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The vocational education and training system in Armenia

Recent Changes, Challenges and Reform Needs

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with the co-operation of the
Ministry of Education and Science,
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General information about Armenia

Population: 3,750,000

Territory: 30,000 km²

Capital city: Yerevan (population 1,248,700)

Other Cities: Gjumri (211,700)

Vanadzor (172,700) Echmiadzin (65,500) Hrazdan (63,900) Abovyan (61,100)

Administrative division: 10 regions (marz) and the city of Yerevan, which has marz status

Ethnic division (%): Armenians – 95.9

Kurds – 1.7 Russians – 1.6 Others – 0.8

Languages: Armenian (State language), Kurdish, Russian, others

Currency: Dram (introduced in November 1993)

1 USD = approx. 530 AMD

Religion majority: Armenian Apostolic Christian,

minorities: Russian orthodox, Kurdish Muslim etc

State system: Presidential republic

State independence regained: 21 September 1991

Constitution: Adopted on 5 July 1995. It provides for the rule of law, separation of

powers, and guarantees fundamental human rights and liberties

according to universally recognised norms and principles

Member of the United Nations Organisation since 2 March 1992.

"The Republic of Armenia declares education as a foremost field of economic, social, intellectual and cultural development of the society."

The Law on Education of the Republic of Armenia

Introduction

The Armenian National Observatory, created in October 1998, is the latest member of the Tacis National Observatories network. The Observatory was set up with the financial support of the EU Tacis Programme and the technical support of the European Training Foundation, as well as through the direct support of the Ministry of Education and Science and Ministry of Social Security. This report is one of the most important products of the National Observatory.

This report is unique in the sense that it has been prepared parallel to the radical changes taking place in the Armenian system of education, the milestone in those changes being the adoption of the "Law on Education" by the National Assembly on 14 April 1999. The authors began filing this report before the bill had become law and finished it after its adoption. Therefore, they had to make perpetual changes throughout their work, in order to reflect the developments made or taking place in the education system.

The current "Law on Education" stipulates the new structure of the education system, the state provided education programmes, degrees, and qualifications, etc. Until this new system is completely moulded and put into operation, the old one will be in force, and those having entered educational institutions until 1999 will study and graduate according to the old order. Thus the old and new systems are described side by side, their comparative analysis is provided with corresponding drawbacks and advantages and with perspectives for their development.

The authors hope that this report will be useful for relevant international organisations to form an accurate and objective picture of the Armenian education system, thus making the various assistance programmes better targeted and more efficient. At the same time, the concise descriptive, statistical and analytical information contained in the report will also serve the corresponding Armenian bodies, organisations and specialists in their formulation and implementation of corresponding policies, and elaboration of development programs.

The authors acknowledge the active support of specialists representing the Ministries of Education and Science, of Social Welfare, of Statistics, State Register and Analysis, and of Finance. Their input in the formulation of this report cannot be overestimated.

1. Political and socio-economic background information

Political reforms started in Armenia after it gained independence in 1991. This reform process, which is aimed at the establishment of democracy, is continuing. The new Constitution adopted on 5 July 1995 proclaims Armenia a "sovereign, democratic state, based on social justice and the rule of law". The President of the Republic is the Head of State and is elected to office for a five-year period.

The President appoints the Prime Minister and upon the latter's recommendation the rest of the government. The central government is administered through ministries.

Legislative powers in Armenia rest with the National Assembly (Parliament). Members of the National Assembly act by the principle of representative democracy. The National Assembly has the right to remove the President from office through impeachment provided that there is a respective ruling by the Constitutional Court. The National Assembly can vote "no confidence" in the government.

The Constitution has established a Constitutional Court, which judges the conformity of laws and resolutions of the National Assembly, Presidential decrees, and acts of the government within the Constitution, as well as passing final decisions on the results of elections and referenda.

1.1 Demography

Armenia was the smallest territorial unit among the 15 former republics of the Soviet Union, the 12th by population size, and second (after Moldova) by population density. At the same time Armenia has traditionally had a high rate of urban population (Table 1.1)¹.

Table 1.1 Population in Armenia (in thousands)

	1970	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total population	2,547.9	3,125.3	3,574.5	3,648.9	3,722.3	3,740.2	3,753.5	3,766.4	3,780.7	3,791.2	3,798.2
Urban	1,531.6	2,062.3	2,484.4	2,515.7	2,535.7	2,532.8	2,533.2	2,535.3	2,532.7	2,535.4	2,536.0
	60.1%	66.0%	69.5%	68.9%	68.1%	67.7%	67.5%	67.3%	67.0%	66.9%	66.8%
Rural	1,016.3	1,063.0	1,090.1	1,133.2	1,186.6	1,207.4	1,220.3	1,231.1	1,248.0	1,255.8	1,262.2
	39.9%	34.0%	30.5%	31.1%	31.9%	32.3%	32.5%	32.7%	33.0%	33.1%	33.2%

Source: Ministry of Statistics, State Register and Analysis.

All data in the report are official, but may differ from actual figures, an example being that official unemployment data excludes unregistered unemployed people and hidden employment.

Until 1992, the population of Armenia grew steadily. For various reasons following 1992, the rate of growth has dropped abruptly (Table 1.2).

Table 1.2 Natural growth of the population in Armenia

Years	Percentage
1970	2.2
1980	1.5
1990	1.7
1991	2.1
1992	2.0
1993	0.5
1994	0.4
1995	0.3
1996	0.4
1997	0.3
1998	0.2

Source: Ministry of Statistics, State Register and Analysis of RA.

The decline of natural growth of the population was triggered mainly by the reduced birth rate, shown in Table 1.3.

Table 1.3 Births in Armenia

	1970	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total	55,694	70,324	79,882	77,825	70,580	59,041	51,143	48,960	48,134	43,929	39,366
Urban	31,714	43,997	50,144	48,439	43,972	35,316	29,958	29,131	29,388	26,904	24,535
Rural	23,980	26,327	29,738	29,386	26,609	23,725	21,185	19,829	18,746	17,025	14,831

Source: Ministry of Statistics, State Register and Analysis of RA.

Naturally, corresponding changes have also emerged in the various age groups of the population, as well (Table 1.4). Because of the decreasing birth rates the relative number of children under 10 has diminished, and due to job-related emigration the most visible decrease was among adults of the 30-34 age group.

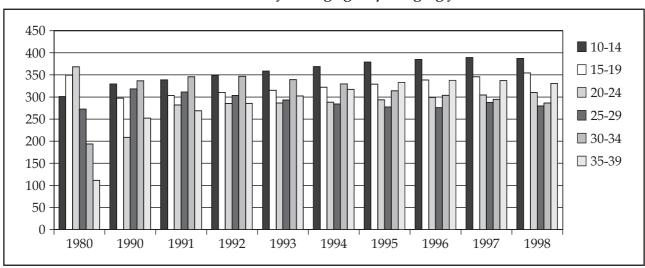
Table 1.4 Population of Armenia in age groups (in thousands)

Age groups	1980	1990	1991	1992	1993	1994	1995	1996	1997	1998
0-4	333.4	383.2	380.3	373.6	356.5	332.3	301.7	272.3	246.4	227.1
5-9	306.3	377.5	385.7	393.3	392.1	385.5	382.5	377.8	368.2	351.4
10-14	300.9	329.4	338.7	349.2	358.4	368.9	378.9	385.1	389.3	387.5
15-19	349.5	297.3	303.4	310.3	315.2	322.2	329.1	338.4	345.8	354.5
20-24	368.2	208.7	281.9	285.4	286.3	288.4	293.8	299.3	304.5	310.2
25-29	272.5	318.5	311.0	303.4	293.2	284.1	277.8	276.0	287.8	280.0
30-34	194.0	336.5	345.7	346.8	339.4	329.6	314.0	303.9	294.8	286.4
35-39	111.6	252.0	268.9	285.7	302.6	317.5	332.9	337.8	336.9	330.9
40-44	208.3	181.1	195.1	211.2	221.8	235.8	248.7	262.8	277.3	294.9
45-49	164.4	107.6	110.0	122.8	140.7	158.7	177.8	189.7	203.5	214.9
50-54	176.2	191.2	183.1	165.3	141.6	120.5	105.5	106.8	116.9	134.5
55-59	100.3	150.9	160.2	166.8	174.7	185.1	184.5	175.0	156.3	134.1
60-64	53.8	161.1	159.2	159.4	152.9	143.7	142.4	149.4	153.1	160.6
65-69	62.0	84.3	102.2	119.1	132.9	138.9	146.1	142.3	141.1	135.7
70-79	92.1	80.9	80.6	83.8	87.1	95.7	104.5	118.7	134.4	149.2
80+	31.8	42.3	42.9	46.2	44.8	46.6	46.2	45.4	44.9	46.2
Total	3,125.3	3,574.5	3,648.9	3,722.3	3,740.2	3,753.5	3,766.4	3,780.7	3,791.2	3,798.2

Source: Ministry of Statistics, State Register and Analysis of RA.

The relative size of the starting age group for vocational education - 15-19 years of age - has grown considerably.

Picture 1. The ratio of the age group ranging from 10 to 39



Since 1988 Armenia has accepted several hundreds of thousands of refugees from Azerbaijan (at the same time local Azerbaijanis have also left Armenia,) some of whom later emigrated to other countries - Russia, the US, and several European countries.

In 1991-1992 due to economic stagnation and massive unemployment, local Armenians also started emigrating. However, there are no precise official statistics on the numbers of those having left to other countries in search of jobs, since no record is made of those leaving; they continue to be citizens of Armenia, and they remain registered in the place of their permanent residence.

Below some data is provided about the population of Armenia in 1999 according to age and gender groups (Table 1.5).

Table 1.5 1999 population of Armenia by age and gender groups (in thousands)

A	Total	Fen	nale	Male		
Age	Total	Amount	0/0	Amount	0/0	
0-4	227.1	107.2	47.20	119.9	52.80	
5-9	351.4	170.8	48.60	180.6	51.40	
10-14	387.5	189.0	32.17	198.5	67.83	
15-19	354.5	173.3	48.88	181.2	51.12	
20-24	310.2	152.3	48.10	157.9	51.90	
25-29	280.0	137.3	49.04	142.7	50.96	
30-34	286.4	149.7	52.27	136.7	47.73	
35-39	330.9	175.1	52.92	155.8	47.08	
40-44	294.9	156.5	53.07	138.4	46.93	
45-49	214.9	115.6	53.79	99.3	46.21	
50-54	134.5	73.0	54.28	61.5	45.72	
55-59	134.1	73.1	54.51	61.0	45.49	
60-64	160.6	88.4	55.04	72.2	44.96	
65-69	135.7	75.7	55.78	60.0	44.22	
70-74	111.1	62.9	56.52	48.2	43.48	
75-79	38.1	24.3	63.78	13.8	36.22	
80-84	25.7	17.1	66.54	8.6	33.46	
85+	20.6	12.7	61.65	7.9	38.35	
Total	3,798.2	1,954.0	51.45	1,844.2	48.55	

Source: Ministry of Statistics, State Register and Analysis of RA.

1.2 Social protection and social policy

The current stage of transition from a centrally planned to a market economy is characterised by a decline in the living standards of the population, which has resulted in extreme impoverishment of thousands of families. The elderly, disabled, orphans, refugees and other socially vulnerable groups are in the most dire straits. Unemployment is soaring, migration has reached high levels, the population growth rate is insufficient to ensure even simple reproduction and the traditional Armenian family appears on the verge of deterioration.

Against a background of decreasing foreign humanitarian assistance and lack of a comprehensive national strategy for poverty alleviation, poverty² is becoming overwhelming. Over half the population (54.7%) is estimated to be below the poverty line and more than a quarter (27%) below the food line (2412 Kcal daily). This level of poverty is to a large degree a consequence of economic and social problems precipitated by the collapse of the former Soviet Union (FSU). These problems have been exacerbated by the devastation caused by the 1988 earthquake and the economic embargo imposed by Azerbaijan and Turkey over Nagorno-Karabakh.

The incidence of poverty is also clearly and closely linked to the high levels of unemployment and underemployment in the country at present, and is amplified by the inadequacy of the basic social safety net to respond to the now widespread needs of the population. The former Soviet system of universal "cradle to grave" social service coverage and utilities subsides has collapsed. At the same time there is no recent tradition of the provision of social services. Whilst the government is struggling to provide a minimum coverage package for those most in need, its narrow revenue base is seriously constraining the public sector's ability to respond adequately. In addition, the health and education sector can no longer be fiscally sustained without major restructuring efforts.

In the health sector, public perception of poor service at a relatively high cost has significantly reduced the demand for medical care. This development, in tandem with the difficult socio-economic environment, has contributed to a worsening of adult health, poor maternal and child health, and the re-emergence of poverty-related diseases. Consequently, the government has taken steps to reform the health care system, which is a legacy of the former Soviet model of central co-ordination by a powerful Ministry of Health. The present system is characterised by chronic underfunding, low service efficiency, low quality, and inequitable access.

The education system of Armenia, which was well regarded during the Soviet era, has suffered an erosion in quality that threatens to reduce both short- and long-term human capital potential in the country. In 1999, the government embarked on a strategy to reform the financing and management of school education and is beginning to study means for reforming higher and post-secondary technical education.

Inadequate national economic growth rates, slow increase of gross domestic product, national income and budget revenues, a soaring shadow economy and consequent lack of accurate data on real incomes of the population pose significant constraints for the implementation of an efficient and targeted social security policy.

In spite of reforms taking place in the sector, the forms and methods of social security under a market economy, their implementation modalities, issues of governance and decentralisation, sources of funding and other pertinent issues have not yet been legislatively and institutionally defined. The framework of interaction between the government and NGOs has not yet been regulated either.

Offices of Social Services operating in all regions and cities of Armenia are responsible for the following social assistance projects:

- Since August 1, 1994 the "Paros" system assesses the financial status of families, the rank of poverty and their needs. The "Paros" system was funded by USAID through the "Fund for Armenia Relief" (FAR) of the Armenian Apostolic Church. Initially the system was used to distribute humanitarian aid to the population. The idea of supporting the traditional Armenian family was one of the basics of the "Paros" system. Currently 230,000 families (27% of families) in the republic are included in this system. An electricity allowance is paid to 70,000 families. The average monthly benefit constituted about 13 USD and average electricity allowance about 3 USD per family.
- The system of "single-family benefit" was developed from January 1997 (as a part of the conditions of IBL SAC II) and inaugurated in January 1999. The main idea is that in the current period the social assistance policy is targeted to the poverty rank of the family rather than the fact that any family member belongs to any recognised vulnerable group. According to the system of family benefit all benefits paid to the population are replaced with a unique family benefit. This criterion is determined by evaluating family vulnerability. The family grade is defined on a cumulative basis. The grades for vulnerability (disabled family member, children, single parent family, unemployed, etc.) are cumulative and the family poverty grade is defined. If the family poverty grade is higher than the check grade, which is 36, the family will receive the benefit calculated for their grade. The grades have differentiation accuracy of one hundredth. Local communities have an important role to include at their discretion up to 5% of the families in their community in the list of those getting assistance.
- The maternity and parental benefits paid to the mother for 2 years are paid separately. Although benefit to the single parents is replaced with family benefit, it may not be less than the total of their previous benefits.

A registered unemployed member of the family increases the poverty grade, and this fact encourages unemployment.

