

# TORINO PROCESS

# UZBEKISTAN

JANUARY 2011







## **TORINO PROCESS 2010**

Uzbekistan

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## List of Abbreviations

ADB	Asian Development Bank
EC	European Commission
ETF	European Training Foundation
EU	European Union
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
(H)SSVE	(Higher) and Secondary Specialised Vocational Education
NPPT	National Programme of the Personnel Training System
PPP	Public Private Partnership
SME	Small and Medium Enterprises
TACIS	Technical Assistance for the Commonwealth of Independent States
VET	Vocational Education and Training

## Foreword

This report represents a participatory review of the progress of the vocational education and training reform in Uzbekistan developed within the framework of the ETF “Torino Process” study. The study has been launched by the European Training Foundation (ETF) in 2010 with the aim of providing a concise, documented analysis of VET reforms in its partner countries, including the identification of key policy trends, challenges, constraints, as well as best practice and opportunities for vocational education and training (VET) system and policies.

In Uzbekistan the main counterparts nominated for the study are the Centre for Secondary Specialised Vocation Education within the Ministry of Higher and Secondary Specialised Vocation Education (SSVE Centre), the Chamber of Commerce and Industry and the Ministry of Labour and Social Protection. Two focus group thematic discussion meetings were organised with representatives from the world of education and world of work on 3 and 4 of June 2010 in Tashkent and two other meetings in Samarkand and Bukhara the following days. The ETF is grateful for the insights provided by participants (SSVE Centre, Chamber of Commerce and Industry, Ministry of Labour and Social Protection, State Committee on Statistics, Institute for Training and Retraining of Secondary Special and Professional Education, Cabinet of Ministers, National Coordinating Unit, university representatives, vocational college directors and various business representatives) during the rich discussions in all the meetings. A first draft report prepared by the ETF was first circulated for comments and then discussed with and commented by the Uzbek stakeholders in detail in thematic meetings on 26 and 27 July 2010 in Tashkent. The ETF is grateful to Mrs Rashidova, the Director the Academic Lyceum N2 under the Uzbek State World Languages University, for hosting the July meetings.

This report follows the analytical framework and guidelines for the Torino Process developed by the ETF, common for all its partner countries. However, data and information was not easily accessible for the report purposes and the key indicators to be gathered for all the ETF partner countries within the Torino Process study were not all available for Uzbekistan or are not up-dated (see Annex 2).

It is worth noting that the participatory review of progress of the VET system developed within the framework of the ETF Torino Process will be repeated again two years from now, i.e. in 2012/13. In the mid to long-term (2013 and beyond), the Torino Process will become a guided-self assessment exercise for monitoring VET policies.

## Executive summary

VET in Uzbekistan is seen as one of the drivers of economic development that supports skilled workers and as a major tool against youth unemployment vis-à-vis the sustained population growth. Uzbekistan is indeed the transition country that has invested by far the most in education in general, and in secondary specialised vocational education in particular. Public expenditure on education in Uzbekistan as a proportion of the GDP is high. Over the last few years it has constantly exceeded 10% of the GDP. Government expenditure as a proportion of total expenditure on education has always exceeded 80% testifying to the government's commitment to support the education system.

The reforms of the VET system started in 1997 with the adoption of the new Law on Education and the National Programme of Personnel Training (NPPT). The reform aimed at delayed entry of youth into the labour market until after 18 years of age to avoid social problems with young people leaving school at the age of 15-18 without any qualification. The NPPT extends compulsory education from 9 to 12 years. After primary and basic general education of 9 years, students continue either in academic lyceums to get secondary specialised education or in vocational colleges to get secondary specialised vocational education. In practice 90% of students are steered to vocational colleges while 10% access academic lyceums through competitive selection exams. The priority has been a 100% enrolment rates in secondary specialised education or vocational training and the increase in the number of vocational colleges across the country. Both lyceums and colleges provide their graduates with equal rights for higher education.

Currently the system of secondary specialised vocational education comprises 1508 schools with 1 473 860 students. Out of these, 103 726 students are enrolled in 138 academic lyceums and 1 370 134 in 1370 vocational colleges. Training in vocational colleges is provided for 264 occupations covering 704 specialisations. The specialisation of professional colleges is decided on the basis of actual needs of the labour market and recommendations from the regions. Adjustments are made every year in the areas of training of vocational colleges. VET curriculum comprises 40 % general education and 60% vocational education subjects and internship. Each college develops curricula in line with the standard curricula approved by the SSVE Centre. According to the national education standard, colleges have the right to introduce changes and amendments up to 15% of "flexibility hours", including "electives" (120 hours) and a "college component" (120 hours).

