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TORINO PROCESS
2014
ARMENIA
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TORINO PROCESS 2014
ARMENIA

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Country profile

Capital: Yerevan
Population (de jure)\(^1\): 3 027 000
Trends in GDP: -14.1% in 2009; +2.2% in 2010; +4.7% in 2011; +7.2% in 2012; +3.2% in 2013
Activity rate (2012), age 15–75: 62.7%
Employment rate (2012), age 15–75: 51.9% (female 45.2%)
Informal employment rate\(^2\): 50.1%
Unemployment rate (2012), age 15–75: 17.3% (female: 18.2%)
Educational attainment of the population (2012), age 15–75:
- primary – incomplete primary: 1.5%
- general basic: 10.4%
- complete general secondary: 42.2%
- vocational: 2.1%
- middle VET: 22.7%
- tertiary VET: 21.2%
Public expenditure on education (2013): 2.9% of GDP\(^3\)

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\(^1\) The total of all usual residents (usual residency is defined as the place of main residence) in a country is generally referred to as the de jure population and the total of all persons present as the de facto population.

\(^2\) In accordance with the National Statistical Service of Armenia (NSSA), informal employment is the share of those holding informal jobs among the total employed population.

\(^3\) Armenia Development Strategy 2014–25, p. 106
EXECUTIVE SUMMARY

Since the last review carried out under the Torino Process in 2012, the overall appeal of the vocational education and training (VET) system in Armenia has continued to improve. Furthermore, as a result of the reform process begun in 2004, its image has changed, transforming the public perception of VET as a second-chance education for the less privileged to a more European-oriented model of education linked to better employability. This applies in particular to the 12 regional state colleges located all over the country, which have been refurbished and modernised through donors’ support.

In 2012 the Ministry of Education and Science (MoES) assumed responsibility for VET in agriculture and culture and in 2013 health also came under the ministry’s control, with the result that now the system is coordinated by only one ministry and the reform process benefits from greater consistency and harmonisation.

There are a number of indications of an improvement in the system, in particular the positive comments from social partners and employers’ organisations that VET is coming closer to meeting the needs of the labour market. Moreover, these stakeholders recommend strengthening the process with the aim of continuing to improve VET’s relevance and quality.

The reform process has included the revision, development and implementation of learning-outcome-based curricula, alongside the further training of teachers and principals. In 2011, the entrance examination for VET institutions was eliminated to facilitate access to the system, and work on the revision of qualifications as part of the implementation of the Armenian National Qualifications Framework is on-going. This also includes the piloting of a credit system for VET in a number of regional state colleges, beginning in the 2014/15 school year.

With the assistance of the European Union (EU), which has been the main donor in the field of VET development since 2004, a fourth phase of budget support was initiated in 2014 to fund, among other programmes, the refurbishment of some preliminary VET schools, the upgrading of equipment in two colleges to provide access for physically disabled students, the strengthening of career guidance services, and the piloting of a process of validation for non-formal and informal learning. The implementation of this phase of budget support will continue until 2015.

The Armenia Development Strategy 2014–25, adopted by Government decree in March 2014, confirms that the education sector is considered a fundamental tool for the sustainable development of the country, and that increasing its quality, effectiveness, relevance and access at all levels are top priorities. The Strategy, which is based on the Sustainable Development Programme adopted in 2008, emphasises that increasing employment levels through the creation of high quality and productive jobs is seen as the main objective of the country’s overall strategic framework.

Furthermore, the strategy reveals that there is a growing tendency for pupils completing basic education to leave the system rather than continuing to secondary education. Around 7.7% of students left education in the 2011/12 academic year, and for this reason, the MoES has submitted a law to Parliament to extend the period of free compulsory education from nine to twelve years, starting from the 2015/16 academic year. The strategy underlines that this decline in participation in secondary education is linked to poverty. It also reveals that there is no great difference between urban and rural areas, as is shown by 2010’s enrolment rate of the poorest 10% of the population, which was 54% in urban areas and 53% for the rural population.

The strategy also highlights that in order to increase the quality and efficiency of the education system, it is crucial to fight corruption at all levels.
Because of the recent economic crisis, the budget allocation for education slightly decreased from 3.2% of gross domestic product (GDP) in 2011 to 3% in 2012, and was estimated at 2.9% in 2013. Nonetheless, starting from the 2012/13 academic year, the number of free places in educational institutions providing middle vocational education programmes has been increased by 50%. Thus, a slight increase in enrolment for middle VET was registered. The teacher/student ratio has remained stable in both preliminary (ISCED level 3) and middle VET (ISCED level 5B) and continues to be low in comparison to general education. With the adoption of the new law, which will enforce the extension of free compulsory education, VET will be totally financed by the MoES’s budget for students enrolled after basic education, and this implies that the GDP allocation will increase substantially from 2015 onwards.

Social dialogue is well defined in the official documents, and the participation of social partners in working groups and advisory boards is ensured to meet this requirement. Social partners’ representatives participate in the meetings of the National Council for VET, which is a tripartite structure, and also sit on the governing boards of VET colleges. Sector Skills Councils are involved in the approval and validation of qualification standards. However, on a number of occasions, representatives of both social partners and schools and colleges have expressed concern about the effectiveness of these mechanisms to promote social dialogue.

Since the last review, Armenia’s economy registered a significant growth in GDP in 2012 (7.2%), followed by a period of deceleration in 2013 (3.2%) owing to the impact of poor weather on agricultural outputs and an increase in the price of gas.

Despite the economic growth, the labour market continues to be characterised by weak labour demand and a scarcity of jobs. The economy is still dominated by labour-intensive sectors such as agriculture, hotels, restaurants and mining, which require only low levels of skills. It is evident that, in order to increase employment opportunities, Armenia needs to attract investment, both national and foreign, and facilitate the creation of new companies in innovative sectors through the improvement of a competitive business climate.

The general level of educational attainment in the population remains high. However, the rates of unemployment or precarious employment for both university and VET graduates are also high.

Because of the high rates of unemployment, particularly among young people, and low wage levels, migration flows continue to be remarkable, especially towards Russia. Thus, high levels of unemployment have reinforced the need for the Government to focus its attention on a wide range of active employment measures. In order to promote job creation, the corresponding budget for 2014 has increased, while no unemployment benefit will be paid to the newly registered unemployed (a passive measure). In June 2014 the State Employment Service Agency (SESA) was renamed the State Employment Agency (SEA) and its local branches merged with the Ministry of Labour and Social Issues’ offices to form ‘Integrated Social Services’, with support from the World Bank and Unicef.

The main challenges for the coming years are:

1. to strengthen the reform of VET with the aim of continuing to improve and mainstream the content and delivery of the system. Available data show that education and skills help to keep people out of poverty, and that targeted programmes should be designed to address the needs of specific groups. The extension of free compulsory education from nine to twelve years from the 2015/16 academic year represents an important challenge, as it will lead to increased demand for VET and a substantial increase of the state budget allocation in this area. Thus, indicators for defining quality, relevance, efficiency and effectiveness should be identified by the MoES when designing and implementing the next steps in the reform process. Furthermore, the reform should continue giving priority to a strategic sector, for instance agriculture, which has
received little attention until now, and which is identified in all the key documents as a priority for the future economic development of the country;

2. to speed up the implementation of the *Armenian National Qualifications Framework* as this can ensure a more systemic approach to reform;

3. to extend the tasks and responsibilities of the *Sector Skills Councils* in terms of defining and anticipating skills needs – an important tool in supporting VET development in line with the socio-economic needs of the country;

4. to promote *effective partnership between education and business* to facilitate VET graduates’ transition from school to work. Youth unemployment is a very serious problem and the newly adopted list of active employment measures can provide incentives to reduce unemployment. Thus, dissemination of labour market information and cooperation among schools, the State Employment Agency, employers, local communities and NGOs should be improved and schools must become more proactive in forging such links.
INTRODUCTION

The Torino Process is a participatory review of progress in VET policy launched in 2010 by the European Training Foundation (ETF) with the aim of building up the capacities of national stakeholders to assess the progress of reform. The Torino Process is carried out every two years by most partner countries with the support of the ETF.

The objective of the Torino Process is to provide a concise, documented analysis of VET reform in each country, including the identification of key policy trends, challenges and constraints, as well as good practice and opportunities, in order to:

- support countries’ evidence-based policy-making, with a view to improving the contribution of VET to sustainable development, and in particular enhancing countries’ competitiveness and social cohesion;
- serve as a basis for the design of the ETF’s support strategy to these countries;
- inform the ETF’s recommendations to the European Commission for future EU assistance to these countries.

Since 2010, the Torino Process, as is also the case for the Bologna Process1, has acquired visibility and credibility in Armenia and is recognised by the national authorities as a valuable instrument for guiding and assessing the progress of the VET reform, as highlighted in the Armenia Development Strategy 2014–25.

The same strategy recognises the Torino process as a key tool for European cooperation in the field of education and VET from a lifelong learning perspective, and it recommends that the reform process should continue with the aim of ‘streamlining professional education in line with the country’s strategic educational and scientific development goals and provisions of the Bologna and Turin Agreements’2.