On an annual basis, surveys of the budgets of 3,600 households are planned to assess the poverty in Armenia since 1999. The surveys are fixed in the draft law, will be paid for from the state budget and conduced by the Ministry of Social Security.

Difficulties and constraints of the transition to the market economy resulted in a rise in the number of vagrants and beggars, including children, on the streets of the Republic, which are not typical of Armenian society.

In 1997 the Government launched an inter-sectoral project to provide complex rehabilitation (social, pedagogic, psychological, medical, psycho-cultural, legislative juridical) of vagrant and begging children. Five ministries are responsible for its implementation. The main activities of the project include:

- revision of the existing legislation;
- reopening of special offices of the Ministry of Interior and revision of their regulation mechanisms;
- establishment of an Inter-sectoral Governmental Advisory Committee on vagrant and begging children;
- establishment of a Co-ordination Advisory Committee of NGO's concerned with family and children issues.

1.3 Labour market

Restructuring in employment by forms of property took place by decline in public sector and increase in private sector. In 1991-1997 the level of employment almost doubled in the private sector at the expense of the public sector, reaching 61% in 1997.

The ratio between supply and demand in the employment market has reached 160:1. The surplus of work force without mechanisms of employment protection has resulted in a sweeping exploitation of the work force through extra long hours, voluminous work, poor working conditions and inadequate payment. Generally, the workforce had difficulty in adjusting to the needs of the market economy.

Finally, the shadow economy, or informal employment, with the tacit approval of the state, presently compensates small salaries, low productivity and artificial employment.

The institutional reforms in employment at this stage are mainly directed at the creation of an adequate legal framework.

- ⇒Property reforms including reforms in privatisation have resulted in decreasing job placement. According to expert evaluation during 1995-1996 one job was created against each 3.3 eliminated at various enterprises. The processes of privatisation and liberalisation led to an increase in the movement of the workforce from the state to the private sector.
- ⇒The "official" rate of unemployment in the republic for 1997 was 10.8% (according to experts there is clandestine (hidden) unemployment in the republic). In general, the number of unemployed citizens that are not officially registered with the employment services is considerably high. Women formed 70% of the total number of unemployed. As for the education level of the unemployed, 56% of them had secondary education. Over half were middle-aged. The highest unemployment rate in 1997 was in the earthquake zone 24.8%.
- According to the data supplied by the Ministry of Statistics, State Register and Analysis as of 31 December 1998, the number of the employed in the republic was 1,334,600, including approximately 550,000 farmers. There were 133,779 unemployed on the same date, most of whom (69.4%) were women.
- → Due to allocations made in 1997-1998 by the State Social Welfare Fund to boost self-employment and small businesses, some progress has been detected in this area.
- → The "Law on Minimum Wages" has been in force since 1 January 1999. The minimum wages have been determined as 10 US dollars per month. For comparison, during the first half of 1998 the minimum price of the food basket was 60 US dollars per month.

Some recent trends observed, because of low income levels³.

- ⇒Considering various factors, including the high level of people working on a part-time basis and the low level of salaries, experts consider that more than 75% of the employed are in fact underemployed.
- ⇒Employment does not keep many from poverty, and 21% of the employed are extremely poor and their income is below the food line. Among the employed the level of poverty constitutes 51.7%.
- → The number of partially employed because of over-qualification form 21% of the employed.
- → Those underpaid form 37.8% of the employed.

³ Source: Ministry of Social Security of RA.

- Secondary or dual employment is one of the main ways of adaptation to market reforms and, for many, the only way to earn enough to survive.
- **⇒**Child labour is growing, as a new phenomenon.
- → The Government programme does not provide objectives for provision of quality information on the labour market or identification of latent employment.
- → Mechanisms to promote job security and work standards are not reflected in the programme.
- The officially reported level of unemployment is lower than the real one, and labour statistics, which are currently adapting to the needs of the market economy, vary significantly from ILO and international guidelines.
- Existing statistics do not provide clear information about the migration of the labour force, although there is an intensive movement of the employed of privatised and state enterprises, mainly because of the low level of incomes. In 1997 about 57.6% of the employed changed their work place, in 1994 it was only 23.1%.
- → Another observed tendency is hidden employment, which primarily pertains to those who have their own business. As of 1997 it constitutes about 75%.

Evaluation

Some useful reforms have been implemented in recent years (1997-1998) such as the improvement of employment legislation; the formation of a three-tier system of governance; the establishment of the labour inspection and the development and implementation of certain employment projects. Nevertheless, State regulation of the fundamental issue of the employment of the population remains unsatisfactory.

The discrepancy between demand and supply in the labour market continues to deepen. The insufficient rate and volume of the integration of the Armenian economy in the global marketplace; the slow process of restructuring of industries to ensure satisfaction of the domestic market; the resulting excessive industrial capacity in relation to demand; and the slow rate of new job creation have all led to a decrease in employment and an increase in unemployment. More often than not, newly created jobs quickly become inefficient, and the 'petty retail' quality of the trade and services in the economy remain the basic source of employment and income.

The stalling of the reforms in the higher and professional vocational education sectors also has a significant impact on the situation in the labour market. The demand in the economy for a number of professions still taught remains quite low.

The measures aimed at the development of small and medium enterprises, the provision of grants to the unemployed to encourage self-employment, the training in professions most sought after in the economy and the implementation of additional privileges for the disabled still fail to significantly affect the level of unemployment. Mechanisms to contain massive layoffs in enterprises under privatisation have not yet been developed.

The fundamental challenge of employment of refugees needs special approaches in the regulation of the labour market in the country. Although refugees are entitled to take advantage of the social guarantees stipulated in the law "On the employment of the population", their employment is nevertheless complicated by the fact that they usually possess qualifications that are not in demand in the labour market. Moreover, their command of the Armenian language is in most cases unsatisfactory. Although the data on refugees is not segregated in state statistics reports on

employment, individual surveys nevertheless demonstrate that the level of unemployment among the refugees is around 35-40%.

The legislation that regulates the legal aspects of employment is obsolete. The labour code fails to regulate the relations between the employers and the workforce in the conditions of the liberalised economy.

The labour market will continue to draw not only from the surplus workforce that emerges from layoffs as a result of the decentralisation of the economy and the process of privatisation, but also from the fresh graduates of educational institutions, as well as those who were nominally employed without pay at idle enterprises.

The analysis of the labour market as it was in 1996, 1997 and 1998 demonstrates that the fundamental issues of employment in the country have been aggravated further.

The challenges of employment are most salient especially in the urban environment and more so in the settlements within the disaster zone.

The positive shifts in many indicators within the unemployed in 1998 were mostly determined not by the increase in the number of jobs, but by the adjustments resulting from their re-registration.

There is a notable increase in the employment of rural dwellers. In comparison with the same period of the preceding year such employment has risen by 1.2 points.

1.4 Employment policies

In the field of employment the Government since 1992 has adopted the following laws:

The "Law on the Employment of Population" of December 27, 1992 and the new "Labour Code", which came into force in December 1996. Both laws regulate legal, economic and organisational provisions of the employment of population by defining state guarantees on the right to work and social assistance for unemployed.

- According to the "Law on Employment" citizens have the right to work or not to work at their discretion, with the exception of cases stipulated by the law.
- → The Law defines the Employment Fund as an Agency responsible for supporting the state policy on the growth of employment. The funds of this Agency are accrued mainly from compulsory insurance instalments made by employers and employees.
- → The Law provides the legal basis for the use of state and private insurance services in promoting job placement.

The main body regulating Employment issues in the Republic of Armenia is the Ministry of Social Security. In 1997 the Employment Service (ES), with regional agencies, was formed within the Ministry to confront the employment crisis in the Republic. In 1997 the ES helped 5,400 people to find jobs. According to official data, in 1996-1998 only 7% of people who found jobs were placed through the ES.

→ Despite the fact that ES is legally sanctioned to restrict cases of mass lay-offs, there are no corresponding financial means and operational mechanisms to realize this authority.

- ⇒State labour inspection and regulation over labour relations and work conditions, which are within the mandate of SES are not exercised.
- ⇒During the last 5 years about 60,000 unemployed were involved in the programme "Food for Work" implemented in co-operation with the World Food Programme.
- ⇒Currently the main role of the SES is the initiation of employment searches rather than just assigning and paying unemployment benefits.
- ► Vocational training and psychological assistance functions of the SES are extremely poor. Thus, the number of participants in vocational programs is very small compared to the number of people who actually need it. This could be one reason that both employers and employees prefer to bypass these services.

The strategic targets of the labour and employment sectors are as follows4:

- A. To ensure the optimal level of employment of the population through full application of the competencies and guarantees stipulated by law and through conduct of active employment policies, including:
 - compilation and implementation of territorial and republican employment programmes;
 - active co-operation between territorial bodies of SES and employers;
 - organisation of professional guidance efforts;
 - organisation of training for the unemployed and courses for their re-qualification in conformity with the demands of the economy;
 - creation of new jobs (assigning top priority to the disaster zone) through the increase of funds appropriated to the unemployed to foster self employment;
 - expansion of the scope, and increase in the volume, of organisation of paid public works;
 - development and implementation within territorial and republican programmes of special projects for the employment of individuals that are uncompetitive in the labour market (the disabled, refugees, the demobilised etc.).
- B. To improve legislation and introduce the basis of a social insurance system.
- C. To computerise the system of the state service of labour and employment.
- D. To improve the management of the system.
- E. To ensure legal regulation of labour relations.

Year 1999

- 1. Elaboration of the methodology for the development and implementation of annual territorial and republican employment programmes.
- 2. Improvement of functions providing the unemployed with funds to establish their own businesses and ensure self-employment.
- 3. Establishment of a basis for co-operation with organisations that provide employment services.
- 4. Formation of relevant structures to ensure state oversight over legal aspects of labour relations.

^{4 &}quot;Social Security System Development Programme for 1999-2001" adopted by Ministry of Social Security in 1998.

- 5. Commencement of computerisation efforts of the sector, computerisation of individual territorial centres.
- 6. Development and improvement of legislation, including:
 - a) participation in the development of the new Labour code;
 - b) preparation work towards the ratification of the ILO Convention # 87, 1948 on the 'Protection of the freedom of associations and the right to form organisations';
 - c) development of the procedure for disbursement of unemployment benefits;
 - d) development of the procedure for professional training of the unemployed;
 - development of a draft government Resolution on 'The authorised body of state governance to exercise oversight over the compliance with labour legislation and maintenance of Labour regulations';
 - f) development of the procedure for the creation of new jobs and organisation of professional training with a view of employing the disabled.

Year 2000

- 1. Development of the conceptual framework for the introduction of a system of social partnership.
- Development of the procedure for the processing of early retirement of the unemployed by the territorial bodies of retirement insurance upon presentation by the territorial bodies of employment.
- 3. Development of draft bilateral intergovernmental agreements with other CIS countries for the free movement of labour
- 4. Co-operation with territorial bodies of state governance and local bodies of self-administration, as well as with employers, in issues pertaining to the creation of new jobs (including through foreign loans and investment).
- 5. Establishment of educational centres for the training and requalification of the unemployed
- 6. The development of a draft law 'On mandatory insurance against unemployment'.
- 7. Harmonisation of employment legislation and the structure and governance of the system with the principles of insurance
- 8. Development and improvement of legislation aimed at revealing and preventing hidden employment.
- 9. Computerisation of all territorial centres of labour and employment.

Year 2001

- 1. Development and introduction of individual social security schemes in the domains of labour and employment.
- 2. Development of a legislative framework for regulation of legal issues in the domains of labour and employment.

- 3. Further enhancement and completion of labour legislation with special emphasis on unemployment insurance and individual coverage by social security schemes.
- 4. Establishment of a national computerised network in the domains of labour and employment.

1.5 Economy

On its independence, Armenia inherited an inefficient economy totally destroyed by the collapse of the centralised planning system and by paralysed trading patterns. The 1988 earthquake, political conflict with Azerbaijan over Nagorno-Karabakh and the subsequent trade blockade were the main factors contributing to a variety of economic and social problems. This economic disruption resulted in an inflation rate of 900% at the end of 1993. Average inflation over 1994 was about 1,500%.

Since 1994 and its hyperinflation, Armenia started economic reforms directed towards introducing an efficient market economy focusing on stabilisation programmes to promote economic development through the following key steps:

- recognition and protection of private ownership rights;
- liberalisation of prices;
- rapid large-scale privatisation of land;
- introduction of a new taxation and fiscal system, and new national currency

Due to the above mentioned measures and international assistance the Government managed to achieve a relatively stabile macroeconomic situation with an annual inflation rate of 10-15% by 1995-1996.

Under the structural adjustment programme, the Government is attempting to increase the share of public expenditure directed specifically to the social sector. In 1995 social sector spending was 14.5% of the state budget, in 1996 it grew to 24.4% and to 33% in 1997.

In May 1998 the new Government presented the Action Programme to the Parliament, which aims towards the implementation of the concept "From Stability to Economic Growth". This concept aims at a real increase in GDP of 6% and more per annum, with accrual inflation at the end of the year 10% lower than at the start of the year. This policy will provide favourable conditions for the creation of new jobs, increased domestic savings and external investments and enable an active social protection system for the population.

The recent Russian and East Asian financial crises worsened the external balance indicators, i.e. trade balance and the balance of payments, by the end of 1998. This shows the vulnerability of the Armenian economy and its strong dependence on external conditions. The Russian financial crises had a deep impact on most New Independent States, depending on the degree of their trade exposure to Russia and, in general, led to wider trade and current account deficits. Although, the degree of Armenian trade exposure to Russia is lower than the New Independent States average, nonetheless, it is still high, considerably exceeding the corresponding indicator for Central and Eastern European countries.

Real GDP growth in 1998 was 7.2%, which is the highest since 1994 and more than double the 1997 indicator. It is better than the target (5.2%) adopted in the Government programme for the year. However, this increase was provided mainly through growth in agricultural production, while industrial production declined by 2.5%. Inflation or consumer prices change in 1998 compared with 1997 was 8.7%, compared with 5.273% in 1994⁵.

The Government promotes increased efficiency of budget expenditure, increases the share of capital expenses in the total budget expenses, implements the tax revenues programme and covers all financial flows, including state social funds, credits, donations and humanitarian aid. The final target is to decrease the budget deficit to 0.5% of annual GDP. The Government budget deficit declined from 10.5% of GDP in 1994 to 3.2% in 1998. The 1998 "Budget Law" put the budget deficit target at 6.9% of projected GDP (5.4% without additional expenditure coming from privatisation revenues).

In 1998 the most important problem in this sector was the limitation of the Russian financial markets and taking measures to reduce the reliance of the Armenian economy on the US Dollar. The latter of these problems remains unresolved.

The qualitative development of the banking sector was supported by the submission of business-plans to the Central Bank by the commercial banks, the introduction in banks of international accounting standards, and the improvement of banking control.

Despite the progress in the banking sector, banks still do not participate effectively in investment policy. The Central Bank should actively participate in the creation and implementation of economic development programmes.

At the end of 1998 the stock in deposit of foreign currency amounted to an equivalent of 39 bln. Drams compared with 23.6 bln. Drams in 1997 and reached 71% of total deposits. But some positive signs in this area have been observed: the share of longer maturity (more than 90-days) foreign exchange deposits has increased more than threefold since 1996. The broad money indicator improved by 37.1% compared with 1997.

