would also include postsecondary TVET (as part of the reform of higher education), as mentioned above.
- Initiatives that are working to improve the employment prospects of TVET graduates by bringing their education and training closer to the needs of the labour market (the MKI and the EU TVET programme, among others).
- The creation of more pathways between the different segments of the system to facilitate vertical and horizontal movement and re-entry into education from the labour market. (See Annex 1 and above).
- The establishment of a system for continuing training that would enable TVET graduates to continue their education after entering the labour market. While this is a recommendation of this report, the issue of continuing vocational training does not rank very high among the policy priorities. The emphasis is on the transition from education and training to the labour market.

4. Internal efficiency, quality, governance and financing

The three main obstacles to internal efficiency and effectiveness in the Egyptian TVET system are summarised below.

- Fragmentation of institutional authority. The system suffers from a multiplicity of institutions with overlapping mandates, and the reform process is hampered by the lack of clear leadership for its implementation, coordination and monitoring.
- Low quality provision. TVET has traditionally made implicit choices favouring access over quality. As a result it is seen as a poor alternative to general education – the preferred option, which paves the way to university entrance – and has fallen into a vicious circle of low esteem, low quality, and low results. This has still not been overcome.
- The need for a radical overhaul of the system. Curricula and teaching methods need to be updated and reformed, and practical learning introduced. The number and kinds of specialities should be reviewed and rationalised. Investment is needed to upgrade the capacity of teachers, trainers and managers and to improve their conditions. Infrastructure and equipment also need to be upgraded. Given the size of the sector, considerable investment will be required to achieve these objectives.

The chief obstacle to monitoring the progress of TVET reform is the lack of a formal mechanism for evaluating the performance of the sector as a whole. This is due, at least in part, to the institutional fragmentation and lack of clear leadership described above. These are key issues that will have to be evaluated and addressed by the master plan or national platform for TVET reform to be set up following current discussions.

As a result of the growing concern about the quality of education, one positive development in recent years has been the creation of the NAQAAE in 2007 as an independent quality assurance and accreditation body under the responsibility of the Prime Minister. This is seen as a way of improving the delivery of education through greater emphasis on accreditation mechanisms and processes. Since NAQAAE deals with quality assurance in education in general, it covers TVET as well as general education. However, it does not as yet cover vocational training centres. NAQAAE commenced operations in 2007, when it approved 200 of the 270 schools that applied for accreditation. This means that some 30% of schools failed to meet the requirements. In the 2009/10 academic year, some 800 schools applied for accreditation.

The work of NAQAAE has the potential to contribute to the creation of an overall quality assurance and accountability framework within which schools could be granted greater substantive and procedural autonomy.

The Quality Assurance Framework developed and adopted by NAQAAE is in line with international benchmarks and comprises the following nine areas:

- the vision and mission of the institution;
- leadership and governance;
- human and financial resources;
- civil society participation;
- quality improvement and accountability;
- learners;
- teachers;
- curriculum;
- educational environment.

Each area is further defined by specific criteria and described through a specific set of indicators (ETF, 2010e).

NAQAAE and other institutions, such as the Professional Academy for Teachers (which does not, however, cover TVET teachers at present), are moving forward, and important groundwork has been laid. Moreover, there is political commitment to supporting the quality assurance system and to the institution leading this process. Clear evidence for this is the Prime Minister's recent decision to entrust NAQAAE with the task of heading up the development of an NQF.

The educational institutions also appear to accept and be committed to the new quality assurance system. However, while this system offers an important opportunity that would benefit the schools, the reality in the field proves that many quality assurance policies and procedures are not yet in place. Further implementation of the accreditation process could be hindered. One problem is that the focus has been on designing controls (accreditation, assessment and validation) intended to direct education and TVET systems, while little provision has been made to build the capacities of the institutions and managers to help them implement the policies.

The present quality assurance framework does not take into account the importance of quality assurance in student assessment. In this respect it is out of step with international criteria. Although the NAQAAE framework has introduced important concepts with direct relevance to the principles of validity, reliability and external verification, these have no immediate impact on assessment in schools. In the case of TVET, high quality assessment of graduates is a very important way of ensuring quality and consistency with other programmes. The advantages of using standardised and quality-assured frameworks to evaluate student performance have been demonstrated in TVET. Such arrangements can improve student performance and enhance the signalling value of qualifications.