The present report was prepared in close consultation with the authorities from various public institutions in Armenia, as well as other bodies, including social partners’ organisations and NGOs. Special thanks are due to the VET Department of the MoES, the National Centre for VET Development, the National Institute for Labour and Social Research, and the Global Development Fund for their daily support in providing data and information.

This report is based on the collection and review of existing documents and on the experience and involvement of the ETF in the VET reform process over many years, through several missions, contacts, visits and meetings with stakeholders. The statistics are mainly drawn from the National Statistical Service of Armenia (NSSA).

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1 The Bologna Process is a series of ministerial meetings and agreements between European countries designed to ensure comparability in the standards and quality of higher education qualifications.
1. VISION FOR THE NATIONAL VET SYSTEM

1.1 Introduction to the VET system

As was the case for many former Soviet Union countries, the Armenian VET system inherited from that time an image as a less attractive education stream compared to general secondary and higher education. Since 2004, inspired by EU policies addressing the issue of employment and skills, reform of VET has become a top priority in the national agenda and has received a significant amount of attention from donors (e.g. the United Nations Development Programme, GIZ and DVV).

VET in Armenia covers mainly initial vocational education and training (IVET) because, until recently, continuing vocational education and training (CVET) has not been part of a systemic approach, but rather has referred to the non-formal training organised by companies for their own staff or offered by the estimated 200 providers in the market offering courses in such areas as information and communications technology (ICT), foreign languages and marketing. The State Employment Agency also organises CVET for a very limited number of unemployed people through local competition, in which schools can also participate if they can meet the necessary requirements in terms of expertise and equipment.

Thus, the definition of VET in this report will mainly refer to IVET, which is divided into two different levels: preliminary (craftsmanship) and middle vocational education.

- The preliminary (craftsmanship) training lasts from six months to three years, providing a qualification level of ‘craftsman’, based on a basic general education (nine years) or secondary general education (12 years). It is compatible with the ISCED 3 level.

- The duration of middle vocational education is from two to five years, with the qualification level of a ‘specialist’, based on the basic general education (nine years) or secondary general education (12 years). It is compatible with the ISCED 5B level.

Both routes offer a vocational qualification (with access to the labour market) and opportunities for a secondary general diploma (Matura), thereby providing students with the option to pursue higher education (see also Annex 2).

Preliminary VET is provided in 25 schools and 20 middle VET colleges, and enrolment increased from approximately 5 600 in 2011 to 6 800 in 2012 (see FIGURE 1.1). Of these students, 86% had completed basic education while 14% had attended secondary school. The number of new students enrolled in preliminary VET in the 2012/13 school year increased to 3 391, from 3 111 in 2011/12. Students in preliminary VET tend to pursue courses in art and design, services, economics and management. About 90% of students in preliminary VET receive free education. The student/teacher ratio has remained stable, reaching an average of 8:1 in 2012.

Middle VET is provided in 72 colleges and six universities and the total enrolment remained stable in 2012 with 27 452 students (compared with 27 381 in 2011, see Figure 1.1), 63% of whom had a basic education while 37% were educated to secondary level. Middle VET is classified as ISCED level 5B, like higher education. The number of new students enrolled in middle VET in the 2012/13 school year increased to 10 399 from 9 462 in 2011/12. The total number of students that enrolled in middle VET with state subsidies increased by up to 50% and the student/teacher ratio was 9.28 in 2012. There is no available information on dropout rates in VET. Enrolment data from the NSSA show that in middle

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3 Calculation based on the total number of teachers published by the NSSA for 2012.
VET the courses taken are mainly in health care and sports, pedagogy, economics and transport and communication.

**FIGURE 1.1** NUMBER OF STUDENTS IN PRELIMINARY AND MIDDLE VET INSTITUTIONS, 2007–12

![Graph showing the number of students in preliminary and middle VET institutions from 2007 to 2012.]

Source: National Statistical Service of Armenia, 2012

**TABLE 1.1** shows that, when compared to 2010, the state budget for general education in 2014 increased by 11%, while the increase for preliminary VET was 49%, for middle VET 96% and for higher education 29%.

**TABLE 1.1** STATE BUDGET ALLOCATION TO EDUCATION, 2010–14 (‘000, AMD)

<table>
<thead>
<tr>
<th>Education</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>General education</td>
<td>70 300 532.6</td>
<td>71 348 093.2</td>
<td>71 855 145.6</td>
<td>72 878 733.3</td>
<td>78 027 372.8</td>
</tr>
<tr>
<td>Pre-school education</td>
<td>–</td>
<td>96 995.7</td>
<td>156 669.2</td>
<td>284 668.3</td>
<td>494 638.1</td>
</tr>
<tr>
<td>Elementary general</td>
<td>20 653 627.3</td>
<td>24 978 555.2</td>
<td>22 054 372.2</td>
<td>23 673 104.3</td>
<td>26 029 041.2</td>
</tr>
<tr>
<td>Basic general</td>
<td>34 782 529.8</td>
<td>31 435 690.0</td>
<td>30 605 561.7</td>
<td>30 768 531.5</td>
<td>32 768 372.9</td>
</tr>
<tr>
<td>Secondary (complete) general</td>
<td>14 864 375.5</td>
<td>14 836 852.3</td>
<td>19 038 542.5</td>
<td>18 152 429.2</td>
<td>18 735 320.6</td>
</tr>
<tr>
<td>Preliminary vocational education</td>
<td>1 910 443.0</td>
<td>1 875 434.8</td>
<td>2 202 733.2</td>
<td>2 562 049.6</td>
<td>2 854 281.3</td>
</tr>
<tr>
<td>Middle vocational education</td>
<td>2 970 799.4</td>
<td>3 164 408.9</td>
<td>3 363 257.0</td>
<td>3 841 661.2</td>
<td>5 843 548.7</td>
</tr>
<tr>
<td>Higher and postgraduate education</td>
<td>7 619 379.1</td>
<td>7 798 809.8</td>
<td>7 808 150.5</td>
<td>8 111 390.5</td>
<td>9 795 346.2</td>
</tr>
</tbody>
</table>

Source: Economic Development and Research Centre (EDRC), Yerevan, Armenia
1.2 Vision and innovation in the VET system

Armenia has no natural resources and, as stated in the Armenia Development Strategy 2014–25 (adopted by government decree in March 2014), human capital is the country’s main asset. Education is therefore considered to be the country’s ‘key competitive advantage’ and the means of promoting its image as a nation with developed scientific and technological capacities. Raising employment levels through the creation of high quality and well-paid jobs is the main objective of the Strategy, and this will be achieved through increased growth in industry, agriculture services and construction. A reduction in non-formal employment is also expected, in particular in agriculture, while international economic integration processes are expected to play an important role in promoting the country’s social and economic development.

Education is governed by the law relating to the Education Development State Programme (EDSP) for 2011–15, which defines the priorities for the implementation of this initiative and states: ‘Education is valued highly in Armenia as an essential instrument for sustainable development, for preserving and enhancing the reproduction of valuable human resources.’

In the VET Reform Programme and Action Plan for 2012–16 (elaborated by the MoES and adopted by the Government in July 2012), the main achievements of the reform so far are underlined. Also included is a plan for the implementation of further necessary measures, highlighting the need for the integration of the country’s VET system into the European Professional Education Area. Moreover, the importance of providing people with skills relevant to the labour market is stressed, alongside the creation of a modern society through education and training. The Reform Programme recognises that it is vital to create effective mechanisms for cooperation and dialogue between education institutions and businesses.

1.3 Capacity for innovation and change

Since the last review, the reform process has continued with the revision, development and implementation of new learning-outcome-based curricula as well as further training of teachers and principals. The entrance examination for VET institutions was eliminated in 2011 and work has started on the implementation of the Armenian National Qualifications Framework, with a pilot test of the credit system for VET being carried out in some regional state colleges. With the assistance received from the EU – the main donor in the field of VET development since 2004 – a fourth phase of budget support was initiated in 2014 to cover, among other projects, the refurbishment of some preliminary VET schools, the upgrading of equipment in two colleges to provide access for physically disabled students, the strengthening of career guidance services and the piloting of a validation process for non-formal and informal learning. Implementation will continue until 2015.

A review of the law on education is under discussion in Parliament and its adoption was expected at the end of 2014. The main change is related to extending free compulsory education from nine to twelve years from the 2015/16 academic year, in order to address the problem of the average 7.7% of students who fail to enrol in secondary education. This implies that the demand for enrolment in VET will increase and that public funding will consequently go up.

The same law makes provision concerning the implementation of supplementary and continuing education policies as an important contribution to the promotion of CVET, including new concepts of, and procedures for the validation of, non-formal and informal learning. The law refers to the Supplementary and Continuing Education Strategy 2013–17, which was adopted by the MoES in December 2013, upon consultation with other public institutions, NGOs and social partners’ organisations.
Since 2013, a project has been implemented by the ETF, in cooperation with the Department of Supplementary and Continuing Education of the MoES and the Armenian Culinary Traditions Development and Preservation NGO, to pilot a system for the validation of non-formal and informal learning in the culinary profession.