The relevance of curricula remains an issue in current public VET system. The Welfare Improvement Strategy of Uzbekistan for 2008-2010 recognises that the quality of the workforce does not meet the occupation and qualification requirements of employers, and that changes need to be introduced in the training of workers at colleges. Involvement of private sector businesses in curriculum development is still limited.

The vocational college graduate of is awarded a diploma and qualification of "junior specialist" in respective field which should be recognized by any institution in Uzbekistan and provides the right to enter university. However, existing VET structure is flat and does not consider multilevel qualification framework. In particular there is no provision for further professional education for "technician" level. Therefore there is a lack of bridges to higher professional qualification after the professional college.

The high enrolment rates in primary and secondary education indicate how effectively the education reforms have been implemented in Uzbekistan. Legally speaking all the citizens have the same opportunities and rights to attend school and to get education and training. In practice however, inequalities may exist between urban and rural areas regarding equal access to education which is relevant in a country where 60% of the population lives in rural areas. This is due to costs related to schooling, transport, distance of schools and the higher poverty rates in rural areas.

Furthermore, informal economy and informal employment are challenges in the Uzbek economy. Over 35% are employed in the informal sector. Informal employment is common for the rural area and among the rural-urban migrants. In addition to the redundancy, high annual increase of the working age population contributes to the growth of informal employment. The demographic pressure is high. About 60 % of the population is under 25 years of age. Every year between 450.000 and 500.000 young graduates from vocational colleges (and academic lyceums) join the labour force.

The general level of unemployment was 5% in 2009 (Ministry of Labour and Social Protection). The Government declared the year 2010 as the "Year of Harmoniously Developed Generation". The Action Plan of the Ministry of Labour and Social Security foresees the creation of 950.000 new jobs with focus on the youth.

VET system can be said to have successfully responded at least partly to the requirements of economy, in particular of a number of public companies and holdings. However the overall effectiveness of VET is difficult to assess when a significant part of the economy and demand for skills is informal. To make the economy and the labour market less informal, knowledge is required of what kind of skilled workers are in demand in companies and which qualifications and skills will help reduce informality. Quite often the SMEs do not know how to formulate their needs in labour and skills. SME development is a challenge and opportunity in Uzbekistan. SMEs in Uzbekistan have the potential to further develop, as it has natural resources, skilled and educated workforce, and favourable geographic location.

Education and business cooperation has a long tradition in Uzbekistan, a heritage from the Soviet period. In all the academic lyceums and vocational colleges School Boards comprise representatives of enterprises. Through the School Boards practical training in companies is organised and employers are involved in final qualification exams. The final attestation commissions comprise representatives of employers (70%) and staff of the college (30%). The head of an attestation commission is a representative of the concerned industry. However, there is a need for a platform for formally involving private sector in the development of the educational system and the curriculum in particular and to develop the capacity of the private sector for skill needs assessment.

The training of the teachers takes place in 43 higher education institutions.

Provision of qualified teachers meeting the state education standards to the academic lyceums and vocational colleges is ensured through regular training and professional development. However, it is difficult to attract young professional teachers to the vocational colleges located in remote rural areas. While planning enrolment (and a number of graduates respectively) of higher education institutions, geographical factors regarding the needs of academic lyceums and vocational colleges for teaching staff should be better considered. Furthermore, often the facilities of the universities specialized in improving qualifications of teachers do not meet the required equipment level of corresponding academic lyceums or vocational colleges.

VET quality assurance issues have been addressed by the Government in a number of Decrees and Regulations. Overall responsibility for attestation and accreditation of VET institutions and teaching staff stay with the Centre for Evaluation under the Cabinet of Ministers. This organization arranges regular monitoring of the performance of all educational establishments in Uzbekistan and vocational colleges in particular. The main tool for quality assurance is the State Final Attestation of graduates. The attestation content should be directly linked to job descriptions for relevant occupational profiles. Examination of skills related to production and technologies must be arranged in the workshops and training fields.

The focus group meetings organised by the ETF in Uzbekistan in June 2010 with the support of the SSVE Centre demonstrated high commitment of both education and business representatives to continue with the reforms. Issues that were addressed included among other:

- A most urgent requirement is to ensure a better match between VET provision and labour market needs. Therefore it is crucial to start working in defining and setting up a certification/national qualifications framework recognised by all the stakeholders, including employers in the private sector.
- There is a lack of capacity of skills needs assessment. Employers, in particular SMEs need incentives and capacity building through training and retraining for skills need analysis and training provision.
- The service sector is developing and growing. The service sector should be further integrated in the VET system (and classifier of occupations).
- There is a need for a more flexible education system to facilitate transition from general education to VET and a multilevel qualification framework.

