



# **TRACER STUDY OF RECENT GRADUATES FROM VOCATIONAL EDUCATION INSTITUTIONS IN KOTAYK AND ARARAT MARZES OF ARMENIA**

## **Draft Report**

**European Training Foundation &  
Caucasus Research Resource Centers Armenia, a program of  
the Eurasia Partnership Foundation**



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## LIST OF ABBREVIATIONS

AGRO	Agriculture
AMD	Armenian Dram
BGE	Basic General Education
CRRC	The Caucasus Research Resource Centres' program of The Eurasia Partnership Foundation in Armenia
CS	Craftsmanship School
ECON	Economy
EDU	Education
ENG	Engineering
ETF	European Training Foundation
EU	European Union
GDF	"Global Developments" Fund
GoA	Government of Armenia
HEAL	Healthcare
ICT	Information and Communication Technologies
ISCO	International Standard Classification of Occupations
LLC	Limited Liability Company
LM	Labour Market
MoES	Ministry of Education and Science
NACE	European Classification of Economic Activities
NCVETD	National Centre for VET Development
NSS	National Statistical Service
OJSC	Open Joint Stock Company
RA	Republic of Armenia
RSC	Regional State College
SAC	State Agricultural College
SC	State College
SCE	State College of Energy
SEC	State Engineering College
SERV	Service
SMC	State Medical College
SME	Small and medium enterprises
VET	Vocational Education and Training

## INTRODUCTION

Vocational institutions in Armenia serve an important role in preparing the labour force, especially those who may not receive any further education, with the necessary skills to be competitive in the labour market. After completing general education, there are two types of vocational colleges students may enter, Preliminary Vocational Education and Training (Pre VET) and Middle Vocational Education and Training (Mid VET). Both of these institution types have been confronted with dramatic changes since independence. Declining attendance, shifting needs in the labour market and changes in funding sources are three of the biggest challenges that VET institutions have faced.

According to a UNESCO report published in 2003<sup>1</sup>, since 1991, the number of Pre VET colleges in Armenia had decreased by 43% while enrolment had fallen by 93%. Mid VET institutions fared slightly better, with the number of colleges actually increasing by 13.2%, though attendance still fell by 31%. Before independence, VET colleges were free, but now fees have been introduced in order to make up for the costs that state support does not cover. This means that to attract students and be competitive, VET institutions must provide a quality of service that enables graduates to engage in labour market as well as an ability to adjust their knowledge and skills (including entrepreneurial) in response to the labour market demand side requirements. To accomplish this, VET colleges must offer relevant curricula, which in the quickly changing post independence economy requires knowledge of the current labour market as well as strong leadership and planning.

Even with these challenges, VET colleges remain an important part of the education system in Armenia. Over 37,000 students were enrolled in VET colleges in 2010<sup>2</sup> (29,600 in Mid VET and 6,400 in Pre VET) and ensuring that they receive a relevant and high quality education is of great importance for the future of Armenia. In order for VET colleges to be successful in the future, policy makers must first possess a thorough understand of challenges that exist. Moreover, by signing The Mobility Partnership Agreement with the European Union (October 27<sup>th</sup>, 2011) and by developing the National Action Program (for 2012-2016) on migration regulation, Armenia has opened-up prospects for its citizens to become employed outside of the country. This requires actions that will support labour migration and ensure that qualifications earned at Armenian VET colleges will be valid outside of the country, especially in Europe.

The government of Armenia recognizes the importance of VET and has taken concrete steps to strengthen it over the last decade. In 2004, the government developed a VET strategy; in 2007, it updated the policy priorities and the underlying action plan; and in October of 2008, the Poverty Reduction Strategy Paper II (it was later renamed “Sustainable Development Programme of Armenia” - SDPA) was adopted. Furthermore, to promote the reforms and modernization, the Ministry of Education and Science implemented VET sector development and support programs funded by TACIS AP 2006, ENP AP 2007, USAID Enterprise Development and Market Competitiveness (EDMC), GIZ Armenia’s “Municipal and Economic Development Programme in Armenia”, as well as several others.

To support Armenia’s efforts in collecting reliable information regarding the success of VET graduates in labour market, their attitude on the relevance of acquired skills and to facilitate experience exchange between countries, The European Training Foundation (ETF), among other activities, initiated and funded this tracer study. The project sought to add value by monitoring the reform process as well as identifying developments in the labour market and the employment reform programme. Special attention was paid to

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<sup>1</sup> UNESCO “Teacher Training and Curriculum reform in the South Caucasus”, pages 32 and 34.

[http://www.ibe.unesco.org/fileadmin/user\\_upload/archive/publications/regworkshops/finrep\\_pdf/finrep\\_tbilisi\\_03.pdf](http://www.ibe.unesco.org/fileadmin/user_upload/archive/publications/regworkshops/finrep_pdf/finrep_tbilisi_03.pdf) (accessed, October 30<sup>th</sup>, 2012)

<sup>2</sup> Armenian National Statistical Services website: <http://armstat.am/file/doc/99466638.pdf> (accessed, October 30<sup>th</sup>, 2012)

mechanisms of cooperation between businesses and VET institutions with the aim to gain new insights and information that could be used to upgrade vocational training curricula, including modular professional skills approaches.

The Caucasus Research Resource Centers-Armenia (CRRC-Armenia), of the Eurasia Partnership Foundation was contracted as the local partner for the project. CRRC was responsible for conducting the survey and drafting the country report on the basis of ETF methodology and in close co-operation with ETF staff.

The successful completion of the project would not have been possible without the great work and tremendous efforts of the following CRRC staff members and affiliates: Heghine Manasyan, Aram Avagyan, Samvel Pipoyan, Ruben Yeganyan, Veronica Grigoryan, Iskuhi Mkrtchyan, Hermine Mheryan, Anna Sarkisyan, Armida Alvandyan, Robia Charles and Drew Loizeaux. In addition, recognition must be given to the team of supervisors and interviewers who contributed to the trustworthy data collection during the fieldwork.

A special thanks is also due to ETF staff, who were invaluable during the entire project by offering their time, resources and expertise. Specifically, recognition is owed to Milena Corradini and Gabriela Platon.

## 2. EXECUTIVE SUMMARY

### 1.1. Research objectives and methodology

The Caucasus Research Resource Centres' program of The Eurasia Partnership Foundation in Armenia (CRRC-Armenia), within the "Consolidation of Support to the Stakeholders of the Republic of Armenia in Implementing Human Capital Development Policies" project funded by the European Training Foundation (ETF) and under the auspices of the RA Ministry of Education and Science, carried out a graduates' tracer study in Kotayk and Ararat marzes (regions) of Armenia with an objective to improve knowledge and experience in assessing the relevance of VET offerings and outcomes in the regions.

The research targeted 2009 and 2010 graduates of VET institutions in Ararat and Kotayk marzes of Armenia. The survey covered 451 graduates (including 278 women) of 6 Colleges (middle VET) and 3 Craftsmanship Schools (preliminary VET) in Kotayk and of 4 Colleges (3 of which provide also preliminary VET) in Ararat. Overall, 23.4% of graduates were reached by the study in both marzes: 21.4% of graduates from Middle VET (hereinafter – Mid VET) institutions and 30.8% of graduates from Preliminary VET (hereinafter – Pre VET) institutions.

Graduates were divided into 7 groups by the field of their study:

1. Economics, Management, Clerical Works
2. Engineering, Technology, Manufacturing, Construction
3. Information and Communication Technologies
4. Services
5. Education
6. Healthcare
7. Agriculture

The graduates' lists for sampling (including their current contact details such as phone number, address, etc.) were obtained from the relevant colleges and contained 1,924 former students; 947 of them were sampled according to the Mid VET/Pre VET and gender proportions, as well as quotas suggested in the Terms of Reference (TOR). Although the required number of graduates was interviewed, they totalled less than half of those in the sampling set due to the following 2 factors:

- Shortcomings in the graduates' lists provided by the educational institutions: the lack of complete addresses and telephone numbers and/or inaccuracies in them made it impossible to find and contact almost every 4<sup>th</sup> respondent.
- High migration mobility of the respondents: during the fieldwork period, more than 18% of the respondents had migrated, of which 10.3% had left the country. More than ¼ of those who had migrated (or 4.5% of all considered graduates) had left the country indefinitely.

More than 2% of all respondents refused interviews: less than 1% in Kotayk but more than 4% in Ararat.

### 1.2. Findings of the study

#### **Employment**

Slightly more than one-third of graduates – 35.9% (162 out of 451 interviewed) considered themselves employed. Reported employment was higher among the Pre VET graduates (40.8% against 34.0% Mid VET graduates). Women made up only 35.8% of employed graduates and were employed at a lower rate than men of only 21%. In general, graduates from rural areas are more successful in finding jobs than those from urban areas.

Employment rates varied across fields of study and college. Agriculture graduates reported being employed at the highest rate at 75%, while graduates of Education and Healthcare were employed only 26.3% and 22.6% of the time, respectively. Graduates of Masis State Agricultural College were the most likely to be employed (62.5%), while graduates of Ararat State College (12.5%) and Ararat State Medical College (9.4%) were the least likely.

More than half of employed graduates worked in private companies, while only 8% were self-employed or involved in a family business. The share of self-employed women was higher than men. No graduate from Agriculture graduate was self-employed or engaged in a family business.

#### **Correspondence between occupations and acquired qualifications**

The relevance of the graduates' qualifications to the job they held at the time of the interview was quite low: 63.6% of employed graduates reported that their qualifications did not match their current work. Mid VET graduates reported working as a "skilled worker" 13.8% of the time, which is a position that normally only

requires the qualifications obtained by Pre VET graduates. The role of a diploma in finding a job is also very limited: for more than half of employed graduates, their diplomas were not important for obtaining their job at all. At the same time, a high level of adaptability to the jobs, even those that were not relevant to the graduates' qualification, was observed.

#### ***Job placement and salaries of employed***

Personal contacts are the most useful channel for the majority of graduates to get jobs, while employment services play a very minor role in job-seeking solutions, with only 7.4% of respondents using this option successfully. The vast majority of employed graduates had an average monthly salary of 50 to 100 thousand AMD (about €100-200). Interestingly, the average salary of Pre VET graduates was more than 20% higher than Mid VET graduates. Men's salaries were higher than women's.

#### ***How the field of study was selected***

Most graduates reported that "*personal interest towards the profession*" was more important to them when choosing the field of study than the prospective employment opportunities. The role of vocational guidance services in choosing an area for study was extremely small. The rating of the institutions' performance by the graduates does not correlate much with their employment, which suggests that many young people do not see an inseparable link between VET and future employment.

#### ***Unemployed***

Almost two thirds – 64.1% of interviewed graduates were not employed at the time of the survey and 42.4% of all interviewed had never worked before. Only 8.3% of all respondents who were not employed were still studying and not searching for any job. A larger share of Mid VET graduates (46.7%) had never worked before compared to Pre VET graduates (31.5%). For those who had never worked, the most frequent explanation was that it was "*impossible to find any job*" (35.6%), which was followed by "*family circumstances*" (26.7%).

Graduates of Economics composed the largest part (31.9%) of those who had never worked, though Healthcare graduates accounted for nearly the same amount (30.4%). Graduates of Agriculture programmes made up the smallest amount of those who had never worked (1.0%).

#### ***Training***

At the time of interviewing, only 80 graduates (17.7% of all interviewed) had participated or were participating in a training course. The largest share of training participants was among Information and Communications Technologies (ICT) graduates (30.6%), who were closely followed by Education graduates (28.9%). Most graduates (60% of those who passed training) either paid for their training personally or were helped by household members. Employers covered the training fees for Engineering graduates more than in any other field, which may be an implication of higher demand towards skilled labour force and/or lower adequacy of competences acquired in the VET institutions in this field.

Of those who had not participated in any training at the time of survey, 80 people (the same number as of those who had passed training) reported they were planning to do so in the future. However, the largest share of graduates had no intention to participate in any training.

### **3. RESEARCH OBJECTIVES AND METHODOLOGY**

The Caucasus Research Resource Centres' program of The Eurasia Partnership Foundation in Armenia (CRRC-Armenia), within the "Consolidation of Support to the Stakeholders of the Republic of Armenia in Implementing Human Capital Development Policies" project funded by the European Training Foundation (ETF) and under the auspices of the RA Ministry of Education and Science, carried out a graduates' tracer study in Kotayk and Ararat marzes of Armenia with an objective to improve knowledge and experience in assessing relevance of the VET offering and outcomes in the regions.

The research targeted 2009 and 2010 graduates of VET institutions in Ararat and Kotayk marzes of Armenia. The survey covered 451 graduates (including 278 women) from 6 Colleges (middle VET) and 3 Craftsmanship Schools (preliminary VET) in Kotayk and of 4 Colleges (3 of which provide also preliminary VET) in Ararat. Overall, 23.4% of graduates were reached by the study in both marzes: 21.4% of graduates from Middle VET (hereinafter – Mid VET) institutions and 30.8% of graduates from Preliminary VET (hereinafter – Pre VET) institutions.

According to the Terms of Reference, in order to ensure a confidence level of 90%, out of the 961<sup>3</sup> graduates from 2010 (according to the official statistics available from the National Statistical Service of Armenia<sup>4</sup>), no less than 420 (out of which, 255 must be women) had to be interviewed. However, due to the problems with graduates' availability (many of them had left their cities of residence or even the country), it was agreed with ETF to also interview 2009 graduates in order to reach the required threshold.

The graduates' lists (including their current contact details such as phone number, address, etc.) for sampling purposes were obtained from the relevant colleges and contained 1,924 people. A total of 451 graduates were interviewed, of which 278 were women. The distribution of those interviewed is presented in the Table 1.

**Table 1. Composition of graduates and the sample, persons**

MARZ AND VET LEVEL	Number of 2009 and 2010 graduates		Number of interviews				Number of 2011 graduates (for comparison)	
			To be interviewed according to the ToR, not less than		Interviewed			
	Total	Girls	Total	Girls	Total	Girls	Total	Girls
<b>Kotayk</b>								
<b>Middle VET</b>	834	464	160	100	170	110	336	191
<b>Preliminary VET</b>	290	105	100	50	110	55	185	76
<b>Ararat</b>								
<b>Middle VET</b>	668	425	160	105	151	108	300	200
<b>Preliminary VET</b>	132	17			20	2	36	-
<b>TOTAL</b>	<b>1924</b>	<b>1011</b>	<b>420</b>	<b>255</b>	<b>451</b>	<b>275</b>	<b>857</b>	<b>467</b>

To implement the research, CRRC, in collaboration with the ETF responsible person and the project experts, developed the following research tools:

- a sampling list of the 2009 and 2010 graduates of 13 VET institutions from two marzes;
- adjusted questionnaire (see Annex 1);
- instructions for interviewers;
- structure of the final report.

The questionnaire was developed through revision and adjustments of the one used for the ETF funded tracer study implemented by the Global Developments Fund<sup>5</sup>.

For the implementation of the survey fieldwork, separate groups of interviewers were formed for Ararat and Kotayk marzes.

The fieldwork was implemented by 15 people, including the coordinator of the fieldwork, 2 regional team leaders/supervisors and 12 interviewers. Before the fieldwork commenced, they were informed about the research objectives and trained on interviewing and questionnaires completion methods.

The fieldwork was carried out within the planned time frame: starting on July 1 and lasting till July 13. This was followed by the telephone verification phase, which checked whether the working group members carried out the interviews as per the requirements.

Although the required number of graduates was interviewed, they totalled less than half of those in the sampling list (see Table 2).

<sup>3</sup> In the ToR it was mentioned 914 (most probably 47 Pre VET graduates of Ararat marz were omitted), while according to the data obtained directly from the colleges, the real number of 2010 graduates of only 13 institutions out of 15 acting in two marzes was 991. The authors of this report cannot explain this difference between the official statistics and the real data; however it may be due to shortcomings in the colleges' statistical data submission activities.

<sup>4</sup> Social Situation in Armenia in 2010, page 77. NSS, 2011, [http://www.armstat.am/file/article/soc\\_10\\_7-8.pdf](http://www.armstat.am/file/article/soc_10_7-8.pdf).

<sup>5</sup> The report is available at [http://www.gdf.am/images/downloads/reportlm\\_eng.pdf](http://www.gdf.am/images/downloads/reportlm_eng.pdf).

**Table 2. Composition of sampling: field work results**

	Number of considered graduates			% of total sampled		
	Kotayk	Ararat	Total	Kotayk	Ararat	Total
<b>Number of graduates in general sampling list</b>	<b>570</b>	<b>377</b>	<b>947</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>from which</i>						
• <b>Interviewed</b>	<b>280</b>	<b>171</b>	<b>451</b>	<b>49.1</b>	<b>45.4</b>	<b>47.6</b>
<i>Including:</i>						
Direct interviews	244	162	406	87.1	94.7	90.0
Phone interviews	36	9	45	12.9	5.3	10.0
• <b>Not interviewed</b>	<b>290</b>	<b>206</b>	<b>496</b>	<b>50.9</b>	<b>54.6</b>	<b>52.4</b>
<i>Including:</i>						
Non-permanent migration within the country	19	19	38	3.3	5.0	4.0
Permanent migration within the country	24	11	35	4.2	2.9	3.7
Non-permanent migration outside the country	26	29	55	4.6	7.7	5.8
Permanent migration outside the country	30	13	43	5.3	3.4	4.5
The respondents are unreachable in their locality	72	8	80	12.6	2.1	8.4
Rejection to be interviewed	5	16	21	0.9	4.2	2.2
Non-complete contact details	114	110	224	20.0	29.2	23.7

The reason the survey included less respondents from the sample set was due to 2 main factors. The first was the graduates' lists provided by the educational institutions lacked complete and/or accurate addresses and telephone numbers for many graduates, which made it impossible to find and contact almost each 4<sup>th</sup> respondent (20% in Kotayk and around 30% in Ararat).

The second, quite predictable, factor was the high migration and mobility of the respondents. During the fieldwork period more than 18% of the respondents had migrated, of which 10.3% had left the country. More than ¼ of those who had left Armenia (or 4.5% of all considered graduates) had done so indefinitely.

More than 2% of all respondents refused interviews: less than 1% in Kotayk but more than 4% in Ararat.

The average duration of an interview was about half an hour. The response rate was 70% (calculated after excluding "permanent migration within the country", "permanent migration outside the country", "non-complete contact details", i.e.  $RR=451/(451+194) \times 100\%$ , where  $194=496-35-43-224$ ).

## 4. GENERAL INFORMATION ON THE SELECTED MARZES

### 3.1. Kotayk Marz

The territory of RA Kotayk Marz is 2,089 km<sup>2</sup>; agricultural land is 161,667 ha, including 38,057 arable hectares. It has 7 urban communities: Hrazdan (marz centre), Abovyan, Charentsavan, Byureghavan, Tsaghkadzor, Yeghvard, Nor-Hachn; and 60 rural communities (for the marz map with indication of VET institutions and distribution of 2009-2010 graduates, see the next page).

Kotayk is situated in the centre of the Republic of Armenia. In the southwest, it borders the capital Yerevan, in the west – Aragatsotn Marz, in the North – Lori Marz, in the northeast – Tavush Marz, in the east – Gegharkunik Marz and in the south – Ararat Marz.

The population is 283.5 thousand people (8.7% of RA total population), including: 159.2 thousand people who live in urban areas (56.2%), and 124.3 thousand people who live in rural areas (43.8%)<sup>6</sup>.

<sup>6</sup> "RA Resident Population as by 1<sup>st</sup> of January 2012", NSS, 2012, [http://www.armstat.am/file/article/bnakch\\_01.01.2012.pdf](http://www.armstat.am/file/article/bnakch_01.01.2012.pdf)

### 3.1.1. Economy

In 2010, the share of Armenia's total economic output for the following sectors that occurred in Kotayk Marz was<sup>7</sup>:

- Industry 10.3%
- Agriculture 6.3 %
- Construction 6.3 %
- Retail 2.9 %
- Services 2.7 %

Energy production is also a very important part of the economy for Kotayk as there are two large electric power stations within the marz. Another main area of the marz economy is the processing industry, which is comprised of the following branches:

- a. food and beverage production (meat and meat product processing and canning, fruit and vegetable processing and canning, milk products, flour, and beverage production),
- b. non-metal mineral production (glass and glass products, cement),
- c. metal-working industry and metal-goods production (casting of steel and cast iron),
- d. production of furniture and finished articles such as jewellery and diamonds.