In 1997 tax policy was revised, the tax base was widened, and tax administration was improved. The tax base was expanded partially at the expense of small business and the informal sector through the introduction of fixed taxation⁶. Indirect taxes, which started to be collected from imports at the border, became the main source of budget revenue. Tax privileges were regulated and the responsibility for State arrears was clarified. The alleviation of the tax burden through direct taxes was aimed at promoting domestic savings and investments. Solid bases for own income were secured for local authorities. A basic post-inflation taxation system was formed. Almost all taxation laws were revised in 1997 and early 1998. The tax burden on profit, income and social obligatory payments were decreased, and this promoted the creation of new jobs.

The minimal tax exemption level (amount for non-taxation of income), will be increased to be close to the minimal consumption basket. At the same time, value-added tax (VAT) will be decreased. The change of direction of budget revenue collection from indirect taxes to direct taxes, such as income tax, is a long-term tax policy objective, which will require the implementation of the structural reforms program. For the present, indirect taxes will maintain their important role as a source of budget revenue.

In the shadow economy the measures are directed to strengthening supervision mechanisms in trade, decreasing the cash circulation in the "black market", and introducing a non-cash payments system for public utilities, including apartments, etc.

Prices have been liberalised and consumer subsidies removed. State trading arrangements have been eliminated and the foreign exchange and trade regime liberalised. From this point, the development of export-oriented industries and increasing of the competitiveness of Armenian goods on external markets is an important economic policy objective.

In 1998 the trade balance continued to worsen as a result of deceleration in world trade and the financial crisis in Russia. The impact of the crisis on the economy of Armenia is reflected mainly through the trade flows and current transfers. In particular, the trade deficit increased compared to 1997 and made up 672.3 mln USD. However, considering the changes to the trade balance during 1995-1998 it is possible to see the essential gradual improvement of the situation. At the same time, the ratio of trade balance deficit to GDP decreased with respect to 1997, but is still high at 35.7%. First of all the deterioration of the trade balance is determined by the worsening of exports. In 1998, exports decreased by 4% and made up 223.4 mln USD.

The privatisation of state enterprises by international tenders will be continued. The Government of Armenia during the next five years anticipates increasing private direct investments resulting from privatisation.

Over 6,000 small enterprises (more than 80% of the total) and some 1,460 medium and large enterprises (70% of the total) were privatised as of the end of 1998. About 87% of all land and more than 80% of the housing stock are privately owned. According to some estimates, 75% of GDP is provided in the private sector.

The peculiarity of the monetary policy anticipated for 1998 was a considerable increase of capital investments through increased savings and foreign currency incomes from privatisation. Strengthening of the macroeconomic environment is required to prevent the further deterioration of the current account deficit and foreign indebtedness.

Private investment, as a priority for Armenia's economic development, enjoys an open-door policy for Foreign Direct Investment (FDI) since 1994. According to that policy, equal legal standards for foreign and domestic businesses are established and maintained by the Government.

The inflow of FDI has accelerated since 1994 and the dynamic of FDI growth is encouraging. The number of new companies registered with FDI amounted to 1,100 from December 1988 to 1997. Among the multinational companies already with operations in Armenia are Bristol Myers Squibb, Castel, Coca-Cola, Caritas, First Dynasty Mines, Huntsman, IBM, Italtel, Midland Bank, Macmillan, KPMG, and others.

In 1995 FDI was reported at 18 million USD, in 1996 – at about 35 million USD, for 1997 it was 52 million USD, and it amounted to 91 million USD for the first three months of 1998. FDI was estimated to be 200 million USD at the end of 1998 due to the privatisation of large state-owned enterprises, including some big hotel facilities. Portfolio investment was 10 million USD for 1996 and is up to 16 million USD for 1997. From 1988-1997, the total FDI in Armenia was about 137 million mainly from countries, where the Armenian Diaspora is concentrated, such as the United States of America, Russia, Iran, and France.

Due to the large shadow economy almost half of FDI is believed to go unregistered.

Responsible bodies

The **State Investment Promotion and Protection Board (SIPPB)** was established by a presidential decree, led by the Prime Minister. The SIPPB sets state investment policy.

The **Armenian Development Agency (ADA),** established by SIPPB will provide the basis for investment promotion and protection, institutional infrastructure, and will implement Government investment and export development policies. It will act, as a "one stop shop" for investors and exporters, and will promote Armenia as an attractive investment economy.

In 1999 the **Central Bank** continues the financial market stabilisation policy, development of the positive trends, and increasing of the efficiency of interest rate controls, maintaining the rate-decrease trend. The main objective in 1999 is keeping prices stable and the inflation rate, under 10%.

- The stable dynamics of interest and exchange rates are the most important problems.
- → The crediting of the economy by the banking sector will increase by more than 18%.
- The small business and industries development credits within the international credit programmes make up a considerable part of crediting volume.
- ➡The improvement of monetary and credit policy instruments, including the creation of the CBANET market dealing centre, and establishment of interrelations between all the financial organisations, are also considered in the 1999 programme.
- → The Government considers the formation of the "financial crossroads"⁷ as an important part of financial policy, through the creation of favourable conditions for financial flows. The development of the secondary market and creation of the regulatory and supervisory body is important. Policy reforms are also anticipated in the production infrastructure branches, including energy, water supply, transport, and communications.
- → The priorities in the industrial development programmes will be given to mineral industry development, state joint-stock companies, and privatised and small and medium enterprises.
- ➡The improvement of state statistics in terms of information dissemination, regulation of the calculation, collection and publishing of indicators by different bodies, and the implementation of international accounting standards will be priorities in this sector.

1.6 Regional development

According to the Law on "Administrative-Territorial Division of the Republic of Armenia" (November 7, 1995) 10 marzes and the City of Yerevan with marz status, were formed on the basis of the former 37 regions and 4 cities of Armenia (Gyumri, Vanadzor, Dilijan, and Yerevan). The new marzes are Aragatsotn, Ararat, Armavir, Gegharkounik, Kotayk, Lori, Shirak, Syunik Vayots Dzor and Tavoush.

Since the beginning of the independence process in 1991 and the move to a market economy, radical changes have taken place. In the regions, and especially in rural areas, the most radical changes are related to the sphere of agriculture, with the forms of agricultural production and the redistribution of agricultural funds. With the privatisation of farmland on the basis of the former 860 soviet and collective farms, thousands of agricultural production units were created in the form of private and collective farms. From 148,263 'individual farms' created in July of 1991 the number grew to 312,909 in January 1995, and to 321,125 in January of 1998. The number of collective farms over the same period reduced from 24,204 to 1244 and finally 256. At the same time the agricultural plot of land for one farm grew from 1.22 hectares (with 0.81 ha. of farming land) in July of 1991 to 1.27 (0.91) in 1995, and in collective farms, correspondingly from 5,81 (4.10) ha. to 32 (23.76) ha. The cattle and poultry of the former farms were also privatised.

In the Republic as a whole, as well as in the regions, privatisation of small and medium trades and services in 1991-1992, and later in 1995 was also very important for introducing market relations. So was the massive privatisation of large, medium and small industrial enterprises starting from March 1995, and the transformation of the bulk of the former state enterprises into open shareholder companies.

⁷ Making Armenia a crossroads of international financial affairs.

For decades Armenia has been an industrial country. Only in recent years has industry been retreating in favour of the agricultural sector. In 1991 industry prevailed over agriculture 1.5 times in added value, yet in 1994 it was the opposite. In 1998 in the structure of the Republic's GDP the ratio of industry was 23.4% and agriculture 33.2%. Similar social and economic changes are taking place in the regions. Mostly in the regions with industrial development (including regional centres) the ratio of agricultural to industrial production grows, which is not triggered by growing agricultural production, but by the decline in industrial production. This phenomenon refers to almost all of the territorial divisions, especially to Armavir, Echmiadzin (Armavir marz), Gavar, Sevan (Gegharkounik marz) Alaverdi, Spitak (Lori marz), Hrazdan, Abovian, Nairi (Kotayk marz), Artik, Maralik (Shirak marz), Kapan, Goris, Meghri (Syunik marz), Ijevan, Dilijan (Tavoush marz), etc. The industrial complexes of Yerevan, Gyumri, and Vanadzor have suffered great relapse. The socio-economic problems have affected employment rates. The number of officially registered unemployed has increased from 56.5 thousand in 1992 to 105.5 thousand in 1995, and 139.1 thousand in 1998. According to 1998 data, the rate of unemployment is especially high in Shirak (20.6%), Vayots Dzor (17.8%), Lori (14.7%), and Kotayk (8.9%). It must be stated that the actual number of full or partially unemployed, and hence the actual unemployment rate, is much higher.

The earthquake of 1988 (loss of one third of the republic's economic potential, death of thousands of people), the Karabakh confrontation and the continuing communications blockade remain significant factors.

As mentioned, the agricultural sector has started to gain crucial importance in recent years. Ararat and Armavir marzes alone, forming 16.1% of total agricultural farmland, have produced a yield worth 117.4 billion drams or about 30% of total agricultural production. Over 3/4 of the vintage and 2/3 of vegetable crops are produced in these regions. About 2/3 of grain is cultivated in Shirak, Armavir, Ararat, Gegharkounik. And more than 62% of potato crops originate from Gegharkounik and Lori marzes.

The marzes of Armavir and Ararat, which before the privatisation of land were specialised in vintage, and yielded only about one tenth of grain, now produce one-third instead. This is mainly related to the growing role of grain as an easily consumed product in the agricultural market, as well as with the objective of subsistence for farms.

Radical changes have taken place in industrial production, as well. Vanadzor and Gyumri, formerly vying for supremacy with Yerevan, have lost their privilege after the earthquake and the volume of joint production in those cities doesn't even reach one tenth of the gross industrial production. During the last two years Yerevan is the leader with a 40% share in the total volume of industrial production. Kotayk marz is second (one quarter), and Armavir marz (13-17%) is third.

In regional construction work, residential construction is of utmost importance, and reached its peak in 1991 when residential buildings and mansions with a total scope of 1,909 square metres, were handed over for exploitation. The large part of this was built and turned over to residents by the construction companies of the former SU republics, republican ministries, and offices in the earthquake zone. In 1992, completed residential construction decreased and formed 360 thousand square meters, in 1993, 370 thousand, and in 1994, 264 thousand. In 1997 and 1998 the total exploited residential housing formed 254.3 thousand and 301.8 thousand square metres, respectively. Construction volume is relatively high in the Shirak marz. Here the rate of residential construction in the total volume of construction formed 25.4 in 1997 and 21.2% in 1998 (in Gyumri 21.3 and 16.9). This is understandable, since the devastating consequences of the earthquake were more severe in these regions. During these years, housing construction in Lori marz formed 5-6% of the total, in Aragatsotn – 6.5-14.9%, in Ararat - 4-10.5, in Armavir – 4.8-13.3%, in Gegharkounik – 3.4-4.8%, in Kotayk about 2.5-13.9%. In the regions of Syunik, Vayots Dzor and Tavoush the volume of housing construction remains low.

In 1998 two schools with 464 student places were completed in Shirak and 3 schools with 1,190 student places in Lori. In Tavoush four schools with 920 student places were reconstructed and reopened, in Shirak - 3 schools with 893 places. During the same year the buildings of Gyumri Musical College and the kindergarten in Vanadzor were reconstructed into three schools with 950 places. At the same time capital and current reconstruction was carried out in 12 Aragatsotn schools, 39 Lori schools, 5 Shirak schools and 8 Tavoush schools.

During the transition to the market economy and its development, industries related to addressing everyday needs of the population have gained special importance in different regions of the Republic (bread products, dairy and meat, canned goods, wines, beer, non-alcoholic beverages, etc.).

The administration, and especially the government, formed by the May 1999 elections of the National Assembly, has adopted new attitudes to the social and economic situation in the country. Realistic strategic plans and measures are being elaborated for economic development and improvement of the socio-economic situation.

The republican and marz administrations consider industrial concerns and enterprises with available material resources, minimal distribution expenses, and corresponding internal and external markets as priority. They elaborate business plans and re-qualification proposals, as well as plans for re-launching some of the old enterprises. Such policy is carried out particularly in relation to the production of cement and gold in Ararat; machinery and glass cans in Armavir; mining and metal works (copper and molybdenum) and textile production in Syunik; machinery, tools and equipment works and production of precious stones in Kotayk; processing of agricultural products in Gegharkounik; chemical, mining and metal works production in Lori; and light industry, production of equipment, stone-cutters, and construction materials in Shirak. Famous foreign companies and investors too, show great interest in the development of industries in the regions.

For further development of agriculture, construction of water pipelines will continue in the regions to regulate main line and inner-farm irrigation ducts and networks, pumping stations, and inner-wells for the improvement of drinking water. Much importance is given to the development of inter-marz co-operation in the agricultural sector, creation of farmers' units, expansion of the land market, organisation of agricultural wholesale markets, and development of small and medium processing industries, in part through making corresponding requests, contracts and payments.

In urban construction, the elaboration of development plans for individual marzes will also be significant. With the purpose of reconstructing the earthquake zone, utilisation of state resources, residential contributions in the form of shares, and provision of loans for private construction will continue. Also, capital reconstruction and paving of roads with concrete and asphalt will also continue in marzes.

An increase in the share of expenses on education is foreseen in the structure of the state budget. The role of marz and local governments in the administration of autonomous schools will grow. Continuing reforms (structural, financial, economic and organisational) in the system of general education, besides being aimed at decentralisation of administration, are geared towards expanding the autonomy of educational institutions to start their funding according to the number of students. In some regions and marzes the problem of securing school facilities for students is not yet resolved, especially in the earthquake zone. Another urgent problem is related to the considerable lack of teachers in marzes, especially in distant and bordering regions, let alone the salary tariffs and delays in their payment.

Formerly, regional co-operation and co-ordination in the main social and economic issues was regulated through the involvement and support provided by the republican bodies. This specifically related to the social issues, construction of industries, their exploitation, training of the workforce,

placement and even recruitment from other regions. Anticipated changes in inter-regional co-operation are mainly related to the new territorial administrative division of the Republic, and current or developing regional policy. In particular, further decentralisation is foreseen in state administration of healthcare, education, and regulation of social systems, the administration of which is delegated to communities. Parallel to the developing democracy and market relations, many important duties of republican bodies are now vested in marzes and communities. In this sense it is necessary to legally clarify the authorities and responsibilities of the local governments, regulate the relationships between the marzial heads and executive bodies of territorial administration, and utilise efficient and controllable mechanisms for the creation and implementation of local budgets. In the economy, inter-regional and inter-community relations will be based on market requirements, with consideration of market prices and other mechanisms (orders, agreements, loans) to build mutual economic ties in production, realisation, purchase of raw materials and their processing.

2. Overall policy in vocational education and training

2.1 Previous development

Armenia has a literary heritage dating back more than 1600 years, and education has long been regarded as the main factor in maintaining national identity.

Having been a constituent part of the former Soviet system of education, the Armenian educational system had a number of serious shortcomings and problems, which were conditioned by residual principles of state financing, by over-politicisation and undue centralisation. All this deprived the system of dynamism and flexibility and the possibility to develop on its own.

Throughout the 70 years of soviet power a state system of education operated in Armenia. With its pre-school, secondary, professional-technical, secondary professional and higher education sub-systems, it met, on the whole, the Republic's needs for socio-economic, cultural and scientific progress.