# 1. Vision and state of the art in vocational education and training

VET in Uzbekistan is seen as one of the drivers of economic development that supports skilled workers and as a major tool against youth unemployment vis-à-vis the sustained population growth. *Education is the highest stated priority of the Republic of Uzbekistan for social development* (Law on Education, 1997). Uzbekistan was the first CIS country to begin institutional reforms of the educational sector in 1996. Uzbekistan is indeed the transition country that has invested by far the most in education in general, and in secondary specialised vocational education in particular (ETF, 2005). Vocational training programmes include secondary specialised, vocational education, higher education (Bachelor's and Master's Degrees), post-graduate study, continuing education and skills upgrading courses (NPPT, 1997).

Within the Soviet education system, there was a strong emphasis on vocational education at secondary school level. Even before the effects of the new education system, launched in 1998, could have any influence, the share of vocational school graduates in secondary education was as high as 58% in 1999 (ETF, 2005). The reforms of the VET system started in 1997 with the adoption of the new Law on Education and the National Programme of Personnel Training (NPPT) which was adopted as a Law. The reform aimed at the abolishment of the Soviet multilevel VET structure and gradual development of a new unified VET system (UNESCO, 2009). The reform also aimed at delayed entry of youth into the labour market until after 18 years of age to avoid social problems with young people leaving school at the age of 15-18 without any qualification<sup>1</sup>.

The NPPT extends secondary education to at least 12 years of schooling for the whole population (compulsory education is extended from 9 to 12 years). After primary and basic general education of 9 years, students continue either in academic lyceums to get secondary specialised education or in vocational colleges to get secondary specialised vocational education. In practice 90% of students are steered to vocational colleges while 10% access academic lyceums through competitive selection exams. Both lyceums and colleges provide their graduates with equal rights for higher education.

The introduction of three additional years of compulsory education brought about an urgent need to put in place a school network that would ensure access for 115,000 students, and accommodate over 1 million students in 178 Academic Lyceums and 1,689 Professional Colleges by 2010. Therefore, the initial reform focused first and foremost on a large school-building programme and on the procurement of equipment. At the same time, the Centre for Secondary Specialised Vocational Education (SSVE Centre) was created within the Ministry of Higher and Specialised Secondary Education to oversee the development of secondary specialised vocational education (ETF, 2005).

In terms of content, emphasis has been placed on defining new educational standards prescribing the share and principles of general education, vocational theory and practical training to ensure that the vocational colleges provide a combination which also provides access to higher education and to the labour market by introducing each student to one or several vocational specialisations. The general education component of secondary vocational education (40%) is obligatory and similar for all students (ETF, 2005).

The priority has been a 100% enrolment rate in secondary specialised education or vocational training and the increase in the number of vocational colleges across the country. Lot of efforts has been put to linking vocational training with industry and employment by varying the in-company training component in the curriculum, depending on the sector. In 1997-2001 the new policy of individualised training was defined, in 2001-2005 the secondary specialised vocational education was transformed and since 2005 it has focused on the improvement and development of the system (Fazylov, Smirnova, 2008). Continuing education at the secondary VET level has been applied gradually upon readiness of different regions, and is to be completed in 2010.

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<sup>1</sup> 60% of the population of Uzbekistan is under 25 years of age.

## 2. External efficiency: Addressing economic and labour market needs

### Economy

Petroleum, natural gas, gold and cotton are the main pillars of the economy. Uzbekistan is the second largest cotton exporter and fifth largest producer in the world. Growth has been very strong in recent years, with the economy expanding at an 8.2% annual average rate between 2005 and 2009. Agriculture accounted for 26.2% of GDP in 2008, manufacturing had a 24.7% share, transportation, storage and communication represented 12.5% and wholesale and retail trade, hotels and restaurants had a 10.4% share (Financial Standards Foundation, 2010).

The economy has been affected by the recession through weaker external demand and lower remittance inflows. However, despite the global recession and economic contraction among its major trading partners, Uzbekistan continued its strong economic performance in 2009. The government took preventive measures to fight recession introducing large-scale anti-crisis programs for 2009–2012. The measures included investment in public infrastructure, fiscal incentives for exporting industries as well as to small and medium-sized enterprises, increased wages for state employees, and recapitalization of commercial banks. The program was financed through the government budget, the state-owned enterprises (SOEs), and the Fund for Reconstruction and Development (FRD), a sovereign wealth management fund established in 2006. Considerable budget revenues, export of gold and gas contributed to the implementation of the programs. As a result, GDP growth was sustained by output gains in industry, including construction and services (ADB, 2010).

Since independence the government has not significantly liberalized or deregulated the economy. For instance it sets production quotas and prices for farmers and owns most of the major companies including the national air company Uzbekistan Airways, the state electric company Uzbekenergo, and the national oil and gas company Uzbekneftegaz. The Government also sets strict control of foreign trade and foreign exchange and pursues a policy of import substitution (Financial Standards Foundation, 2010). While there has been some progress in privatisation of collective farms, transition is hindered by lack of capital and the sector remains heavily underinvested (EBRD, 2005).