In 2010, industrial output was valued at 85,084.3 million AMD, which exceeds 2009 output by 2,750.1 million AMD. However, the marz's share of countrywide output in the industry sector decreased in 2010 by 2% from 12.3% in 2009.

Poultry farming makes up the largest share of agricultural activity in the marz (3 large poultry farms in the territory of the marz). At the same time, 9.1% of cattle, 6.7% of sheep and goats and 13.2% of pigs raised in Armenia are concentrated in Kotayk<sup>8</sup>.

As of 1 January 2011, livestock products valued at 27,669.2 million AMD were produced, which accounted for 11.3% of the similar products manufactured in the country. Crop production totalled 12,948.7 million AMD (65.6% of the previous year production), which equalled 3.3% of the country's total output.

### 3.1.2. Poverty assessment in Kotayk Marz

According to the results of household survey implemented by the RA NSS<sup>9</sup>, Kotayk Marz has the high level of poverty (Table 3) in the country. Analysis of survey data shows that in 2010, the poverty rate was 46.8% (increasing from 39.5% in 2008), which was significantly higher than the national average of 35.8%. The depth<sup>10</sup> of poverty in Kotayk marz was 12.4%, which was the highest among all the marzes and significantly more than the national average of 8.1%. The acuteness<sup>11</sup> of poverty in Kotayk marz was 4.0%, which considerably exceeded the national average of 2.5%. According to the Integrated Living Conditions Survey of Households<sup>12</sup>, the unemployment rate in Kotayk in 2010 was 19.2%.

<sup>7</sup> "Marzes of the Republic of Armenia and Yerevan city in figures" NSS, 2011, <http://www.armstat.am/en/?nid=82&id=1286>

<sup>8</sup> Socio-economic Development Plan of Kotayk Marz for 2011-2014 (only in Armenian), <http://kotayk.gov.am/development-plan/>

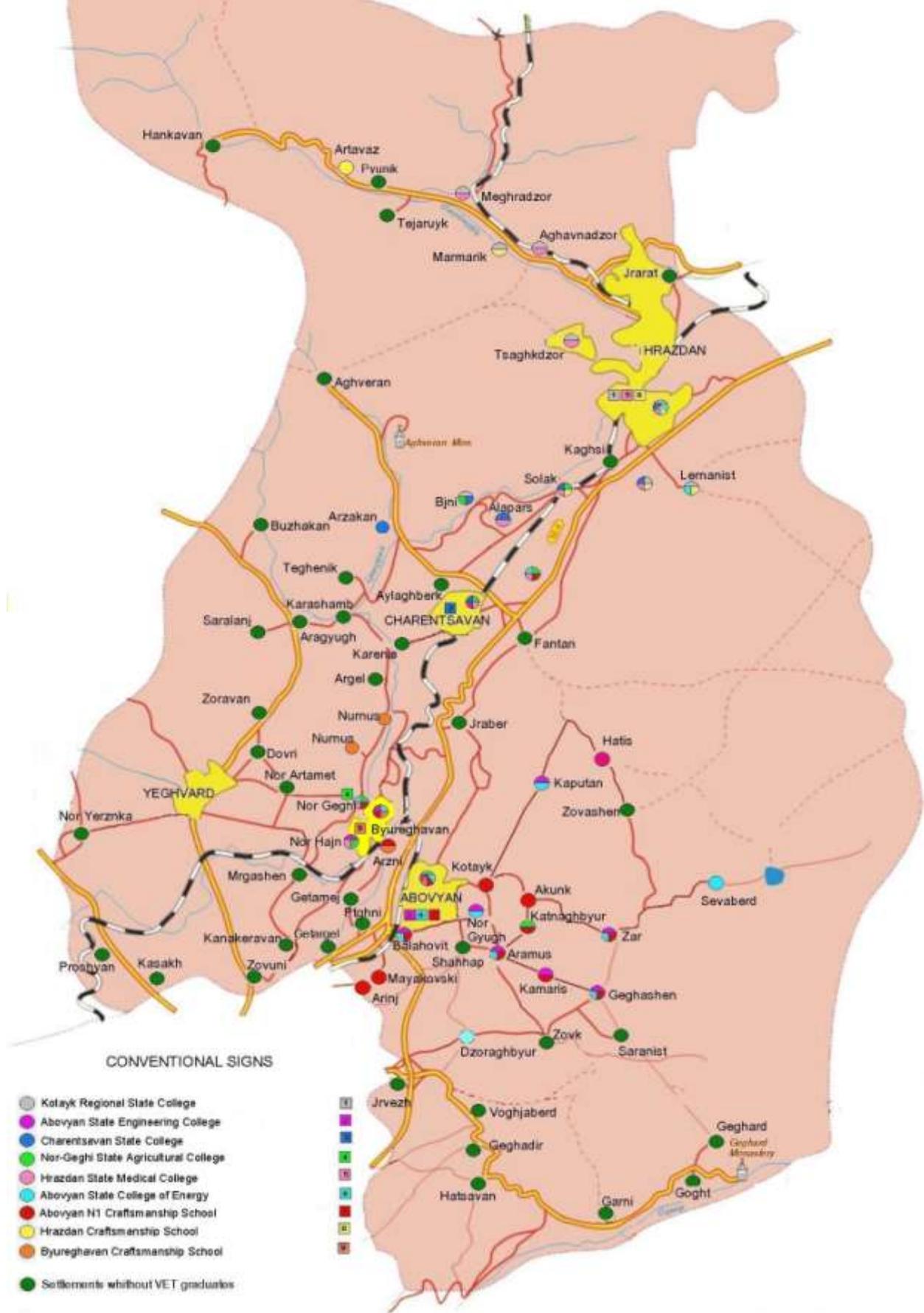
<sup>9</sup> Social Snapshot and poverty in Armenia, 2011, RA NSS, [http://www.armstat.am/file/article/poverty\\_2011e\\_2.pdf](http://www.armstat.am/file/article/poverty_2011e_2.pdf)

<sup>10</sup> Depth of poverty (poverty gap) describes how far below the poverty line are the households. For example, poverty depth of 19% means that if a country is in a position to pool resources equal to 19% of the poverty line and efficiently distribute these among the poor, poverty may theoretically be eradicated.

<sup>11</sup> Acuteness (severity) of poverty shows the number of the poor in the lowest level of poverty. Acuteness of poverty is calculated as arithmetical average of the squares of depth.

<sup>12</sup> "Social Snapshot and Poverty in Armenia, Statistical Analytical Report Based on the Results of the 2010 Integrated Living Conditions Survey of Households", National Statistical Service of the Republic of Armenia, 2011, [http://www.armstat.am/file/article/poverty\\_2011e\\_2.pdf](http://www.armstat.am/file/article/poverty_2011e_2.pdf)

VET INSTITUTIONS IN THE RA KOTAYK MARZ AND DISTRIBUTION OF 2009/2010 GRADUATES



**Table 3. Basic Poverty Indicators by Marzes and in Yerevan, 2008 and 2010, %**

Marz	2008			2010						
	Extremely poor	Very poor	Poor	Extremely poor	Very poor	Poor	%, poor population	%, total population	Poverty depth	Poverty acuteness
Yerevan	1.1	8.1	20.1	2.2	14.3	27.1	25.9	34.2	5.8	1.8
Aragatsotn	0.5	7.0	20.3	2.8	15.9	28.9	3.3	4.0	6.3	1.9
Ararat	1.6	15.0	31.3	2.9	25.5	42.4	9.4	7.9	9.7	2.9
Armavir	0.7	11.0	24.5	1.4	20.2	33.0	7.8	8.4	7.1	2.1
Gegharkunik	0.4	11.1	32.0	1.4	23.1	43.6	8.3	6.8	8.6	2.3
Lori	2.8	17.9	34.2	5.2	28.6	45.9	12.1	9.5	11.1	3.6
Kotayk	2.1	20.2	39.5	5.8	34.0	46.8	12.9	9.9	12.4	4.0
Shirak	4.6	21.2	42.4	5.0	30.4	48.3	12.3	9.1	11.4	3.6
Syunik	1.3	11.5	20.3	1.7	14.8	26.8	3.0	4.0	5.3	1.4
Vayots Dzor	1.9	8.6	21.1	2.2	20.7	37.1	1.9	1.9	7.5	2.0
Tavush	1.7	9.7	23.2	1.2	14.2	26.1	3.1	4.3	5.2	1.3
<b>Total</b>	<b>1.6</b>	<b>12.6</b>	<b>27.6</b>	<b>3.0</b>	<b>21.3</b>	<b>35.8</b>	<b>100</b>	<b>100</b>	<b>8.1</b>	<b>2.5</b>

Source: RA NSS

### 3.1.3. Education system

For the 2011-2012 academic year, the structure of education system in Kotayk Marz was the following<sup>13</sup>:

- 48 kindergartens with 5,126 children (2,657 girls);
- 105 general schools (including 1 private), 39 of which were in urban areas;
- 35,084 pupils, 16,980 of which were girls.
- Teaching staff of 3,327, of which 2,835 were women.
- **6 state middle vocational education institutions – colleges** with a total of 1,401 students (5.1% of country total for middle VET), 594 of which were women:
  1. Kotayk Regional State College (in Hrazdan)
  2. Abovyan State College of Energy
  3. Abovyan State Engineering College
  4. Charentsavan State College
  5. Nor-Geghi State Agricultural College
  6. Hrazdan State Medical College

Combined teaching staff of 206 people, 157 (76.2%) of which were women.

- **5 Preliminary vocational education institutions<sup>14</sup>** – craftsmanship schools with a total of 567 students (10.1% of country total for Pre VET), 155 of which were women:
  1. Byureghavan Craftsmanship School
  2. Hrazdan Craftsmanship School
  3. Abovyan N1 Craftsmanship School
  4. Abovyan N2 Special Craftsmanship School
  5. Nairi Craftsmanship School

Combined teaching staff of 567 people, 155 (26.9%) of which were women.

- 24 out-of-school education centres teaching music, arts, etc. that served 3,637 children (2,467 girls).
- 2 private universities with 472 students, 293 of which were women. Total teaching staff of 19, 8 of which were women.

Distribution of the professions by colleges and craftsmanship schools as well as the number of graduates in 2009 and 2010 are presented in the Annex 2<sup>15</sup>.

<sup>13</sup> "Socio- Economic Situation of RA, January-March 2012" NSS, 2012, <http://www.armstat.am/en/?nid=82&id=1337>

<sup>14</sup> Besides, Hrazdan branch of the European College in Armenia is acting in the marz. This college is functioning within the structure of the European Regional Academy established with participation of the Government. In 2012, the branch had only about 20 students and is planned to be closed down from the next academic year.

<sup>15</sup> Nairi Craftsmanship School produced no graduates in 2009 and 2010. Data on the Abovyan N2 Special Craftsmanship School are not presented due to the special status of this institution (attached to the youth (juvenile offenders') prison).

## 3.2. Ararat Marz

The territory of RA Ararat Marz is 2,096km<sup>2</sup>; agricultural land covers 156,706 ha, of which 26,953 ha are arable. Ararat has 4 urban communities: Artashat (marz centre), Ararat, Vedi and Masis, and 93 rural communities (for the marz map with indication of VET institutions and distribution of 2009-2010 graduates, see the next page).

RA Ararat Marz is located in the southwestern part of the country. In the north, it borders Yerevan, Armavir and Kotayk Marzes, in the east – Gegharkunik, in the southwest – Vayots Dzor, and in the south, it has a state border with Turkey. The marz has both mountains and plains, with Ararat valley occupying 40% of the marz territory. The highest point of the marz is the peak of Spitakasar (3,555m).

The population is 281.7 thousand people (8.6% of total RA population), with 83.1 thousand people (29.5%) living in urban areas and 198.6 thousand (70.5%) living in rural areas<sup>16</sup>.

### 3.2.1. Economy

In 2010, the share of Armenia's total economic output for the following sectors that occurred in Ararat Marz was<sup>17</sup>:

- Industry 8.8 %,
- Agriculture 17.0%,
- Construction 3.8 %,
- Retail 1.6 %,
- Services 1.5 %

Agriculture is Ararat's largest economic sector by value of output. Most of the agriculture is centred on the production of wine, fruit and vegetables. In 2011, the volume of gross agricultural production was 139.4 billion AMD (16.9% of the national), which was an increase of 30.9 billion AMD from 2010<sup>18</sup>.

Industrial production in the marz faced large structural changes during the economic transition following independence. Machinery and instrument-making production fell dramatically, while food processing became a leading industry. Ararat has both large enterprises (i.e. with more than 250 employees, such as Ararat Cement Factory, Ararat Gold Extraction Plant, Ararat and Artashat Cannery, Vedi Alco, Avshar Wine Factory, International Masis Tobacco, ArmVinkon Wine Factory, etc.) and numerous medium and small enterprises (SME). There were 5,255 SMEs in 2010, out of which 3,732 were individual entrepreneurs, and 1,522 were legal entities. Almost 45% of SMEs were food production enterprises. The SME of Ararat Marz accounted for 6.4% of Armenia's total SME in 2010.

The processing industry, which now makes up most of industrial production in the marz, can be broken into three main branches:

- a. food and beverages (processing and canning of fruits and vegetables, manufacturing of distilled alcoholic beverages),
- b. tobacco products (tobacco fermentation),
- c. non-metallic mineral products (manufacturing of cement, lime carbonate, asbestos cement products, cutting and processing of stone).

### 3.2.2. Poverty assessment in Ararat Marz

According to the results of household survey implemented by the RA NSS<sup>19</sup> (see Table 3 above), Ararat Marz is among the poorest in the nation with a 42.4% poverty rate. Table 3 also shows that poverty is on the rise; in 2010, the poverty rate increased from 2008 when it was 31.4%. The depth of poverty in Ararat Marz (9.7%) was the 4<sup>th</sup> highest and above the national average of 8.1%. The poverty acuteness in Ararat Marz was 2.9%, which exceeds the national average of 2.5% and was only lower than Lori (3.6%), Shirak (3.6%) and Kotayk (4.0%) marzes.

According to the Integrated Living Conditions Survey of Households<sup>20</sup>, the unemployment rate in Ararat of 6.6% was the lowest in the nation in 2010.

<sup>16</sup> "RA Resident Population as by 1<sup>st</sup> of January 2012", NSS, 2012, [http://www.armstat.am/file/article/bnakch\\_01.01.2012.pdf](http://www.armstat.am/file/article/bnakch_01.01.2012.pdf)

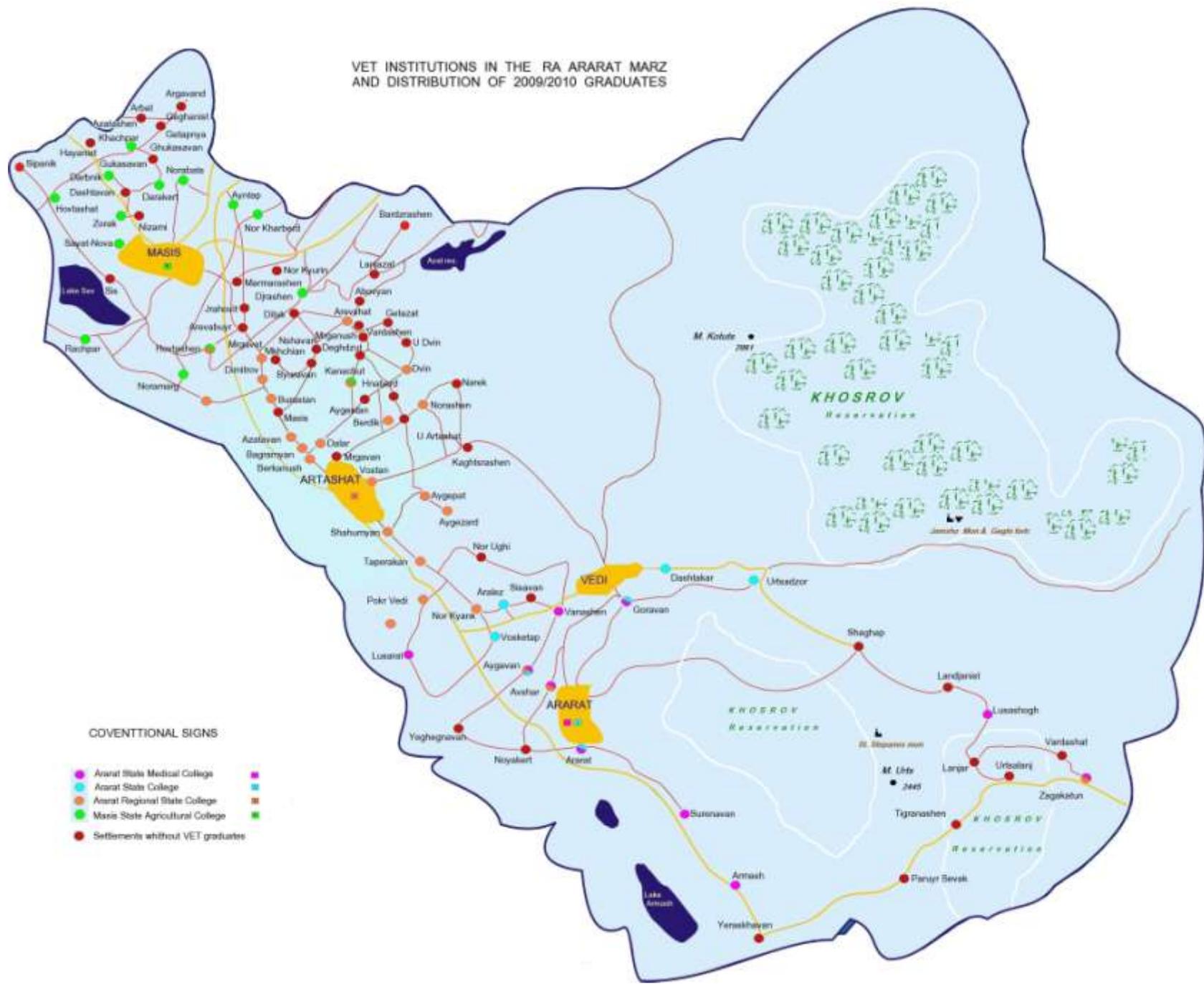
<sup>17</sup> "Marzes of the Republic of Armenia and Yerevan city in figures" NSS, 2011, <http://www.armstat.am/en/?nid=82&id=1286>

<sup>18</sup> Socio-economic Development Plan of Ararat Marz for 2011-2014 (available only in Armenian)  
<http://ararat.gov.am/development-plan/>

<sup>19</sup> Social Snapshot and poverty in Armenia, 2011, RA NSS, [http://www.armstat.am/file/article/poverty\\_2011e\\_2.pdf](http://www.armstat.am/file/article/poverty_2011e_2.pdf)

<sup>20</sup> "Social Snapshot and Poverty in Armenia, Statistical Analytical Report Based on the Results of the 2010 Integrated Living Conditions Survey of Households", National Statistical Service of the Republic of Armenia, 2011,  
[http://www.armstat.am/file/article/poverty\\_2011e\\_2.pdf](http://www.armstat.am/file/article/poverty_2011e_2.pdf)

VET INSTITUTIONS IN THE RA ARARAT MARZ AND DISTRIBUTION OF 2009/2010 GRADUATES



- COVENTIONAL SIGNS
- Ararat State Medical College
  - Ararat State College
  - Ararat Regional State College
  - Masis State Agricultural College
  - Settlements without VET graduates

### 3.2.3. Education system

For the 2011-2012 academic year, the structure of education system in Ararat Marz was the following<sup>21</sup>:

- 73 kindergartens with 4,940 children (2,485 girls);
- 112 general schools (all state-run), 21 of which were in urban areas.
- 34,604 pupils, 16,702 of which were girls.
- A teaching staff of 3,354 people, 2,852 of which were women.
- **4 state middle vocational education institutions – colleges** with a total of 1,252 students (4.6% of country total for middle VET), 549 of which were women:
  1. Ararat Regional State College (in Artashat)
  2. Ararat State College
  3. Masis State Agricultural College
  4. Ararat State Medical College

Combined teaching staff of 127 people, 88 (69.3%) of which were women.