A new meaning has been given to the social role of education in the Republic of Armenia. It is regarded as a decisive factor for the establishment of national statehood and for the progress of the people. It is managed by the state, which gives it a development priority over other branches of economy.

During transition, some factors have frustrated the process of transformation of the education system. Foremost among these is that more than 40% of the Republic's territory was destroyed by the 1988 earthquake, as a consequence of which more than half a million people were left homeless. About 350 thousand refugees have come from the neighbouring republic to settle in Armenia. The earthquake wholly or partially damaged 277 schools, 245 pre-school establishments and a dozen higher and technical school buildings. Supply of the material and technical basis for the entire system has considerably decreased. Furthermore, in all kinds of educational establishments the normal process of education was disrupted in the winter months of the past years.

Until 1991 vocational education in Armenia, just as in the former Soviet Union, was being carried out on two levels:

- 1. professional-technical education
- 2. secondary professional education.

PTI's ("Tekhnikum" and "Usumnaran"). Admittance to PTI's was realised on the basis of basic general education (eight-years) and secondary (complete) general education (10 years). PTI studies lasted correspondingly three years or one year. Graduates received the qualification of a "Worker".

Secondary professional education was realised in the secondary professional educational institutions - **SPI**'s ("*Tekhnikum*" for technical profile and "*Usumnaran*" for humanitarian profile). Admittance to these institutions was realised on the same basis, and the years of study depended on the level of the applicants' prior education, as well as the profession, and lasted from two to five years. The graduates

were granted the qualification of *Technician* or equal to that qualification of a technologist, accountant, school class headmaster, nurse, musical ensemble performer, and other certificates.

Both PTI and SPI also granted certificates of secondary general education (the professional diploma was considered a certificate of secondary general education) to those admitted after basic general (eight-years) education.

A new type of educational institution - colleges - have been introduced since 1991, which were officially considered SPI institutions, but graduates were granted higher diplomas of *Junior Engineer* or equivalent qualifications. Admittance to colleges was realised only on the basis of complete (10 years) secondary general education, and the duration of studies was 3 years. The specifics of colleges was that, through implementation of corresponding curricula, students having graduated the second year with the highest results were able to continue their education in a corresponding higher education institution from the third year.

Though the Law on Education stipulates a different education system, a detailed description of the old one is extremely important for the following reasons:

- it is still in operation and students admitted until 1998 are still studying according to the old system and will be granted corresponding qualifications;
- the new system has been in operation only since September 1999;
- it emphasises the content and volume of the forthcoming changes.

Considerable work needs to be carried out by corresponding authorities to change the old conceptual approaches to conform with the new conceptual structure and mechanisms stipulated by the Law on Education.

The main trends of the last years' changes made in vocational education were as follows:

- introduction of colleges, which allowed graduates a higher degree of certification (junior engineers), and allow them to be transferred from vocational to higher educational institutions.
- introduction of paid education which allowed control of the state order for specialists, to gradually bring it closer to the real demands of the State (State institutions), at the same time making it possible for educational institutions to offer broader and more flexible educational services to the population in the form of paid education, and reciprocally, allowing the population to choose and get education in the area of their preference.
- establishment of private (non-state) educational institutions as a form of free economy (there are lots of problems in this area; e.g. until recently, non-state educational institutions' activities were completely out of state control, and certification granted by them was not recognised by the state).

Naturally, these reforms are not enough to resolve all the problems facing the Armenian vocational education system.

The main obstacle in the way of reforms until 1999 was the absence of a legislative basis, and consequent absence of a corresponding state educational program.

The 1999 Law on Education stipulates that state policy in education should be organised on the basis of a *national programme of the development of education*, which upon presentation to the Government must be confirmed by the National Assembly.

At present this programme is still in development and after its ratification it will be strictly implemented in the education system, including vocational education. To secure further development, certain reforms require urgent introduction, directed to the resolution of some of the serious problems that have accumulated.

One of the reasons underlying these problems is that vocational education has never been as popular as higher education, even more so after the 1991-1992 economic recession when the number of unemployed increased dramatically, and the state order started to decline and be replaced by paid education. The number of those striving for higher education has not decreased, despite the fact that the state order has been steadily reduced from one year to the next, and the yearly tuition is incomparably (about 20 times) higher, than at PTI or SPI education institutions.

Table 2.1 The enrolment plan for higher education (state order and paid education) and the number of applicants

	1992	1993	1994	1995	1996	1997	1998
State order	3,809	3,695	3,000	3,701	4,903	5,174	5,392
Paid education places	6,310	5,650	4,900	3,895	3,566	3,387	3,495
Total places	10,119	9,345	7,900	7,596	8,469	8,561	8,887
Number of applicants	13,927	13,483	13,145	12,998	11,799	11,633	12,965

Source: Ministry of Education and Science, Department of Higher Education.

Table 2.2 The enrolment plan for middle (former secondary) professional education (state requisite and paid education) and the number of applicants

	1992	1993	1994	1995	1996	1997	1998
State order	8,291	7,266	7,255	5,564	4,225	4,019	2,088
Paid education places	981	2,687	2,189	5,550	5,288	8,228	9,641
Total places	9,272	9,953	9,444	11,114	9,513	12,247	11,729
Number of applicants	14,917	12,853	11,531	13,623	12,919	11,665	11,322

Source: Ministry of Education and Science, Department of Professional Education.

Throughout the Soviet period in Armenia there was serious competition for few higher education vacancies. The number of university graduates, just as in other small countries of the Soviet Union like the Baltic States, was not restricted by the number of people striving for higher education or their intellectual abilities, but by the number of higher education places planned by central government.

This phenomenon was not so much related to the fact that higher education provided better job opportunities as by the peculiarity of national mentality to excel in everything. An individual's social stature was not so much related to his or her financial position as to his education and the "level" of the work performed even if it was not well-paid. One of the most striking factors of the soviet era was the fact that workers often received better wages than those with higher education, e.g. engineers.

2.2 Further options

The prospective socio-economic needs of the Republic of Armenia, with the objectives of preserving and developing the nation's intellectual potential more efficiently, have made contextual and structural reforms in the system of education, and vocational training as an important component, most crucial. Such reforms will guarantee the balance between the system and the market economy, and will help to bring the skills and knowledge of specialists to the level of international standards.

Financial problems facing the Republic are one of the main hurdles in the way of reforms, which prevent necessary investments in new curricula and educational materials, furnishing the buildings with contemporary materials and equipment, and involving better-qualified specialists in the process of instruction. Private institutions, or state institutions with paid education are also unable to resolve these problems single-handed through tuition fees alone, since in that case they would have to raise the tuition fee dramatically, which is also impractical because of the low payment capacity of the population.

One solution might have been financing by enterprises. Unfortunately, in current economic conditions, they too are not yet able to make substantial contributions. Besides, psychological drawbacks and the traditional distrust for vocational education are still at work, moreover, there is a surplus of specialists (especially with higher education) prepared by the old methods. Enterprises and businesses have not yet passed to full-scale use of modern technologies, which would have required a large number of new specialists.

Social issues also present a serious problem for reforms. Making educational institutions rationalise will create a large army of unemployed teachers, who will be unable to find work elsewhere. Enterprises will be faced with the same problem, when replacing the old specialists with the new ones. At present, when the state is unable to address the social needs of the unemployed, growth of their numbers is unacceptable. Therefore, reform measures in the system of education, which would result in increased unemployment, need to be realised in a prolonged, gradual manner.

3. Characteristics of the vocational education and training system

3.1 Organisation of education and training provision

Different levels of education in Armenia are realised through different educational programs. Educational programs define the contents of education for a specific level and area, the required volume of learning, skills and competencies.

The "Law on Education" defines the following educational programs implemented in Armenia;

- 1. General education (basic and supplementary);
- 2. Professional education (basic and supplementary).

3.1.1 General education

General educational programmes are geared towards the comprehensive development of an individual, shaping his/her approaches, provision of prerequisites for conscious choices and accomplishment of professional educational programmes according to an individual's preferences and abilities.

General educational basic programmes are:

- 1. pre-school education
- 2. elementary general education
- 3. basic general education
- 4. secondary (complete) general education

The main goals of *pre-school education* are:

- creation of prerequisites for the physical, moral and mental development of a child,
- provision of requisites to communicate in his/her own language and on that basis to study foreign languages,
- development of elementary competencies in mathematics,
- elementary norms of ethics,
- introduction to biology and environmental science,
- introduction to history and elements of national culture,
- shaping love and respect for his/her motherland,

- acquisition of elementary skills and abilities in handicrafts, and
- preparation for school education.

In realising pre-school educational programmes the state leaves the primary role of upbringing to the family, and provides the necessary conditions to organise education of children at home.

To support the family the State creates pre-school institutions - nursery-kindergartens and kindergartens.

The goal of *general education* is creating favourable conditions to shape and bring up intelligent and progressive citizens able to show their intellectual, spiritual and physical abilities.

The main objectives of general education are as follows:

- acquiring basic understanding of nature, society, technology, production and the environment by students;
- provision of necessary conditions for self-education and self-improvement in the system of continuing education;
- shaping a socially active individual and a citizen who is in touch with his national roots and universal values, a heir to his national culture, its moral values and psyche.

Secondary (complete) general education is realised in a three-tier secondary general school, with a total of 10 years of instruction and through the following consecutive stages:

- Elementary School (1-3 forms)
- Middle School (4-8 forms)
- Senior School (9-10 forms)

In *elementary school* instruction is geared toward ingraining elements of logic and cultural-linguistic psyche, shaping elementary skills in learning and work, introduction to national and universal values.

In *middle school* education is geared towards shaping the students perception of a healthy lifestyle, formation of a scientific viewpoint about the surrounding world and nature, and imparting a minimum amount of necessary information for individual work, education and individual social action.

The first two tiers of secondary general education form the *basic school*.

In *senior school* instruction is geared toward acquisition of knowledge for basic general preparation of the learners. According to the learners' inclinations, abilities and skills in senior school, additional instruction in various areas can also be carried out.

Basic general education is compulsory until a learner turns 16, if not completed earlier. After a learner is 16 years old, he can leave school with his parents' consent.

3.1.2 Professional/vocational education

Professional educational programmes are aimed at preparing specialists in corresponding qualifications, shaping their abilities and skills through the consecutive system of general and professional education levels, and endowing them with extended knowledge and better skills.

Professional educational basic programmes are:

- 1. primary-professional education⁸
- 2. middle professional education⁹
- 3. higher professional education
- 4. post-graduate professional education

The goal of *primary-professional education* is preparation of learners for jobs requiring preliminary professional qualifications on the basis of basic general education. Primary-professional education is realised at senior school handicraft classes or at professional training centres of enterprises, companies and organisations.

The goal of *middle professional education* is to prepare a workforce with middle professional qualification on the basis of secondary (complete) general education, and to expand the students' general and professional competencies.

The government defines those professions in relation with which middle professional education can be organised after only basic general education.

Middle professional education is realised in middle professional education institutions (MPI's) (colleges), which can also realise general education and primary-professional education. Graduates of MPI's are granted a middle professional qualification - diplomas of *junior specialist*.

At present, the Ministry of Education and Science works out the order in which graduates with excellence will pass from one educational level to the next, to be ratified by the government.

The goal of *higher professional education* is preparation and re-qualification of highly qualified specialists, meeting the educational development requirements of persons on the basis of general and middle professional education.

There are four types of higher educational institution in Armenia: University, Institute, Academy and Conservatory.

The status of higher educational institutions is defined according to the form of study (full-time, distance, self-learning), the legal-organisational form, and state accreditation.

The following higher professional education degrees exist:

- 1) Bachelor
- 2) Specialist with diploma (certified specialist)
- 3) Master

The list of professions taught by higher educational institutions, and resulting in diplomas, is approved by the government, on submission by the Ministry of Education and Science.

Based on type and according to established rules, the higher educational institution can also conduct general and middle professional educational programmes in professions agreed upon with the Ministry of Education and Science.

The goal of *postgraduate professional education* is enhancement of scientific-pedagogic qualification of people with higher education. Postgraduate professional education is conducted in postgraduate divisions (aspirantoura, internatoura, and ordinatoura) of higher educational

⁸ Primary-professional education will be jointly called *vocational education*.

⁹ Middle professional education will be jointly called *vocational education*.

institutions and scientific institutions with researchers' educational programmes, as well as in educational centres with master's educational programmes or those of specialists with diploma.

3.2 The shaping of vocational education and training policy and its provision

3.2.1 Social dialogue and industrial relations system

Social dialogue in Armenia (particularly, in the realm of education) has just started to emerge. Economic relations are still in a formative stage, accumulation of primary capital is in progress, the social policy of the state has not been finally shaped, and the VET system itself is still in transition and has yet to prove its viability and efficacy. A most important component in social dialogue - trades unions - the role and essence of which was distorted in the soviet era, are undergoing a deep crisis and still have to revive themselves.

According to official data the Confederation of Trade Unions involves 26 branches and formally comprises 941,649 members, about 65% of whom are officially employed. Expertsi evaluation is that more than 80% of employees have no relationship with trade unions at all, and more than 40% are not sure whether they are members of any trade union, although trade union deductions are made monthly from their salaries.

The primary barrier to efficient social dialogue, it seems, is the fact that the society itself has not yet recognised its role, and what is more important, its essence. Undoubtedly, social dialogue might acquire quite different forms and expressions in different countries, depending on the structure of a given state, the level of economic development, national peculiarities and traditions. Nevertheless, in Armenia, with years of educational tradition, where education is still considered as very important, social dialogue in this realm is bound to begin sooner or later, and the 'best practice' experience of other countries in this area will contribute to its effectiveness.

3.2.2 Involvement of enterprises

Involvement of enterprises in the organisation and implementation of the education process in Armenia is extremely low. The role of enterprises in this area has almost stopped since independence. Where the role was clearly, often formally, defined and included the number of specialists, organisation of practical training, obligation of job placement, implementation of curricula on the job, and superintendence of educational institutions, the recession, unemployment, and privatisation has left enterprises uncertain of their ability to participate.

By "involvement of enterprises in education" we mean, first and foremost, the placement of orders for specialists, with corresponding financing and guaranteed future jobs, as well as education or its components carried out at enterprises. Other forms of participation e.g. participation in the development of education policy, etc., can only be considered after this. The above mentioned can be realised only in two conditions; there should either be 'forcing' legislation or immediate economic interest in promoting education.

At present there are no laws or regulations in Armenia directly compelling enterprises to participate in the process of education in any form (see section 5.2 of this Report). The only existing thing is the

provision of the "Law on Education" according to which one stage of primary-professional education *may also be* realised at enterprises.

In terms of economic interest, the owner or the employer must be firmly convinced, that his investment in the preparation of specialists will be justified and bring additional profits through better qualified work. Enterprises do not yet fully trust the quality of specialists provided by the current system of vocational education. Because of inadequate investment in modern technologies, enterprises prefer to keep experienced employees, specialised on a given job in the course of many years, rather than take a new one, even one prepared through modern methods. Ultimately, this results in isolation of enterprises from the education system, and their indifference in making material or organisational contributions to the development of vocational education, which could have made this level of education more prestigious, more efficient, and secured the progressively high quality of prepared specialists.

Stringent measures are necessary to break this vicious circle; including daring experimentation, and illustrious examples of efficient co-operation between enterprises and the education system (or individual education institutions).