Governance and financing of the system

a) Governance

The governance model of the Egyptian education system is changing on four main fronts (ETF, 2010e). The first of these involves the creation of new institutions with specific responsibilities for setting standards and for the certification, assessment and evaluation of the education system. The second is the policy decision to decentralise the system. The third relates to empowering schools and giving them more autonomy. The fourth concerns the involvement of civil society and social partners in policy decision making. These changes are not yet accompanied by clear policies on the responsibilities and accountability of the institutions and actors or on the mechanisms that need to be set up to define levels of performance and to monitor and assess the system (World Bank, 2010). The World Bank report focuses on the separation of policy-making functions from the oversight functions that are the responsibility of the new institutions (NAQAAE, the Professional Academy for Teachers, and others). However, the official government papers and the World Bank report neglect the school level or the changes needed to achieve the objectives of the reform. As mentioned earlier in this report, if the reform is to succeed, it is important that decentralisation and school-based reform go hand in hand. However, the reality is that decentralisation, school empowerment and greater autonomy are in tension with existing forms of governance, and this may be inevitable. The autonomy and the accountability of schools have yet to be defined, and no effective school model is proposed in the National Strategic Plan.

The following are the main developments in governance affecting vocational training.

- The future creation of a body for the quality assurance and accreditation of vocational training (since the NAQAAE is active mostly in education). While the plan for this new body is currently under discussion at Prime Ministerial level, the early drafts of the decrees for its establishment indicate that it would be affiliated to the Ministry of Manpower and Emigration.
- The creation of three sectoral HRD Councils with private sector participation. Since 2006, enterprises have been playing a more active role in the reform of education and training. This is reflected in the considerable representation of private businesses on the boards of the education and training councils set up by the government to enhance the quality and relevance of education and training in three key sectors: industry, building and construction, and tourism.

- The Industrial Training Council was set up within the Ministry of Trade and Industry by Ministerial Decree to improve the coordination and effectiveness of existing training projects, especially those connected with the ministry itself. The aim was to increase the efficiency of these projects, bringing them closer to the real needs of the different industrial sectors and maximising the use of available resources. The council's board of directors (mainly composed of representatives of private enterprise) is addressing a number of key education and training issues. Ongoing projects include support for the Ministry of Education in the work of upgrading 100 technical secondary schools and the modernisation of the Productivity and Vocational Training Department network. The council is also responsible for the implementation at national level of the National Skills Standards Project.
- The Building Skills Development Council set up in 2008 under a Prime Ministerial Decree is managed by a board of trustees chaired by the Minister of Housing. Its mandate is to develop the training strategy for the sector, monitor the implementation of the strategy and approve related plans and budgets.
- The National Council for HRD for the Tourism Sector was set up by Prime Ministerial Decree in 2010 to enhance the quality of human resources in the tourism sector. It has considerable private sector representation through the five tourism chambers and the Egyptian Tourism Federation.

As regards the governance of the system as a whole, the only formal overall body in which business and education come together is the SCHR, a Ministerial Council chaired by the Minister of Manpower and Emigration. In theory, the SCHR is the highest authority in charge of formulating HRD policies. Its members include all the relevant ministries (Education, Higher Education, and the sectoral ministries in charge of vocational training) as well as representatives of the trade unions and the private sector (through the federations of employers). While the SCHR was revamped by the Labour Law of 2003, it has not, in actual fact, met in plenary session since the law was passed. In 2007, a process aimed at reactivating this council was set in motion by the Minister of Manpower and Emigration under the auspices of the Prime Minister. To achieve this aim, a new SCHR executive committee (intended to be council's operational arm) was established and met regularly until 2009 to prepare a new agenda for this policy body. The future of this body now depends on a decision to be taken by the Prime Minister. While the SCHR has been inactive, all policy discussions related to education and training have taken place in the Ministerial Committee for Employment and HRD Issues. The composition of this committee includes the government, the Social Fund for Development and NAQAAE. The committee is chaired by the Minister of State for Military Production and reports to the Prime Minister.

b) Financing of the education system (including TVET)

The Egyptian government is implementing several reforms in the educational financing system, most of which are linked to decentralisation. These can be analysed from the point of view of the mobilisation, allocation and use of resources. Three key challenges still need to be addressed: (i) gaps in the financial requirements of the NESP; (ii) mechanisms for the allocation of resources, including equity issues; (iii) linking funding to improved quality and performance (ETF, 2010e).