- **2 private middle vocational education institutions<sup>22</sup>**, which had 64 students, of which 51 were women. Teaching staff of 22 people, 19 of which were women.
- **Preliminary vocational education** is implemented in the above institutions except the medical college. There were 139 students (2.5% of country total for Pre VET), 3 of which were women;
- 22 out-of-school education centres teaching music, arts, etc. that served 2,922 children (2,243 girls).
- There are no universities in the marz.

**The numbers of formal VET institutions and students (2011-12 academic year) by marzes are as follows:**

▪ <i>Kotayk:</i>	– 6 State Colleges	– 1,401 students;
	– 5 State Craftsmanship Schools	–567 “
▪ <i>Ararat:</i>	– 4 State Colleges	– 1,252 students;
	– 2 Private Colleges	–64 “

**The number of different qualifications offered in VET institutions are as follows:**

▪ <i>Kotayk:</i>	– Mid VET	– 23 qualifications;
	– Pre VET	– 10 “
▪ <i>Ararat:</i>	– Mid VET	– 17 qualifications;
	– Pre VET	–5 “
▪ <i>Total:</i>	– Mid VET	– 30 qualifications;
	– Pre VET	– 11 “

Distribution of the professions by colleges and craftsmanship schools, as well as the number of graduates in 2009 and 2010 are presented in Annex 3<sup>23</sup>.

<sup>21</sup> “Socio- Economic Situation of RA, January-March 2012” NSS, 2012, <http://www.armstat.am/en/?nid=82&id=1337>

<sup>22</sup> Besides, Vedi Branch of the European College in Armenia is acting in the marz. This college is functioning within the structure of the European Regional Academy established with participation of the Government. In 2012, the branch had around 90 student.

<sup>23</sup> Nairi Craftsmanship School and Abovyan N2 Special Craftsmanship School are not considered.

## 5. SURVEY RESULTS

The graduates were divided into 7 fields of study based on their qualifications (professions<sup>24</sup>) (for a detailed list, see Annex 4):

1. Economics, Management, Clerical Works (hereinafter – Economics)
2. Engineering, Technology, Manufacturing, Construction (hereinafter – Engineering)
3. Information and Communication Technologies (hereinafter – ICT)
4. Services
5. Education
6. Healthcare
7. Agriculture

Grouping by internationally recognised economic activities, e.g. NACE, could not be done as graduates with such qualifications as “Accountant”, “Manager”, “Technician” may be employed in companies with various economic activities, which correlate to different NACE groups. Grouping, in accordance with the formal classifier of occupations (such as ISCO or *National Classifier of Occupations*), was also impossible because the qualifications’ titles in the *List of Educational Professions* defined by the GoA do not provide enough details. Another issue preventing the use of more traditional classification is that graduates with many qualifications may be employed in a wide range of occupations that relate to different groups or subgroups defined by ISCO<sup>25</sup>.

The final reason for using the chosen grouping was the relatively small number of graduates in the various professions within each field, which would have made judgements based on representative statistical data impossible.

The total number of interviewed graduates was 451. Their distribution by marz, level of VET and the field is presented in the Table 4.

**Table 4. Number of interviewed graduates by the year of graduation, education level, field and marz**

MARZ \ FIELD	KOTAYK						ARARAT						Total, %		
	Middle VET			Pre VET			Middle VET			Pre VET			1	2	3
	1*	2*	3*	1	2	3	1	2	3	1	2	3			
Economics	261	56	21.5%	53	24	45.3%	246	52	21.1%	24	4	16.7%	584	136	23.3%
Engineering	259	37	14.3%	135	46	34.1%	75	14	18.7%	74	7	9.5%	543	104	19.2%
Healthcare	140	38	27.1%	-	-	-	235	55	23.4%	-	-	-	375	93	24.8%
Education	93	20	21.5%	-	-	-	97	18	18.6%	-	-	-	190	38	20.0%
ICT	65	16	24.6%	38	20	52.6%	-	-	-	-	-	-	103	36	35.0%
Services	16	3	18.8%	64	20	31.3%	9	8	88.9%	8	1	12.5%	97	32	33.0%
Agriculture	-	-	-	-	-	-	6	4	66.7%	26	8	30.8%	32	12	37.5%
<b>Total</b>	<b>834</b>	<b>170</b>	<b>20.4%</b>	<b>290</b>	<b>110</b>	<b>37.9%</b>	<b>668</b>	<b>151</b>	<b>22.6%</b>	<b>132</b>	<b>20</b>	<b>15.2%</b>	<b>1924</b>	<b>451</b>	<b>23.4%</b>

\*) 1 – graduates of 2009 and 2010; 2 – interviewed; 3 – interviewed as % of 2009 and 2010 graduates

In total, 23.4% of graduates were covered by the study in both marzes: 21.4% of Middle VET (hereinafter – Mid VET) graduates and 30.8% of Preliminary VET (hereinafter – Pre VET) graduates. The distribution of graduates by the year of graduation, education level, field and marz is presented in Annex 5.

### 4.1. Employment of graduates by the fields of study

#### 4.1.1. General data on employment

At the time of the survey, 104 (37.1%) out of 280 interviewed graduates in Kotayk and 58 (33.9%) out of 171 interviewed graduates in Ararat were employed. When combined, 35.9% of graduates reported being employed (162 employed out of 451 interviewed).

<sup>24</sup> In this report the titles of professions and qualifications are presented in strict accordance with the lists approved by the RA Government Decision No 73-N, 12.01.2006 for Middle VET and No 838-N, 31.07.2008 for Preliminary VET.

<sup>25</sup> For example, those who graduated with the profession 1005 “Thermo-power Plants” and acquired qualification of “Technician” can be hired for very different positions (occupations) in a power plant.

A higher percentage of employment was registered among the graduates with Pre VET in both marzes: 39.1% (against 35.9% Mid VET graduates) in Kotayk and 50.0% (against 31.8% Mid VET graduates) in Ararat. Aggregated for both marzes, the percentage of employed with Pre VET was higher than those with Mid VET by almost 7% (40.8% and 34.0%, respectively).

Among all employed graduates, only 35.8% (58 out of 162) were women. The share of employed among the interviewed women was only 21.1%, which was significantly lower than among men (59.1%). The share of those employed among rural graduates<sup>26</sup> was slightly larger (36.5%) than among the graduates from urban areas (35.6%). This trend is present in both marzes, with graduates from rural areas in Kotayk being employed 39.3% of the time versus 36.6% of urban respondents and a corresponding 34.8%/32.9% rural/urban split in Ararat marz.

Agricultural graduates reported the highest employment rate at 75%, though it should be noted that only 12 people from this field were interviewed. Graduates of Engineering had the second highest percentage of employed graduates at 48.1%. The lowest reported employment rates were among the graduates of Education (26.3%) and Healthcare (22.6%). Distribution of employed graduates by the fields of study is presented in Table 5 and a more detailed distribution by Marz and VET level can be found in Annex 6.

**Table 5. The share of those employed among interviewed graduates by fields of study, marz and VET level**

Interviewed and employed Field of Study	Number of Interviewed	Number of Employed	Share of those employed				
			Total	By VET level		By Marz	
				Mid VET	Pre VET	Kotayk	Ararat
Agriculture	12	9	75.0%	75.0%	75.0%	n.r.	75.0%
Engineering	104	50	48.1%	60.8%	35.8%	43.4%	66.7%
ICT	36	14	38.9%	31.3%	45.0%	38.9%	n.r.
Economics	136	47	34.6%	36.1%	28.6%	36.3%	32.1%
Services	32	11	34.4%	-	52.4%	47.8%	-
Education	38	10	26.3%	26.3%	n.r.	30.0%	22.2%
Healthcare	93	21	22.6%	22.6%	n.r.	21.1%	23.6%
<b>Total</b>	<b>451</b>	<b>162</b>	<b>35.9%</b>	<b>34.0%</b>	<b>40.8%</b>	<b>37.1%</b>	<b>33.9%</b>

Among the various institutions, *Masis State Agricultural College* had the highest level of graduates who reported being employed (62.5% of interviewed graduates). The next highest performing institutions were *Abovyan State Engineering College*, *Kotayk Regional State College*, *Abovyan State College of Energy*, and *Abovyan N1 Craftsmanship School*, which all had graduate job placement rates from 42.4% to 44.4% (Table 6). The smallest share of employment reported was among the graduates of *Ararat State College* (12.5%) and *Ararat State Medical College* (9.4%).

**Table 6. The share of those employed among interviewed graduates by institutions**

Institution	Number of interviewed graduates	Employed	
		Number	% of interviewed
Masis State Agricultural College	40	25	62.5
Abovyan State Engineering College	9	4	44.4
Kotayk Regional State College	53	23	43.4
Abovyan State College of Energy	33	14	42.4
Abovyan N1 Craftsmanship School	33	14	42.4
Byureghavan Craftsmanship School	59	23	39.0
Ararat Regional State College	67	26	38.8
Nor-Geghi State Agricultural College	21	8	38.1
Hrazdan Craftsmanship School	18	6	33.3
Charentsavan State College	16	4	25.0
Hrazdan State Medical College	38	8	21.1
Ararat State College	32	4	12.5
Ararat State Medical College	32	3	9.4

<sup>26</sup> Urban and rural graduates are defined on the bases of their residence but not the location of the VET institution from which they graduated.

Out of all the employed graduates, 17.9% (10.5% from Kotayk and 7.4% from Ararat) had been working without interruptions before, during and after their education: 9.3% (5.6% from Kotayk and 3.7% from Ararat) worked without interruptions during and after education and 20.4% (14.2% from Kotayk and 6.2% from Ararat) worked without interruptions only after their education. The remaining 52.5% of employed graduates reported having interruptions in their careers before.

#### 4.1.2. Employment by type and size of organisations

More than half – 54.9% of employed graduates (56.7% in Kotayk and 51.7% in Ararat) were working in *private companies*, 36.4% (33.7% in Kotayk and 41.4% in Ararat) worked for *state (public) organisations*, 5.6% (6.7% in Kotayk and 3.4% in Ararat) were *self-employed* and only 2.5% (4 people) were involved in a *family business*. One female graduate had another type of employment, which she did not specify (Table 7). It is interesting to mention that the share of women employed in private companies (56.9%) and the share of women who were self-employed (6.9%) was higher than the share of men (53.8% and 4.8%, respectively).

**Table 7. Employees by type of organisations/business and by gender**

Type of employment	Men		Women		Total	
	Number employed	% employed	Number employed	% employed	Number employed	% employed
State/public employee	40	38.5	19	32.8	59	36.4
Private employee	56	53.8	33	56.9	89	54.9
Family/personal business	3	2.9	1	1.7	4	2.5
Self-employed	5	4.8	4	6.9	9	5.6
Other	-	-	1	1.7	1	0.6
<b>Total</b>	<b>104</b>	<b>100</b>	<b>58</b>	<b>100</b>	<b>162</b>	<b>100</b>

Education graduates were the most likely to be employed by public organisations (60%), though they were closely followed by Agriculture graduates (55.6%). The Education graduates' engagement in public organisations was quite predictable as they are mostly employed as teachers in public general schools (there is only 1 private school in Kotayk marz and none in Ararat). The high level of public sector employment for Agriculture graduates, coupled with the fact that none reported being self-employed or engaged in family business (see also Annex 7), seems to point that this is not a representative group.

The highest level of employment in private companies was registered among the ICT (78.6%) and Services (72.7%) graduates.

Half of employed graduates reported working in micro and small enterprises (31.5% and 18.5% correspondingly), 13.6% worked for medium-sized and 11.1% for large enterprises<sup>27</sup>. The remaining 25.3% (41 people) did not know the size of the organisation they worked for or refused to answer this question.

Services graduates were the most likely to be employed in micro enterprises (54.5% of them). This could be explained<sup>28</sup> by the existence of many small service companies such as restaurants, cafes, small hotels and motels, etc. in the marzes, though the data presented below (part 4.1.3 of this report) show very low relevance of the Services graduates' qualifications to their current jobs, which indicates other factors could also have caused this. Graduates of Agriculture were the most likely to be employed in large enterprises (44.4%), followed again by Services (18.2%) and Engineering (16.0%).

Most employed graduates (61.1%) were working in the organisations providing services (including those providing educational and healthcare services such as schools, hospitals, polyclinics, etc.), followed by industrial (21.6%) and construction companies (10.5%). Only 11 people (6.8%) were employed in agriculture companies (Table 8). These indicators do not seem to correlate with employment rate by field of study. However, this is quite reasonable as some fields of study (e.g. graduates of Economics or ICT) could be employed in any type of organisation.

<sup>27</sup> This classification should be considered here with some reservations as, strictly speaking, it should relate only to commercial organisations: according to the RA Law on Support to Small and Medium-sized Entrepreneurship, the *commercial organisations and individual entrepreneurs* with up to 10 employees and with yearly income up to 100 mln AMD are considered as micro enterprises, with 10-49 employees and yearly income up to 500 mln AMD are considered as small enterprises, with 50-249 employees and yearly income up to 1,500 mln AMD are considered as medium-sized enterprises, and with 250 and more employees and yearly income 1,500 mln AMD and more are considered as large enterprises.

<sup>28</sup> As the questionnaire didn't foresee a question about the title of the organisation the graduates work in, it is impossible to verify this hypothesis.

**Table 8. Distribution of employed graduates by the fields of the organisations they work in**

Employed graduates Field of organisation	Kotayk				Ararat				Total				Total	
	Mid VET		Pre VET		Mid VET		Pre VET		Mid VET		Pre VET			
	No	%	No	%										
<b>Agriculture</b>	2	3.3	1	2.3	6	12.5	2	20.0	8	7.3	3	5.7	11	6.8
<b>Construction</b>	3	4.9	9	20.9	4	8.3	1	10.0	7	6.4	10	18.9	17	10.5
<b>Industry</b>	15	24.6	13	30.2	6	12.5	1	10.0	21	19.3	14	26.4	35	21.6
<b>Service</b>	41	67.2	20	46.5	32	66.7	6	60.0	73	67.0	26	49.1	99	61.1
<b>Total</b>	61	100	43	100	48	100	10	100	109	100	53	100	162	100

#### 4.1.3. Employment types, relevance of job and qualification, importance of diplomas and job mobility

It is worth emphasising that a much larger share of employed Pre VET graduates were working as *highly qualified specialists*<sup>29</sup> (18.9% against 8.3% of Mid VET graduates). Employed Mid VET graduates, however, were more likely to be working as *average qualification specialists* (31.2% against 11.3% of Pre VET graduates) or *office employees* (10.1% against 3.8% of Pre VET% graduates). It is also interesting to note that 13.8% of employed Mid VET graduates were working as *skilled workers*, a position that normally relates to the qualifications of Pre VET graduates. Meanwhile, only 24.5% of employed Pre VET graduates were employed as skilled workers.

The weak conformity between the level and field of education and the positions held by the graduates was confirmed by graduates, who generally reported low relevance of their education to their occupations. Only 26.5% of employed graduates thought that their qualifications were relevant to their current occupations, 9.9% found it partly relevant and 63.6% found their education not relevant to their employment at all. It is interesting that the highest level of relevance was reported among the graduates of Healthcare (71.5% relevant or partly relevant) and Education (70.0% relevant or partly relevant), which also had the lowest job placement levels (Table 9: the last column presents the share of employed by the fields of study for comparison purposes).

**Table 9. Relevance of employed graduates' education to current jobs by fields of study, marz and the VET level, % of employed graduates**

	KOTAYK						ARARAT						Total			SoE
	Mid VET			Pre VET			Mid VET			Pre VET			R	PR	NR	
	R	PR	NR													
Healthcare	75.0	-	25.0	n.g.	n.g.	n.g.	61.5	7.7	30.8	n.g.	n.g.	n.g.	66.7	4.8	28.6	22.6
Education	66.7	16.7	16.7	n.g.	n.g.	n.g.	25.0	25.0	50.0	n.g.	n.g.	n.g.	50.0	20.0	30.0	26.3
ICT	-	-	100	55.6	-	44.4	n.g.	n.g.	n.g.	n.g.	n.g.	n.g.	35.7	-	64.3	38.9
Agriculture	n.g.	n.g.	n.g.	n.g.	n.g.	n.g.	66.7	-	33.3	16.7	33.3	50.0	33.3	22.2	44.4	75.0
Economics	23.8	19.0	57.1	-	12.5	87.5	16.7	11.1	72.2	n.e.	n.e.	n.e.	17.0	14.9	68.1	34.6
Engineering	33.3	4.8	61.9	-	6.7	93.3	-	-	100	-	-	100	14.0	4.0	82.0	48.1
Services	n.e.	n.e.	n.e.	9.1	18.2	72.7	n.e.	n.e.	n.e.	n.e.	n.e.	n.e.	9.1	18.2	72.7	34.4
<b>Total</b>	36.1	9.8	54.1	14.0	9.3	76.7	29.2	8.3	62.5	10.0	20.0	70.0	26.5	9.9	63.6	35.9

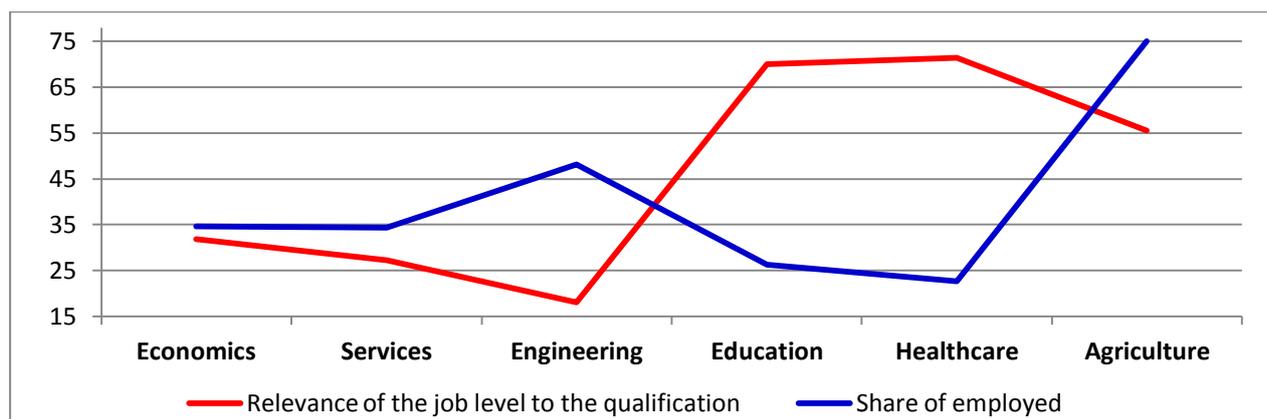
R – Relevant; NR – Not relevant; PR – Partly relevant; n.g. – no graduates; n.e. – no employed; SoE – share of employed graduates.

The lowest level of relevance (18.0% relevant or partly relevant) was registered among the graduates of Engineering, where the level of job placement was the second highest, after Agriculture. No Mid VET Engineering graduate in Ararat Marz had a job relevant to his/her qualifications. Another peak of irrelevance (100%) was registered among Mid VET graduates in the ICT field, though 55.6% of their peers with Pre VET had relevant jobs.

Taking into account the level of job relevance to the qualifications in the remaining fields, Chart 1 shows that, in general, this indicator, with some minor deviations, varies inversely to the employment rate.

<sup>29</sup> The formulation “High quality specialist” mentioned in the English version of the questionnaire does not precisely reflect the Armenian wording that was actually used during the interviews. The latter one should be translated as “Highly qualified specialist”

**Chart 1. Correlation between the level of job to qualification relevance<sup>30</sup> and the shares of the employed by fields of study, %**



It is important to determine the different reasons why employed graduates felt their education was irrelevant to their jobs. For most, *having a job from another field* (56.3%), was the main reason while *requiring lower level of qualification* (22.7%), *requiring only a part of acquired competences* (10.1%) or *requiring higher level of qualification* (1.7%) were also reported (9.2% of employed graduates could not or refused to answer).