A new element contributing to improving the effectiveness of VET is the setting up of career guidance services in the 12 regional state colleges, with the support of the ETF. Developing the underlying methodology and training the staff, as well as some guidance work, was carried out with the support of the Methodological Centre for Professional Orientation. This Centre has been operational since January 2013 under the Ministry of Labour and Social Issues (MoLSI) and used to be the Youth Professional Orientation Centre, providing career guidance services directly to young people.

A further concept for the development of a professional orientation (career guidance) system was approved by the Government in October 2012. It aims at ensuring the provision of career guidance services in preliminary, middle and higher education institutions. The training of career guidance experts and the production of a related manual, job fairs and monitoring and consulting visits have all been organised since 2013 under an ETF-funded project.

A National Training Fund (NTF) was also established in 2011 by the then Government with the aim of promoting a market for CVET and to make it more respondent to the needs of the labour market, thus ensuring a better quality workforce.

The NTF’s mission, as stated in its strategy covering the 2013–16 period, is to improve the country’s economic productivity and competitiveness. This is to be achieved through the promotion of improved employment and living standards for the workforce, including vulnerable groups, by providing access to VET. In accordance with the strategy, funding for the training will come from the NTF’s own resources as part of the budget allocation provided by the MoES, and by employers and employees. No information is available on the results achieved so far by the NTF.
2. EFFECTIVENESS AND EFFICIENCY IN ADDRESSING ECONOMIC AND LABOUR MARKET DEMAND

2.1 Economic and labour market factors that shape demand for skills

As regards the position of the country in the international context, it is important to mention that Armenia has so far not signed the Association Agreement with the EU. The Government has decided to join the Russian-led customs agreement, together with Belarus and Kazakhstan. However, during the Vilnius Summit in November 2013, the EU and Armenia did adopt a declaration, which proposed that they to continue to cooperate in non-trade related areas such as human rights, good governance and the rule of law.

With reference to economic performance, in 2013 Armenia (classified by the World Bank as a middle-income country) registered a slight decrease in GDP compared to the previous year. After a significant contraction in 2009 (-14.1%), GDP had started to grow gradually: by 2.2% in 2010, 4.7% in 2011 and 7.2% in 2012, which was followed by a deceleration in 2013 (+3.2%).

Over the 2010–13 period, the contribution to GDP made by the industrial sector went down slightly, from 36.9% to 31.5%. Due to unfavourable climatic conditions in 2013, a slight reduction was recorded in the agricultural sector’s contribution to GDP from the previous year, from 21.6% to 20.9%. The service sector registered an increase in its GDP share in 2013 to 46.6% (from 44.1% in 2012).

Over the 2008–12 period, the Armenian national currency depreciated relative to the US dollar and other foreign currencies, which reflected the reduction in private transfers and direct foreign investments. Armenia’s inflation rate stood at 5.8% in 2013, according to the NSSA.

In 2012 the Armenian Government adopted measures aimed at facilitating business start-ups, for example the elimination of company registration fees and the merging of the employee and employer social contributions with individual income tax to make one unified income tax system. In terms of creating a business-friendly environment, the overall ranking of the country, according to the World Bank’s Doing business survey, is 37th out of 189 countries (World Bank and IFC, 2013).

The small and medium-sized enterprises (SME) sector continues to be a priority for the Government because of its important role in boosting economic development. The reforms undertaken in 2010 included actions aimed at improving the business environment and facilitating the availability of credit for industrial enterprises based on their business plans. According to the calculations of the National Development Centre in 2010, the contribution of SMEs to GDP was 43% (an increase from 41.7% in 2008). In 2010, SME sector employment as a percentage of total employment increased slightly to 42.2% (World Bank, 2012). SMEs represented 98% of the total number of actively operational economic entities in the country at the beginning of 2013 (SMEDNC, 2013).

In 2013, the Global Competitiveness Index ranked Armenia in 79th position out of 148 countries. This is an improvement compared to the previous year, in which it was placed 82nd out of 144 countries. Armenia, like the other Eastern Partnership Countries, has also participated in the assessment of progress following the Small Business Act for Europe. This process is aimed at identifying strengths

4 The agreement was signed in October 2014.
5 The National Development Centre manages the funds allocated by the state budget to the development of SMEs. It provides technical assistance, including business consulting and training, and financial support through the provision of loan guarantees, equity financing, seed capital and partial subsidies of credit interest rates.
and weaknesses in policy design and execution, comparing experiences and performance, and setting priorities in measures convergence towards the implementation of the policy principles promoted by the Small Business Act.

As regards the human capital dimension, the report published in 2012 highlights that the development of knowledge and skills is recognised as a priority for enterprise growth and is supported by the business community (OECD et al., 2012). Further development of training and support systems for start-ups and growing enterprises requires the systematic collection of data, as well as analysis of the impact of existing programmes. According to information from the National Centre for VET Development (NCVETD), elements of lifelong entrepreneurial learning have been included in school curricula since 2010, and a module on social science has recently been added, including economics, psychology, ethics and safety at work.

With respect to the labour market, the situation has remained stable, with a slight increase in the activity rate (from 61.2% in 2011 to 62.7% in 2012) and the employment rate (49.64% in 2011 to 51.9% in 2012), with 45.2% of the workforce being women.

The highest rate of employment by education level in 2012 is seen in those who have completed tertiary and postgraduate-level studies at 61.6%, followed by preliminary VET graduates at 56.7%, middle VET at 53.7%, complete general secondary education at 50.8%, general basic at 33.6% and primary and incomplete primary at 38.1%.

The share of people employed in agriculture continued to be high in 2012 (37.3%), although showing a slight decrease from 2010 (38.6%) and absorbing 44% of the women in employment.

The structure of employment for the economically active population is recorded as follows: 56.5% employees, 0.5% employers, 28.5% self-employed and 14.5% other categories (referring to 2012 data).

The overall unemployment rate slightly decreased from 19% in 2010 to 17.3% in 2012, with the highest rate seen in those with a preliminary VET qualification (24.8% – a considerable increase from 17.8% in 2011) followed by middle VET graduates (18.4%), those educated to tertiary and postgraduate level (18.2%), general secondary (16.3%), general basic (15.5%) and other categories (1.5%). There is also a gender disparity in the unemployment statistics, with worse figures recorded for women (19.8% compared to 16.4% for men).

The rate of informal employment in 2012 continued to be high at 50.1%, with an incidence of 24.1% in urban and 79% in rural areas and covering 99% of the workers in agriculture and 19.3% in non-agricultural activities.

Youth unemployment (aged 15–24) is still the highest category, and the figures here are more than double the general unemployment rate (TABLE 2.1) although they show a declining trend. The unemployment rate for young people decreased from 39.2% in 2011 to 35.4% in 2012, while for young women the rate decreased from 44.9% in 2011 to 40.7%. There is an urban/rural disparity in youth unemployment, with higher rates in urban areas and an increase from 47.3% in 2011 to 50.2% in 2012. The data reveal that young people experience difficulties in entering the labour market and that the situation continues to be more problematic for young women, as indicated already in the Torino Process report 2012.

Because of scarcity of jobs, employers can employ higher education graduates for low-skilled jobs, thus making VET graduates more vulnerable and less sought after in the labour market.
### TABLE 2.1 YOUTH (15–24) UNEMPLOYMENT RATE BY GENDER AND LOCATION (%)

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>38.9</td>
<td>39.2</td>
<td>35.4</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>31.9</td>
<td>34.9</td>
<td>31.5</td>
</tr>
<tr>
<td>Women</td>
<td>48.0</td>
<td>44.9</td>
<td>40.7</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>48.6</td>
<td>47.3</td>
<td>50.2</td>
</tr>
<tr>
<td>Rural</td>
<td>23.9</td>
<td>27.1</td>
<td>14.4</td>
</tr>
</tbody>
</table>


The proportion of the unemployed population who are classed as long-term unemployed has been growing since 2009, and in 2012 more than half of the unemployed (52.7%) were long-term unemployed, showing a higher trend for women (FIGURE 2.1).

![FIGURE 2.1 LONG-TERM UNEMPLOYMENT* AS % OF TOTAL UNEMPLOYMENT](image)

(*) Long-term unemployment is defined as being unemployed for more than 12 months.

Source: National Statistical Service of Armenia, 2012

Of the total number of 245 000 unemployed in 2012, only 65 000 were officially registered with the State Employment Agency (70 000 were registered in 2011), out of which 46 400 (71%) were males and 11.2% resided in rural areas. In addition to the unemployed, there were around 7 000 registered employees who were looking for better job opportunities. The low number of those who are registered as unemployed can be explained by the fact that the State Employment Agency’s services in job seeking or counselling are not considered by the population as particularly relevant or effective.

The group with the highest number of registered unemployed are those with general secondary education (47%) followed by preliminary and middle VET (30%), higher or postgraduate level (16.3%) and those with general basic education (6.7%).
2.2 Mechanisms for identifying demand for skills and matching skills supply

In 2012, almost 50% of the registered unemployed received some services – 35.5% (of which 63% were women) collected unemployment benefit\(^7\) compared to 55% in 2011, and 3% attended professional training compared to 4% in 2011.