The co-operation between the largest Armenian banks and the Financial-Banking College established in Yerevan in 1998 could be such an example. The College was founded in the framework of the Armenian-German inter-governmental agreement on the implementation of the "Secondary Professional Education in Banking Specialities" project. Besides the newly introduced "dual" method of education for Armenia utilising modern instruction materials in the framework of the above-mentioned program, it also applies an important method of preparation - supplies for immediate orders placed by enterprises. Most of the tuition for the students is paid by various banks, which also carry out their practical training, participate in consultations with the college's consultative bodies, etc. The tools of this model will be clearly moulded in the college and extended over other MPI's, as one of the primary models of preparing specialists.

In the last two to-three years, especially in the industrial regions of Armenia some enterprises have started requesting specialists, which are not yet financed by the customer, but the tendency itself is as important. Given the right direction, this might result in tangible and effective co-operation between vocational education institutions and the 'consumer' enterprise, ultimately to corresponding financial investments and guarantees of job placement for graduates, etc.

3.2.3 Provision of vocational education and training

Instruction in vocational education institutions is realised both for free (by the so-called state order) and for a tuition fee. The latter has been introduced since 1992.

The number of vacancies for free education on state order, is confirmed annually by the Government, based on the demand for corresponding specialists, as well as on the volume of budgetary allocation for vocational education.

The number of places for enrolment in paid education is confirmed annually by the Ministry of Education and Science and the Ministry of Finance jointly, based on the capabilities of a given educational institution (its building conditions, availability of teachers, curricular literature, etc.). Involvement of the Ministry of Finance in this process is explained by the fact that, though the tuition is non-budgetary, it is still considered a state resource.

As seen from Table 2.2, the state order has decreased since 1992, and gradually been replaced by growing paid education.

The rate of tuition according to the decision of the Government is determined by the educational institutions themselves. It may fluctuate from 30 to 150 times the minimum wages (with the exception of the Yerevan State Medical College, where tuition is 400 times of the minimum wages) and it depends both on the profession and the residential district. In the said range, tuition rates for arts specialities are relatively high, since it entails considerable expenses for individual training; and the most popular specialities (such as pedagogy, law, health care, languages) are in highest demand among the population. However, in some distant or underdeveloped regions and residential areas, despite the type of speciality, the tuition tariffs are minimal.

In vocational education institutions enrolment is realised on a competitive basis, through entrance examinations. For each profession entrance examinations are required in two-five subjects. The results are evaluated on a 20-point scale, and selection is based on these results.

First and second degree handicapped¹⁰, orphans (up to 18 years of age), and children and spouses of deceased soldiers enjoy entrance privileges, who upon passing the entrance examinations successfully, are enlisted in the places for non-competitive free education (if such are foreseen in the line of profession they have chosen).

Up to and including 1990, citizens up to 30 years of age could enter vocational institutions. In 1991 the age restriction was cancelled.

In 1999 on an experimental basis, enrolment for paid places in state MPI's (with the exception of medical, pedagogical, military, sports and arts MPI's of state ownership) was carried out without entrance examinations, based on **certification marks** of basic general or secondary (complete) general education. Only those applicants wishing to be accepted for free placement had to take entrance examinations. The results of this experiment have yet to be thoroughly analysed, upon which it will be decided whether this method will still be used in the future. However, the rate of applicants for 1999 in comparison with the previous two years had grown considerably.

Vocational education in Armenia is realised in educational institutions. The school year, which starts on September 1 and ends in June-July, consists of two semesters, each of which is concluded with examination sessions. Extensive attention is paid to the theoretical instruction of students. Generally a three or four month theoretical instruction is followed by two to four weeks of practical training (placement). The following types of placement are employed: *educational placement*, realised in educational institutions, *technological placement*, carried out at enterprises, and *pre-diploma placement*, implemented immediately before graduate examinations.

Previously, placements were carried out in a centralised way at enterprises defined by the state. At present, with reduced production, sharp decline in the demand for specialists, and privatisation of enterprises, serious problems have emerged in organising practical training. Often, companies consider organisation of practical training at their facilities as a service rendered to educational institutions, and require corresponding compensation.

The education process is concluded by the defence of a Diploma-Project or by Graduation State Examinations. The latter are implemented by the State Certification Commissions, which decide on granting qualification to graduates (actually this is one of the methods of quality control over vocational education and the State is responsible¹¹). The chairs of State Certification Commissions are appointed by the administration of a given educational institution (Ministry), and the Commissions have to report to the administration on the course of state examinations or the defence of diplomas.

At present there are 77 middle professional educational institutions and 65 professional-technical educational institutions in Armenia. The distribution of MPI's and PTI's in Armenia by marzes is shown below.

¹⁰ There are three levels of definition for the handicapped population. The first level indicates the most severe.

¹¹ Furthermore, there is also a system of inspections on the learning process implemented during the school year.

Table 3.1 The distribution of middle professional educational institutions (MPI) by marzes

Marz/City	Number of middle professional institutions	Number of Branches ¹²
Yerevan	28	0
Shirak	10	0
Lori	10	0
Gegharkounik	6	2
Syunik	7	0
Tavoush	5	0
Kotayk	5	2
Ararat	2	3
Armavir	4	1
Vayots Dzor	0	1
Aragatsotn	0	1
Total	77	10

Source: Ministry of Education and Science, Department of Professional Education.

Table 3.2 The distribution of professional-technical educational institutions (PTI) by marzes

Marz/City	Number of professional-technical educational institutions
Yerevan	20
Shirak	10
Lori	5
Gegharkounik	5
Syunik	3
Tavoush	4
Kotayk	6
Ararat	3
Armavir	3
Vayots Dzor	2
Aragatsotn	4
Total	65

Source: Ministry of Education and Science, Department of General Education.

Branch is a territorial subdivision of an educational institution. It acts in a different city and in a broad sense can be considered as a separate institution.

The list of institutions can be found in annex.

In recent years, due to the industrial decline in the Republic, in a number of those educational institutions, more popular humanitarian professions have replaced technical and technological professions. At present in many institutions named "Industrial-Technological", "Technological" or "Polytechnic", and mainly on a paid basis, courses on "Instruction in Elementary Classes", "Pre-School Education", "Law", "Accounting" and similar courses are being organised.

The new list of specialities for secondary vocational education has already been worked out and adopted. The list, consisting of 435 specialities in 28 speciality groups, should best address the current and future requirements of the Armenian economy, and at the same time meet the demand of conformity with other countries (first of all, Russia), to secure mutual recognition of certificates and qualifications.

Instruction at vocational institutions is implemented according to professional curricula containing the list of subjects to be taught, hours of instruction planned for each of them and their distribution across semesters. Formerly curricula ratified by the Soviet Ministry of Education were carried out, some parts of which, though adapted and modified, are still in use. All educational institutions specialised in a given profession were guided by the same curriculum. The Law on Education provides for curricula to be developed by the educational institutions themselves and confirmed by the Ministry of Education and Science. In future, different educational institutions training for the same profession can be guided by varying curricula, the only requirement posed by the State being their congruity with state education standards. In the past, subject curricula were also provided in a centralised manner, but during recent years they have been mostly revised and modified by educational institutions.

As stated above, vocational education institutions (VEI) can realise instruction both on the basis of eight and 10 years of previous education. During the first year of instruction those enrolled on an eight-year basis are taught general subjects (by a condensed programme of secondary schools' 9-10 grades) and principles of some professional subjects. Arts schools make an exception, where from the very first year of education the students are exposed to a full course of professional subjects, and the general education subjects are reduced to a minimum.

In all professional educational institutions, including higher institutions, irrespective of the preliminary education basis and in conformity with the provision of the Law on Language, all students have to study Armenian. In contrast with the curriculum of general schools, in professional educational institutions instruction in Armenian is dedicated to developing linguistic skills and improvement of the professional speech specific for a given area.

Unfortunately, instruction in foreign languages, including Russian, (still of primary importance for Armenia) is not at an appropriate level in VEI's. Russian and a second foreign language (English, French or German) is studied during the first year by students enrolled on the basis of primary general education as a compulsory course of secondary general school, and those admitted on the basis of secondary general education study foreign languages as optional courses. In relation to specific professions other foreign languages are also mandatory, like Latin in medicine and Italian in vocal classes.

Professors with higher education teach in VEI's. Some general vocational subjects are usually taught by teachers with pedagogical education, and other disciplines by tutors with corresponding professional higher education. Teachers with non-higher (secondary vocational) education form 4% of the whole pedagogical staff. In PTI's headmasters with industrial training make up the majority. These are specialists with secondary vocational education and their duties include provision of knowledge to the students in specific practical skills.

Formerly, once every five years all VEI teachers passed mandatory retraining in a centralised manner, but from 1991 those courses were cancelled due to financial difficulties, and the issue of re-qualification was left to the educational institutions themselves and the teachers' own initiative. Resuming the programme of teachers' re-qualification is considered one of the central issues in reforming the system of VET.

Up to and including 1990, distance training was largely implemented in SPI's, and it provided a large number of young people with the opportunity to work and get education concurrently. Unfortunately, mechanisms of implementing and controlling this type of education were imperfect, which gradually reduced the quality of instruction, and during recent years it has become almost uncontrollable and inadequate, and has been practically cancelled since 1991, being preserved only for agricultural professions. However, due to the social hardships, it has not disappeared altogether during recent years, on the contrary, the need for distance education has grown.

On 18th May 2000 the government adopted the list of 19 professions to be taught in distance education from the 2000-2001 school year.

The Law on Education also envisages the external style of instruction, which will be launched after corresponding procedures are worked out.

Over the last couple of years efforts were made to make admittance plans of VEI's more efficient (distribution of professions by educational institutions and distribution of places by profession) and in conformity with the needs of the labour market. With that purpose the Ministry of Education and Science requested information from the marz administrations, and republican and territorial employment services about the demand for vocational specialists according to professions, and their employment and unemployment rates. Unfortunately, the above named administrations do not gather such information, which makes planning and rationalising through this method very difficult.

Nevertheless, employment centres gradually adhere to new, improved methods of evaluating the labour market, which will allows their data to be used in the future to plan enrolment rates in VEI's.

3.3 Continuing vocational training and management training

3.3.1 Continuing education

The concept of "continuing education" can have most broad and diverse interpretations. It is often used to indicate both a specific type of education, and a specific principle of organisation and implementation of education, for instance, transition from one stage of education to another.

It seems more appropriate to use the term "continuing education" for education, training, and re-training (or simply for acquiring, expanding, or advancing in one's knowledge, abilities and skills), which is not part of the general system. That is to say, continuing education should be used in relation with those organised and systematic education projects, styles, methods and activities, which in their contextual and structural sense, are supplementary to the existing general structure of education (defined, accepted or guaranteed in a given state). Continuing education often bears non-formal character and non-traditional forms in contrast to traditional education programmes, institutions, administration and other characteristic features. It provides an individual with a lifetime opportunity to better adjust to the demands of the labour market, or simply to satisfy his/her own educational needs.

Formerly, there were some restricted, but clearly organised forms and institutions of continuing (or additional) education in Armenia. These were primarily the so-called "Faculties for social studies" and the "Institutes (faculties) for quality improvement".

With the demise of the Soviet Union's centralized system and lack of corresponding funds the number of these institutions and trainees attending them reduced dramatically. The numerical data on the ratios in this system at present is provided in Table 3.3.

 Table 3.3
 Supplementary Education in Armenia

	Maintenance funds for the Supplementary Education Institutions (thousand drams)		Distribution of state order in Supplementary Education Institutions (thousand drams)		Number of trainees in 1999
	1998	1999	1998	1999	
Ministry of Education and Science	45,019.2	80,633.6	0	0	8,723
Ministry of Culture, Youth Affairs and Sport	1,330.7	0	0	0	0
Ministry of Justice	6,143.0	8,116.3	0		600
Ministry of Foreign Affairs	41.0	0	0	0	0
Ministry of Social Security	8,665.6	10,352.1	0	0	600
Ministries of Finance and Economy	1,850.0	0	0	0	0
Ministry of Health	0	0	47,274.0	56,310.8	3,110
Emergency Management Administration	6,959.0	9,981.2	0	0	1,400
State Language Inspectorate	6,143.0	6,146.4	0	0	530
Public Administration School	59,792.9	68,309.6	0	0	78
Total	135,944.4	183,539.2	47,274.0	56,310.8	15,041

Source: Ministry of Finance.

In the new economic conditions state and private organisations have started offering some educational services in accounting, computer training, languages, and other such courses, which are not addressed by the formal system of education. To some extent these courses helped an individual to have better chances in finding a job, or being transferred to a better paying job in circumstances of growing inflation and unemployment. In addition, employment centres have started making their first steps in organising courses to retrain the unemployed. Much has to be done particularly in this area, starting from the organisational forms and funding sources, and ending with the context of such training, which is yet to be clarified.

However, despite some progress, continuing education is still regarded as a way of satisfying personal educational or simply spiritual needs in Armenia. Unfortunately, this system does not enjoy much popularity, and it has a long way to go become ingrained in people's minds (be it a state or private employer, an employee or an unemployed) as a lever of advancement in one's career and a prerequisite for a better lifestyle.

3.3.2 Management training

The system of education and training for junior and senior staff is part of the Republic's reserve potential, a basis for socio-cultural, educational, economic and political development. Moulding the concept of education for leading personnel, specifically government employees, and based on that, elaboration of corresponding curricula, is an important prerogative in the process of providing the republic with highly qualified administrators and other leading professions.

In May 1994, with the intention of addressing the above mentioned issues, by the decision of the government and with the technical support of the European Union's Tacis Programme, the "School of Public Administration" was founded, which has adopted the European style of training for state employees. It prepares mid-level and high ranking state employees in the Republican executive bodies. Instruction of state employees at the School is carried out in the following directions:

- 1. Preparation (day-time and distance);
- 2. Improvement and retraining;
- 3. Post-university education (aspirantoura).

The duration of day-release training is 2 years, that of distance education - 2.5.

Instruction is realised in modules according to the following courses;

- 1. Political Principles of Government,
- 2. Economic Principles of Government,
- 3. Legal Principles of Government,
- 4. Organisational Principles of State Governance,
- 5. Foreign languages (English, French, German).

The School has already produced 100 graduates in day-release education, and 1,700 participants have passed quality improvement courses.

Up until now higher education institutions prepare specialists, which form the reserve to complete the senior management staff. None of the higher education institutions prepares managers for the state and municipal sphere as well as business managers. Quality improvement and retraining institutions for administrative skills exist in the Ministries of Education and Science, Social Security, Health, Agriculture, Internal Affairs and National Security, as well as in other legal and judiciary offices. However, a consolidated network of educational institutions, preparing state employees and private sector managers (administrators) has not yet been shaped. No office exists in the republic to formulate the principles of state service and generally to co-ordinate and oversee the quality of preparation of management staff, quality improvement and retraining.

In the re-evaluation of the state role in the transition to the new economic system, a demand has arisen for new management functions and new methods of work, new quality standards and a new system of attestation. For these reasons, it is necessary to introduce a consolidated system of

education for state employees, and managers in general, which would be regulated in the framework of state policy and be determined by the current requirements for management. The solution must begin with the provision of normative criteria. Specific forms, time frames, requirements, workload, model curricula and subject/course plans for quality improvement and retraining must be formulated. Based on this the issue might be addressed from a standpoint of common needs. Normative standards should be provided for each quality improvement phase for a manager. With the growing volume of education, quality improvement and retraining courses will have to be accomplished in slowly emerging education centres.