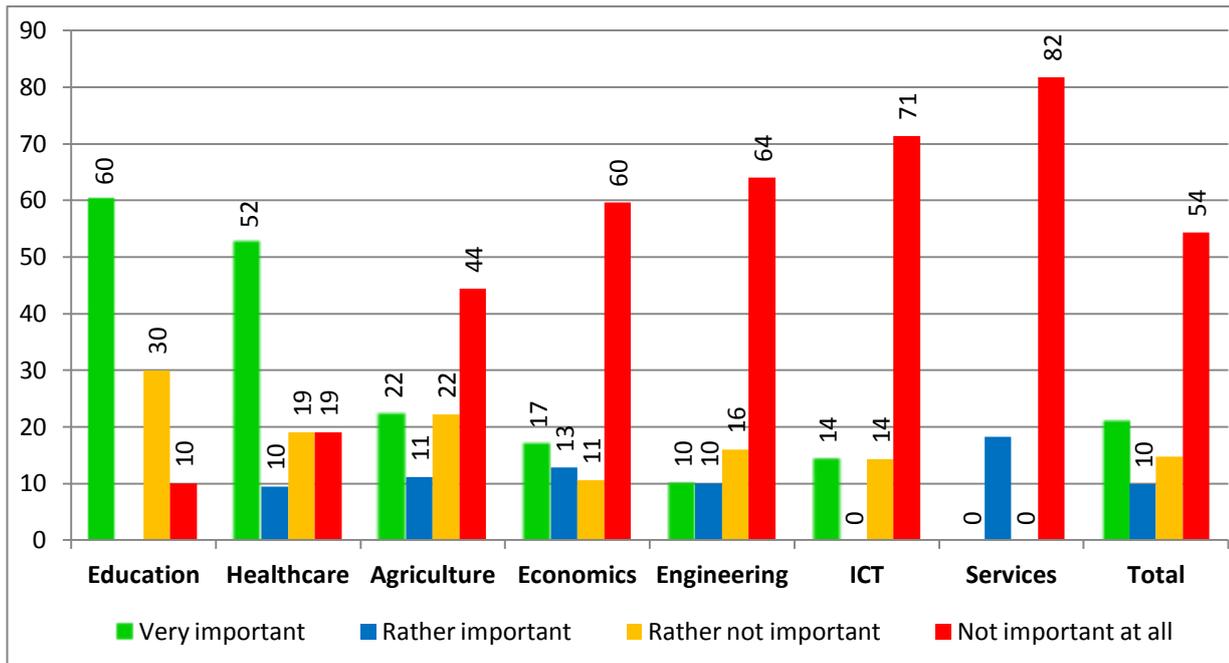
For 86.6% of those who did not have a job relevant to their qualification, an absence of alternative in the labour market was the reported reason, while 4.2% reported a lack of adequate skills (9.2% referred to other “*not specified*” reasons). One positive trend observed with those who did not have a job that corresponded with their education was that 65.4% of them had adjusted to it *easily*. Less than a third (27.2%) adjusted *with some difficulty*, while 4.9% reported it was *difficult* to adjust and only 1 graduate *could not adjust at all*. Only three graduates (4.9%) received *some training from the employer*. Thus, in the majority of cases, the relevance of qualification did not play a decisive role in job placement for either graduates or employers. This correlates with the results of different studies<sup>31</sup>, according to which only a small share of employers consider formal qualifications important while hiring employees.

The graduates’ answers to the question “*To what extent was the diploma important for finding the job?*” show similar results to the questions on relevance of their education. Fifty-four percent of graduates thought that their diplomas were *not important at all* (and 14.8% – *rather not important*) while only 21.0% thought that their diplomas were very important and 9.9% felt it was *rather important*. As expected, graduates of Education and Healthcare programmes, who reported most often that their qualifications were relevant to their work, felt that their diploma was more important in finding a job than other graduates did (60.0% and 52.4%, respectively). In contrast to the Education and Healthcare graduates, no Services graduates found their diploma was very important for job placement (only 18.2% – *rather important* and the remaining 81.8% – *not important at all*). For ICT, Engineering and Economics graduates, the diploma did not play any role in finding a job for 71.4%, 64.0% and 59.6% of employed graduates, respectively (Chart 2).

<sup>30</sup> Based on the sum of Relevant and Partially relevant

<sup>31</sup> See particularly: Report on the analysis of the adequacy of competences provided by VET system for labour market requirements, ETF, GDF, Yerevan 2012, [http://www.gdf.am/images/downloads/reportIm\\_eng.pdf](http://www.gdf.am/images/downloads/reportIm_eng.pdf).

**Chart 2. Importance of diploma in finding a job, % of employed graduates**



For more than half of graduates (50.6%), their current job was their first, for 31.5% it was their second, for 8.0% it was their third, and for 8.7% it was their 4<sup>th</sup> to 6<sup>th</sup> job (Table 10). For two graduates, their current jobs were their 10<sup>th</sup> ones. The largest turnover (3 jobs or more) was reported among Agriculture graduates (55.6%), followed by ICT (28.6%) and Engineering (26.0%). The most “stable” graduates (not more than 2 jobs) were those from Education and Healthcare (both 100%), followed by Economics (89.4%) and Services (81.8%). In aggregate, 82.1% of employed had no more than two jobs after graduation, which again shows their adaptability to a job regardless of their formal qualification. When analysed by gender, men were more likely have had more than two jobs (26%) than women, who reported this just 1.4% of the time.

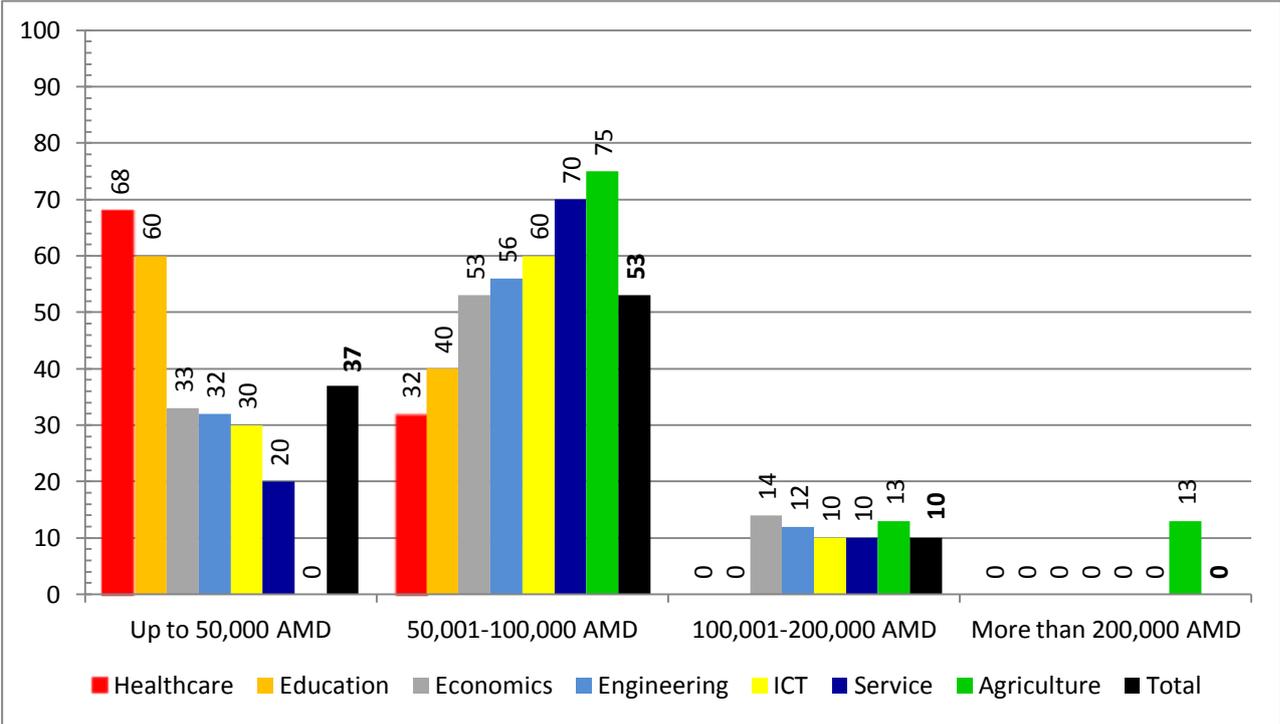
**Table 10. Number of jobs after graduation (including self-employment and current job), number and % of employed graduates by field**

No of jobs changed	ECON		ENG		ICT		EDU		SERV		HEAL		AGRO		Total	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
1	30	63.8	23	46.0	5	35.7	7	70.0	4	36.4	10	47.6	3	33.3	82	50.6
2	12	25.5	14	28.0	5	35.7	3	30.0	5	45.5	11	52.4	1	11.1	51	31.5
3	5	10.6	5	10.0	2	14.3	-	-	-	-	-	-	1	11.1	13	8.0
4	-	-	5	10.0	2	14.3	-	-	-	-	-	-	2	22.2	9	5.6
5	-	-	2	4.0	-	-	-	-	1	9.1	-	-	1	11.1	4	2.5
6	-	-	-	-	-	-	-	-	-	-	-	-	1	11.1	1	0.6
10	-	-	1	2.0	-	-	-	-	1	9.1	-	-	-	-	2	1.2

#### 4.1.4. Graduates’ salaries and types of contracts

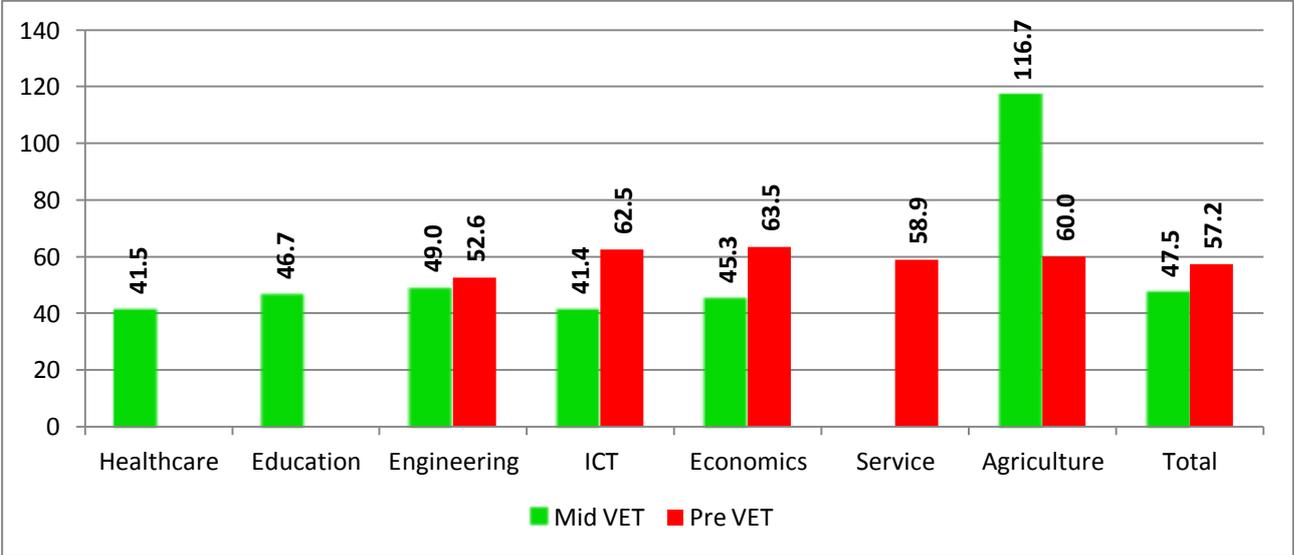
More than half (53.0%) of the employed graduates reported an average monthly salary of 50 to 100 thousand AMD (about € 100-200 euro). There were, however, a considerable number of respondents (36.6%) who had lower (up to 50 thousand AMD) and 9.7% who had higher (100 to 200 thousand AMD) salaries. Only one graduate from Agriculture had a salary higher than 200 thousand AMD (Chart 3).

**Chart 3. Distribution of graduates by ranges of monthly average salary, % of employed graduates**



Surprisingly, the average salary<sup>32</sup> of Pre VET graduates was more than 20% higher than that of Mid VET graduates. By field of study, this difference ranged from 7.3% for Engineering graduates to 50.8% for ICT graduates. Only Agriculture graduates with Mid VET had higher (by 94.4%) salaries than those with corresponding Pre VET (Chart 4).

**Chart 4. Graduates’ monthly average salaries by level of VET, thousand AMD**



On average, women’s salaries were lower than men’s were: 51.7% of women had salaries up to 50 thousand AMD, 36.2% - from 50 to 100 thousand AMD and no one more than 100 thousand AMD<sup>33</sup> while men reported salaries between 50 and 100 thousand AMD 48.1% of the time and only 18.3% reported earning less than 50 thousand. In Ararat, women’s salaries were lower than those in Kotayk (for detailed data see Annex 9).

Only slightly more than half (53.1%) of employed graduates had written contracts. The vast majority (73.3%) of those who had a written contract also had full time employment. Healthcare (71.4%) and Education (70.0%) graduates had the largest share of written contracts while ITC graduates were the least likely to

<sup>32</sup>Calculated as weighted average.  
<sup>33</sup> The remaining 12% didn’t answer this question.

have a contract. Every Services graduate who had a written contract was also permanently employed while Healthcare graduates (employed mostly in public organisations) also reported almost unanimously (93.3%)<sup>34</sup> that if they received a contract, it was only for a full time position.

It is also important to mention that larger shares of women (53.4% versus 52.9% of men) and Mid VET graduates (58.7% versus 41.5% of Pre VET graduates) had written contracts.

#### 4.1.5. Job placement

More than half (51.9%) of employed graduates found a job within one month after graduation and 27.2% reported that their job search lasted from 1 to 6 months. Only 21% spent more than 6 months looking for work. On average, Mid VET graduates found work more quickly than Pre VET graduates (Table 11). There was no major difference noted by area of study though Services graduates fared the best, with 63.6% of them finding a job within the first month after graduation. Employed Economy and Healthcare graduates found their job in the first month after graduating (55.3% and 52.4%, respectively), but overall, the graduates from these programs also reported not being employed most often. On average, it took a longer time for Agriculture and Economic graduates to find work, and it took between 1 and 6 months to find jobs for 83.3% and 83.0% of them, respectively. More detailed data on the job-seeking periods are presented in Annex 10.

**Table 11. Distribution of graduates by duration of job seeking period, % of employed graduates**

Duration of looking for a job	Mid VET		Pre VET graduates		Total	
	No	%	No	%	No	%
Up to 1 month	58	53.2	26	49.1	84	51.9
1-6 months	27	24.8	17	32.1	44	27.2
7-12 months	12	11.0	3	5.7	15	9.3
13-24 months	9	8.3	4	7.5	13	8.0
More than 24 months	3	2.8	3	5.7	6	3.7

Only 16 graduates (less than 10% of all employed) changed the place of their residence to find their current job. Half of those who moved were Engineering graduates and 11 of them were Mid VET graduates. Out of those 16 graduates, only 3 were inhabitants of rural areas (2 in Kotayk and 1 in Ararat). Thus, 94.4% out of 54 employed rural graduates could find jobs in their own villages. The urban graduates who had to move to find employment represented 12.0% of the total employed urban graduates.

For the overwhelming majority (80.9%) of employed (72.5% of those with Mid VET and 98.1% with Pre VET), *family/friends contacts* were one of the most useful tools for finding a job. This was followed by *knowledge and skills acquired during education in the institution* (23.5%), *advice from the employment centre* (7.4%), *Internet* (4.3%) and *media/advertising* (3.7%). For 2.5% of graduates, *other factors*, which they did not specify were the most important. It is interesting to mention that for 100% of Agriculture graduates (both with Mid and Pre VET), *family/friends contacts* were the only means for finding a job and for 100% of Economic, Engineering and Services Pre VET graduates, this very factor was the most useful in addition to others.

Employed graduates mentioned *salary* as the most important aspect of a job 38.9% of the time, while job description was mentioned as the second most important aspect at the same average rate<sup>35</sup> (Table 12). *Job description*, *distance from home* and *work environment* were rated the most important aspect by 25.3%, 22.8% and 11.1% of employed graduates, respectively.

**Table 12. Distribution of graduates by the importance of employment aspects, % of employed graduates**

Aspects \ Level of priority	Salary	Job description	Work environment	Distance from home
1	38.9	25.3	11.1	22.8
2	20.4	38.9	22.8	16.7
3	23.5	20.4	39.5	15.4
4	16.0	14.2	25.3	43.8
5	1.2	0.6	0.6	0.6
Do not know	0.0	0.6	0.6	0.6
<b>Average rating</b>	<b>75.9</b>	<b>74.4</b>	<b>63.3</b>	<b>63.1</b>

<sup>34</sup> The remaining 6.7% were not necessarily working in the public healthcare institutions, so this might be even more uniform than it seems.

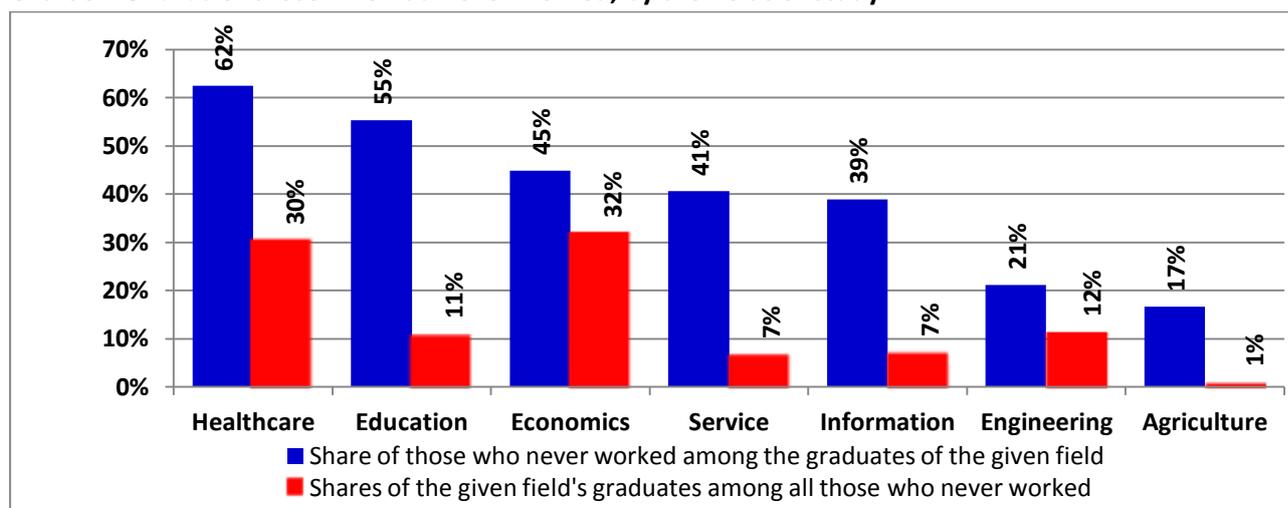
<sup>35</sup> Rate =  $(\sum_{i=1}^5 p_i(6-i))/5$ , where  $p_i$  is the percentage of respondents who gave the priority level "i" to the aspect.

## 4.2. Unemployed graduates

There were 289 (64.1% of interviewed) graduates who were not employed at the time of the survey (62.9% in Kotayk and 66.1% in Ararat), out of which 80 people (17.7% of all interviewed or 27.7% of those who were not employed at the moment of interviewing) had worked after graduation (19.6% or 31.3% in Kotayk and 14.6% or 31.3% in Ararat, respectively), while 191 (42.4% of all interviewed) had never worked before<sup>36</sup>. Of those who had never worked, only 24 people (20 with Mid VET and 4 with Pre VET) or 8.3% of all not employed graduates, were still studying and not searching for a job.

More Mid VET graduates than Pre VET graduates had never worked before; 46.7% of all interviewed Mid VET graduates had never worked before versus 31.5% of those with Pre VET. Moreover, Mid VET graduates comprised 78.5% of all those who had never worked. By field of study, the largest share of those who never worked before was among the Healthcare graduates (62.4%), followed by Education (55.3%). Agriculture graduates were the least likely to have never worked before (Chart 5).

**Chart 5. Shares of those who had never worked, by the fields of study**



For those who had stopped working, the reason reported most often was the *elimination of the job* (21.3%), followed by *low salary* (16.3%), *family circumstances* (15.0%) and *hard working conditions* (13.8%). Only 2.5% of those who had a job before stopped to *continue their education*. It is interesting to mention that even though 53 people (or 66.3% of 80 those who had worked before) had jobs that were not relevant to their qualifications. Only 1.3% stopped working for this reason (Table 13).