Data from the NSSA’s Yearbook for 2012 show that 15.7% of the total registered unemployed were placed in work in 2012 (2.5% in agriculture, 25.9% in industry, 6.2% in transport and communication, 11.4% in construction and 54% in services). The average duration of unemployment was 23.8 months, with this figure being almost equal for men and women. The average age of registered unemployed was 42 years.

Only 1 689 vacancies were offered by employers in 2012, with a proportion of 38 applications for each vacant position, which is an indicator of the lack visibility of the State Employment Agency as an instrument for finding work.

As regards wages and income for those in employment, many existing jobs do not pay enough to lift people out of poverty. In 2012, 37.3% of workers were employed in agriculture, while this sector accounted for only around 20% of GDP, and this highlights that there is a serious problem concerning productivity in this area.

The average monthly nominal wage\(^8\) was AMD 113 163\(^9\) in 2012, showing an increase of 4.7% compared to 2011, with women’s wages 22% below average. The average monthly nominal wage for employees in the education sector was around AMD 80 000, which places it in the last but two positions on the salaries’ scale, after culture and agriculture.

The average monthly income\(^10\) slightly increased compared to 2011, from AMD 78 408 to AMD 85 212 in 2012. The average monthly income for men was AMD 104 874 in contrast to AMD 61 853 for women, and the figures were higher for people living in urban as opposed to rural areas. The lowest average incomes were recorded in agriculture and industry, while the highest were in transport, communication, finance and business. In terms of qualifications, the lowest average income was recorded for workers with a vocational education (AMD 64 246) and the highest for those who had completed tertiary or postgraduate studies (AMD 105 135). The average monthly income in formal employment was AMD 93 065 compared to AMD 72 183 in the informal sector.

Starting from 1 July 2014 the salaries of all civil servants have been increased, and the net minimum salary has risen to AMD 50 000\(^11\).

Because of the low wages, approximately 3% of the employed have a second job, of which 89% are in the agriculture sector.

A system to anticipate and identify skills needs is not yet in place. Ad hoc surveys are conducted by VET institutions and employer associations, while studies are occasionally carried out by international institutions. However, the methods employed by these surveys and hence the quality of the results

\(^7\) Average monthly amount of unemployment benefit: AMD 16 031 = EUR 29 as of 11 August 2014.
\(^8\) The nominal wage is the amount of employees’ gross remuneration including taxes. This information is based on the statistical reports submitted by organisations/companies and gathered by the monitoring and sample surveys of small and micro-companies carried out by the NSSA.
\(^9\) AMD 113 163 = EUR 205 as of 11 August 2014.
\(^10\) Refers to net income from monetary and in-kind income generated from employment, and is based on the responses of 15–75-year-old employed persons. The reference period is the month preceding the survey.
\(^11\) AMD 50 000 = EUR 90.57 as of 11 August 2014.
varies. In addition, it is unclear how the information generated is to be used and there is a lack of coordination. The main practices to mention in this regard are the state quota system that defines enrolment rates for VET and higher education, and the labour market analyses conducted by the State Employment Agency, based on employer surveys and unemployment records.

Furthermore, in June 2014, new regulations were adopted to counteract the high levels of unemployment, in particular among young people, and a wider range of active employment measures have been designed. These active measures, the implementation of which will start in 2015, are intended to focus on facilitating youth employment, and they include, among other initiatives, supporting start-up businesses, VET, assisting farmers in the promotion of seasonal employment, organising internships in companies, offering lump sum compensation to employers hiring new staff, and monitoring and evaluating the effectiveness of these measures. State Employment Agency staff have been trained to implement these measures, and 19 local branches have been moved to MoLSI local offices in order to provide multiple services to the public under one roof.

Nevertheless, the overall budget for employment measures for 2014 has decreased by 23%, with a reduction of 35% for passive measures (e.g. payment of unemployment benefits), and an increase of 65% for active employment, compared to 2013. In order to promote a more active approach to job seeking, no unemployment benefit will be paid to the newly registered unemployed from 2015.

2.3 The potential of the VET system to influence economic and labour market needs

Despite remarkable efforts by the institutions concerned, economic and labour market demand do not yet seem to exert a great influence on VET provision. Available data, in particular from the tracer studies carried out by donors, show that the VET system mainly plays the role of a supplier of graduates who then attempt to enter the labour market (hence data show a mismatch between VET supply and labour market demand).

This is clearly a consequence of the scarcity of jobs because, despite signs of economic recovery and some improvements (decrease of unemployment rate), the labour market demand remains weak. The economic structure is still dominated by labour-intensive sectors of the economy such as agriculture, hotels, restaurants and mining, where only low levels of skills are required. It is evident that in order to increase employment opportunities, Armenia needs to attract investment, both national and foreign, to improve the competitive business climate and facilitate the creation of new companies in innovative sectors.

However, the workforce’s skills do not seem to be a major constraint for job creation (World Bank, 2012b), and employers highlight that improving business regulation, reducing bureaucracy, and limiting the numerous business inspections and associated extortion should be a matter of priority to improve the business environment.

A National Employment Strategy (NES) and implementation plan was adopted by the Government in November 2012 covering the 2013–18 period. Among the top priorities are:

- increasing employment levels through the creation of 100 000 jobs deriving from the development of SMEs;
- strengthening the services provided by the State Employment Agency;
- the organisation of VET provision by the MoES, designed in accordance with labour market needs;
- education is to be improved through the implementation of the Armenian National Qualifications Framework; and

- a professional orientation system is to become accessible to everyone, regardless of their employment status and career.

In addition to above priorities, the strategy identifies the need to regulate employment promotion programmes for vulnerable groups and includes active support to job seekers through the provision of specialised services, such as information or counselling services, mediation, placement, training and retraining and help with business start-ups. An increase in the budget allocation for active employment measures is included in the strategy as well as a proposal for a minimum wage and an annual increase of the number of vacancies that will be filled with State Employment Agency support.

The strategy was instrumental in the adoption of a law on employment in 2013, which highlighted, in addition to above priorities, tailored approaches for specific target groups (for example, setting up entrepreneurial activities, providing training for the disabled, assisting with work rehabilitation and job seeking, as well as public works initiatives).
3. EFFECTIVENESS AND EFFICIENCY IN ADDRESSING DEMOGRAPHIC, SOCIAL AND INCLUSION DEMAND

3.1 Demographic and social factors that shape demand for VET

Based on Armenia’s Population Census of 2011, the de jure population in January 2013 numbered 3 027 000, with a gender composition of approximately 52% female and 48% male. When compared with the same indicators for the beginning of 2012, the total figure had risen by 5 500, reflecting a natural increase in the population (the difference between registered births and deaths) and estimated net migration.

At the beginning of 2013, almost 32% of the population was below 25 years. The average age of the population was 36.2 with 34.5 for males and 37.8 for females. Since 2001, population trends have been characterised by alternating phases of rising and falling numbers, but during this period a total decrease of 5.7% was registered. In the last five years the trends in the age structure of the population have shown a slow decrease for the young age group (up to 24 years) and an accelerated expanding of adult labour resources (aged 25–64).

Early 2013, the share of the urban/rural population was 63% to 37% respectively, with a slight trend towards a decrease in the urban population and an increase in the rural (NSSA, 2012b). Of the total population, 35.2% live in Yerevan and the proportion of women is higher in urban areas (53%).

Long-term projections (to 2050) identify a change in the age structure of the population, with a shrinking of the working-age group (aged 25–64) by almost 8% and an 8.5% increase in the retired population (Eurostat, 2011). This will have an impact on society as a whole in areas such as factor dependency rates, workforce, available skills, and social and health care services provision.

Emigration is still an important factor as a consequence of poverty and unemployment. It is estimated that over 213 000 Armenians left the country during the 2007–12 period and 32 205 people emigrated in 2013. The chief reasons for this remain the prevailing employment situation and low salaries.

Long-term emigrants to Russia who have lived there for a year or more make up around 70% of Armenian emigrants and there are approximately 800 000 Armenian migrant workers in Russia12.

The ETF study (2012) on migration shows that 87% of returning migrants were males coming back from Russia, with a large percentage of them having worked in construction, manufacturing and trade. The majority worked in jobs with a low skills requirement and below their education level. This entails a high risk of deskillling, which increases with education level. Of the returning migrants, 42% were able to find a job and 68% were seriously thinking of migrating again.

Remittances from emigrants have increased, reaching 21.5% of GDP in 2012 (Prokhorova, 2013), but this has not led to greater investment in entrepreneurial activity, as, according to a World Bank survey carried out in 2012, only 12% of households are engaged in business. A further analysis shows that while in the short run remittances have a positive impact on economic growth, their effect tends to become negative in the long run, as households receiving remittances do not tend to be active in the labour market.

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12 Gagik Yeganyan, Head of State Migration Service – interview with Arka (an Armenian news agency), Yerevan 12 February 2014
Furthermore, it must be mentioned that over the 2008–12 period the average gross income in rural communities increased by 16.8%. This rise is mainly a reflection of the growth of private transfers through remittances from relatives residing outside Armenia.