It would be expedient to have private schools preparing business administrators and state educational institutions preparing government employees. This will ensure the dynamic growth of the administrative sector and introduce healthy competition. Such private schools might be sponsored and financed by various enterprises, public organizations and various business associations, or at least, they may closely cooperate with them.

Organisation of short-term quality improvement courses with the help of visiting foreign faculty members or by sending local specialists abroad would be an important input in acquiring progressive Western experience. Education of state service employees and managers according to European standards is a new phenomenon throughout the former Soviet territory, and also in many Eastern European countries. This might lay the groundwork for co-operation between those countries in shaping education policy, creating normative principles, and exchanging and co-ordinating curricula. Foreign countries might help by providing standard educational and methodological materials, as well as suggesting methods and means of co-operation with the above mentioned Centres.

To shape a unified system of training for managers in the republic, it is necessary to establish the required legal and normative field in education. For now, there is only one basic law the Law on Education, two regulatory Acts on "Creation of RA School of Public Administration", and indoctrination of the "State Governance and Local (municipal) Self-Governance" course in the speciality list of higher education. Based on this, during the 1999-2000 school-year, two higher education institutions (the Yerevan Institute of National Economy and in the Yerevan State Engineering University) launched courses in "State and Municipal Governance" with 70 places, with 10 on state order. In other state and private universities enrolment in Governance is extremely low, and with a lack of centralised oversight, it doesn't meet the demand to resolve the radical issues facing the republic. Each of the said higher education institutions forms its curriculum as it prefers, based on its resources and traditions, which may cause difficulties in the future in promotion, rotation between management posts, and in specialisation levels and attestation procedures.

A major boost to management training in the private sector, might be adoption of a unified state programme for administration of education, where considering the significant role of education for Armenia, privileged terms for private entrepreneurs would be guaranteed.

In such conditions competition will become more effective, co-operation between the state and entrepreneurial associations, trade, trends, and business association will gain a growing role in education, and the quality of state and private management will become more flexible to match the ever-changing requirements.

4. Responsible bodies

4.1 Description

Different bodies governing education have been acting in Armenia at different times.

→Until 1988

- Ministry of Enlightenment responsible for general and professional-technical education,
- *Ministry of Higher and Secondary Professional Education* responsible for higher and secondary professional education.

→1988-1990

• *Ministry of Public Education* - responsible for the whole educational field.

→1990-1996

- Ministry of Enlightenment responsible for general and professional-technical education,
- **State Committee of Higher Education and Science -** responsible for higher and secondary professional education, and science (renamed the *Ministry of Higher Education and Science* in 1993).

⇒From 1996

• *Ministry of Education and Science -* responsible for the whole educational field and science.

As seen above, the system of *professional-technical* education has always been under the jurisdiction of bodies responsible for secondary general education, whereas the system of *secondary professional* education has been under the higher education system. Even up until 1996, when the whole education system in Armenia was covered by a common body, *professional-technical* education was still under the jurisdiction of the secondary education administration, whereas *secondary professional* education was governed by an administrative branch of vocational education responsible specifically for that level.

Such a division of vocational education in two levels, in fact, was not well grounded, since institutions of both these levels carried out similar functions. They realized admission on the same education basis (eighth grade and secondary) and granted professional certificates (*Worker or Technician depending on the institution*) to graduates. Both also granted certificates of secondary education to those admitted on the basis of an eight-year education.

Because of that division the same policy of general education was carried out in the area of professional-technical education, whereas, secondary professional education was treated differently, closer to that of higher education. This was also one reason why professional-technical education was not very popular.

Soon, although the Law on Education does not allow pre-professional educational institutions any more corresponding to the previous professional-vocational education, administration of this programme of professional education is likely to be implemented through the same body as secondary professional education (most probably this will be the Professional Education Department of the Ministry of Education and Science).

Until 1991 a number of Secondary Professional Educational Institutions (SPI) were under the various Republican and Soviet Union Ministries (state committees), such as the Ministries of Health, Agriculture, Culture, the State Department of Cinematography of Armenia, and the Ministries of Communication Highways, Electronic Machinery, Industry of Communication Devices, Radio-Industry, Electrical-Technical Industry of the USSR.

After the 1991 disintegration of the Soviet Union, all the Union SPI's were relinquished to the administration of republican bodies.

In 1994, after the creation of new administrative-territorial divisions, i.e. marzes, some PTI's were transferred to the marz administrations. Presently 46 PTI's are under the marzpetarans¹³ and 19 under the Ministry of Education and Science.

The tables below show the distribution of MPI's (former SPI's) and PTI's by authority.

Table 4.1 Number of MPI-s by authorities

Ministry/Authority	Number of Colleges	Numbers of Branches
Ministry of Education and Science	50	5
Ministry of Agriculture	11	0
Ministry of Health	7	4
Ministry of Culture, Youth Affairs and Sports	5	1
Ministry of Transport	1	0
Ministry of Energy	1	0
Ministry of Defence	1	0
Yerevan Municipality	1	0
Total	77	10

Source: Ministry of Education and Science, Department of Professional Education.

The Ministry of Education and Science realises general educational policy. Other bodies carry out administration of educational institutions under their jurisdiction. They are responsible for the organisation of the educational process, appointment of the governing bodies, financing and other similar activities. Oversight of the educational institutions is realised both by the Ministry of Education and Science and the corresponding responsible bodies.

During recent years the unified policy of the Ministry of Education for educational institutions under other jurisdiction was hampered for different reasons. This was reflected in students' admittance rules, elaboration and adoption of curricula, efficiency of different methods of education, evaluation of the students' performance, implementation of various procedures in other spheres, etc. This resulted in the reduction in oversight of the quality of the graduating specialist and a decline in their professional level.

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Marzpetaran - regional administration of marz.

Table 4.2 Number of PTIs by authorities

Authority	Number of PTI-s
Ministry of Education and Science	19
Yerevan Municipality	11
Shirak Marzpetaran	9
Lori Marzpetaran	4
Gegharkounik Marzpetaran	4
Syunik Marzpetaran	2
Tavoush Marzpetaran	3
Kotayk Marzpetaran	3
Ararat Marzpetaran	3
Armavir Marzpetaran	2
Vayots Dzor Marzpetaran	2
Aragatsotn Marzpetaran	3
Total	65

Source: Ministry of Education and Science, Department of General Education.

At present, after adoption of the Law on Education and in correspondence with it, specific actions are being undertaken in relation to educational institutions of various jurisdictions and different type of property, to secure implementation of a common education policy.

4.2 Centralisation/decentralisation and common standards

To secure efficiency of education, high professionalism of graduates, and to satisfy the growing needs of the labour market, it is very important to co-ordinate the system both vertically (Government - Ministries - educational institutions), and horizontally (Ministry of Education and Science - other ministries - enterprises). This means coordinate centralization and decentralization of procedures in various fields of education to secure the flexibility of the education system itself.

According to the Law on Education administration of vocational education is distributed in the following order:

- The *government's* jurisdiction in educational sphere is:
 - the realisation of state educational policy,
 - the affirmation of the national programme of the development of education,
 - the affirmation of state educational standards,
 - the affirmation of the list of educational professions,
 - the affirmation of the state admittance plans of general, professional and higher education,
 - to affirm the examples of graduation documents,

- the adoption of the order of licensing and state accrediting of the educational establishments,
- the affirmation of standard regulation of state educational establishments.
- The role of the *Ministry of Education and Science* is:
 - to work out the national programme of the development of education, to provide the realisation and the state control,
 - to work out the state educational standards and control their realisation,
 - to license, certificate and accredit all forms of educational establishment,
 - to work out the standard regulations for educational establishments,
 - to work out the lists of educational professions,
 - to create the re-qualification system and train he state educational establishments' pedagogical specialists,
 - to work out and affirm the rules, order and admittance requirements to state higher and secondary professional educational establishments, to provide their realisation irrespective of departmental subordination,
 - to found, reorganise and liquidate the educational establishments under the Republic,
 - to provide development programs and their realisation for the structure of the republican educational establishments,
 - to adopt normative documents within the bounds of its competence.
- Activities of an *educational institution* include providing methodological support in the process of admissions and education, its organisation and implementation, choice and distribution of specialists, scientific, financial and other activities within its jurisdiction. These activities are defined in the Law on Education and the charter of the educational institution.

Immediate administration over an educational institution is realised by the Director appointed and dismissed according to the policy of the educational institution (in case of state institutions - by the corresponding state administration, in case of non-state educational institution - by the founders of that educational institution).

The Armenian administrative system of vocational education is centralised. However, such centralisation seems to justified, considering the small size of the country, its national homogeneity and absence of considerable social-political, economic, and moreover, cultural or ethnic differences in different regions.

The local governments are not vested with the right of working out and realising education policies. As stated above, local governments do not have any SPI's under their jurisdiction (with the exception of the Medical College "Erebouni", which is governed by the Department of Health and Social Services of the Yerevan City Hall). And in relation with PTI's under their jurisdiction the local governments can realise only administrative and financial leadership, but they cannot interfere with the contents of education. According to the Law on Education, marzes are vested with rights only in the sphere of *general* education, vocational education is completely out of their supervision.

However, since according to the same law the pre-vocational education is intended to be realised in particular, in **secondary high-schools**, it is plausible that in the future this specific level of *vocational education* becomes a privilege of the local governments, or at least falls under the sphere of their influence, for the simple reason that it will be realised in institutions which fall under their jurisdiction.

Though priorities and limits of state bodies (including those with educational institutions under their jurisdiction) have still to be specified, the fact that these bodies and corresponding enterprises will play an instrumental role in the development of state educational standards in corresponding specialities, in attestation and accreditation, and in professional-methodological organisation of the process of education, is unequivocal.

The fact that according to the Law on Education the right to work out curricula is vested in the schools themselves, might serve as evidence to the growing independence of educational institutions, although with the present scant professional resources, this is arguable. Theoretically, each educational institution should elaborate and present curricula for professions taught at their schools to the Ministry of Education and Science, for confirmation. But this does not mean it will result in different education institutions having different curricula for one and the same profession. The Ministry can confirm one of the curricula elaborated by different institutions (the most successful one) and instruct all the other institutions to be guided by it, allowing little leverage to the rest within that curriculum (e.g. 3-5%); or several education institutions can join their efforts to work out a curriculum for a specific profession and present a unified education plan for confirmation (such tendencies are already apparent).

The process of producing high quality curricula is further complicated by the fact that it requires long-term direct commitments between specialists, customer and consumer enterprises, and central bodies (e.g. Ministries). For some educational institutions, especially those outside Yerevan, irrespective of the proficiency and numbers of their specialists, this type of co-operation is extremely difficult.

In terms of administrative powers, another example of expanding rights for the educational institutions themselves, is their right to establish branches. However, it would be prudent to co-ordinate this process in a centralised way, to avoid deviations from a relatively rational structure necessary for the development of vocational education.

5. Legislation

5.1 Present situation and further requirements

Until 1991 the economy and all other social spheres in Armenia, including education, were regulated by laws, other legislative acts and normative documents adopted by the Soviet Government. Corresponding laws adopted by the Armenian government had to conform with this framework, and in the sphere of education they carried rather procedural and incidental character.

After declaring independence Armenia gradually began to create its own laws, however, one of the most essential laws for social development - adoption of the law on education - was delayed. The absence of a law regulating structural, statutory and other similar issues, as well as absence of a state education policy and development plan for the education system, hampered introduction of reform in the system. Though structural and regulatory decisions made in relation with some levels provided temporary solutions for some of the problems, in general, in terms of the system as a whole, they simply exacerbated the problems.

During 1991-1996 attempts were made to adopt concepts of education policy to become the basis for education reforms and future development, but eventually it became clear that without a law stipulating positions and guarantees taken by the state such intermediate remedies were not viable.

Meanwhile, laws adopted during the soviet period formally continued to function (with some new ones for specific issues), the bulk of which could not control the new situation because of the changes that had already taken place (introduction of paid education, establishment of private educational institutions, liberalisation of economic activities, elimination of communist conceptualisation of education, etc.).

The Constitution adopted on July 5, 1995, became the legislative basis for the education law of independent Armenia. The Constitution already confirmed the rights of Armenian citizens to education, specifically that:

- each citizen is entitled to education;
- secondary education in state education institutions is free;
- each citizen is entitled to get free vocational and higher education at state educational institutions on a competitive basis

The National Assembly adopted the Law on Education on April 14, 1999. The law has defined the principles of state policy in education, the State's guarantees for the right to education, the main structural elements of the education system (education programmes, their objectives and modes of implementation, forms of education, types and statutes of educational institutions), the authority of various bodies governing the education system, and the economic basis of the system of education, social guarantees, etc.

While the Law established an adequate basis for structural changes to the education system, the organisation of a state policy, i.e. conceptual changes in the sphere of education, must be provided by a national programme of the education development. The latter, according to the Law, must be worked

out by the Ministry of Education and Science, and upon presentation to the government must be ratified by the National Assembly. The definition of a specific procedure to ratify the national programme of the development of education indicates how seriously the government takes the programme.

Despite the fact that the Law on Education contains articles regulating vocational education, it bears a rather general character. It outlines specific legislative frames and directions for activities and development of the whole system of education, and it can not reflect all the details pertaining to education levels, or those related to the implementation of education plans. This is the reason why a special article in the Law envisions separate laws on higher education and vocational education to be created in the future.

The existence of the Armenian National Observatory, the diverse support provided by the European Union, and particularly by the European Training Foundation, are excellent requisites to work out and adopt a progressive draft law on vocational education promptly. Naturally the basic law on education itself, reflecting the most conservative and at the same time the most flexible area in all social spheres - will also undergo changes in the course of time.

5.2 Co-ordination with legislative procedures for other policy areas

Besides issues related to educational policy, the structure of the education system, educational programs, and other relevant questions, the "Law on Education" also defines specific responsibilities for the institutions included in the system. However, by "institutions in the system" the Law implies education institutions, other organisations realising educational programs and bodies of educational administration. At the same time, the Law does not provide regulation for the activities of other organisations or institutions directly or indirectly related to education (e.g. state bodies, enterprises, customers, public organisations, etc.), in terms of their responsibilities towards the system of education or most broadly taken, towards education itself. Other laws or regulations should define these obligations. In terms of vocational education the following issues, are not yet regulated.

- →What kind of financial and other investments should be made by various organisations towards preservation and development of the education system?
- ⇒What obligations should the organisations/institutions carry in the organisation of students' practical training?
- ► What level of professional education and qualification is required from individuals to be involved in entrepreneurial activities?
- →What type of educational issues should organisations undertake for their employees?
- ► What level of participatory rights should organisations and other interested bodies enjoy in the formation of policy and contents of education?

It is clear that without legislative regulation of these and other relationships the unconstrained operation and consistent development of the system is impossible.

Nevertheless, currently there are some laws in Armenia, which are more or less related to the sphere of education.

These are laws addressing specific categories of the population with social problems. They define certain educational privileges for first and second category disabled people, orphan children, children of deceased or first category disabled soldiers, citizens having fulfilled their service in the Army (see points 3.2.3 of this Report), etc.