Only 25 people (31.3% of the 80) who had worked were ever given written contracts, from which only 14 were permanent. Like those who are currently employed, Mid VET graduates who had been employed in the past were more likely (35.3%) to have had written contracts than those with Pre VET (24.1%). Ten others had temporary or seasonal in the past and 1 person had another (unspecified) type of contract.

**Table 13. Distribution of those who stopped working by reason, %**

Elimination of the job	21.3
Low salary	16.3
Family circumstances	15.0
Hard working conditions	13.8
Resignation (firing) from work	8.8
Health conditions	5.0
Maternity leave	3.8
Continuation of education	2.5
Service in army (past or forthcoming)	2.5
Job not relevant to qualification	1.3
Leave the country (past or planned)	1.3
Other (not specified)	8.8

**Table 14. Distribution of those who had never worked by reason, %**

Cannot find a job	35.6
Family circumstances	26.7
Continuation of education	11.5
Cannot find work relevant to my qualifications	11.5
I do not need a job/I am not looking for a job	6.8
I was serving in the army	3.7
Hard working conditions	1.6
Low payment	1.0
Health conditions	0.5
Other (not specified)	0.5
Refuse to answer	0.5

<sup>36</sup> Remaining 18 people had worked before starting their education but not after.

For those who had never worked, the most frequent reason (35.6%) given was the *impossibility to find any job*, followed by *family circumstances* (26.7%). *Continuation of education* and *impossibility to find job relevant to the qualification* were both given as reasons 11.5% of the time. Only 22 people, or a bit less than 5% of all interviewed, continued education after VET graduation (Table 14).

Graduates of Economics composed the largest part (31.9%) of those who had never worked, closely followed by Healthcare graduates (30.4%), while Agriculture graduates made up the smallest share (1.0%). It is important to note that more than half of those (12 people) who continued education were graduates of Economics, which could partly account for their low level of employment (for detailed data see Annex 11).

### 4.3. Self-employment/businesses

The share of those graduates who had made an attempt to become self-employed and/or set up their own business was 13.1% (11.2% of Mid VET graduates and 17.7% of Pre VET graduates). Even though 59.3% of them (35 people) reported that this attempt was successful or very successful, only 18.6% (11 people, out of which 4 were Mid VET graduates and 7 were Pre VET graduates) still had these businesses<sup>37</sup>. More businesses were maintained in Kotayk (8) than in Ararat (3).

Services (such as Cosmetology, Haircutting, and Knitting) were the most common type of activity (33.9%) for the self-employed. Trade (shop, retail outlets, etc.) was the second most reported activity (25.4%), which was followed by agriculture production (11.9%) and industry (lumber mill, oven, etc.), at 6.8%.

In total, 63.0% of all graduates would like to make an attempt to establish their own business in the future.

To the question “*In your opinion, how well was entrepreneurship covered in curricula of your school/college?*” (asked to all graduates regardless their state and type of employment), 24.6% of answered “*sufficiently*”, 24.8% - “*not enough*” and 39.0% - “*not at all*”. The remaining graduates were never interested in this topic. Graduates with Pre VET were less satisfied: only 19.2% of them found the entrepreneurship coverage by curricula *sufficient* (42.3% answered “*not at all*”) versus 26.8% of Mid VET graduates (37.7% answered “*not at all*”).

*Hrazdan Craftsmanship School* received the most negative response from its graduates (66.7% of them answered “*not at all*”), followed by *Ararat Regional State College* (58.2%), *Hrazdan State Medical College* (57.9%) and *Kotayk Regional State College* (56.6%). The most satisfied graduates were from *Masis State Agricultural College* (80.0% of them answered “*sufficiently*”).

### 4.4. Formal Education

#### 4.4.1. Reasons for choosing the profession and tuition fees

When choosing a profession (qualification), *personal interest* was the most important factor for the majority (74.1%) of all interviewees, while the *perspective of employment opportunities* was mentioned as the main reason by only 9.8% of graduates (see Table 15). Graduates reported 9.5% of the time that they had been *encouraged by others* to select their field of study. Other reasons given were: *inability to pay for other education* (2.4%); *suggestion of vocational guidance services* (1.8%); and *the grades obtained at school* (0.7%).

**Table 15. The reasons why the graduates chose their profession (qualification), % of interviewed by the fields of study**

	ECON	ENG	ICT	EDU	SERV	HEAL	AGRO	Total
Personal interest	67.6	67.3	83.3	86.8	87.5	77.4	75.0	<b>74.1</b>
Encouraged by others	13.2	8.7	8.3	7.9	6.3	7.5	16.7	<b>9.8</b>
Perspective employment opportunities	13.2	13.5	2.8	5.3	3.1	7.5	-	<b>9.5</b>
I could not pay for other	0.7	4.8	5.6	-	-	3.2	-	<b>2.4</b>
Suggested by vocational guidance services	1.5	3.8	-	-	3.1	1.1	-	<b>1.8</b>
Because of the grades I obtained at school	-	1.9	-	-	-	1.1	-	<b>0.7</b>
Other (not specified by respondents)	3.7	-	-	-	-	2.2	8.3	<b>1.8</b>

<sup>37</sup> Out of those 11 people who still had businesses, only 7 considered themselves self-employed, 2 people were involved in family businesses and 2 others were employed in private companies.

It is interesting to mention that *personal interest* was most frequently reported as important for those who had chosen *Services* (87.5%), *Education* (86.8%) and *ICT* (83.3%), while graduates from these fields also had very low hope for *prospective employment opportunities* (3.1%, 5.3% and 2.8%, respectively). *Economics* and *Engineering graduates*, who reported choosing their profession by personal interest at a much lower rate, also had higher hopes for future employment (13.2% and 13.5%, respectively). No *Agriculture graduates* mentioned employment opportunities as a reason for choosing their field of study (75.0% of graduates were led by personal interest, 16.7% were encouraged by others and the remaining 8.3% had other reasons which they didn't specify). One factor that may lead to confusion in regards to the *Agriculture graduates* responses is the fact that the rural population normally does not consider the work at their own farms (where they actually can use the skills acquired in college) as employment.

Almost half (48.6%) of the graduates studied for free (paid for by the state) and nearly the same share (48.3%) had their fees paid by their household (relatives) from incomes earned in Armenia. Only 0.7% of graduates had their fees paid for by income received from relatives abroad. No graduate enjoyed financial support in terms of tuition fees from an employer or a sponsor. The remaining 2.2%<sup>38</sup> paid their fees from other sources (see Table 16).

**Table 16. Who paid for education, % of interviewed by fields**

	ECON	ENG	ICT	EDUC	SERV	HEAL	AGRO	Total
The state (unpaid basis)	49.3	70.2	75.0	36.8	78.1	4.3	75.0	<b>48.6</b>
Household (relatives), from their incomes received in Armenia	46.3	26.9	25.0	60.5	18.8	92.5	25.0	<b>48.3</b>
Household (relatives), from their incomes received abroad	0.7	1.0	-	-	-	1.1	-	<b>0.7</b>
The employer	-	-	-	-	-	-	-	-
Sponsor/charity organisation	-	-	-	-	-	-	-	-
Other (not specified by respondents)	2.9	1.9	-	2.6	3.1	2.2	-	<b>2.2</b>

Services graduates were the most likely (78.1%) to have their education paid for by the state. They were closely followed by ICT and Agriculture (equally 75.0%) graduates and then by Engineering graduates (70.2%). Only 4.3% of Healthcare graduates received a free education from the state. Taking into account the comparatively high fees and low employment rates for Healthcare (210 thousand AMD per year against 40-70 thousand AMD for e.g. Engineering professions), it seems there is a high demand for this field of study among the population but not in the labour market (see data on graduates' job placements in Table 5 above).

Almost all (124 out of 130, or 95.4%) of Pre VET graduates received their education for free, while 70.4% of Mid VET graduates paid for theirs.

#### **4.4.2. Rating of the VET institutions' performance by graduates**

The results from the survey were overwhelmingly positive when rating the quality of education and teaching methods, with 95.8% of respondents evaluating the methods as "very good" or "rather good" (95.0% in Kotayk and 97.1% in Ararat). *Ararat State College* received the best rating from graduates (93.8% of graduates gave the mark "very good" and the remaining 6.2% - "rather good"), while *Charentsavan State College* had the worst ("very good" - 50% and "rather good" - 25.0%). At 4 institutions, including the two *Regional VET Centres*, 100% of graduates only gave the two highest marks.

When asked to rate the organisation of practical training (including in the enterprises), 87.6% of graduates (87.8% in Kotayk and 87.1% in Ararat) evaluated this aspect as "very good" or "rather good". The highest satisfaction (100% "very good" or "rather good") was among the graduates of *Hrazdan State Medical College*, which was closely followed by *Ararat State College* (96.9%). Five other institutions also had ratings of more than 90%. *Charentsavan State College* again had the lowest rating ("very good" or "rather good" - 43.8%, "very bad" - 37.5%). The practical training at *Kotayk Regional State College* and *Ararat Regional State College*<sup>39</sup> was rated as "very good" or "rather good" by 92.3% and 85.1% of the graduates, respectively. *Ararat Regional State College's* rating was lower than the regional and overall average.

<sup>38</sup> Out of 451 respondents, 450 (or 99.8%) answered this question.

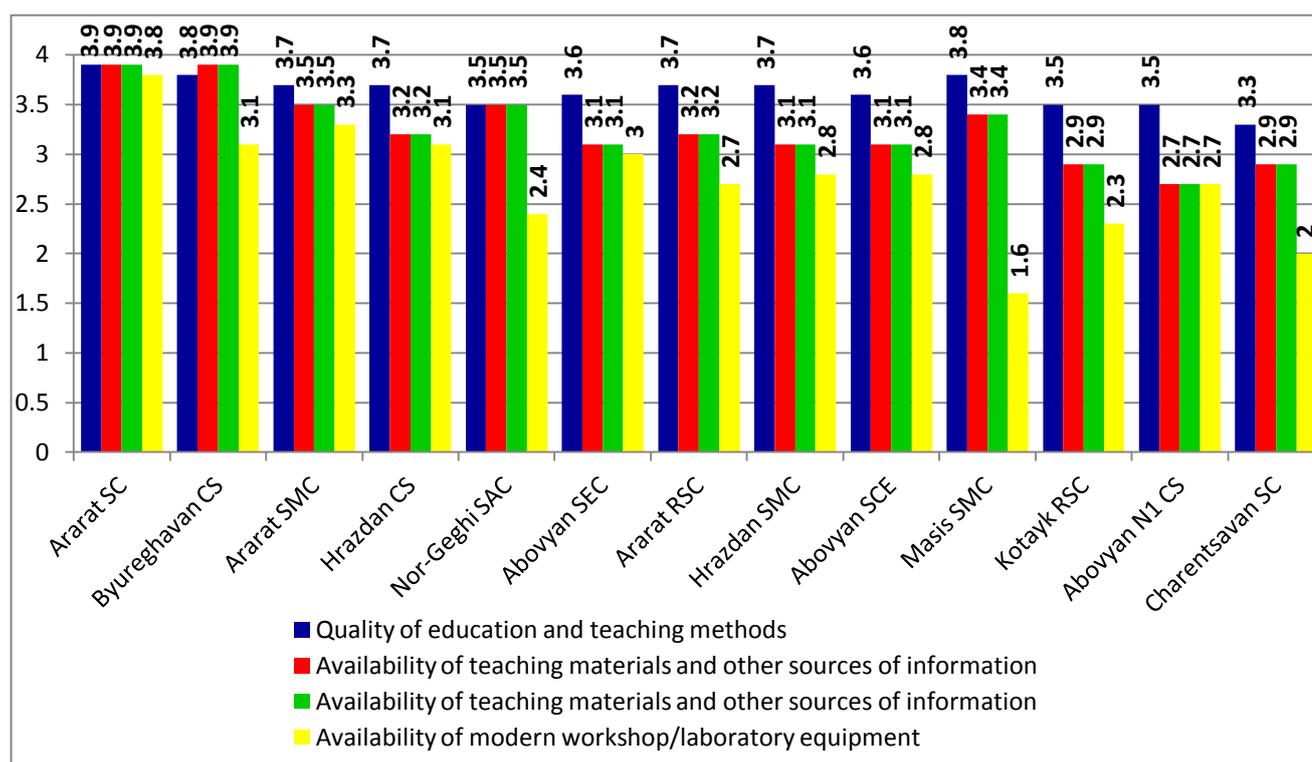
<sup>39</sup> These two colleges, along with 10 others (one college per marz and two colleges in Yerevan), are considered regional multifunctional VET Centres and received considerable support from the EU budget support programme for improvement of facilities, training equipment, staff development etc.

The availability of teaching materials and other sources of information were evaluated slightly lower: 81.1% of graduates (80.3% in Kotayk and 82.5% in Ararat) considered them to be “very good” or “rather good”. *Byureghavan Craftsmanship School* was the leading institution (98.3%), followed by *Hrazdan Craftsmanship School* (94.4%). *Abovyan N1 Craftsmanship School* received the lowest mark by its graduates (only 60.6%), while the second worst was *Charentsavan State College* (68.8%). *Kotayk Regional State College* received the 2 highest marks (“very good” or “rather good”) from only 69.2% of graduates, while *Ararat Regional State College* received the two highest marks from 80.6% of the graduates. Both of their ratings were lower than the regional and overall average.

The lowest level of graduates’ satisfaction was registered for the availability of modern workshop/laboratory equipment: only 58.7% of graduates (57.7% in Kotayk and 60.2% in Ararat) evaluated it as “very good” or “rather good”. The highest rated institutions in this regard were *Ararat State College* (90.6%) and *Ararat State Medical College* (81.3%), while the lowest two were *Masis State Agricultural College* (17.5%) and *Charentsavan State College* (31.3%). *Kotayk Regional State College* and *Ararat Regional State College* received “very good” or “rather good” marks from only 42.3% and 61.2% of graduates, respectively. This more negative response is not surprising, as the modern training equipment provided by the framework of the EU budget support to the Armenian VET system has only been used for 2-3 years and the 2009 and even 2010 graduates might not have had the opportunity to use it.

The summary of the graduates’ assessment of different aspects of their education institutions is presented in Chart 6 below (for more detailed rating, see Annex 12).

**Chart 6. Rating of different aspects of the VET institutions’ performance by graduates, weighted average (point scale: 4=very good, 1=very bad)<sup>40</sup>**



It is interesting to mention that the above ratings of the institutions by the graduates do not strongly correlate with the indicators of employment presented in Table 6. Moreover, in some institutions such as *Ararat State College* or *Ararat State Medical College* (with high rating of all training aspects but low level of graduates’ job placement) or *Masis State Agriculture College* (with comparatively low rating of training aspects but high level of graduates’ job placement), the two pieces of data are even contradictory.

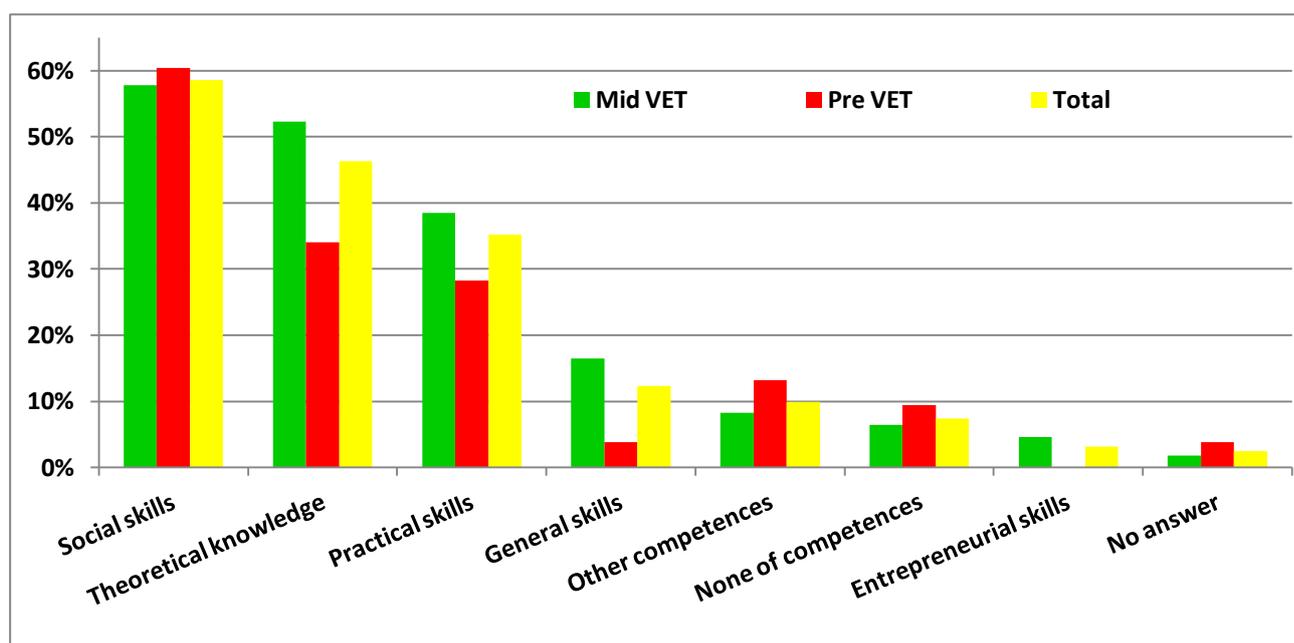
When answering the question “In relation to your qualification, which of the following skills acquired were adequate for your current job?” 58.6% of graduates mentioned “social skills” (such as attitude towards work,

<sup>40</sup> In the graph, the institutions are presented in order according to the sum of all 4 aspects’ ratings, from the highest to the lowest.

ethics, etc.), 46.3% – “theoretical knowledge”, and 35.2% – “practical skills”<sup>41</sup>. Two other types of competences mentioned in the questionnaires – “general skills” (foreign languages, ICT, etc.) and *entrepreneurial skills* were mentioned very infrequently (Chart 7). It is notable that the ratings given by Mid and Pre VET graduates to different competences were rather close, but that Pre VET graduates valued almost all competences slightly lower. Moreover, almost no one thought that entrepreneurial skills were adequate for their current jobs, which may point to serious problems in this training area, specifically in the craftsmanship schools. Some of graduates – 7.4% (6.4% with Mid VET and 9.4% with Pre VET) didn’t value any competences acquired at the VET institution.

In general, Mid VET ICT graduates tended to be more dissatisfied, and the only area that all fields valued was social skills. Agriculture graduates from with both Mid and Pre VET were also generally dissatisfied and only valued theoretical knowledge and practical skills 50% of the time). The highest level of satisfaction was reported among Mid VET graduates from Economics and Pre VET graduates from ICT (for details see Annex 13).

**Chart 7. Relevance of the graduates’ competencies to their current occupation, % of employed graduates**



When asked if they would choose the same institution again, 46.3% of graduates responded they would. When asked if they would keep the same profession, 65.9% said they would. *Byureghavan Craftsmanship School* had the highest percentage of graduates (79.7%) who said they would have still chosen that institution. *Ararat State College* (68.8%) and *Ararat Regional State College* (55.2%) also received generally positive reviews from their graduates. *Charentsavan State College* (25.0%), *Kotayk Regional State College* (18.9%) and *Hrazdan Craftsmanship School* (11.1%) received the most negative responses from their graduates. For the other institutions, graduates responded positively approximately 37% to 47% of the time. Only 2 respondents could not answer this question and one refused to answer it. It is important to note that in general, this evaluation does not correlate with the graduates’ job placement levels by institutions (Table 17).

<sup>41</sup> In accordance with the results of the analysis of the adequacy of competences provided by VET system for labour market requirements ([http://www.gdf.am/images/downloads/reportlm\\_eng.pdf](http://www.gdf.am/images/downloads/reportlm_eng.pdf)), only 4.8% of employers found the practical skills of the graduates sufficient, and the same share of employers answered that the graduates’ theoretical knowledge matches the requirements.