Recent amendments to Russia’s laws on immigration and the legal status of foreign citizens, which came into force at the beginning of 2014, may have a serious impact on future migration trends. According to these amendments, citizens from visa-free countries, such as Armenia, are allowed to stay in Russia for 90 days during every 180-day period, and this will have a potentially serious impact on the possibilities for circular migration.

In 2011, the EU and Armenia signed the Mobility Partnership agreement with the aim of promoting legal mobility. Noteworthy among the specific needs identified is the provision of VET for potential migrants in order to promote their skills within a labour/skills-matching environment. Moreover, developing a system to facilitate the recognition of skills and qualifications has been identified as a priority. Many projects financed by the EU and other donors are implemented under the Mobility Partnership and mainly include support actions for the integration of returning migrants.

The EU and Armenia Visa Facilitation Agreement came into force on 1 January 2014. The agreement makes it easier and cheaper for Armenian citizens, in particular those who travel frequently, to acquire short-stay visas for trips to and throughout the EU. For particular categories of travellers and under certain conditions, Member States are supposed to issue multi-entry visas with long periods of validity.

EU citizens have been exempted from the visa obligation when travelling or transiting through Armenia since January 2013.

The conflict in Syria has led to the arrival of around 10,000 Syrians of Armenian origin seeking support, for instance in terms of education, employment opportunities and training. Challenges such as these will have an impact on social and economic policies.

### 3.2 Delivering to the individual demands and aspirations of learners: access, participation, progression

The educational attainment of the population (TABLE 3.1) reveals a consistent share of preliminary and middle vocational education of about 25%, which has remained stable over the last two years. Moreover, there has been a slight increase for tertiary education (from 18.6% in 2010 to 21.2% in 2012), and 2012 saw a higher rate of participation in this sector for women (21.7% against 20.5% for men). Compared to general education (42.2% in 2012 up from 41.7% in 2011), participation in VET (including preliminary and middle) has remained stable (from 25% in 2011 to 24.8% in 2012), showing no significant changes.

Compulsory education lasts for nine years and includes primary and general basic schooling.

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13 Skills development and recognition are proposed as aspects to be considered.
TABLE 3.1 EDUCATIONAL ATTAINMENT OF POPULATION (15–75) BY GENDER (%)

<table>
<thead>
<tr>
<th></th>
<th>2010 Total</th>
<th>2010 Female</th>
<th>2011 Total</th>
<th>2011 Female</th>
<th>2012 Total</th>
<th>2012 Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary, incomplete primary</td>
<td>2.0</td>
<td>2.1</td>
<td>1.7</td>
<td>1.7</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>General basic</td>
<td>10.3</td>
<td>8.8</td>
<td>10.2</td>
<td>8.4</td>
<td>10.4</td>
<td>9.1</td>
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<tr>
<td>Complete general secondary</td>
<td>43.9</td>
<td>41.8</td>
<td>41.7</td>
<td>40.8</td>
<td>42.2</td>
<td>40.6</td>
</tr>
<tr>
<td>Preliminary vocational</td>
<td>2.2</td>
<td>1.9</td>
<td>1.9</td>
<td>1.6</td>
<td>2.1</td>
<td>1.6</td>
</tr>
<tr>
<td>Middle vocational</td>
<td>22.9</td>
<td>25.9</td>
<td>23.1</td>
<td>25.5</td>
<td>22.7</td>
<td>25.5</td>
</tr>
<tr>
<td>Higher postgraduate</td>
<td>18.6</td>
<td>19.4</td>
<td>21.3</td>
<td>22.0</td>
<td>21.2</td>
<td>21.7</td>
</tr>
</tbody>
</table>


By tradition, Armenian society has until recently tended to privilege higher education over VET because of the better chances of finding a rewarding and well-paid job – in particular in the public sector\(^{14}\) – and also because of the greater recognition of this level of education in society. In the 2012/13 academic year, 245,977 students graduated from universities, which is 37% more than five years ago, 2.3 times the number of graduates 10 years ago and 2.5 higher than 15 years ago.

3.3 Delivering to socio-economic and inclusion demand

The 7.2% economic growth of 2012 resulted in a certain reduction of poverty, which in Armenia is assessed on the basis of consumption aggregate as an indicator for economic well-being. The poor are defined as those with consumption per adult equivalent to or below the upper total national poverty line; the very poor are defined as those with consumption per adult below the lower national poverty line; and the extremely poor or undernourished are defined as those with consumption per adult equivalent to or below the food poverty line. In 2012, poverty decreased in comparison with the previous year, with the overall rate being 32.4% – a reduction of 2.6% from 2011 (35%) – of which 2.8% were living in extreme poverty, a fall from 3.8% in 2011. In 2012 almost every third person (32.4%) in the population was classed as poor and, within this group, 13.5% were recognised as very poor and 2.8% extremely poor.

Although the poverty rate decreased in 2012 in comparison with 2011, both the proportion of people living in poverty and its severity were still greater than in 2008. The overall number of those classed as poor in 2012 was around 980,000 (in the resident population); in the category of very poor the number was 408,000 and the figure for those deemed extremely poor was around 85,000. Poverty indicators did not significantly differ by urban (32.5%) and rural (32.1%) communities. In 2012, the lowest rate of extreme poverty was observed in Yerevan, while the majority of those classed as extremely poor were urban residents living in towns and cities other than the capital (73%).

This situation is indicative of the fact that subsistence agriculture plays an important role in safeguarding people against extreme poverty and that increasing productivity through targeted programmes including skills development can represent an opportunity for economic growth.

\(^{14}\) The government sector (public administration, education and health care) provides employment for 45% of higher education graduates, while, by comparison, only 4.5% of workers with a university degree are employed in the manufacturing sector and 4.4% in the ICT sector (World Bank, 2012b).
Concerning poverty by region, in 2012, with almost 46% of its population living below the poverty line, Shirak, a high-altitude region devastated by the earthquake in 1988, was still the poorest district in Armenia. Over the 2008–12 period, the poverty rate increased in all regions except for Vayotz Dzor and Yerevan.

As regards to the structural profile of poverty, in 2012 the proportion of women in the population classed as poor was 54.9%, showing a slight reduction compared to the previous year. Larger households with children are exposed to a higher risk of poverty and targeted programmes should be designed to address these issues.

The incidence of poverty and extreme poverty is generally higher in small and medium-sized settlements, and in 2012 the rate was 25.6% in Yerevan and 40.2% in other cities.

Labour market participation plays an important role in determining the rate of poverty in the population. Specifically, lack of employment increases the risk of being poor or extremely poor. This is highlighted by the fact that in 2012, the poverty rate among households with no employed members was 44.5%, which was higher than the national average. During the same period, the extreme poverty rate among households with no employed members was 4.8%, which was 1.8% higher than the national average. However, over the 2008–12 period the poverty rate increased both among labour market participants and among non-participants, that is, the economically inactive population (e.g. the poverty rate for students was 24.2% in 2008 and this increased to 31.5% in 2012).

Education and skills play an important role in keeping people out of poverty, as is shown in Table 3.2. It is evident that people with a higher level of education are less likely to be poor. The incidence of poverty among more highly educated individuals is more than half (17.4%) that of the national average (30.5%). During the financial crisis (2008–10), the incidence of poverty showed the highest growth among individuals with a middle VET level of education, giving some indication of the difficult economic recovery in terms of jobs for qualified workers. Compared to 2008, extreme poverty increased for all education levels, except for those with elementary and primary education (Table 3.2).

| Table 3.2 Poverty Incidence by Education Level (Population 16+), 2008 & 2012 (%) |
|-------------------------------|----------|----------|----------|----------|
|                               | Poverty  | Extreme  | Poverty  | Extreme  |
|                               | 2008     | 2012     | 2008     | 2012     |
| Elementary/primary            | 36.1     | 35.2     | 4.2      | 4.2      |
| General basic                 | 40.1     | 41.5     | 3.2      | 4.8      |
| Complete general secondary    | 30.2     | 36.5     | 1.7      | 3.1      |
| Middle VET                    | 21.9     | 29.8     | 1.0      | 2.1      |
| Higher education              | 14.7     | 17.4     | 0.4      | 1.2      |
| Total                         | 26.6     | 30.5     | 1.6      | 2.8      |

Available data show that incomes are higher for well-educated and highly skilled workers than for those with a lower level of education. Moreover, well-educated individuals have a lower rate and duration of unemployment than less educated workers. As regards salary, people with higher and postgraduate education earn at least twice as much as someone with only basic education. However, for this level of education a slight decrease in earnings compared to 2011 is noticeable, while for all other categories the tendency has been towards growth.