The Civil Code, as well as some other laws regulating questions of establishment, reorganisation, insolvency, state registration, estate, property rights in relation with state and private organisations, also pertains to educational institutions.

The Labour Code defines the rights and responsibilities of various enterprise leaders and employees towards each other, and its requirements are also mandatory both for educational institutions, and office holders and employees in state administration of education.

Nowadays, development of the market economy, growth of private property, other democratic processes set forth in the country, as well as the progressive experience of European countries in the sphere, facilitate the expeditious elaboration and adoption of laws and regulations directed towards a more efficient and socially secure education system in Armenia.

6. Financing of vocational education and training

6.1 Sources of vocational education and training financing at national, regional and local level

The free-of-charge state education institutions are completely financed from the budget, the specific procedures of which are regulated by the laws "On the State Budget," "On the Budget System" and other legislative acts. The rate of impending educational expenses is determined by corresponding educational administrations in conformity with the Ministry of Finance and government decisions, depending on the available free-of-charge places. The results are then incorporated in the budget through a specific procedure and ultimately allocated to the educational institutions.

Actual investments for 1998 and substance investments for 1999 are shown in tables 6.1 and 6.2. In regard to the paid system, it is fully realised through tuition fees paid by the students, which makes about 1.4 billion drams annually, and the tuition per student fluctuates from 25 to 150 thousand drams, depending on the school and speciality.

No other investments are being made in this area for now.

Since independence, state resources have been primarily utilised to maintain the existing situation in the Republic of Armenia. The major reform of the last years related to the re-specialisation of the educational institutions.

Table 6.1 Public expenditure on education and vocational education and training

Year	GDP (Million Drams)	Public Expenditure on Education (000)	Public Expenditure on VET (000)	Public Expenditure on Education as % of GDP	Public Expenditure on VET as % of GDP
1995	522,256	12,524,208	1,613,400	2.40	0.31
1996	660,310	17,626,644	1,603,469	2.67	0.24
1997	798,555	13,547,990.4	1,621,946.1	1,70	0,20

Source: Ministry of Finance.

Table 6.2 Financial investment in primary-professional education (1998-1999)

CRITERIA FOR EVALUATING INVESTMENT					
	Unit	1998 factual	1999 confirmed budget		
Average annual number of students	Student	4,901	3,653		
Total number of instruction hours in theory	Hour	389,059	320,505		
Monthly average wages of pedagogues	Dram	6,891.5	8,016.3		
Annual average payroll of pedagogues	1000 dram	49,122.8	56,995.9		
Average number of headmasters	Tariff	386	321.7		
Monthly average payroll rate	Dram	6,666.5	7,873.0		
Payroll fund for headmasters	1000 dram	30,879.4	30,392.8		
Monthly average wages	Dram	6,173.7	7,363.9		
Annual payroll fund for the administration and other school employees	1000 dram	126,240.6	135,421.3		
Current transfers, including	1000 dram	247,707.4	230,407.6		
payments for mandatory social insurance	1000 dram	67,347.7	63,882.3		
Annual fund of scholarship/stipend	1000 dram	180,359.7	166,525.3		
Average annual number of students getting scholarship	Student	4,615	3648		
Rate of average monthly scholarship	Dram	3,256.8	3,804.0		
Expenses on procurement and services, including	1000 dram	29,077	46,870.3		
purchase of materials, including	1000 dram	11,511.1	3,581.7		
equipment, stationary and materials, including	1000 dram	552.2	1,979.4		
soft furniture and garments	1000 dram	0	812.7		
Food	1000 dram	10,958.9	0		
Business trips, dispatches	1000 dram	179.7	2,051.8		
Payment for transportation services	1000 dram	1,953	16,227.4		
Telephone subscription fees	1000 dram	756.1	998		
Expenses for commodities, including	1000 dram	14,238.3	22,409.1		
fuel and heating, including	1000 dram	7,770	10,467		
power supply expenses	1000 dram	5,580.1	9,103.9		
Other expenses	1000 dram	438.8	1,602.3		
CRITERIA FOR EVALUATING THE RESULTS					
Total number of instruction hours	Hour	276,253	211,838		
Number of graduating students	Student	1,767	833		
Absentees	Student/day	4,517	2,852		
Drop-outs/transition failures	Student	216	52		
EVALUATION OF I	PROFICIENCY				
Total expenses per student (general expenditures/total number of students)	Dram	99,318	120,570		

Source: Ministry of Finance of RA

Table 6.3 Financial investment in middle professional education (1998-1999)

CRITERIA FOR EVALUATING INVESTMENT					
	Unit	1998 factual	1999 confirmed budget		
Average annual number of students	Student	10,043	8,501		
Average number of groups	Group	986	702		
Number of students per group	Student	10.2	12.1		
Number of tariffs per group	Tariff	2.6	3.1		
Pedagogical tariffs	Tariff	2,568.6	2,147.7		
Average monthly wages of pedagogues	Dram	7,390.6	8,862.6		
Annual payroll fund for pedagogues	1000 dram	227,800.4	228,411.1		
Average monthly payroll fund for suppl. (school employees) and administrative staff	Dram	6,264.81	7,787.9		
Annual payroll fund for the supplementary (School employees) and administration	1000 dram	197,104	245,007.5		
Current transfers, including	1000 dram	536,809.7	542,774.2		
payments for mandatory social insurance	1000 dram	138,557.7	137,652.4		
Annual fund of scholarship/stipend	1000 dram	398,252	405,121.8		
Average annual number of students getting scholarship	Student	7,967	7,756		
Rate of monthly scholarship	Dram	4,165.6	4,352.8		
Expenses on procurement and services, including	1000 dram	151,537.8	200,302		
purchase of materials, including	1000 dram	83,449.6	99,266.4		
equipment, stationary and materials, including	1000 dram	2,810.2	8,052.5		
soft furniture and garments	1000 dram	0	949		
Food	1000 dram	79,352.3	85,280.6		
Business trips, dispatches	1000 dram	866.2	2,674.6		
Payment for transportation services	1000 dram	6,815.9	16,462.4		
Telephone subscription fees	1000 dram	3,795.7	3,518.4		
Expenses for commodities, including	1000 dram	38,569.4	56,104.7		
fuel and heating, including	1000 dram	9,836.6	19,300.6		
power supply expenses	1000 dram	24,868.8	26,780.4		
Other expenses	1000 dram	18,041	22,275.5		
CRITERIA FOR EVALUATING RESULTS					
Total number of instruction hours	Hour	1,367,963	1,058,347		
Number of graduating students	Student	2,984	2,836		
Absentees	Student/day	2,867	3,172.8		
Drop-outs/transition failures	Student	394	231		
EVALUATION OF I	PROFICIENCY				
Total expenses per student (general expenditures/total number of students)	Dram	112,359	145,241		

Source: Ministry of Finance.

6.2 Bilateral and multilateral donor contributions to VET reform

Today tendencies for internationalising education and science are quite obvious all over the world. Integrated international programmes and information networks are being established. In view of these new prospects, the system of education must be geared towards a broad international co-operation, which is not only a quality objective but also a lever for necessary development resources.

Armenia is also gradually integrating into various international programmes of VET reform.

Since 1997, within the framework of Armenian-German inter-governmental agreement, the programme "Secondary VET Education in Banking Specialities" has been launched by the German organisation **GTZ** through the **ABU-Consult** company. To this end a new educational institution has opened in Yerevan - the Financial-Banking College - the founders of which are the Ministry of Education and Science, the Central Bank and the Union of Armenian Banks.

The programme strives to prepare middle level bank clerks with practical skills corresponding to international requirements.

The programme foresees reconstruction works for the educational institution, re-training of local specialist trainers, counselling by German experts, elaboration of educational materials, as well as elaboration of proposals and normative drafts aimed at reforming the VET system.

At first it was decided to realise the programme at one of the secondary state educational institutions, but later a decision was made to create a new educational institution, anticipating that this version would allow new, better qualified faculty members to be recruited on a competitive basis. The programme introduced independently a new "dual" type of education and, if successful, the benefits could be extended to other educational institutions.

Presently about 90 first and second-year students are involved in the programme. Obviously, the results can only be judged after having the first graduates from the Financial-Banking College, based on state attestation, as well as employers' opinions about their competencies and skills. However, preliminary agreement has already been reached for the implementation of a second phase, which will last another two years.

A programme called "Strategy of Higher and Technical Education Reform in Armenia" is being carried out in the framework of the World Bank's second loan programme (SATAC 2) in technical assistance for structural reform, and consists of two phases. The first, technical refurbishment of administration in higher and technical education, has already been accomplished (the Ministry of Education and Science has been provided with computers). The second phase, expert counselling on strategy of reform in the system of higher and technical education, will be launched in autumn 1999 and be implemented by the Dutch Fontys University.

7. VET research

The former Institute of Pedagogics, the Scientific Research Institute of Education and the Pedagogical Library have been dealing with the central issues of pre-school and general education and upbringing. After independence the realm of activities for the Scientific Research Institute of Education included vocational education issues. Provision of methodological assistance to secondary professional education and organisation of the process was carried out by the Scientific-Methodological Centre for Higher Education Problems (the former Scientific-Methodological Office). The Centre has also carried out expert analysis of educational-methodological documents.

During soviet times these institutions were involved in co-ordinating documents - decrees and instructions - bestowed by higher bodies.

After proclaiming independence in the Republic, in correspondence with the specifics of the time, old documents have been revised and new ones have been introduced to organise the process of education.

There have been no specific institutions in Armenia for vocational education research, and still there are none. The "Centre for Education Reform" is the only newly established office which also has authority over research in middle professional education.

The *Centre for Education Reform Ltd.* has been founded according to the December 29, 1998 decree of the Ministry of Education and Science on the basis of the four former institutions.

The main goals of the company are:

- to develop and test drafts of the national programme for the development of education,
- to introduce and carry out education reform drafts made on order by the Ministry,
- to work on contextual, structural and organisational development of education
- to organise scientific, methodological and experimental procurement,
- to provide provision of expert evaluation and support,
- to retrain specialists and managers, and accredit pedagogues, their qualification and retraining.

The Centre for Education Reform consists of seven departments; involved in elaboration of:

- 1. Normative criteria for education management (8 employees);
- 2. Contextual Reform of education (13 employees);
- 3. Investment of new methodologies and technologies in education (15 employees);
- 4. Normative criteria for licensing and state accreditation (7 employees);
- 5. Planning of the scientific-educational process and information analysis (8 employees);
- 6. Special education curricula and upbringing (7 people);
- 7. Evaluation systems (8 people).

There is a total staff of 66, including department heads, chief, advanced and first class specialists, and laboratory technicians. There are 3 Doctor-Professors, 20 Candidates of Science and Assistant Professors, and 27 research (methodology specialists) teachers.

Non-staff and contract employees are chosen from the best specialists of the Academy of Sciences and higher education institutions in the Republic.

All Departments have their planned research programmes (Attestation of Vocational and Higher Education Institutions, Improvement of the Physical Training Curriculum in VEI's, etc.). Some staff are also involved in special programs (Strategy of Reform in Middle Professional Education, Central Issues in Ecological Education, Principles of Civic Education, etc.).

Two of the six themes guaranteed from state centralised sources at the Centre are directly related and the other four are indirectly related to the central issues of vocational education.

In relation with introduction of a new list of specialities for instruction, work is under way to revise and modernise methodological documents of education. The 'office of expertise services for specialities of vocational education curricula' is in the process of formation at the Centre, with leading specialists recruited from different departments. The office will co-ordinate and consolidate documentation requirements related to the same sphere or speciality of education, conforming them with the stipulations of the Law on Education and the description of qualifications for specialists.

Some supplementary and regulatory legislative documents on vocational education have been developed or are being processed (the procedure of final state attestation of graduates, the state requisites for middle professional education, exemplary curricula of secondary vocational education, etc.).

The curricula for 1999 admission examinations, tasks, problems to be solved and evaluation criteria have been worked out, published and distributed to the MEI's by professional commissions.

The Centre has an abundant library, providing scientific and research information. The library contains about 60,000 items, of which 12,000 are literature on vocational education. The Centre subscribes to 67 local and 57 foreign professional periodicals: newspapers, magazines and other sources of information, and exchanges information through the Internet.

Specialists from the Centre often visit educational institutions and provide methodological and practical support to the teachers, in their own and their students' individual research work (in the organisation of practical courses, diploma and course studies, in principles and methods of introducing and filing educational documentation, etc.).

Despite restricted resources, pedagogical studies, seminars, conferences, and other events are organised for teachers by the directors and the subject (cycle) commissions. Also, professional workshops, subject contests, hearings, competition on course papers and theses, and other events are organised for students.

In the framework of their authorities, cycle (subject) commissions make a serious input to curricula, helping to make necessary changes in the subject plans. These are discussed commission sessions, at educational institutions, and in methodological councils, and upon approval are sanctioned for implementation. There are numerous cases when changes introduced through research have been quite successful. Since educational and vocational requirements for colleges have been raised to match those of higher education institutions, if required the latter can contract with the corresponding schools of higher education to secure the necessary level of their students and their continuing education.

Naturally, research on education and various studies cannot be based only on data existing within the country, but also on information from abroad. In this sense the network of National Observatories engaged in issues of vocational education provides unprecedented opportunities for accumulation, analysis, dissemination and exchange of information in this area. The National Observatory of Armenia has already provided voluminous information, literature and statistical data to vocational education institutions and organisations, and particularly to the Centre for Educational Reform, thus helping to carry out corresponding high quality research.

8. Summary: Constraints, challenges and further needs

VET in Armenia was established at the beginning of the century and has produced hundreds of thousands of specialists, which has served in the various realms of economic and social life; in industry, agriculture, health care, pedagogy and arts. As a powerful mass, medium level specialists have played a valuable role in the foundation and development of Armenia's economy.

In the present transitional period, just as in all spheres of life in the Republic, in vocational education too, there are symptoms of stagnation. Those are, in particular, the poor state funding, general devaluation of education, and deficiency of the legislative basis. Despite the "Law on education", there are also numerous social problems which probably have objective reasons stemming from the current economic situation.

Other more subjective problems, the attitude to this level of education, underestimation of its role, the ambition to get higher education no matter what it takes, etc. are also affecting VET.

In these conditions, considering objectives for VET to meet international standards and requirements of modern technology based industries, the issue of reform and development in the VET system gains special importance in the framework of comprehensive reforms in the whole system of education in Armenia.

Attempts to reform the VET system started in 1991. These were aimed at revitalising professional-technical and secondary professional education, raising its prestige among the population, improving the quality of specialist prepared by VET education, and adjusting the activities of VET institutions to market principles and demands.

Despite some steps in this direction (establishment of colleges, introduction of paid education, better ties with higher educational institutions in speciality and methodology related issues, incorporation of new professions, revision and renovation of curricula and subject programs for some professions), with the absence of a legislative base and the lack of a clear state policy and programme, the results have been unsatisfactory.

The following measures, outlined in the Law on Education could be undertaken in order to achieve the government's VET reform aims:

- 1. Elaborate the draft Law on Vocational Education and other legislative documents.
- Optimise the system of professional education, making its structure compatible with the requirements of the "Law on Education," reviewing the number of institutions by region, their distribution and professional orientation.
- 3. Modify the legal organisational forms (institution, Limited company, Stock Company) of professional educational institutions to comply with the law and the needs of the market economy.