**Table 17. Distribution of graduates by the answers to the question “Would you chose the same institution again?”, % of interviewed**

No	Institution	Yes	No	Do not know	Refuse to answer	Share of employed graduates	
						%	rating of institution <sup>42</sup>
1	Byureghavan Craftsmanship School	79.7	18.6	1.7		39.0	6
2	Ararat State College	68.8	31.3			12.5	12
3	Ararat Regional State College	55.2	44.8			38.8	7
4	Ararat State Medical College	46.9	53.1			9.4	13
5	Abovyan State College of Energy	45.5	54.5			42.4	4/5
6	Masis State Agricultural College	45.0	55.0			62.5	1
7	Abovyan State Engineering College	44.4	55.6			44.4	2
8	Abovyan N1 Craftsmanship School	39.4	60.6			42.4	4/5
9	Nor-Geghi State Agricultural College	38.1	61.9			38.1	8
10	Hrazdan State Medical College	36.8	63.2			21.1	11
11	Charentsavan State College	25.0	68.8		6.3	25.0	10
12	Kotayk Regional State College	18.9	79.2	1.9		43.4	3
13	Hrazdan Craftsmanship School	11.1	88.9			33.3	9
<b>Total</b>		<b>46.3</b>	<b>53.0</b>	<b>0.4</b>	<b>0.2</b>		

Interesting contradictions are noticed when comparing graduates' job placement rates (see Table 5 above) and their responses to whether they would choose the same profession or not again. Graduates from Education, Services, and Healthcare would choose the same profession again 76.3%, 75.0% and 72.0%, respectively, even though they were among the least likely to have a job. On the other hand, the more frequently employed graduates of Engineering and of Agriculture would keep their profession only 46.2% and 50% of the time, respectively. These results seem to suggest that not all students and graduates directly associate a good education with further employment opportunities, but probably perceive the education to possess an independent value.

**Table 18. The reasons why graduates would or would not chose the same profession or institution**

Reason	Number	%
It's a good profession, and the quality of education is high	182	40.4
It's a good profession, and I would choose another institution	91	20.2
There are no prospects with this profession and institution	83	18.4
It's a bad profession, but the quality of education is high	23	5.1
It's a good profession, but there is no job	19	4.2
Other (not specified)	18	4.0
I don't like this profession	16	3.5
It's a good profession, but the quality of education is low	9	2.0
Do not know	8	1.8
Profession does not provide high earnings	1	0.2
Refuse to answer	1	0.2
<b>Total</b>	<b>451</b>	<b>100</b>

The reasons why the graduates would or would not chose the same profession or institution again are presented in Table 18.

When the graduates were asked if they see a correlation between investment in education and better employment opportunities and living standards, 57.9% responded positively. This correlation was more obvious to graduates in Kotayk (65.4% versus 45.6% in

Ararat) and for female graduates (64.2% versus 49.1% of males).

Nearly all respondents (96.7%) reported that “without a good education it is impossible to have success”, while only 1.3% reported that “money and personal relations are more important”. The latter factor was most commonly considered true among those who did not see any correlation between education and living standards (42.5% of them gave this answer), while 35.8% thought that other factors (not specified) were more important than education.

<sup>42</sup> Compare with the numbering in the first column of the table.

## 4.5. Trainings

At the time of interviewing, only 80 graduates (17.7% of all interviewed) had participated or were participating in a training course<sup>43</sup>. The largest share of training participants was among ICT graduates (30.6%), followed by Education graduates (28.9%). The shares of graduates of other fields who had participated, or were participating, in the trainings ranged from 8.3% (only 1 graduate of Agriculture) and 18.4% (Economics).

Most graduates who had participated in a training (85.0% of them) had been involved in only one training course, while 8.8% had participated in two (1 or 2 graduates of Economics, Engineering, Education and Healthcare) and 6.3% had attended three (1 or 2 graduates of Economics, Engineering, ICT and Healthcare). Only 45.0% of training participants had taken (or were taking) courses related to their profession, while 32.5% had an objective other than professional skills and 26.3% were hoping to acquire general skills (foreign languages, computer, management, etc.). The largest shares of those who wanted to obtain professional skills that differed from their education (probably to change their field of work) were among ICT (72.7%) and Services (66.7%) graduates. No ICT graduates were seeking to obtain general skills and no Agriculture graduates had attended training for other professional skills outside of their field (Table 19).

**Table 19. Distribution of graduates by the types of training, % of those who participated in training**

	ECON		ENG		ICT		EDU		SERV		HEAL		AGRO		Total	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Related to the profession	13	52.0	6	46.2	4	36.4	6	54.5	0	0.0	6	37.5	1	100	36	45.0
For other professional skills	5	20.0	4	30.8	8	72.7	2	18.2	2	66.7	5	31.3	-	-	26	32.5
For general skills	8	32.0	4	30.8	-	-	3	27.3	1	33.3	5	31.3	-	-	21	26.3

Most of graduates (60% of those who passed training) paid for their training personally or relied on household members. State or public institutions paid the fees for 25% of the trainings and employers paid for 8.8%. Agriculture and Economics graduates seemed to be most interested in training, as they paid for their training personally 100% and 72.0% of the time, respectively (Table 20). Employers were most active in covering the training fees for Engineering graduates, which may be an implication of higher demand towards a skilled labour force and/or lower adequacy of competences acquired in the VET institutions in this field.

**Table 20. Who paid for training, % of those who participated in training**

	ECON		ENG		ICT		EDU		SERV		HEAL		AGRO		Total	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Personally (household)	18	72.0	6	46.2	6	54.5	6	54.5	1	33.3	10	62.5	1	100	48	60.0
Public/State organisations	2	8.0	3	23.1	-	-	2	18.2	-	-	-	-	-	-	7	8.8
Employer	1	4.0	-	-	-	-	-	-	-	-	1	6.3	-	-	2	2.5
Other private organisation or NGO	4	16.0	4	30.8	5	45.5	2	18.2	2	66.7	3	18.8	-	-	20	25.0
International organisations	1	4.0	-	-	-	-	1	9.1	-	-	-	-	-	-	2	2.5
Other (not specified)	-	-	-	-	-	-	-	-	-	-	2	12.5	-	-	2	2.5

Private education/training centres provided trainings for the largest share of participants (23.8% of graduates who passed training). State-run training facilities were also very popular and provided 22.5% of the trainings. Pre and Mid VET colleges provided 18.8% of the trainings, while universities hosted 12.5% of them. It is important to note that the share of Engineering graduates who participated in on-the-job training (30.8%) is much higher than of any other profession, which provides further evidence that the skills needed for the work place are not adequately taught in VET institutions (Table 21).

<sup>43</sup> The question was about any training course for finding a job or a better job or getting a promotion at the job.

**Table 21. Who implemented the course, % of those who participated in training<sup>44</sup>**

	ECON		ENG		ICT		EDU		SERV		HEAL		AGRO		Total	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Organisation where they work/worked	1	4.0	4	30.8	1	9.1	2	18.2	-	-	-	-	-	-	8	10.0
A special state education centre	4	16.0	1	7.7	2	18.2	4	36.4	-	-	7	43.8	-	-	18	22.5
A special non state education centre	8	32.0	2	15.4	1	9.1	2	18.2	2	66.7	4	25.0	-	-	19	23.8
International agency	1	4.0	-	-	-	-	-	-	-	-	-	-	-	-	1	1.3
College or craftsmanship school	4	16.0	3	23.1	5	45.5	2	18.2	1	33.3	-	-	-	-	15	18.8
Higher educational institution	5	20.0	1	7.7	-	-	-	-	-	-	3	18.8	1	100	10	12.5
Other (not specified)	4	16.0	2	15.4	1	9.1	1	9.1	-	-	2	12.5	-	-	10	12.5

Most graduates (95.0%) used their own free time to attend trainings. Aside from Engineers, the only professions where graduates reported on-the-job trainings were Education (18.2%), Economics (12.0%) and Engineering (7.7%).

Among those who had not participated in any training at the time of survey, 80 people (the same number as of those who had passed training) were, nevertheless, planning to do so in the future. The majority of graduates, however, had no intention of attending any training (Table 22).

**Table 22. Distribution of graduates by attendance of trainings, % of interviewed graduates**

	ECON	ENG	ICT	EDU	SERV	HEAL	AGRO	Total
Participated in training	18.4	12.5	30.6	28.9	9.4	17.2	8.3	17.7
Had not participated but was going to	22.8	13.5	13.9	13.2	15.6	16.1	33.3	17.5
Had not participated and was not going to	58.8	74.0	55.6	57.9	75.0	66.7	58.3	64.7

For those who were planning to look for training programs in the future, personal contacts (42.5%) and the Internet (27%) were the most frequently mentioned resources that they expected to use (Table 23). All Agriculture graduates said that personal contacts would be the only option they used.

**Table 23. Distribution of graduates by the sources for finding training opportunities, % of interviewed graduates**

	ECON	ENG	ICT	EDU	SERV	HEAL	AGRO	Total
In Internet	34.2	25.7	36.4	10.5	20.0	21.4	-	26.7
In newspaper	5.5	17.1	13.6	10.5	30.0	11.9	-	11.2
Personal contacts (networks)	42.5	51.4	40.9	52.6	50.0	50.0	100.0	48.1
In state employments agency	6.8	2.9	-	10.5	-	16.7	-	7.3
Other	11.0	2.9	9.1	15.8	-	-	-	6.8

Only 7.1% of interviewed graduates were willing to trust VET institutions for their training (Table 24). While relatively low, this was more than those who would trust the companies where they worked (6.6%) and specialised private training providers (5.4%). State training providers (27.8%), international agencies (26.6%) and universities (25.3%) were the most desired places for future training.

<sup>44</sup> Some graduates participated in more than one training provided by different types of organisations, so the sum of percentage may be more than 100%.

**Table 24. Whom the graduates would trust for future training, % of interviewed graduates**

	ECON	ENG	ICT	EDU	SERV	HEAL	AGRO	Total
Organisation where they work(ed)	6.8	8.8	8.3	8.7	-	5.4	-	6.6
A special state education centre	26.1	20.6	20.8	30.4	27.3	39.3	-	27.8
A special non state education centre	3.4	5.9	4.2	4.3	27.3	5.4	-	5.4
International agency	30.7	20.6	29.2	30.4	18.2	25.0	-	26.6
College or craftsmanship school	4.5	14.7	8.3	4.3	18.2	5.4	-	7.1
Higher educational institution	28.4	26.5	29.2	17.4	9.1	19.6	80.0	25.3
Other (not specified)	-	2.9	-	4.3	-	-	20.0	1.2

#### 4.6. Migration trends

Only 27.3% of interviewees (23.2% in Kotayk and 33.9% in Ararat) have ever thought about moving abroad in the past to get a job or a better job. When asked about the future, a dramatic increase was noticed, with 76.4% of graduates (75.4% in Kotayk and 77.6% in Ararat) reporting that they would consider moving abroad in the future. An interesting distinction in these numbers is that men were much more likely to have already considered moving abroad for work (43.8% against 16.7% of women), but both groups reported a similar likelihood to do so in the future (79.2% of men and 71.7% of women).

Graduates who were employed were more likely (29.0%– 26.9% in Kotayk and 32.8% in Ararat) to have thought about moving abroad before than those who were unemployed, but were less likely (only 68.1% – 64.3% in Kotayk and 73.7% in Ararat) to consider it in the future. This illustrates that for some graduates, employment is a very important factor when deciding whether to migrate or not.

When comparing the desire to migrate with the poverty data presented in Table 3, a strong correlation is not present. While all poverty indicators are higher in Kotayk Marz, a larger share of Ararat graduates would consider leaving the country. This may indicate that the absolute poverty level is not the only factor driving people to migrate and that other motives play a more important role.

## 6. CONCLUSIONS AND RECOMMENDATIONS

### 5.1. Conclusions

The aim of this tracer study was to improve knowledge and experience in assessing the relevance of VET programmes offered in the marzes of Armenia. Due to the limited sample, the research cannot be considered representative and the results should be considered with this in mind.

The research covered two marzes – Kotayk and Ararat, and it included 2009 and 2010 graduates of 13 state VET institutions. A total of 451 graduates were interviewed. They were divided into 7 groups according to their fields of study.

The main findings of the survey can be summarised as follows:

- The share of those **employed** among the interviewed graduates was rather low (35.9%), with unequal distribution between the fields of study:
  - Agriculture - 75.0%
  - Engineering - 48.1%
  - ICT - 38.9%
  - Economics - 34.6%
  - Services - 34.4%
  - Education - 26.3%
  - Healthcare - 22.6%
- Graduates of Pre VET programs were more likely to be **employed** than Mid VET graduates. Women made up only 35.8% of the employed graduates despite making up 62.6% of all those interviewed.
- The share of those who were employed among graduates from **rural** areas was insignificantly larger (36.5%) than those from urban areas (35.6%).

- Masis State Agricultural College had the highest job placement rate (62.5%) of any **institution**, while Ararat State College (12.5%) and Ararat State Medical College (9.4%) had the lowest rates.
- The share of graduates who were **self-employed** or involved in **family businesses** was rather small: 5.6% and 2.5% of all employed graduates, respectively. This correlates with the opinions of the graduates that entrepreneurship issues were poorly covered by the VET institutions' curricula (24.8% thought that this coverage is not enough" and 39.0% reported no coverage at all). The share of self-employed women (6.9%) was higher than that of men (4.8%). No graduate from an Agriculture programme was self-employed or engaged in a family business. Only 11 of 35 graduates who had established their own business and considered it successful were still operating that business.
- Interviewed graduates felt that the high **unemployment** was due to limited vacancies in the labour market, especially vacancies that related to their qualifications. Low salaries offered by vacancies that did exist were also mentioned as a reason for unemployment. Many graduates reported family circumstances as the reason they stopped working (15.0%) or did not to start working at all (26.7%). Only 11.5% of graduates were not working because they were continuing their education.
- Most graduates (63.6%) reported that their **qualifications** were not relevant to their current occupations. Three fields where graduates were especially dissatisfied with the relevance of their education were Engineering (82%), Services (72.7%) and Economics (68%). Generally, the field of study and the level of education did not have a strong correlation to what type of employment the graduates had, though some programmes proved more relevant than others. For example, 18.9% of Pre VET graduates work as "highly qualified specialists", which is a position that usually requires a Mid VET degree. Meanwhile, only 8.3% of Mid VET graduates had jobs of this responsibility level. Mid VET graduates reported working as "skilled workers" 13.8% of the time even though such positions should normally relate to the qualifications of Pre VET graduates.
- More than half of employed graduates (54.3%) reported that their **diploma** (certification of qualification) was not important at all in finding their current jobs. A personal contact was the most used resource (80.9%) for graduates that had found employment, while employment services were useful for only 7.4% of the employed graduates. Of graduates that found work outside the area they studied, 64.5% found it rather easy adapt to their jobs.
- Most employed graduates had an average monthly **salary** from 50 to 100 thousand AMD a month. The average salary of Pre VET graduates was more than 20% higher than Mid VET graduates and the salaries of men were higher than women. The highest average salaries were registered among Agriculture graduates; two of whom were earning 200 thousand AMD or more a month.
- Graduates' **satisfaction** rates with their profession or education in the various fields ranged from 46% to 66%.The satisfaction levels are especially interesting after considering the fact that many of those who were satisfied were also unemployed. In some fields, such as Engineering and Agriculture, more than half of the graduates would not choose the same field of study a second time. When choosing their field of study, most graduates reported that "*personal interest towards the profession*" was considerably more important than the prospective employment opportunities. The rating of the education institutions' performance by the graduates does not correlate much with the graduates' employment rate. These responses suggest that many young people do not associate VET education quality with future employment opportunities, but probably perceive education as an independent or formal value.
- The share of graduates who completed further **training** after graduation was rather small (17.7% of all interviewed) and most of them paid for their trainings personally. Agriculture and Economics graduates seem to be most interested in such trainings, while employers were most likely to pay the fees of Engineering graduates. Nearly a third (30.8%) of Engineering graduates completed on-the-job training organised by employers. This may be an indication of a higher demand for a skilled labour force and/or a lower adequacy of competences acquired from the VET institutions in the field of Engineering.

## 4.1. Recommendations

For addressing the issues identified in this project, the following steps are proposed:

- The education system needs to revise the education content provided in some qualifications, especially in ITC, Engineering and Economics. There should be an increase in the involvement of the business community (employers or their representatives) in the design of the new content and teaching processes through the participation in development of educational standards, curricula and modular programmes.
- The education system needs to take actions to increase the involvement of employers in the formative and summative assessments of students.
- The mechanisms of VET system cooperation with social partners should be expanded at both the national and local levels. Initiatives for the advancement of this cooperation should be promoted to the benefit of all involved: the education system, business community and individuals. The employers' councils established attached to the local employment centres, similar councils could be established also for the colleges, particularly the Regional VET Centres.
- Increased career guidance and information services for the terminal years of compulsory education. Organisation of "open days" initiatives, both in enterprises and in VET institutions, should be among the priorities in the education system.
- Actions should be taken to increase the participation and capacity of Local Employment Centres in providing support services to students who are graduating (terminal semesters) by organising information sessions on the local and regional labour markets, the portfolio of services offered and the rights and opportunities of individuals in the country. The focus of these centres should be on supporting matching skills (supply and demand of labour force) and professional orientation services in general.
- More focus should be placed on the quality of general/core skills, such as foreign languages, communication, management, and IT skills. The relevant requirements should be reflected in the VET standards and curricula.
- The revised entrepreneurial learning and skills formation process should be based on the assessment of the current curricula. Entrepreneurial skills should be considered as important as the development of professional skills, so necessary revisions should be made in all training programmes. Favourable conditions for starting businesses in the country in general are an essential precondition for promoting entrepreneurship and/or self-employment as an option of development and should be addressed alongside any change in training.
- Instruments for monitoring education institution results should be developed by MoES and introduced in the country as a systematic approach (e.g. once per every 2-3 years tracer studies should be conducted). These should not be the only instruments for measuring the results, but an important tool for institutions' promotion and development. Such studies should retrace the same graduates at least once to follow (backtrack) their carrier developments. They should also focus on interviewing employers to assess the level of their satisfaction of the graduates' competencies and work performance/progress. The National Centre for VET Development (NCVETD) should be responsible for organising and coordinating such studies and for summarising the results.
- Implementation of the graduates' tracer studies should become a normal (mandatory) task of all VET institutions and prescribed by their charters. Complete and systematically updated databases of the students and graduates (with all necessary details) should be established in all institutions to not only make future surveys easier, but also to improving VET information management systems in general. Regional VET centres should take responsibility for supporting and coordinating these activities as well as on analysing the labour market needs that relate to the qualifications offered within the corresponding regional VET networks.
- Introduce a mechanism of encouragement/reward (in forms of funding, etc.) for institutions that is linked to their graduates' employment rate.

- Take into consideration the current labour market structure and the changing requirements in various occupations, particularly in terms of broadening the professional profiles (which are also in line with modern European and international trends). Review current professional training programmes, especially those programs where graduates reported high levels of work that did not correspond to their education. Review the existing VET qualifications' structure and classifier and consider the elimination of the out-dated separation of VET into two levels (Pre and Mid), still retained from the Soviet system, and the establishment of new a VET qualifications framework that better matches the real labour market needs and occupational classifiers and standards.
- The database of the graduates formed by the project team for this study can be provided to the corresponding colleges to assist in the establishment of graduates' databases for further tracer studies.