It is evident that the most striking social challenge is the economic divide between rural and urban areas and between the regions in terms of (industrial) infrastructure and job opportunities. One of the most pressing issues for poverty alleviation is to increase access to general secondary and VET provision as a way of improving economic and social mobility and social cohesion. Targeted programmes should thus be designed and implemented in order to address the needs of specific groups.
4. INTERNAL EFFICIENCY OF THE VET SYSTEM

4.1 Quality assurance

There are no mechanisms in the VET system for assessing the performance of institutions. The Armenian National Centre for Professional Education Quality Assurance (ANQA), established in 2008 with responsibilities for both higher and vocational education, has been taking the first steps towards the definition of quality assessment standards and criteria. However, so far the Centre has concentrated its activities mainly in higher education (for which it compiled the Strategic Plan – Transitional Period 2011–15). ANQA has defined the institutional quality assurance process as having three phases: (i) self-assessment; (ii) assessment by external trained assessors; and (iii) the preparation and publishing of a report (a compilation of the first two) (UNESCO-IBE, 2011).

A new law for VET has been recently developed, with the assistance of donors, to establish an effective system of quality control, but it is still under internal discussion. The Armenian National Qualifications Framework, adopted in 2011, follows the structure of the European Qualifications Framework and is considered a key reform instrument for improving quality in the national education and training system. Since the level descriptors in the national qualifications framework form the basis for the development of state educational standards, once implementation starts, the existing educational programmes will have to be reviewed in accordance with these descriptors. The MoES has recently set up a working group to review the national classification of qualifications. The Ministry is aware of the need to consider the progression route from general secondary education to preliminary VET and middle VET in a coherent way and in terms of the skills, knowledge and competences acquired by learners.

As regards planning, enrolment in VET is based on state orders issued by the MoES, which takes into consideration the capacity of the school as well as information on possible labour market demand received by other institutions such as MoLSI or the State Employment Agency. The National Council for VET provides supervision and guidance in relation to these activities.

Planning is also based on the Medium-term Expenditure Framework, which makes provision for budget allocation to all public institutions, including the MoES and the VET Department. The budget for education is based on a per capita funding allowance.

There is no systemic approach to the assessment and evaluation of VET, but the NCVETD has recently carried out monitoring reviews of the reform process, including the implementation of new curricula, teacher training and the functioning of college management boards. The reports from these reviews, including findings and recommendations, are delivered to the VET department of the MoES.

Each college is licensed by the MoES for the delivery of training with a specific profile, and any changes that the college wants to introduce, likewise have to be approved. The licence is based on the evidence that the colleges can provide concerning, for example, the competence of the teachers and the facilities provided, such as classrooms and equipment, as well as on the demand for that specific qualification in the local labour market.

Donors have contributed to improving the quality of the system, and, in this regard, it is worth mentioning the following interventions.

1. The EU has continued to be the main donor in the field of VET reform through budget support, having allocated a total grant of around EUR 40 million during the period from 2007 to December 2013. The main objective of the reform programme was to assist national authorities in improving
the image of the VET system and raising its profile through modernising both the infrastructure and the content.

With EU support, 100 training standards have been developed by the NCVETD in cooperation with Sector Skills Councils, representing the employment side, to ensure that the standards meet the requirements of the labour market. These standards are competence based and are organised into learning modules, outcomes and performance criteria. They are also structured on the basis of general subjects, core skills, and general vocational skills for the sector and specialised vocational skills for particular professions, including theory and practice. The structure also defines the number of weeks and hours devoted to theory and practice.

The EU assistance has focused in particular on innovation and the rehabilitation and refurbishment of the 12 multifunctional colleges (one per region plus two in Yerevan), which have thus become models for the development of the system nationwide. In 2011, the colleges were renamed as regional state colleges and registered as non-profit organisations. The main aim of the colleges was to become autonomous educational institutions, with a more business-oriented focus in the national and regional contexts. The regional state colleges have established networks with other colleges and played a leading role in the promotion of VET, as well as in the implementation of particular initiatives (for example, awareness raising, teacher training, and improving staff qualifications and the assessment of teachers) aimed at creating trained specialists able to respond to labour market demand. However, their success depends largely on the overall economic development of the country and, in particular, of each specific region. Investment in human resources development is important but its success depends on a wider investment for economic growth. Recently EU budget support has also included providing technical assistance for preliminary VET schools and funding activities related to the validation of non-formal and informal learning and career guidance, among other initiatives.

2. The United Nations Development Programme has also been very active in the field of VET reform through the financial assistance provided by the Danish Government until 2013. This reform focused on issues such as the supply of equipment, curricula development and reviews of existing legislation.

3. For almost 20 years the World Bank has been a main donor in the field of general education, providing assistance in the areas of rehabilitation, equipment supply, curricula development and IT upgrading, among others.

4. In the 2012–13 period, GIZ instigated the following activities.

   • The ‘E-learning institution building and development of human resources in South Caucasus’ project was implemented. As part of this project, e-learning has been utilised in the training of VET teachers, in the modernisation of curricula and, in general, to improve the quality of education.

   • The MoES was given support to participate in the 42nd ‘World Skills’ competition in Germany. The Armenian national team participated in three sectors – jewellery, cookery and design.

   • Professional training standards for VET teachers were developed with the aim of revising the content of the existing guidelines and modules.

   • A feasibility study was undertaken on the establishment of Sector Skills Councils in the tourism and wine-making sectors, which will be ready in the autumn of 2014\textsuperscript{15}.

\textsuperscript{15} Presented to the public in December 2014; further support to be provided by GIZ in 2015.
4.2 Policies for VET trainers and directors

The minimum requirements of the teaching and learning environment for VET providers are defined by the standards applied by the MoES in licensing the colleges. As a result, in 2011, 81% of the VET institutions’ teaching staff had university degrees, although less than 1% had gained a PhD or higher degree. VET teachers’ salaries have recently been increased but are still lower than the national average, making the profession less attractive compared with other careers.

The importance of having motivated and qualified teachers as key contributors to the reform process is immense, although this is not always fully taken into consideration. The goals of the successful introduction of innovation in learning and assessment, with schools taking a more active part in local social and economic development and enabling constructive interaction with social partners, are all largely dependent on the effective involvement of teachers, trainers and directors.

Given that middle VET has until now been mainly privately financed (through enrolment fees), the colleges’ principals have had autonomy in the employment of teachers, using the number of students enrolled as their main criterion. This reduced the transparency in the process, to some extent, incurring the risk of a loss of quality. In order to prevent this, a set of guidelines on selection and assessment procedures and the application of penalties and rewards have been approved by the National Council for VET, under the title ‘Guidance on assessment and possible replacements/rewards, financial incentives of teachers and school principals’.

As part of the EU budget support, the training of about 4 000 lecturers and principals was carried out to assist them in the implementation of the new training standards and curricula. Manuals, training materials and modular programmes were developed and published for VET sector specialists. Public awareness-raising activities were also initiated.

Recently, an accreditation and certification system for college directors was introduced in order to ensure that they have the appropriate skills and abilities for managing a college.

Since March 2014 the International Labour Organisation (ILO) and the Skolkovo Moscow School of Management have organised activities within the framework of the Russia-ILO project ‘Applying the G20 Training Strategy’, which, through trials in a number of schools, aims to test a distance learning computer simulation tool for directors on ‘Managing TVET institutions’. This product can also be used as a self-assessment tool for vocational institutions that apply the ILO’s G20 Training Strategy methodology and assessment indicators.

4.3 Teaching and learning

Since 2005, training courses have been organised annually for around 20% of teachers, and until 2011, some 74% of teachers participated in training courses. However, the problem of ageing and the outflow of qualified teachers reflect the lack of competitiveness of the teaching profession and the education system in general. The average age of teachers is 55 years and one in six teachers is a pensioner.

The gender breakdown of employment in teaching positions shows a large imbalance, with women occupying over 80% of jobs in public education and 70% in private schools. As well as traditional factors (teaching is traditionally considered as a female job), wage levels are largely responsible for the failure to attract men to the profession, particularly those with household responsibilities. Furthermore, there is no grading structure for teachers and managers in the VET system.

Teachers’ specialised education (for general education schools) is provided by the State Pedagogical University and by VET colleges.
Pre- and in-service training of teachers for the VET system is undergoing reform, but the system is currently still weak and incomplete. Approved standards for VET teachers’ competences and skills, a framework for quality assurance and specialised training institutions all remain to be developed. In addition, the qualification or profession of ‘VET teacher’ does not exist in current classifications.

4.4 Efficiency of use of resources

The number of VET institutions has declined during recent years as a result of attempts to rationalise the system and make it more efficient. As described in TABLE 4.1, the cost of VET per pupil is more expensive than general education and this is due, among other factors, to the teacher/student ratio, which is very low, as well as the higher costs of equipment, materials and buildings. The MoES is fully aware of this and committed to improving the situation, which could imply closing down certain obsolete schools and using existing facilities for VET provision, for instance general secondary schools or even local branches of universities, which are not fully utilised. This obviously has implications in terms of institutional responsibilities, coordination, teacher numbers and labour market demand. The existing VET Reform Programme and Action Plan for 2012–16 should be reviewed taking into consideration all the aspects discussed above.