- 4. Develop and launch licensing and state certification mechanisms for state and private secondary professional education institutions. Support private professional educational institutions in their activities and establish their administrative oversight.
- 5. Conduct continuous research and analysis of the labour market, the demand for professional education by area and level of qualification, for the rational provision of a professional-education qualified workforce.
- 6. Clarify the process in which the state order is developed and implemented, implement principles of contracting.
- 7. Work out State Educational Standards for vocational education, envisioning the growing knowledge and skills of specialists with professional education, and their continuing development needs, to comply with the needs of the market economy and international standards.
- 8. Review vocational education curricula, subject programs and other educational-methodological documents to make them modern and rational in order to comply with the State Educational Standards. Also organise creation of professional education textbooks, guides and other materials.
- 9. Realise reasonable liberalisation of the admittance system through:
 - the development of competitive admittance based on secondary school graduation grades
 - reform of the evaluation system
 - expansion of the paid system of education, in particular;
 - paid places should be mainly allotted to popular specialities¹⁴, as well as those ordered by enterprises to satisfy their personnel needs (in this case corresponding contracts are signed between the educational institution and the enterprise on meeting educational expenses and providing internship).
 - restrict the number of paid places by the technical capabilities of the educational institution (considering the building space, material basis, teachers staff, etc.)
- 10. For specific professions introduce external, distance and other forms of education to provide better education opportunities, as well as securing the flexibility of the education system itself.
- 11. Perfect the system of attestation of graduating students and the oversight of professional qualifications.
- 12. Review the present system of passing from one education level to the other.
- 13. Develop and introduce a re-qualification system for the unemployed, considering special programs for refugees, the handicapped, imprisoned, former prisoners and other special categories.
- 14. To insure the efficiency of administration and oversight in VET, introduce a system of attestation, competency improvement and retraining for the leadership and staff of educational institutions, work out and implement new standards for selecting and assigning administrators.
- 15. Organise and secure scientific research work in vocational education.
- 16. Create a working system of recreation and health care for students and staff.

¹⁴ Professions enjoying popularity and demand in the community.

- 17. Foster and enrich the material and technical basis of vocational education. Elaborate and launch non-state-funded (not requiring financing from the state budget) mechanisms of supporting vocational education (enrichment of the educational and material basis of educational institutions, provision of information, financial support of students in the paid system of education, etc.)
- 18. To improve VET financially¹⁵
 - Authorise educational institutions to produce and sell various paid services (including educational), elaborate and carry out a corresponding state policy;
 - To utilise buildings and equipment currently unused, in order to:
 - organise some production or paid services in these facilities;
 - lease them out on a competitive basis;
 - organise their auction¹⁶.
- 19. Work towards mutual international recognition of graduation certificates (diplomas, degrees and other qualifications).
- 20. Contribute to the establishment of social dialogue in the sphere of vocational education, as well as support stable cooperation between employers, unions, other partners and the education system.

According to laws in force, the state educational institutions are not allowed to undertake any entrepreneurial activities.

¹⁶ According to law, liquidated buildings of state educational institutions can be used only for educational purposes.

Structure of bibliographic references

- 1. The Constitution of the Republic of Armenia
- 2. The Law on Education of the Republic of Armenia
- 3. Civil Code of the Republic of Armenia
- 4. USAID Report on Strategic Plan (FY 1999-FY 2003)
- 5. The Law on State Budget of the Republic of Armenia
- 6. The Programme of Social Security System for 1999-2000

Annexes

Annex 1. List of the professional-technical educational institutions of Armenia by the responsible bodies

		Number of	f Students
		Total	Free of charge Education
	Ministry of Education and Science		
1.	Yerevan PTI #2	94	94
2.	Yerevan PTI #4	230	230
3.	Yerevan PTI #9	70	70
4.	Yerevan PTI #11	151	151
5.	Yerevan PTI #13	81	81
6.	Yerevan PTI #17	182	182
7.	Yerevan PTI #22	128	128
8.	Yerevan PTI #23	103	83
9.	Yerevan PTI #26	81	81
10.	Vanadzor PTI #47	167	167
11.	Abovyan PTI #50	115	80
12.	Ashtarak PTI #56	59	59
13.	Kapan PTI #62	175	175
14.	Hrazdan PTI #67	115	115
15.	Ijevan PTI #69	90	90
16.	Gavar PTI #70	52	52
17.	Armavir PTI #84	95	95
18.	Maralik PTI #91	117	117
19.	Eghvard PTI #92	82	82
	Υ	erevan Municipality	
20.	Yerevan PTI #5	36	36
21.	Yerevan PTI #6	71	71
22.	Yerevan PTI #8	62	62
23.	Yerevan PTI #12	58	58
24.	Yerevan PTI #14	91	77
25.	Yerevan PTI #15	75	75
26.	Yerevan PTI #16	79	60
27.	Yerevan PTI #18	55	55
28.	Yerevan PTI #19	114	65
29.	Yerevan PTI #24	109	35
30.	Yerevan PTI #29	25	25

		Number of Students	
		Total	Free of charge Education
	•	Shirak Marzpetaran	
31.	Gjumri PTI #33	75	75
32.	Gjumri PTI #35	101	101
33.	Gjumri PTI #36	62	62
34.	Gjumri PTI #42	109	109
35.	Gjumri PTI #43	122	100
36.	Artik PTI #58	100	100
37.	Ghukasyan PTI #83	57	57
38.	Akhuryan PTI #85	75	75
39.	Amasia PTI #88	104	104
		Lori Marzpetaran	
40.	Tashir PTI #66	51	51
41.	Stepanavan PTI #74	87	87
42.	Alaverdi PTI #89	80	80
43.	Spitak PTI #90	115	11!
	Gegl	harkounik Marzpetaran	
44.	Vardenis PTI #65	50	50
45.	Martouni PTI #71	136	136
46.	Chambarak PTI #80	35	35
47.	Sevan PTI #68	105	10
		Ararat Marzpetaran	
48.	Artashat PTI #55	182	149
49.	Masis PTI #61	86	86
50.	Ararat PTI #78	108	108
	Vay	yots Dzor Marzpetaran	
51.	Eghegnadzor PTI #64	90	90
52.	Vajk PTI #75	34	34
	Ar	agatsotn Marzpetaran	
53.	Aparan PTI #72	47	47
54.	Talin PTI #76	50	50
55.	Aragats PTI #77	54	3.
		rmavir Marzpetaran	
56.	Echmiadzin PTI #53	88	88
57.	Lernagog PTI #87	36	3
		Syunik Marzpetaran	
58.	Sisian PTI #68	0	
59.	Goris PTI #73	76	76

	Number of Students		f Students
		Total	Free of charge Education
	T	avoush Marzpetaran	
60.	Dilijan PTI #59	155	155
61.	Tavoush PTI #81	97	97
62.	Noyemberyan PTI #82	92	92
	ŀ	Kotayk Marzpetaran	
63.	Abovyan PTI #48	76	76
64.	Bjureghavan PTI #51	140	140
65.	Charentsavan PTI #79	106	106
TOTAL		6000	5654

Source: Ministry of Education and Science of RA.

Annex 2. List of middle professional educational institutions of Armenia by responsible body

		Number o	f Students	Number of
		Total	Free of charge Education	Lecturers
	Ministry of Educatio	n and Science		
1.	Yerevan Industrial College	398	228	61
2.	Yerevan Electro-technical College	247	9	43
3.	Yerevan Computer College	406	118	45
4.	Yerevan Polytechnic College	167	116	38
5.	Yerevan Light Industry College	219	151	41
6.	Yerevan Food Industry College	235	116	30
7.	Yerevan Constructing College	120	80	35
8.	Yerevan Industrial-Pedagogical College	298	80	46
9.	Yerevan Financial-Banking College	44	0	11
10.	Yerevan Financial-Economical College	234	109	34
10.1	Yeghegnadzor branch	144	38	19
10.2	Vedi branch	76	0	16
11.	Yerevan Trade-Economical College	236	92	40
12.	Yerevan College of the Armenian State Engineering University	539	239	112
13.	Yerevan Humanitarian College	598	231	151
13.1	Martouni branch	137	0	23
13.2	Artashat branch	23	0	11

		Number o	f Students	Number of
		Total	Free of charge Education	Lecturers
14.	Yerevan Pedagogical College	199	105	43
15.	Yerevan Pedagogical College of the M.Sebastatsy Educational Complex	103	59	27
16.	Yerevan Musical College	659	281	267
17.	Yerevan Musical-Pedagogical College	437	212	240
18.	Yerevan Art College	375	215	65
19.	Gjoumri Polytechnic College	258	102	33
20.	Gjoumri Constructing College	78	52	16
21.	Gjoumri Light Industry College	77	58	20
22.	Gjoumri Pedagogical College	298	104	50
22.1	Talin Branch	37	0	10
23.	Gjoumri Musical College	138	103	66
24.	Vanadzor Polytechnic College	155	74	35
25.	Vanadzor Technological College	267	86	36
26.	Vanadzor Musical College	252	116	90
27.	Sevan Industrial-Technological College	225	47	38
28.	Martouni Industrial-Technological College	183	44	23
29.	Vardenis Polytechnic College	223	78	9
30.	Gavar Industrial-Pedagogical College	287	64	35
31.	Gavar Musical College	106	97	28
32.	Kapan College of the Armenian State Engineering University	161	71	35
33.	Kapan Musical College	108	94	67
34.	Goris Pedagogical College	394	104	91
35.	Armavir Technological College	266	53	29
36.	Armavir Art College	151	98	57
37.	Echmiadzin Club-Librarian College	394	104	91
38.	Ararat Industrial-Technological College	368	57	34
39.	Hrazdan Industrial-Technological College	314	173	20
40.	Charentsavan Polytechnic College	107	74	13
41.	Ijevan Industrial-Technological College	347	67	39
42.	Alaverdi Industrial-Technological College	117	41	25
43.	Dilijan Radio-Electronics College	173	56	26
44.	Dilijan Art College	77	11	51
45.	Tavoush Humanitarian College	123	46	21
46.	Artik Industrial-Technological College	246	90	32
47.	Spitak College	104	40	15
48.	Abovyan Engineering College	216	95	39

		Number of Students		Number of
		Total	Free of charge Education	Lecturers
49.	Sisian Humanitarian College	280	107	95
50.	Sisian National Economy College	250	89	50
	Ministry of Agr	iculture		
51.	Yerevan Melioration College	420	237	46
52.	Nor-Geghi Agricultural College	804	467	71
53.	Stepanavan Agricultural College	199	147	43
54.	Gavar Agricultural College	355	225	32
55.	Goris Agricultural College	130	75	27
56.	Armavir Agricultural College	275	81	34
57.	Darbnik Agricultural College	413	145	22
58.	Vanadzor Agricultural College	274	148	44
59.	Vanadzor Agricultural Constructing College	198	158	35
60.	Shirak Agricultural College	318	203	54
61.	College of the Armenian National Agricultural Academy	142	0	64
	Ministry of H	ealth		
62.	Yerevan Basic Medical College	2547	930	381
62.1	Ararat branch	207	0	40
62.2	Armavir branch	147	10	26
62.3	Hrazdan branch	143	10	53
63.	Yerevan Grigor Magistros Medical College	1752	542	168
64.	College of Yerevan State Medical University	183	0	85
65.	Gjumri Medical College	486	108	145
66.	Vanadzor Medical College	822	141	174
67.	Kapan Medical College	323	158	53
68.	Dilijan Medical College	176	98	50
68.1	Gavar branch	171	20	34
	Ministry of Culture, Youth	Affairs and Spo	orts	
69.	Yerevan College of Cinematography	87	75	18
70.	Yerevan College of Variety Art and Jazz	72	40	21
71.	Yerevan Dancing Art College	275	275	90
72.	Yerevan Olympic Reserves (Sport) College	440	440	58
72.1	Tsakhkadzor branch	20	20	8
73.	Gjumri Olympic Reserves (Sport) College	290	290	19
	Ministry of E	nergy		
74.	Abovyan Energetic College	249	172	20
	Ministry of Tra			
75.	Gjumri College of Railway transport	194	0	20

		Number of Students		Number of
		Total	Free of charge Education	Lecturers
Ministry of Defence				
76. College of Military Aviation		116	116	40
	Yerevan Municipality			
77.	Yerevan "Erebouni" Medical College	355	106	70
TOTAL		25257	10411	4762

Source: Ministry of Finance of RA.

Annex 3. List of profession groups of middle professional education

NN	Name of the profession group	Number of professions in the group
1.	Naturalistic Professions	2
2.	Humanitarian-Social Professions	13
3.	Education	21
4.	Health Care	13
5.	Culture and Art	28
6.	Economy and Management	31
7.	Geology and Exploration of Natural Resources	7
8.	Extraction of Natural Resources	9
9.	Energy	15
10.	Metallurgy	11
11.	Machine-building and Treatment of Material	22
12.	Technological Devices and Equipment	34
13.	Electro-Technology	18
14.	Instrument-making	17
15.	Electronic Technology, Radio Technology and Communication	30
16.	Automatic devices and Control	13
17.	Computer Science	8
18.	Service	9
19.	Exploitation of the Transportation	10
20.	Chemical Technology	15
21.	Forest Resources	9
22.	Food Technology	17
23.	Technology of Consumer Goods	22
24.	Construction and Architecture	26

NN	Name of the profession group	Number of professions in the group
25.	Geodesy and Mapping	7
26.	Agriculture and Fish-farming	19
27.	Security of Surroundings and Life-support	8
28.	Measurement, Standardisation and Quality Control	6
TOTAL		440

Annex 4. List of acronyms

ADA	The Armenian Development Agency
AMD	Armenian Dram, national currency of Armenia
СВ	Central Bank of Armenia
CBANET	The Computer Network of the Central Bank of Armenia
CIS	Commonwealth of Independent States
FAR	Fund of Armenian Relief of Armenian Apostolic Church
FDI	Foreign Direct Investments
FSU	Former Soviet Union
ILO	International Labour Organisation
IBL	Institutional Building Loan
ISCED	International Standard Classification of Education
LE	Law on Education
MPI	Middle Professional Educational Institutions
NGO	Non-Governmental Organisation
PTI	Professional-Technical Educational Institutions
RA	Republic of Armenia
SAC	Structural Adjustment Credit
SES	State Employment Service
SIPPB	The State Investment Promotion and Protection Board
SPI	Secondary Professional Educational Institutions
USAID	United States Agency for International Development
USD	United States Dollar
VAT	Value Added Tax
VEI	Vocational Educational Institution
VET	Vocational Education and Training
WFP	World Food Programme of the United Nations Organisation

Annex 5. Glossary

Bachelor	Higher educational qualification degree
College	Middle Professional Educational Institutions
Junior Engineer	Secondary professional qualification degree (former, for graduates of Colleges)
Junior Specialist	Middle professional qualification degree
Marz	Administrative district of Armenia
Marzpetaran	Government of Marz
Master	Higher educational qualification degree
National Assembly	Parliament of Armenia
"Paros"	Social assistance system in Armenia
Specialist with Diploma	Higher educational qualification degree
State Order	Free of charge education funded by Government
Technician	Secondary professional qualification degree (for former 'Tekhnikum' graduates)
Tekhnikum	Former type of Secondary Professional Educational Institution
Usumnaran	Type of Secondary Professional Educational Institution
Worker	Preliminary professional qualification degree