# ANNEX 1. QUESTIONNAIRE



Caucasus Resource Research Centers - Armenia  
A Program of Eurasia Partnership Foundation

## QUESTIONNAIRE FOR VET GRADUATES' TRACER STUDY

NUMBER OF QUESTIONNAIRE										DATE		
Personal code of the interviewer	Number of questionnaire							Day	Month		Year	
											2012	

### A. Personal Data of the Respondent

A1. Marz, type and name of settlement	Ararat	1	Town	1	Name of settlement
	Kotayk	2	Village	2	

A2. Given name and surname (if the respondent does not mind), gender, birth date	Name Surname	Male	1	Year of Birth
		Female	2	

**Interviewer: In case of <Don't Know>, <Refuse to Answer> correspondingly use 98> and <99> codes in the right side of each question.**

### B. EDUCATION

1. Institution and year of graduation	Code of Institution	Code of Location	Preliminary	1	2009	1
			Vocational	2	2010	2

2. 2.1 Profession	
2.2 Qualification	

3. What economic field your profession is mostly applicable for?	
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4. What was the main reason for choosing this profession?	Personal interest	1
	Encouraged by others	2
	Perspective employment opportunities	3
	Suggested by vocational guidance services	4
	Because of the grades I obtained at school	5
	I could not pay for other	6
	Other (specify)	7

5. Who has mainly paid for your education?	The State (unpaid basis)	1
	HH/relatives, from their incomes received in Armenia	2
	HH/relatives, from their incomes received abroad	3
	The employer	4
	Sponsor/charity organization	5
	Other (specify)	6

6. During your VET studies, how would you rate the following? 4 point scale: 4= very good, 1= very bad	1. Quality of education and teaching methods	
	2. Availability of teaching materials and other sources of information	
	3. Availability of modern workshop/laboratory equipment	
	4. Organization of practical training (including in the enterprises)	

7. Did you think about moving abroad in order to get a job/ better job?	Yes	1	→9
	No	2	

8. Is this still part of your plans?	Yes	1	No	2
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9. Looking back, would you choose the same:	9.1 Profession	Yes	1	No	2
	9.2 Institution	Yes	1	No	2

10. Please explain why.	
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11.	Do you see a correlation between investment in education and better employment opportunities and living standards?	Yes	1
		No	2

12.	Please describe that correlation.	
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### C. EMPLOYMENT

13.	Have you ever worked?	Yes, without interruptions before, during and after education	1	→15
		Yes, without interruptions during and after education	2	→15
		Yes, without interruptions after education	3	→15
		Yes, with interruptions before, during and after education	4	
		Yes, with interruptions during and after education	5	
		Yes, with interruptions after education	6	
		No	7	→D

14.	Are you currently employed?	1	Yes	
		2	No	→D

15.	What is the nature of your main job?	State/public employee	1	Self employed	4
		Private employee	2	Other (specify) _____	5
		Family / personal business	3		

16.	What is the size of the company you are employed in?	Overall number of employees		
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17.	What is the main activity of the company you currently work?/What is the nature of your self-employment?	Agriculture	1
		Construction	2
		Industry	3
		Service	4

18.	What is the nature, description of your job?	High quality specialist	1
		Average quality specialist	2
		Office employee	3
		Employee in service sector, household utility economy or trade organization	4
		Qualified employee in agricultural, forestry, hunting, fish farming or fishing organization	5
		Skilled worker	6
	Other (specify) _____	7	

19.	Is your job relevant to your qualification?	Yes	1	→22
		Partially	2	
		No	3	

20.	Please explain how it is not relevant or partially relevant to your qualification?	
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21.	Why did you accept a job which is different from your qualification?	No alternative in the labour market	1
		Lack of adequate experience	2
		Other (specify) _____	3

22.	How did you adjust to the job?	Easily	1	It was very difficult	3
		With some difficulty	2	Could not adjust at all	4
				Got some training from the employer	5

23.	How much is your average monthly salary?	Thousand AMD
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24.	In relation with your qualification, which of the following skills acquired were adequate to your current job? (accept more than 1 answer)	Theoretical knowledge	1
		Practical skills	2
		General skills (foreign languages, ICT, etc.)	3
		Social skills (attitude towards work, ethics, etc.)	4
		Entrepreneurship skills	5
		Other (specify) _____	6

25.	How many jobs did you after graduation (including self-employment and the current job)?	Number
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26.	To what extent was the diploma important for finding the job?	Very important	1	Rather not important	3
		Rather important	2	Not important at all	4

27.	Are you regularly employed with a written labour contract?	Yes	1		
		No	2	→29	
28.	What is your employment contract?	Permanent	1	Part-Time	3
		Temporary/Seasonal	2	Other (specify) _____	4
29.	In order to find this job, did you have to move from your city/region of residence?	Yes	1	No	2
30.	In order of priority, which of the following aspects are most important for your employment? 1=most important, 2=2 <sup>nd</sup> most important, etc.	Distance from my home			
		Job description			
		Salary			
		Work environment			
Other (specify) _____					
31.	For how many months after your graduation you looked for your first job?	Number of months			
32	What was the most useful for you to find the job? (Accept more than one answer)	Knowledge and skills acquired during education in the institution	1	→E	
		Advice from the employment centre	2	→E	
		Family/friends connections	3	→E	
		Media/advertising	4	→E	
		Internet	5	→E	
		Other (specify) _____	6	→E	

#### D. NOT EMPLOYED

33.	Have you worked after graduation?	Yes	1				
		No	2	→38			
34.	Was your job relevant to your qualification?	Yes	1	Partially	2	No	3
35.	Were you regularly employed with a labour contract?	Yes	1				
		No	2	→37			
36.	What was your employment contract?	Permanent	1	Part-Time	3		
		Temporary/Seasonal	2	Other (specify) _____	4		
37.	Why did you interrupt your job?	Continuation of education	1				
		Family circumstances	2				
		Low wages	3				
		Hard working conditions	4				
		It was not relevant to my qualifications	5				
		Health conditions	6				
		I do not need a job/ I am not looking for a job	7				
		I resigned/I was fired from work	8				
		Elimination of the job	9				
		Other (specify) _____	10				
38.	Why you are not employed?	Continuation of education	1				
		Family circumstances	2				
		Low payment	3				
		Hard working conditions	4				
		Cannot find a job	5				
		Cannot find work relevant to my qualifications	6				
		Health conditions	7				
		I do not need a job/I am not looking for a job	8				
		Other (specify) _____	9				

#### E. SELF-EMPLOYMENT/OWN BUSINESS

39.	Did you ever make any attempt to become self-employed and/or set up your own business?	Yes	1	No	2	→42	
		Yes and now I have my own business	3				
40.	Please describe your attempt.						
41.	To what extent is/was it successful?	Very successful	1	Successful	2	Not successful	3
42.	Would you like to make (another) attempt?	Yes	1	No	2		

43.	In your opinion how well entrepreneurship was covered in the study plan of your school/college?	Sufficiently	1	Not at all	3
		Not enough	2	I was never interested in the topic	4

### F. TRAINING OPPORTUNITIES

44.	Have you participated or are you currently participating in any course for finding a job / a better job / getting promotion in the job, if yes – in how many courses. If no, then are you planning to participate in one during the next 12 months?	1	Yes (in how many)	
		2	No but I am going to	→49
		3	No and I am not going to	→END

45.	Which of these courses have you participated? (More than 1 answer possible)	Related to your profession	1
		To obtain other professional skills	2
		General skills (foreign languages, computer, management, etc.)	3

46.	Who has paid for the training? (Accept more than 1 answer)	Household members / I personally	1
		My employer	2
		Other private / non-governmental organizations	3
		Public/State organizations	4
		International organizations	5
		Other (specify) _____	6

47.	Who has implemented the course? (Accept more than 1 answer)	Organization where I currently work /have worked	1
		A special state education centre	2
		A special non state education centre	3
		International agency	4
		College or technical school	5
		Higher educational institution	6
		Other (specify) _____	7

48.	When has the course been implemented? (Accept more than 1 answer)	During your working day	1
		During your free time	2
		Other (specify) _____	3

49.	Where do you search for training opportunities? (Accept more than 1 answer)	In Internet	1	Personal networks	3
		In newspaper	2	In state employments agency	4
		Other (specify) _____		5	

50.	What type of organization would you most trust to provide you with training? (Accept more than 1 answer)	Organization where I currently work /have worked	1
		A special state education centre	2
		A special non state education centre	3
		International agency	4
		College or technical school	5
		Higher educational institution	6
		Other (specify) _____	7

**THANK YOU!**

**ANNEX 2. DISTRIBUTION OF THE PROFESSIONS BY COLLEGES AND CRAFTSMANSHIP SCHOOLS AND THE NUMBER OF 2009 AND 2010 GRADUATES IN KOTAYK MARZ<sup>45</sup>**

Profession	2009			2010		
	Total	M	F	Tot.	M	F
<b>Kotayk Regional State College (in Hrazdan)</b>						
0312 Teaching at elementary (primary) school	8	-	8	16	-	16
0313 Preschool education	2	-	2	13	-	13
0601 Economics, Accountancy and Audit	22	4	18	16	2	14
1005 Thermo-power Plants	10	10		5	5	
2014 Technical Service and Maintenance of Radio-electronic Equipment	5	5	-	-	-	-
2203 Computing machinery and automated systems software	8	2	6	17	6	11
2302 Service Organisation in Hotels and Tourist Complexes	-	-	-	16	6	10
2401 Organisation of Transportation and Traffic Control	41	41	-	25	25	-
2915 Assembly and exploitation of gas supply equipment and systems	11	11	-	13	13	-
<b>Total</b>	<b>107</b>	<b>74</b>	<b>33</b>	<b>121</b>	<b>57</b>	<b>64</b>
<b>Abovyan State Engineering College</b>						
0601 Economics , Accountancy and Audit	16	2	14	16	4	12
0312 Teaching at elementary (primary) school	11	-	11	8	-	8
2203 Computing machinery and automated systems software	6	2	4	8	1	7
2905 Construction and Exploitation of Roads and Airports	-	-	-	5	5	-
<b>Total</b>	<b>33</b>	<b>4</b>	<b>29</b>	<b>37</b>	<b>10</b>	<b>27</b>
<b>Abovyan State College of Energy</b>						
0601 Economics , Accountancy and Audit	27	7	20	25	5	20
0604 Banking	17	4	13	17	6	11
1001 Electric power plants, networks and systems	15	15	-	15	15	-
1015 Relay protection and automation of electrical power system	8	3	5	10	6	4
2203 Computing machinery and automated systems software	10	4	6	16	5	11
2915 Assembly and exploitation of gas supply equipment and systems	5	5	-	5	5	-
3401 Metrology	7	5	2	13	13	-
<b>Total</b>	<b>89</b>	<b>43</b>	<b>46</b>	<b>101</b>	<b>55</b>	<b>46</b>
<b>Charentsavan State College</b>						
0307 Physical education and sports	-	-	-	10	7	3
0312 Teaching at elementary (primary) school	17	1	16	8	-	8
0601 Economics , Accountancy and Audit	16	11	5	20	6	14
<b>Total</b>	<b>33</b>	<b>12</b>	<b>21</b>	<b>38</b>	<b>13</b>	<b>25</b>
<b>Hrazdan State Medical College</b>						
0402 Obstetrics	16	-	16	18	-	18
0405 Pharmaceutics	14	-	14	12	-	12
0406 Nursing	26	-	26	33	-	33
0416 Dental techniques	16	-	16	5	5	
<b>Total</b>	<b>72</b>		<b>72</b>	<b>68</b>	<b>5</b>	<b>63</b>
<b>Nor-Geghi State Agricultural College after G. Aghajanyan</b>						
0602 Management	7	1	6	7	-	7
0603 Finances	7	5	2	6	5	1

<sup>45</sup> Numbers of graduates are presented in accordance with the information (graduates' lists) provided by the colleges.

0603 Finances <b>Part-time</b>	<b>12</b>	8	4	<b>14</b>	10	4
0612 Commodity Research	<b>6</b>	1	5	<b>7</b>	-	7
0612 Commodity Research <b>Part-time</b>	<b>3</b>	2	1	-	-	-
2401 Organisation of Transportation and Traffic Control	<b>8</b>	8	-	<b>6</b>	6	-
2401 Organisation of Transportation and Traffic Control <b>Part-time</b>	<b>19</b>	19	-	<b>18</b>	18	-
2401 Organisation of Transportation and Traffic Control <b>Part-time (BGE)</b>	-	-	-	<b>8</b>	8	-
3114 Exploitation and maintenance of agricultural machinery and equipment	<b>2</b>	2	-	<b>5</b>	5	-
<b>Total</b>	<b>64</b>	46	18	<b>71</b>	52	19
<b>Byureghavan Craftsmanship School</b>						
0601* Book-keeping ( <i>Book-keeper</i> )	-	-	-	<b>20</b>	8	12
2203* Computer operation ( <i>Computer operator</i> )	<b>18</b>	8	10	<b>20</b>	8	12
2304* Haircutting art and decorative cosmetics ( <i>Hairdresser</i> )	<b>19</b>	14	5	-	-	-
2401* Transport means operation and repair ( <i>Car repair locksmith</i> )	-	-	-	<b>17</b>	17	-
2809* Sewing technology ( <i>Tailor</i> )	<b>19</b>	-	19	-	-	-
<b>Total</b>	<b>56</b>	22	34	<b>57</b>	33	24
<b>Abovyan N1 Craftsmanship School</b>						
0605* Clerical work, information and organisational service ( <i>Secretary</i> ) <sup>46</sup>	<b>16</b>	-	16	<b>17</b>	3	14
1207* Welding works technology ( <i>Electric- and Gas-welder</i> )	-	-	-	<b>12</b>	12	-
2311* Catering ( <i>Cook</i> )	<b>17</b>	13	4	<b>14</b>	8	6
2401* Transport means operation and repair ( <i>Car repair locksmith</i> )	<b>20</b>	20	-	<b>12</b>	12	-
2907* Carpentry, parquet and glass works ( <i>Carpenter</i> )	<b>16</b>	16	-	-	-	-
<b>Total</b>	<b>69</b>	49	20	<b>55</b>	35	20
<b>Hrazdan Craftsmanship School</b>						
2311* Catering ( <i>Cook</i> )	-	-	-	<b>14</b>	8	6
2401* Transport means operation and repair ( <i>Car repair locksmith</i> )	<b>16</b>	16	-	<b>14</b>	14	-
1003* Technical operation of Machines' and Mechanisms' electrical equipment ( <i>Electric equipment repair locksmith-electrician</i> )	<b>9</b>	8	1	-	-	-
<b>Total</b>	<b>25</b>	24	1	<b>28</b>	22	6

<sup>46</sup> Professions with codes marked by (\*) relate to Preliminary VET.

**ANNEX 3. DISTRIBUTION OF THE PROFESSIONS BY COLLEGES AND THE NUMBER OF 2009 AND 2010 GRADUATES IN ARARAT MARZ**

Profession	2009			2010		
	Total	M	F	Tot.	M	F
<b>Ararat Regional State College (in Artashat)</b>						
0303 Teaching of Russian language	10	-	10	8	-	8
0405 Pharmaceutics	27	26	1	29	-	29
0416 Dental techniques	25	22	3	19	19	-
0601 Economics, Accountancy and Audit	31	11	20	42	15	27
2401 Organisation of Transportation and Traffic Control	7	7	-	13	13	-
2312 Cosmetics and makeup art	9	-	9	19	-	19
<i>Subtotal Middle VET</i>	<b>109</b>	66	43	<b>130</b>	47	83
1207* Welding works technology ( <i>Electro- and Gas-welder</i> )	13	13	-	12	12	-
2401* Transport means operation and repair ( <i>Car repair locksmith</i> )	14	14	-	35	35	-
<i>Subtotal Pre VET</i>	<b>27</b>	27	-	<b>47</b>	47	-
<b>Total</b>	<b>136</b>	83	43	<b>177</b>	94	83
<b>Ararat State College</b>						
0201 Science of law	1	1	-	-	-	-
0302 Teaching of Armenian language	11	-	11	13	-	13
0303 Teaching of Russian language	10	-	10	8	-	8
0304 Teaching of foreign language	12	-	12	-	-	-
0312 Teaching at elementary (primary) school	13	-	13	-	-	-
0313 Preschool education	12	-	12	-	-	-
0601 Economics, Accountancy and Audit	22	8	14	19	12	7
0601 Economics, Accountancy and Audit <b>(BGE)</b>	7	6	1	16	8	8
0601 Economics, Accountancy and Audit <b>Part-time</b>	-	-	-	7	6	1
<i>Subtotal Middle VET</i>	<b>88</b>	15	72	<b>63</b>	26	37
0601* Book-keeping ( <i>Book-keeper</i> )	12	7	5	12	8	4
2304* Haircutting art and decorative cosmetics ( <i>Hairdresser</i> )	-	-	-	8	1	7
<i>Subtotal Pre VET</i>	<b>12</b>	7	5	<b>20</b>	9	11
<b>Total</b>	<b>100</b>	22	78	<b>83</b>	35	48
<b>Masis State Agricultural College</b>						
0602 Management	13	3	10	-	-	-
0612 Commodity Research	12	6	6	15	10	5
0612 Commodity Research <b>Part-time</b>	7	4	3	21	9	12
0612 Commodity Research <b>Part-time (BGE)</b>	14	10	4			
2401 Organisation of Transportation and Traffic Control	10	10	-	9	9	-
2401 Organisation of Transportation and Traffic Control <b>Part-time</b>	10	10	-	12	12	-
2401 Organisation of Transportation and Traffic Control <b>Part-time (BGE)</b>	11	11	-			
2707 Technology of canned food and food concentrates	3	2	1	-	-	-
3104 Veterinary	-	-	-	6	6	-
<i>Subtotal Middle VET</i>	<b>80</b>	56	24	<b>63</b>	46	17
3106* Agriculture Mechanisation ( <i>Agricultural production tractor-driver</i> )	10	9	1	16	16	-
<i>Subtotal Pre VET</i>	<b>10</b>	9	1	<b>16</b>	16	-
<b>Total</b>	<b>90</b>	65	25	<b>79</b>	62	17
<b>Ararat State Medical College</b>						
0402 Obstetrics	13	-	13	16	-	16
0405 Pharmaceutics	25	1	24	24	-	24
0406 Nursing	18	-	18	28	-	28
0416 Dental techniques	3	3	-	8	8	-
<b>Total</b>	<b>59</b>	4	55	<b>76</b>	8	68

## ANNEX 4. GROUPING OF THE GRADUATES' PROFESSIONS AND QUALIFICATION BY FIELDS OF STUDY

Field Code and Title of Profession	Title of Qualification
<b>Economics, Management, Clerical Works</b>	
0601 <sup>47</sup> Economics , Accountancy and Audit	Accountant
0601* Book-keeping	Book-keeper
0602 Management	Manager
0603 Finances	Financier
0604 Banking	Banking specialist
0605* Clerical work, information and organisational service	Secretary
0612 Commodity Research	Commodity expert
<b>Engineering, Technology, Manufacturing, Construction</b>	
1001 Electric power plants, networks and systems	Technician
1003* Technical operation of Machines' and Mechanisms' electrical equipment	Electric equipment repair locksmith-electrician
1005 Thermo-power Plants	Technician
1015 Relay protection and automation of electrical power system	Technician
1207* Welding works technology	Electro- and Gas-welder
2014 Technical Service and Maintenance of Radio-electronic Equipment	Technician
2401 Organisation of Transportation and Traffic Control	Technician
2401* Transport means operation and repair	Car repair locksmith
2707 Technology of canned food and food concentrates	Technician
2809* Sewing technology	Tailor
2905 Construction and Exploitation of Roads and Airports	Technician
2907* Carpentry, parquet and glass works	Carpenter
2915 Assembly and exploitation of gas supply equipment and systems	Technician
3401 Metrology	Technician-Metrologist
<b>Information and Communication Technologies</b>	
2203 Computing machinery and automated systems software	Technician
2203* Computer operation	Computer operator
<b>Services</b>	
2302 Service Organisation in Hotels and Tourist Complexes	Manager
2304* Hairdressing art and decorative cosmetics	Hairdresser
2312 Cosmetics and makeup art	Technologist
2311* Catering	Cook
<b>Education</b>	
0302 Teaching of Armenian language	Teacher of Armenian language
0303 Teaching of Russian language	Teacher of Russian language
0304 Teaching of foreign language	Teacher of foreign language
0307 Physical education and sports	Teacher of physical education (trainer/coach)
0312 Teaching at elementary (primary) school	Teacher at elementary (primary) school (form master/ mistress)
0313 Preschool education	Educator of preschool age children

<sup>47</sup> Codes of professions are given in accordance with the RA Government Decisions on approval of the lists of professions of Preliminary and Middle professional Education.