As highlighted by the European Commission (2007) report on the compliance assessment of sector budget support for education, the current Egyptian public budgetary system does not provide financial data by level of education or by type of educational activity (type of school).

It is well documented that education (pre-university and university) is the largest social expenditure sector in Egypt (European Commission, 2009; World Bank, 2007; OECD and World Bank, 2009). According to the European Commission report, its share of total public expenditure was 16.2% in the 2002/03 fiscal year, 16% in 2004/05, and 12.6% in 2006/07.

The total ministry budget is distributed between the central ministry (about 15%), the governorates (72.5%) and the supporting agencies (12.5%). The supporting agencies include the General Authority for Education Buildings, which receives nearly 90% of the allocation for supporting agencies. Effective application of the decentralisation policy is reflected in the steadily increasing share of educational expenditure by governorates, from about 70% of total educational expenditure in 2000/01 to over 80% in 2006/07.

Expenditure on wages and salaries as a percentage of the total budget has increased steadily, rising from 71% in 2000/01 to 83% in 2006/07. At the same time, the share of other recurrent expenditures (mainly student-related and school operation-related expenditure) declined to 12% in 2006/07. Given the substantial expenditure on wages, the key challenge is the scant resources available to cover developmental expenses, such as teaching and learning materials and other inputs. Without sustained mid-term commitment, there will be no option but to allocate most of the available budget to recurrent expenditures (wages), leaving almost no budget for programmes addressing the quality of mainstream education. Inadequate funding will lead to the direct reproduction of patterns of social and economic inequality since students will be heavily dependent on their parents' financial situation.

As a result, schools will continue to be under-financed, with negative repercussions on both quality and equity. The reliance on civil society and families to contribute to the financing of the system may further increase disparities in quality between rural and urban and between rich and poor areas. Another challenge facing the Egyptian system is to use funds in a cost-efficient way. There are grounds for saying that the educational system as a whole costs more than it should. Available capacity is far from being fully utilized owing to problems in management and pedagogical organisation, length of school day and other factors.

A serious shortcoming of the system is that budget allocation is not tied to any performance criteria or based on any clear parameters or formula. At present, budget allocation does not take into account the differences between types of schools (technical, versus general), equity issues (rural versus urban) or the school's performance (for example, reduction in drop-outs or improvements in quality). To date, the government has not seen funding as an instrument that could be used to promote institution-wide reform and innovation in all types of schools.

c) **Financing of vocational training**

A National Training Fund was set up by the Labour Law of 12/2003 to raise contributions from employers and employees (employers only pay 1% of net profit) to finance continuing training. However, shortly after the fund started collecting revenues, a legal question concerning its constitutionality was raised, and operations were suspended. In collaboration with the EU TVET Reform Programme, the Ministry of Manpower and Emigration – the competent authority – is currently studying mechanisms and solutions for making this fund effective. At the same time, the World Bank Skills Development Programme has piloted a demand-driven training funding mechanism. The objective was to stimulate and test a new mechanism for funding demand-driven and competitively priced training for SMEs by financing short courses on production processes on a cost-sharing basis with the participation of the SMEs. Training needs were identified through business and investors' associations, which also commit to raising awareness about the importance of training as a vehicle for enhancing productivity and competitiveness.

The sectoral training councils mentioned above have their own (public) budgets. Their funding mechanisms vary, and each one is governed by its own set of regulations. The potential of these mechanisms has not yet been fully explored.

In summary, the main actions covered by this chapter can be grouped into the following six areas.