TABLE 4.1 ANNUAL PUBLIC EXPENDITURE PER PUPIL IN THE PUBLIC EDUCATION SYSTEM, 2008–11

<table>
<thead>
<tr>
<th>Education level</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AMD</td>
<td>GDP per capita (%)</td>
<td>AMD</td>
<td>GDP per capita (%)</td>
</tr>
<tr>
<td>Elementary and general secondary</td>
<td>144 063</td>
<td>13</td>
<td>182 145</td>
<td>18.6</td>
</tr>
<tr>
<td>Elementary</td>
<td>138 458</td>
<td>12.5</td>
<td>166 218</td>
<td>16.9</td>
</tr>
<tr>
<td>General secondary</td>
<td>146 202</td>
<td>13.2</td>
<td>188 910</td>
<td>19.3</td>
</tr>
<tr>
<td>Preliminary and middle VET</td>
<td>304 335</td>
<td>27.5</td>
<td>347 422</td>
<td>35.4</td>
</tr>
<tr>
<td>Preliminary VET</td>
<td>347 919</td>
<td>31.5</td>
<td>344 292</td>
<td>35.1</td>
</tr>
<tr>
<td>Middle VET</td>
<td>282 337</td>
<td>25.6</td>
<td>349 414</td>
<td>35.6</td>
</tr>
<tr>
<td>Higher education</td>
<td>354 930</td>
<td>32.1</td>
<td>398 301</td>
<td>40.6</td>
</tr>
</tbody>
</table>

FIGURE 4.1 STATE BUDGET ALLOCATION TO VET, 2010–14
5. GOVERNANCE AND POLICY PRACTICES IN THE VET SYSTEM

Defining vision and strategy for VET

The VET Department within the MoES is the main driver for change and is responsible for defining the vision and strategy of the sector, while at the same time also taking into account the experience, examples and information supplied by other countries.

The Department is fully committed to the reform process and aware of the changes that need to be undertaken in order to modernise the VET system so that it is perceived as more relevant and attractive in Armenian society. However, the Department is also fully aware of the practical problems, and of the limitations in terms of resources and staff as well as the difficulty of changing entrenched attitudes. It recognises that the changes have to be introduced step by step with a clear vision of what can be realistically achieved.

The National Council for VET, which was established in 2008 as a tripartite advisory body, with equal representation (seven people) from government institutions, employers' and business organisations and trade unions, meets on a quarterly basis and the VET Department is responsible for organising these meetings. The main goals of the National Council for VET are (i) to identify the strategic development trends in the VET sector; (ii) to approve VET development programmes; and (iii) to enhance the efficiency of the reform process and strengthen and promote social partnership.

The NCVETD continues to be the operational arm of the VET Department and its activities have included the development of training standards and modular curricula and the training of staff, school directors and members of the Skills Sector Councils, as well as the publication of manuals.

The Centre has also organised monitoring visits to VET schools in relation to the implementation of new curricula/standards and to assess the overall impact of the reforms. It is also responsible for activities to promote visibility, such as the publication of the VET journal, various booklets and calendars. In 2013, Armenia became a member of the World Skills organisation and NCVETD represents the country in this forum. The Centre also steers the activities organised by the Sector Skills Councils.

The Sector Skills Councils have been established as consultative bodies in relation to the MoES, offering guidance and validating the development of training standards and curricula. Social partners participate in the meetings of the Councils at the specific request of the Ministry. The Councils operate as a permanent working structure and are recognised in the legislation mainly for educational purposes, at present having no role in identifying and anticipating the skills needs of a specific sector or in expressing opinions to a wider institutional audience representing education, employment and civic society organisations. The transformation of the current Councils into recognised bodies responsible for skills needs in a wider sense may become a medium-term priority for the Government, contributing to the process of introducing innovation into the system.

The National Institute for Labour and Social Research (NILSR) is undertaking a study to assess social needs by conducting interviews with 1000 households located all over Armenia. The results should be ready by the end of 2014. A new initiative undertaken by MoLSI is related to the optimisation and rationalisation of orphanages and homes for the elderly, including a harmonisation of staff salaries, which currently vary widely and are not based on clear and transparent criteria. The NILSR has been involved in the redefinition of 120 job profiles, and the decision on the occupations to be examined was based on NILSR’s researches into the needs of the labour market. Recently the NILSR has
started to work very closely with the MoES and participate in the meetings of the Sector Skills Council. This will ensure that the occupational profiles which are developed in the future will form the basis for the development of the qualification standards upheld by the NCVETD. The NILSR cooperates with the United States Agency for International Development (USAID), Unicef and Save the Children to implement projects to provide integrated social services and to support homeless people.

Aiming at increasing VET’s effectiveness and its relevance to regional and local needs, the management boards continue to operate in all VET colleges. They are made up of representatives from the student body, social partners’ organisations, local institutions, employment offices and other stakeholders. The boards have a range of powers, including approving the budgets, strategic programmes and tuition fees, and electing a director. The boards meet four times a year, and, judging by the feedback received on various occasions, their effectiveness seems to depend very much on the personality and dedication of the director, who is the key player in terms of fostering motivation and commitment in all the parties involved.

Employers cooperate, whenever possible, in the organisation of work-based learning, in the marking of the final exam and assessing the practical knowledge of students. However, during some workshops organised by the ETF, employers have underlined that some incentives should be offered by the MoES in order to make this cooperation more systemic rather than merely based on the goodwill of the business leaders concerned. The new active employment measures, which will be rolled out in 2015 by the State Employment Agency, include some incentives for both the employers and the trainees participating in work-based learning, so hopefully this will facilitate the transition from school to work.

Social partners’ organisations like the Republican Union of Employers of Armenia and the Chamber of Commerce continue to participate actively in all activities organised at central and local level, and appoint their representatives to the Sector Skills Councils.

Skills anticipation and matching is still under development. As already mentioned, institutional cooperation between the MoES, MoLSI, other ministries, trade unions and employers takes place at central level through the National Council for VET and at local level through the colleges’ management boards. Some research is carried out by MoLSI on an annual basis through interviews with employers aimed at collecting qualitative and quantitative information on the qualifications required by the labour market, but the results do not seem to be widely disseminated or used for educational purposes.

In addition, the State Employment Agency carries out a so-called ‘barometer’ test of labour market needs, but, again, there appears to be no dissemination of the results or use made of them in the educational arena.

A management information system covering the whole VET and higher education system is due to begin operation by the end of 2014/at the beginning of 2015.
ANNEXES

Annex 1. Ministry of Education and Science – Organisational chart
Annex 2. The Armenian education system

Education System in Armenia
Annex 3. Governance matrix

<table>
<thead>
<tr>
<th>Functions within a VET system</th>
<th>Authority/objectives setting</th>
<th>Competence/implementation responsibilities</th>
<th>Resources implementation</th>
<th>Accountability/monitoring/assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who are the actors legally in charge of this function? Have roles(^\text{16}) and responsibilities been adequately defined?</td>
<td>Do actors have the technical competences needed to fulfil this function?</td>
<td>Do actors have adequate financial and human resources to fulfil this function?</td>
<td>In which ways are the actors in charge made accountable for the work done?</td>
<td></td>
</tr>
</tbody>
</table>

Policies and legislation

| Defining national VET and employment policies | The Ministry of Education and Science (MoES) is in charge of preliminary (craftsmanship), middle VET and continuing education. The body providing methodological support for VET is the National Centre for VET Development (NCVETD), which is under the supervision of the MoES. The National Council for VET Development was set up to provide advice to the MoES, thereby facilitating the preparation of VET sector development programmes, promoting the effectiveness of reforms implementation in the sector and further deepening social partnership. The Ministry of Agriculture, Ministry of Health and Ministry of Culture are no longer responsible for VET, which has been transferred to the responsibility of the MoES. The Ministry of Labour and Social Issues (MoLSA) is in charge of employment policy. MoLSA has a separate division, the State Employment Agency. The task of the Agency is the execution of state policies on employment regulation. | The actors have adequate competences, but more efficient reforms implementation and policy development are required. | Human resources are adequate, but financial resources are not sufficient. | The National Centre for VET Development is accountable for methodological reforms, development of standards, modular curricula and teacher training. The NCVETD sends reports to the MoES twice a year and submits reports to the National Council at the end of each year. The MoES is accountable and submits reports to the Government. There is a system of intradepartmental/interministerial accountability. |

| Monitoring national VET and employment policies | Ministries (mainly MoES and MoLSA), National Centre for VET, State Employment Agency | Ministries do not have sufficient competences to monitor implementation. | Human resources are sufficient, but the effective use of these resources is problematic. Staff require better training. Financial resources are not sufficient. | There is a system of intradepartmental/interministerial accountability. The ministries are accountable and submit reports to the Government. |