<b>Healthcare</b>	
0402 Obstetrics	Obstetrician/midwife
0405 Pharmaceutics	Pharmacist
0406 Nursing	Nurse
0416 Dental techniques	Dental technician
<b>Agriculture</b>	
3104 Veterinary	Veterinarian
3114 Exploitation and maintenance of agricultural machinery and equipment	Technician
3106* Agriculture Mechanisation	Agricultural machines and equipment repair locksmith Agricultural production tractor-driver

**ANNEX 5. DISTRIBUTION OF GRADUATES BY THE YEAR OF GRADUATION, EDUCATION LEVEL, FIELD OF STUDY AND MARZ**

*Kotayk Marz*

YEAR FIELD	2009						2010						Total, %		
	Mid VET			Pre VET			Mid VET			Pre VET			1	2	3
	1*	2*	3*	1	2	3	1	2	3	1	2	3			
Economics	133	26	19.5%	16	6	37.5%	128	30	23.4%	37	18	48.6%	314	70	22.3%
Engineering	131	15	11.5%	80	20	25.0%	128	22	17.2%	55	26	47.3%	394	148	37.6%
ICT	24	4	16.7%	18	7	38.9%	41	12	29.3%	20	13	65.0%	103	50	48.5%
Education	38	7	18.4%	-	-	-	55	13	23.6%	-	-	-	93	13	14.0%
Services	-	-	-	36	13	36.1%	16	3	18.8%	28	7	25.0%	80	59	73.8%
Healthcare	72	14	19.4%	-	-	-	68	24	35.3%	-	-	-	140	24	17.1%
<b>Total</b>	<b>398</b>	<b>66</b>	<b>16.6%</b>	<b>150</b>	<b>46</b>	<b>30.7%</b>	<b>436</b>	<b>104</b>	<b>23.9%</b>	<b>140</b>	<b>64</b>	<b>45.7%</b>	<b>1124</b>	<b>364</b>	<b>32.4%</b>

\*) 1 – graduates of 2009 and 2010; 2 – interviewed; 3 – interviewed as % of 2009 and 2010 graduates

*Ararat Marz*

YEAR SECTOR	2009						2010						Total, %		
	Mid VET			Pre VET			Mid VET			Pre VET			1	2	3
	1*	2*	3*	1	2	3	1	2	3	1	2	3			
Economics	107	22	20.6%	12	3	25.0%	139	30	21.6%	12	1	8.3%	270	56	20.7%
Engineering	41	11	26.8%	27	-	-	34	3	8.8%	47	7	14.9%	149	21	14.1%
Education	68	10	14.7%	-	-	-	29	8	27.6%	-	-	-	97	18	18.6%
Services	9	1	11.1%	-	-	-	13	7	53.8%	8	1	12.5%	17	9	30.0%
Healthcare	111	25	22.5%	-	-	-	124	30	24.2%	-	-	-	235	55	23.4%
Agriculture	-	-	-	10	3	30.0%	6	4	66.7%	16	5	31.3%	32	12	37.5%
<b>Total</b>	<b>336</b>	<b>69</b>	<b>20.5%</b>	<b>49</b>	<b>6</b>	<b>12.2%</b>	<b>345</b>	<b>82</b>	<b>23.8%</b>	<b>83</b>	<b>14</b>	<b>16.9%</b>	<b>800</b>	<b>171</b>	<b>21.0%</b>

\*) 1 – graduates of 2009 and 2010; 2 – interviewed; 3 – interviewed as % of 2009 and 2010 graduates

**ANNEX 6. DISTRIBUTION OF EMPLOYED GRADUATES BY THE FIELDS OF STUDY, BY MARZ AND BY VET LEVEL**

**Kotayk marz**

	<i>Middle VET</i>			<i>Pre VET</i>			<i>Total</i>		
	<i>Interv.</i>	<i>Empl.</i>		<i>Interv.</i>	<i>Empl.</i>		<i>Interv.</i>	<i>Empl.</i>	
		<i>No</i>	<i>%</i>		<i>No</i>	<i>%</i>		<i>No</i>	<i>%</i>
Economics	56	21	37.5	24	8	33.3	80	29	36.3
Engineering	37	21	56.8	46	15	32.6	83	36	43.4
ICT	16	5	31.3	20	9	45.0	36	14	38.9
Education	20	6	30.0	-	-	-	20	6	30.0
Services	3	-	-	20	11	55.0	23	11	47.8
Healthcare	38	8	21.1	-	-	-	38	8	21.1
<b>Total</b>	<b>170</b>	<b>61</b>	<b>35.9</b>	<b>110</b>	<b>43</b>	<b>39.1</b>	<b>280</b>	<b>104</b>	<b>37.1</b>

**Ararat marz**

	<i>Middle VET</i>			<i>Pre VET</i>			<i>Total</i>		
	<i>Interv.</i>	<i>Empl.</i>		<i>Interv.</i>	<i>Empl.</i>		<i>Interv.</i>	<i>Empl.</i>	
		<i>No</i>	<i>%</i>		<i>No</i>	<i>%</i>		<i>No</i>	<i>%</i>
Economics	52	18	34.6	4	-	-	56	18	32.1
Engineering	14	10	71.4	7	4	57.1	21	14	66.7
Education	18	4	22.2	-	-	-	18	4	22.2
Services	8	-	-	1	-	-	9	-	-
Healthcare	55	13	23.6	-	-	-	55	13	23.6
Agriculture	4	3	75.0	8	6	75.0	12	9	75.0
<b>Total</b>	<b>151</b>	<b>48</b>	<b>31.8</b>	<b>20</b>	<b>10</b>	<b>50.0</b>	<b>171</b>	<b>58</b>	<b>33.9</b>

**Total**

	<i>Middle VET</i>			<i>Pre VET</i>			<i>Total</i>		
	<i>Interv.</i>	<i>Empl.</i>		<i>Interv.</i>	<i>Empl.</i>		<i>Interv.</i>	<i>Empl.</i>	
		<i>No</i>	<i>%</i>		<i>No</i>	<i>%</i>		<i>No</i>	<i>%</i>
Economics	108	39	36.1	28	8	28.6	136	47	34.6
Engineering	51	31	60.8	53	19	35.8	104	50	48.1
ICT	16	5	31.3	20	9	45.0	36	14	38.9
Education	38	10	26.3	-	-	-	38	10	26.3
Services	11	-	-	21	11	52.4	32	11	34.4
Healthcare	93	21	22.6	-	-	-	93	21	22.6
Agriculture	4	3	75.0	8	6	75.0	12	9	75.0
<b>Total</b>	<b>321</b>	<b>109</b>	<b>34.0</b>	<b>130</b>	<b>53</b>	<b>40.8</b>	<b>451</b>	<b>162</b>	<b>35.9</b>

## ANNEX 7. DISTRIBUTION OF EMPLOYED GRADUATES BY TYPE OF ORGANISATIONS / BUSINESSES

	Private employee		State/public employee		Self employed		Family / personal business		Other		Total	
	No	% of empl.	No	% of empl.	No	% of empl.	No	% of empl.	No	% of empl.	No	% of empl.
Economics	31	66.0	12	25.5	2	4.3	1	2.1	1	2.1	47	100
Engineering	22	44.0	24	48.0	1	2.0	3	6.0	-	-	50	"
ICT	11	78.6	1	7.1	2	14.3	-	-	-	-	14	"
Education	3	30.0	6	60.0	1	10.0	-	-	-	-	10	"
Service	8	72.7	2	18.2	1	9.1	-	-	-	-	11	"
Healthcare	10	47.6	9	42.9	2	9.5	-	-	-	-	21	"
Agriculture	4	44.4	5	55.6	-	-	-	-	-	-	9	"
Total	89	54.9	59	36.4	9	5.6	4	2.5	1	0.6	162	"

## ANNEX 8. DISTRIBUTION OF EMPLOYED GRADUATES BY THE FIELDS OF STUDY, ORGANISATIONS' SIZE AND FIELDS

### a) Distribution of employed graduates by fields of study and organisations' sizes

	ECON		ENG		ICT		EDU		SERV		HEAL		AGRO		Total	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
micro enterprises	15	31.9	13	26.0	5	35.7	3	30.0	6	54.5	8	38.1	1	11.1	51	31.5
small enterprises	10	21.3	5	10.0	3	21.4	5	50.0	1	9.1	4	19.0	2	22.2	30	18.5
medium-sized enterprises	10	21.3	5	10.0	1	7.1	1	10.0	1	9.1	3	14.3	1	11.1	22	13.6
large enterprises	4	8.5	8	16.0	-	-	-	-	2	18.2	-	-	4	44.4	18	11.1
Do not know	7	14.9	17	34.0	5	35.7	1	10.0	1	9.1	4	19.0	1	11.1	36	22.2
Refuse to answer	1	2.1	2	4.0	-	-	-	-	-	-	2	9.5	-	-	5	3.1
	47	100	50	100	14	100	10	100	11	100	21	100	9	100	162	100

### b) Distribution of employed graduates by organisations' fields and sizes

	Agriculture	Construction	Industry	Service	Total
micro enterprises	6	5	5	35	51
small enterprises	1	4	4	21	30
medium-sized enterprises	1	1	10	10	22
large enterprises	1	-	6	11	18
Do not know	1	7	10	18	36
Refuse to answer	1	-	-	4	5
	11	17	35	99	162

## ANNEX 9. DISTRIBUTION OF GRADUATES' MONTHLY AVERAGE SALARY RANGES BY MARZ AND GENDER

a) Male

Salary range	Ararat		Kotayk		Total	
	No	%	No	%	No	%
Up to 50,000 AMD	4	12.5	15	20.8	19	18.3
50,001-100,000 AMD	13	40.6	37	51.4	50	48.1
100,001-200,000 AMD	4	12.5	9	12.5	13	12.5
More than 200,000 AMD	1	3.1	-	-	1	1.0
Do not know	1	3.1	-	-	1	1.0
Refuse to answer	9	28.1	11	15.3	20	19.2
<b>Total</b>	<b>32</b>	<b>100</b>	<b>72</b>	<b>100</b>	<b>104</b>	<b>100</b>

b) Female

Salary range	Ararat		Kotayk		Total	
	No	%	No	%	No	%
Up to 50,000 AMD	10	38.5	20	62.5	30	51.7
50,001-100,000 AMD	12	46.2	9	28.1	21	36.2
100,001-200,000 AMD	-	-	-	-	-	-
More than 200,000 AMD	-	-	-	-	-	-
Do not know	1	3.8	-	-	1	1.7
Refuse to answer	3	11.5	3	9.4	6	10.3
<b>Total</b>	<b>26</b>	<b>100</b>	<b>32</b>	<b>100</b>	<b>58</b>	<b>100</b>

c) Total

Salary range	Ararat		Kotayk		Total	
	No	%	No	%	No	%
Up to 50,000 AMD	14	24.1	35	33.7	49	30.2
50,001-100,000 AMD	25	43.1	46	44.2	71	43.8
100,001-200,000 AMD	4	6.9	9	8.7	13	8.0
More than 200,000 AMD	1	1.7	-	-	1	0.6
Do not know	2	3.4	-	-	2	1.2
Refuse to answer	12	20.7	14	13.5	26	16.0
<b>Total</b>	<b>58</b>	<b>100</b>	<b>104</b>	<b>100</b>	<b>162</b>	<b>100</b>

**ANNEX 10. DISTRIBUTION OF GRADUATES BY AMOUNT OF TIME SPENT  
LOOKING FOR A JOB BY FIELDS OF STUDY AND VET LEVELS**

Duration	Economics						Engineering					
	MVET		PVET		Total		MVET		PVET		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
up to 1 month	23	59.0	3	37.5	26	55.3	15	48.4	9	47.4	24	48.0
2-6 months	10	25.6	3	37.5	13	27.7	10	32.3	7	36.8	17	34.0
7-12 months	2	5.1	1	12.5	3	6.4	1	3.2	-	-	1	2.0
13-24 months	3	7.7	1	12.5	4	8.5	3	9.7	1	5.3	4	8.0
more than 24 months	1	2.6	-	-	1	2.1	2	6.5	2	10.5	4	8.0
Total	39	100	8	100	47	100	31	100.1	19	100	50	100

*Continuation*

Duration	ICT						Education		Service		Healthcare	
	PVET		Total		Total		MVET		PVET		MVET	
	No	%	No	%	No	%	No	%	No	%	No	%
up to 1 month	2	40.0	4	44.4	6	42.9	5	50.0	7	63.6	11	52.4
2-6 months	2	40.0	3	33.3	5	35.7	2	20.0	2	18.2	2	9.5
7-12 months	-	-	-	-	-	-	2	20.0	1	9.1	7	33.3
13-24 months	1	20.0	2	22.2	3	21.4	1	10.0	-	-	1	4.8
more than 24 months	-	-	-	-	-	-	-	-	1	9.1	-	-
Total	5	100	9	100	14	100	10	100	11	100	21	100

*Continuation*

Duration	Agriculture						Total					
	MVET		PVET		Total		MVET		PVET		Total	
	No	%	No	%	No	%	No	%	No	%	No	%
up to 1 month	2	66.7	3	50.0	5	55.6	58	53.2	26	49.1	84	51.9
2-6 months	1	33.3	2	33.3	3	33.3	27	24.8	17	32.1	44	27.2
7-12 months	-	-	1	16.7	1	11.1	12	11.0	3	5.7	15	9.3
13-24 months	-	-	-	-	-	-	9	8.3	4	7.5	13	8.0
more than 24 months	-	-	-	-	-	-	3	2.8	3	5.7	6	3.7
Total	3	100	6	100	9	100	109	100	53	100	162	100

**ANNEX 11. THE REASONS WHY GRADATES ARE UNEMPLOYED (THOSE WHO HAVE NEVER WORKED)**

	<b>Economics</b>	<b>Engineering</b>	<b>ICT</b>	<b>Education</b>	<b>Service</b>	<b>Healthcare</b>	<b>Agriculture</b>	<b>Total</b>
Continuation of education	12	2	-	4	-	3	1	22
Family circumstances	12	-	5	6	5	23	-	51
Low payment	1	-	-	-	-	1	-	2
Hard working conditions	1	2	-	-	-	-	-	3
Cannot find a job	21	11	4	8	5	19	-	68
Cannot find work relevant to my qualifications	7	1	3	2	2	7	-	22
Health conditions	-	-	-	-	-	-	1	1
I do not need a job/I am not looking for a job	5	5	2	-	-	1	-	13
Other	2	1	-	1	1	4	-	9
<b>Total</b>	<b>61</b>	<b>22</b>	<b>14</b>	<b>21</b>	<b>13</b>	<b>58</b>	<b>2</b>	<b>191</b>
Share of those who have never worked within the field of study	44.9%	21.2%	38.9%	55.3%	40.6%	62.4%	16.7%	
Share of the field of study within all those who have never worked	31.9%	11.5%	7.3%	11.0%	6.8%	30.4%	1.0%	

**ANNEX 12. RATING OF DIFFERENT ASPECTS OF THE VET INSTITUTIONS' PERFORMANCE BY GRADUATES, % of interviewed graduates**

	Quality of education and teaching methods		Availability of teaching materials and other sources of information		Availability of modern workshop/ laboratory equipment		Organisation of practical training (including in the enterprises)	
	Very bad + Rather bad	Very good +rather good	Very bad + Rather bad	Very good +rather good	Very bad + Rather bad	Very good +rather good	Very bad + Rather bad	Very good +rather good
Ararat State College	-	100	3.1	84.4	6.3	90.6	3.1	96.9
Hrazdan Craftsmanship School	-	100	5.6	94.4	27.8	72.2	5.6	94.4
Ararat State Medical College	3.1	96.9	6.3	84.4	18.8	81.3	6.3	93.8
Byureghavan Craftsmanship School	3.4	96.6	1.7	98.3	28.8	71.2	11.9	88.1
Hrazdan State Medical College	-	100	15.8	84.2	34.2	65.8	-	100
Ararat Regional State College	6.0	94.0	19.4	80.6	37.3	61.2	14.9	85.1
Abovyan State College of Energy	6.1	93.9	27.3	72.7	42.4	57.6	6.1	93.9
Kotayk Regional State College	-	100	30.8	69.2	53.8	42.3	7.7	92.3
Abovyan N1 Craftsmanship School	9.1	90.9	39.4	60.6	42.4	57.6	6.1	93.9
Abovyan State Engineering College	11.1	88.9	22.2	77.8	33.3	66.7	33.3	66.7
Nor-Geghi State Agricultural College	9.5	90.5	9.5	90.5	52.4	47.6	28.6	71.4
Masis State Agricultural College	-	100	17.5	82.5	72.5	17.5	22.5	77.5
Charentsavan State College	25.0	75.0	31.3	68.8	68.8	31.3	56.3	43.8

### ANNEX 13. RELEVANCE OF THE GRADUATES' COMPETENCIES TO THEIR CURRENT OCCUPATION

	<i>Economics</i>				<i>Engineering</i>				<i>ICT</i>			
	<i>Middle VET</i>		<i>Pre VET</i>		<i>Middle VET</i>		<i>Pre VET</i>		<i>Middle VET</i>		<i>Pre VET</i>	
	<i>No</i>	<i>% of empl.</i>	<i>No</i>	<i>% of empl.</i>	<i>No</i>	<i>% of empl.</i>	<i>No</i>	<i>% of empl.</i>	<i>No</i>	<i>% of empl.</i>	<i>No</i>	<i>% of empl.</i>
Theoretical knowledge	22	56.4	3	37.5	12	38.7	4	21.1	-	-	5	55.6
Practical skills	16	41.0	-	-	8	25.8	4	21.1	-	-	6	66.7
General skills	11	28.2	1	12.5	-	-	-	-	-	-	1	11.1
Social skills	20	51.3	6	75.0	17	54.8	15	78.9	5	100	4	44.4
Entrepreneurial skills	3	7.7	-	-	1	3.2	-	-	-	-	-	-
Other competences	5	12.8	-	-	2	6.5	3	15.8	-	-	2	22.2
None of competences	3	7.7	-	-	2	6.5	3	15.8	-	-	1	11.1
No answer	2	5.1	-	-	-	-	-	-	-	-	1	11.1

Continuation

	<i>Education</i>				<i>Service</i>				<i>Healthcare</i>			
	<i>Middle VET</i>		<i>Pre VET</i>		<i>Middle VET</i>		<i>Pre VET</i>		<i>Middle VET</i>		<i>Pre VET</i>	
	<i>No</i>	<i>% of empl.</i>	<i>No</i>	<i>% of empl.</i>	<i>No</i>	<i>% of empl.</i>	<i>No</i>	<i>% of empl.</i>	<i>No</i>	<i>% of empl.</i>	<i>No</i>	<i>% of empl.</i>
Theoretical knowledge	8	80.0	x <sup>48</sup>	x	x	x	3	27.3	13	61.9	x	x
Practical skills	3	30.0	x	x	x	x	2	18.2	13	61.9	x	x
General skills	2	20.0	x	x	x	x	-	-	5	23.8	x	x
Social skills	8	80.0	x	x	x	x	7	63.6	13	61.9	x	x
Entrepreneurial skills	-	-	x	x	x	x	-	-	1	4.8	x	x
Other competences	-	-	x	x	x	x	2	18.2	2	9.5	x	x
None of competences	-	-	x	x	x	x	1	9.1	2	9.5	x	x
No answer	-	-	x	x	x	x	1	9.1	-	-	x	x

Continuation

	<i>Agriculture</i>				<i>Total</i>				<i>Total</i>	
	<i>Middle VET</i>		<i>Pre VET</i>		<i>Middle VET</i>		<i>Pre VET</i>		<i>Mid+Pre</i>	
	<i>No</i>	<i>% of empl.</i>	<i>No</i>	<i>% of empl.</i>	<i>No</i>	<i>% of empl.</i>	<i>No</i>	<i>% of empl.</i>	<i>No</i>	<i>% of empl.</i>
Theoretical knowledge	2	66.7	3	50.0	57	52.3	18	34.0	75	46.3
Practical skills	2	66.7	3	50.0	42	38.5	15	28.3	57	35.2
General skills	-	-	-	-	18	16.5	2	3.8	20	12.3
Social skills	-	-	-	-	63	57.8	32	60.4	95	58.6
Entrepreneurial skills	-	-	-	-	5	4.6	-	-	5	3.1
Other competences	-	-	-	-	9	8.3	7	13.2	16	9.9
None of competences	-	-	-	-	7	6.4	5	9.4	12	7.4
No answer	-	-	-	-	2	1.8	2	3.8	4	2.5

<sup>48</sup>No graduates or no employed graduates