- The decisions regarding the creation of a master plan and a national platform for the implementation, coordination and monitoring of the TVET reform process.
- The establishment of the NAQAAE, the body responsible for accreditation and quality assurance in education (including technical secondary schools). A similar institution for vocational training is currently being designed.
- The Prime Minister's decision to go ahead with the establishment of an Egyptian NQF under the leadership of the NAQAAE. This decision followed two years of technical work carried out by a National Task Force under the auspices of the Minister of Manpower in his capacity as chair of the SCHR executive committee.
- The revision and design of curricula and training packages, teacher and trainer training, and the introduction of alternative systems of practical learning closely connected with the world of work, similar to those developed by various programmes, including the MKI and the EU TVET Reform

Programme (through the Education and Training Partnerships). These experiences need to be further assessed and decisions must be taken on the mainstreaming of innovative models.

- The decentralisation process as an opportunity to bring the governance of the TVET system closer to the local community.

- The National Training Fund and the actions of sectoral training councils as opportunities in the field of innovative financing for TVET.

5. Innovation, partnership and entrepreneurship

The following are some of the main areas of current innovation in the TVET sector in Egypt.

- A number of important projects have focused on the task of building partnerships and creating links between education and business, that is, between the public and the private sector. The MKI and the ETPs of the EU TVET Programme are two of the initiatives that could be mainstreamed. The next challenge will be to carefully assess the proposed models and make policy decisions on the mechanisms that would be needed to extend these innovations throughout the system.
- The Clusters Project (an Education Development Fund initiative still in the experimental phase) is a significant example of innovation. Clusters group together different types of TVET institutions (technical secondary schools, vocational training centres, and technical colleges). The different institutions share premises and equipment, methodology, certification and governance systems. The aims are to maximise the use of resources, ensure stronger links with the local community, and create pathways that will facilitate lifelong learning.
- Egypt's participation in the Euromed Charter for SMEs has identified several excellent practices for entrepreneurial learning in the training sector. The Ministries for Education and Higher Education are currently working together on the Egyptian Strategy for Entrepreneurial Learning (see Annexe 1). The aim is to introduce entrepreneurial learning into education and higher education. Another important development is the plan to set up Entrepreneurship Centres in technical colleges.
- The government has requested the ENCC to draft a National Strategy for Competitiveness, which will identify the key sectors in the future development of Egypt's competitiveness. It has been decided that HRD will be one of the main chapters in this strategy document and that TVET will occupy a prominent position. The link between education, training and competitiveness is emerging as an innovative area, and the strategy document will highlight the contribution of TVET to the country's socioeconomic goals.

Donor projects, which for years have been the main vehicles for testing and fostering innovative approaches in TVET, have often used a bottom-up methodology (for example, the EU TVET Reform Programme, the MKI, and the Skills Development Programme). These projects are the laboratories where experience is gained with different possible solutions for the challenges identified in this report. The chief difficulty is to take advantage of synergies and to optimise the coordination of all these initiatives because many multilateral and bilateral donors with large budgets are active in the country and many different models have been proposed for dealing with the same issues and situations. The second major challenge is to move from project-supported pilot programmes to full implementation of selected models in the mainstream system.

National projects have also supported innovation in recent years (the National Skills Standards Project, agreements between the education ministries and business interests, and the activities of the training councils). However, at this stage it could not be said that the TVET system as a whole in Egypt is really supportive of innovation, but rather that there are islands of innovation. The system still needs to change before innovation is accepted as a common feature.

The key may be the ability of TVET policies to accommodate the findings of the many national and donor-driven pilot projects and the capacity of the system to evaluate the different solutions proposed and tested and take the necessary policy decisions that would lead to the full implementation of some of these innovations within the system.

The following are some of the chief obstacles to the integration of innovative changes into the system.