16 Actors could have decision-making, advisory or executive roles.
| Legislation for VET (both initial and continuing) | MoES | The competences are sufficient. | Financial and human resources are sufficient. | The MoES is accountable and submits reports to the Government. There is also a system of intradepartmental/interministerial accountability. VET legislation and new reforms are discussed during the National Council for VET Development meetings. |
| Qualifications and curricula |  |
| National, sectorial or regional skills or training needs analyses | National Centre for VET Development, State Employment Service Agency | There is a lack of technical competences. | Human resources are sufficient. Financial resources are not sufficient. | The National Centre for VET Development is accountable to the MoES. |
| Designing a list of occupations | MoLSI/National Institute/MoES/National Centre for VET Development | Technical competences are sufficient. | Resources are not sufficient. | The National Centre for VET Development is accountable to the MoES. |
| Definition or revision of standards/qualifications | MoES, National Centre for VET Development | Technical competences are sufficient. | Resources are sufficient. | The National Centre for VET Development is accountable to the MoES. There is a system of intradepartmental accountability. |
| Development or revision of curricula (all kinds) | MoES, National Centre for VET Development, VET institutions | Technical competences are sufficient. | Resources are sufficient. | The National Centre for VET Development is accountable to the MoES. There is a system of intradepartmental accountability. |
| Teachers and trainers |  |
| Pre-service training and induction of VET teachers | MoES – National Education Institute, National Centre for VET Development, donors | Technical competences are sufficient. | Human resources are sufficient. Financial resources are not sufficient. | The National Education Institute and the National Centre for VET Development are accountable to the MoES. |
| Recruitment of teachers | VET institutions undertake the recruitment of teachers themselves. | Technical competences are sufficient. | Resources are not sufficient. | The accountability is demonstrated through intradepartmental reports. |
| In-service training of VET teachers | MoES – National Education Institute, National Centre for VET Development, donors | Technical competences are sufficient. | Resources are not sufficient. | The accountability is demonstrated through intradepartmental reports. |
| Teacher appraisal and career development | VET institutions | Technical competences are sufficient. | Resources are not sufficient. | The accountability is demonstrated through intradepartmental reports. |
### VET providers

<table>
<thead>
<tr>
<th>Category</th>
<th>Providers</th>
<th>Technical competences</th>
<th>Human resources</th>
<th>Financial resources</th>
<th>Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network of providers of initial and continuing VET</td>
<td>Ministries (mentioned above), National Education Institute, National Centre for VET Development</td>
<td>Technical competences are sufficient.</td>
<td>Human resources are sufficient.</td>
<td>Financial resources are not sufficient.</td>
<td>There is a system of intradepartmental/inter-ministerial accountability.</td>
</tr>
<tr>
<td>Planning VET programmes and student numbers</td>
<td>MoES, Ministry of Health, Ministry of Culture, Ministry of Sport and Youth Affairs, in collaboration with the Government, VET institutions in collaboration with the MoES</td>
<td>Technical competences are not sufficient.</td>
<td>Human resources are sufficient, but a database and other capacities are required.</td>
<td>Financial resources are not sufficient.</td>
<td>There is a system of intradepartmental/inter-ministerial accountability.</td>
</tr>
<tr>
<td>Planning budgets for vocational schools</td>
<td>MoES, Ministry of Finance</td>
<td>Technical competences are not sufficient.</td>
<td>Human resources are sufficient, but a database and other capacities are required.</td>
<td>Financial resources are not sufficient.</td>
<td>There is a system of intradepartmental/interministerial accountability.</td>
</tr>
<tr>
<td>Dealing with school expenses (managing school budgets)</td>
<td>VET institutions, the managerial bodies of the VET institutions</td>
<td>Technical competences are not sufficient.</td>
<td>Financial resources are not sufficient.</td>
<td></td>
<td>The principals are annually accountable to the institutions’ managerial bodies. Some VET institutions elaborate their business plans every three years.</td>
</tr>
</tbody>
</table>

### Learning materials and equipment

<table>
<thead>
<tr>
<th>Category</th>
<th>Providers</th>
<th>Technical competences</th>
<th>Financial resources</th>
<th>Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning materials</td>
<td>MoES, National Education Institute, National Centre for VET</td>
<td>Technical competences are sufficient.</td>
<td>Financial resources are not sufficient.</td>
<td>The accountability is demonstrated through intradepartmental reports.</td>
</tr>
<tr>
<td>Workshop equipment</td>
<td>Government, donors</td>
<td>Technical competences are not sufficient.</td>
<td>Resources are not sufficient.</td>
<td>The accountability is demonstrated through intradepartmental reports.</td>
</tr>
</tbody>
</table>

### Practical learning sites

<table>
<thead>
<tr>
<th>Category</th>
<th>Providers</th>
<th>Technical competences</th>
<th>Effective use of these resources is problematic. There is a need to analyse labour market demand and strengthen cooperation between employers and VET institutions.</th>
<th>Accountability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liaison with employers</td>
<td>MoES, National Council for VET, VET institutions, MoLSA/State Employment Service Agency</td>
<td>Technical competences are sufficient.</td>
<td></td>
<td>The accountability is demonstrated through intradepartmental reports.</td>
</tr>
<tr>
<td>Practical training places within companies</td>
<td>Place</td>
<td>Technical competences</td>
<td>Resources</td>
<td>Accountability</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>------</td>
<td>-----------------------</td>
<td>-----------</td>
<td>----------------</td>
</tr>
<tr>
<td></td>
<td>VET institutions</td>
<td>are not sufficient.</td>
<td>Many companies distrust VET students.</td>
<td>The accountability is demonstrated through VET institutions.</td>
</tr>
<tr>
<td>Apprenticeships</td>
<td>VET institutions</td>
<td>are not sufficient.</td>
<td>resources, workshops, laboratories and trained teachers.</td>
<td>The accountability is demonstrated through VET institutions.</td>
</tr>
<tr>
<td>Assessment and certification</td>
<td>Place</td>
<td>Technical competences</td>
<td>Resources</td>
<td>Accountability</td>
</tr>
<tr>
<td>Assessment of students' skills</td>
<td>VET institutions</td>
<td>are sufficient.</td>
<td>are sufficient.</td>
<td>The accountability is demonstrated through VET institutions.</td>
</tr>
<tr>
<td>Issuing certificates</td>
<td>MoES</td>
<td>are sufficient.</td>
<td>are sufficient.</td>
<td>The accountability is demonstrated through intradepartmental reports.</td>
</tr>
<tr>
<td>Monitoring and impact</td>
<td>Place</td>
<td>Technical competences</td>
<td>Resources</td>
<td>Accountability</td>
</tr>
<tr>
<td>Monitoring the quality of VET provision</td>
<td>MoES, National Centre for VET, National Centre for Professional Education Quality Assurance (ANQA)</td>
<td>are not sufficient.</td>
<td>are sufficient.</td>
<td>The accountability is demonstrated through intradepartmental reports.</td>
</tr>
<tr>
<td>School-to-work transition surveys or tracer studies for graduates</td>
<td>Not conducted</td>
<td>are not sufficient.</td>
<td>resources.</td>
<td>No accountability</td>
</tr>
<tr>
<td>Research and innovation</td>
<td>Place</td>
<td>Technical competences</td>
<td>Resources</td>
<td>Accountability</td>
</tr>
<tr>
<td>Research and innovation, including the transfer of innovations from pilot to system level</td>
<td>MoES, donors</td>
<td>are not sufficient.</td>
<td>are sufficient.</td>
<td>The accountability is demonstrated through intradepartmental reports.</td>
</tr>
<tr>
<td>Donor coordination</td>
<td>Place</td>
<td>Technical competences</td>
<td>Resources</td>
<td>Accountability</td>
</tr>
<tr>
<td>Efficient coordination of donors in VET</td>
<td>MoES</td>
<td>are sufficient.</td>
<td>are sufficient.</td>
<td>The accountability is demonstrated through intradepartmental reports.</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
<td></td>
<td></td>
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<tr>
<td>--------------</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMD</td>
<td>Armenian dram (currency)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANQA</td>
<td>Armenian National Centre for Professional Education Quality Assurance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CVET</td>
<td>Continuing vocational education and training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ETF</td>
<td>European Training Foundation</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<td></td>
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<tr>
<td>EUR</td>
<td>Euro (currency)</td>
<td></td>
<td></td>
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<tr>
<td>GDP</td>
<td>Gross domestic product</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>GIZ</td>
<td>Deutsche Gesellschaft für Internationale Zusammenarbeit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ICT</td>
<td>Information and communications technology</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>ILO</td>
<td>International Labour Organisation</td>
<td></td>
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<tr>
<td>ISCED</td>
<td>International Standard Classification of Education</td>
<td></td>
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<td></td>
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<tr>
<td>IT</td>
<td>Information technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IVET</td>
<td>Initial vocational education and training</td>
<td></td>
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<tr>
<td>MoES</td>
<td>Ministry of Education and Science</td>
<td></td>
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<tr>
<td>MoLSI</td>
<td>Ministry of Labour and Social Issues</td>
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<tr>
<td>NCVETD</td>
<td>National Centre for VET Development</td>
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<tr>
<td>NGO</td>
<td>Non-governmental organisation</td>
<td></td>
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<tr>
<td>NILSR</td>
<td>National Institute for Labour and Social Research</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NSSA</td>
<td>National Statistical Service of Armenia</td>
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<tr>
<td>NTF</td>
<td>National Training Fund</td>
<td></td>
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<tr>
<td>SME</td>
<td>Small and medium-sized enterprise</td>
<td></td>
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</tr>
<tr>
<td>TVET</td>
<td>Technical and vocational education and training</td>
<td></td>
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<tr>
<td>Unicef</td>
<td>United Nations Children’s Fund</td>
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<tr>
<td>VET</td>
<td>Vocational education and training</td>
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