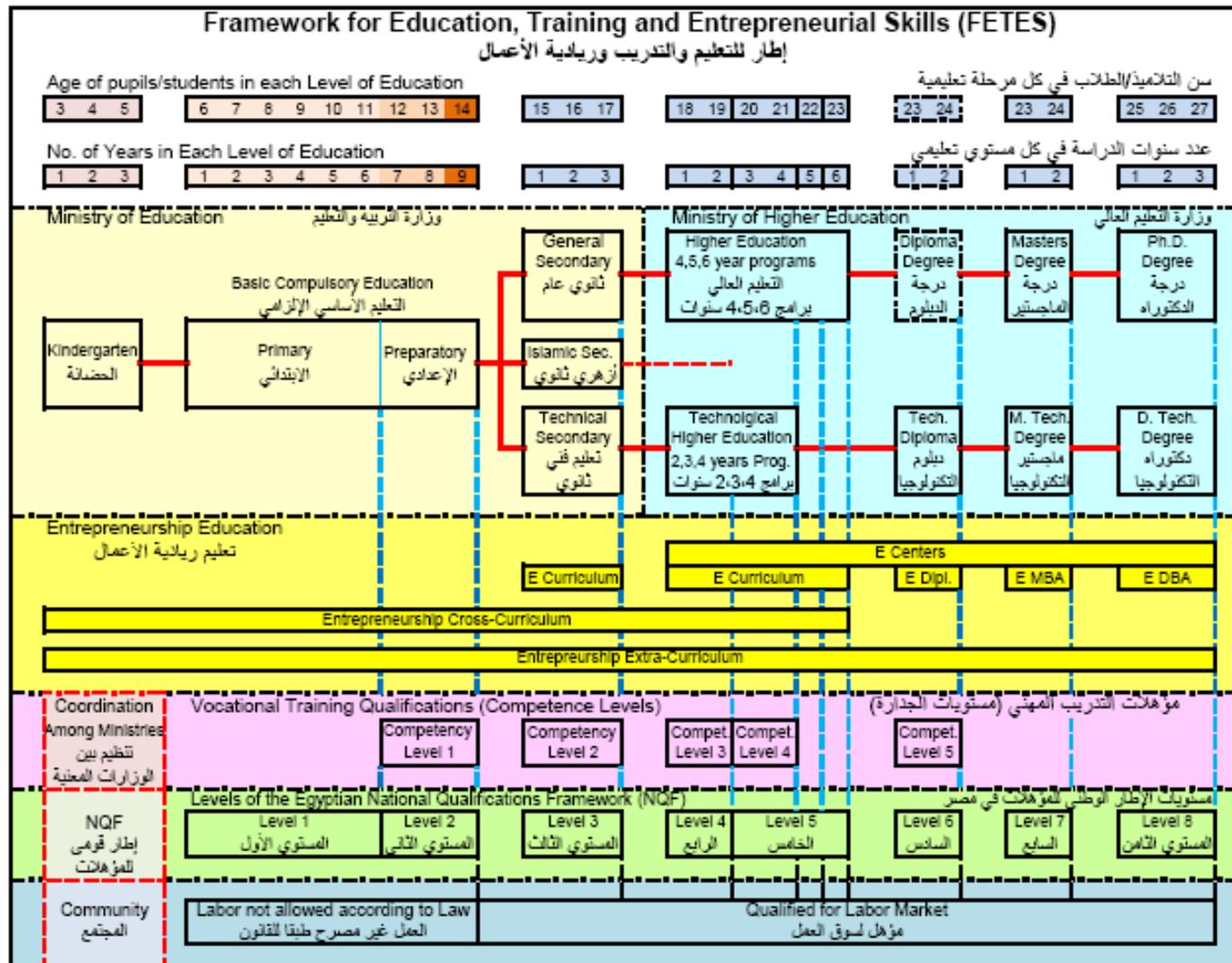
- Financial constraints. The innovations implemented by some projects are very difficult to sustain after the project finishes or would be very expensive to mainstream in a large system.
- Legal and administrative obstacles. Mainstreaming innovations involves regulatory changes, a process that can require considerable work. The legal and administrative provisions governing the

system tend to be rather rigid. Policy decisions and leadership are needed to drive the process. However, recent developments, such as the ongoing decentralisation of the education system prove that it is possible to instigate change providing the political will is there.

- The lack of evaluation of innovative initiatives. The proliferation of pilot projects provides a fertile testing ground for innovative initiatives. However, this experimentation needs to be followed up by thorough evaluation of the results, consideration of the most appropriate models for the Egyptian context and, finally, a policy decision. At present this mechanism for weighing up the results of innovative processes and deciding which ones should be mainstreamed is not yet present in the system. This mechanism should be included in the master plan for the implementation of TVET reform.
- There is some strong social resistance within the education community (parents, teachers, students) to some of the innovations proposed by the current reforms. New curricula and new teaching methods cannot be applied without first upgrading the capacities of teachers, trainers and managers.

In the future, the newly created institutions, such as the sectoral training councils, should be able to take a leading role in fostering innovation and transforming the lessons learned into actual policies for the sector. This would also be one of the main tasks of the future national platform or body in charge of coordinating and monitoring the TVET reform in Egypt.

Annex 1: Diagram of the TVET system



Annex 2: Country fiche with main indicators

	2000	2005	2006	2007	2008	2009	2010	EU average, latest year available	
Total population at the beginning of the year (thousands)	63 305.0	69 997.0	71 347.0	72 798.0	74 311.2	76 054.1	77 701.6	497 649 125	
Dependency rates (%): pop. under 15 and over 65 as % of working age population	69.4	69.8	69.8	54.9	54.9	54.9			
Life expectancy, years (male)	66.7	68.6	69.2	69.5	69.9	70.2		76.07	
Life expectancy, years (female)	71.0	73.2	73.6	74.0	74.4	74.8		82.21	
GDP/capita, PPP (constant 2005 international US\$)	2000	2005	2006	2007	2008	2009	2010		
GDP per capita, PPP (constant 2005 international dollars)	3 992.0	4 318.9	4 529.6	4 761.7	5 006.4				
GDP per capita, PPP (current international dollars)	3 531.2	4 318.9	4 675.4	5 047.1	5 425.3			25100 33452 (WB, euro area 2008)	
	2000	2005	2006	2007	2008	2009*	2010		
School years (2000 refers to 1999/2000)	GDP by economic sector (%)	50.13	49.21	47.87	49.59	49.25	49.00		
	(services)								
	(agriculture)	16.74	14.86	14.07	14.07	13.22	13.68	2 (agriculture)	
	(industry)	33.13	35.92	38.06	36.34	37.53	37.32	27 (industry)	
	Employment rate (%), total		44.41	43.85	45.78				72 (services)
	Employment rate (%), female		17.72	16.87	19.85				
	Unemployment rate (%), total	8.98	11.24	10.64	8.95	8.70	9.38		
Unemployment rate (%), female	22.73	25.08	24.00	18.58	19.27	22.96		8.8	

	2000	2005	2006	2007	2008	2009	2010	EU average, latest year available
Number of people who have participated in lifelong learning, total**	93515	62664	116673	126472	116630	126293		9.30
Gross enrolment rate, upper secondary	64.4	NA	NA	NA	NA	NA		110.88
Participation in TVET % of upper secondary	65.3 (2001)	NA	NA	NA	NA	NA		49.94
Student/teacher ratios in TVET (%) (ISCED 3) (industrial) (agricultural) (trade)	2000	2005	2006	2007	2008	2009		
		11.30	10.66	9.92	7.90	7.56		
		17.29	15.96	13.53	10.63	9.46		
		18.99	18.68	17.90	14.23	12.94		12.17
Student/teacher ratios in general education (%) (ISCED 3)	12.80	12.99	12.25	11.67	8.41	8.65		
Private education as % of total (ISCED 3), TVET		6.53	6.57	6.48	5.67	5.61		12.58
Private education as % of total (ISCED 3), general		7.64	7.59	7.82	7.95	7.95		12.69
Public expenditure on education as % of GDP								
		4.80	4.10	3.80	3.90			5.04 (s)
Percentage of the population aged 25 to 64 who have completed at least upper secondary education	22.70	27.20					30.70	71.5

* initial

** number of enrolled students in Open education has been taken as a proxy for lifelong learning

Note: PPP indicates purchasing power parity

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