Currently the economy is resource-based, making it susceptible to the fluctuations of the global commodity prices. In order to achieve broad-based inclusive growth, private sector development, industrial diversification and trade liberalization are essential. The recent economic achievements of the country provide a sound opportunity for speeding up the transition to a sustainable and competitive economy (ADB, 2010).

### Employment

Agriculture employs 32% of the workforce while industry employs about 20%. Employment in the services sector has gradually increased to 50 % (ADB, 2010).

The working age population is 57.8% of the total population (55.3% of the working age population are women). According to the statistics available in July 2010 (Ministry of Labour and Social Protection), 11 930 000 people are economically active and 11 328 000 out of them are employed. This translates to an activity rate of 74%, an employment rate of 70% and an unemployment rate of 5% (ETF calculations)<sup>2</sup>. Out of the 5 523 000 economically active women, 5 200 000 are employed (Ministry of Labour and Social Protection) which translates to a female activity rate of 62%, a female employment rate of 58% and a female unemployment rate of 5,8% (ETF calculations)<sup>3</sup>.

Female labour is concentrated in certain sectors. Women are mostly employed at low paid state sectors of the economy such as health care, education and agriculture (Alimdjanova, 2009). Women

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<sup>2</sup> ILO KILM statistics provide a male activity rate of 7% and female activity rate of 58% and a male employment rate of 63% and a female employment rate of 53% for 2008 for the population 15+.

<sup>3</sup> No official statistics were provided, the number of active and employed overall and for women were reported orally and a written input given stating that the workforce is 57.8% of the total population out of which 55.3% are women and that economically active population is 74% of the workforce, women being 46.3% of them.

represented 78% of the total of employees in health care (and sports) 70% in education, and 53% in agriculture in 2006 (Alimdjanova, 2010, State Statistical Committee, 2008).

The monitoring held according to the methodology approved by the Resolution of the Cabinet of Ministers of Uzbekistan (No 106 of May 24, 2007), shows the current need (as of 01.01.2010) in employment for 601,400 people (Ministry of Labour and Social Protection, 2010). In 2009, 940 500 jobs were created within the approved regional development programs. These include 391 800 jobs in small and private businesses, 196 700 home-based jobs (out of them 77,500 created jointly through contracts with companies) and 70 600 jobs created due to new production, the reconstruction and expansion of active businesses (Ministry of Labour and Social Protection, 2010).

SME development is a challenge and opportunity in Uzbekistan. SMEs in Uzbekistan have the potential to further develop, as it has natural resources, skilled and educated workforce, and favourable geographic location. As per the data by the Chamber of Commerce and Industry, 1 July 2010 there were 510 820 registered enterprises of small business. However, the SMEs' potential to develop further has been little materialised. The main reasons for this according to ADB are due to "(i) internal constraints of SMEs in information and technology management, processing skills; (ii) external policy, legal, and regulatory constraints; and (iii) lack of access to credit and foreign exchange for importing capital goods, materials and technology" (ADB, 2009). The "Doing Business 2010" Report (World Bank, IFC, 2009) ranks Uzbekistan 150<sup>th</sup> out of 183 countries on the ease of doing business. Over a third of the SMEs are in agriculture.

Furthermore, informal economy and informal employment are challenges in the Uzbek economy. According to the Ministry of Labour and Social Security, over 35% are employed in the informal sector<sup>4</sup>. Informal employment is common for the rural area and among the rural-urban migrants. Most workers that became redundant in 1990-2000 due to the restructuring of state enterprises, including the agricultural sector, found low paid jobs in the informal sector. In addition to the redundancy, high annual increase of the working age population contributes to the growth of informal employment.

Labour mobility equally constitutes a challenge. There has been an important external labour mobility from Uzbekistan to Russian Federation, Kazakhstan, Gulf States and South Korea in the 2000s according to International Organisation for Migration. IMF estimated that the remittances from the migrant labour force contributed up to 11% of the GDP in 2007 (CER, UNDP, 2010). Several hundred of thousands of workers returned home in 2009 because of the global economic downturn.

## **Vocational education and training**

Available modern facilities and qualified personnel of vocational colleges makes it possible to train graduates who will manage to apply their competences and expertise in various sectors of economy, farms, small and private businesses. Currently, a big number of vocational colleges train junior specialists in such knowledge areas as engineering, processing, construction, as well as agriculture and water management (SSVE Centre).

VET system can be said to have successfully responded at least partly to the requirements of economy, in particular of a number of public companies and holdings. However the overall effectiveness of VET is difficult to assess when a significant part of the economy and demand for skills is informal. To make the economy and the labour market less informal, knowledge is required of what kind of skilled workers are in demand in companies and which qualifications and skills will help reduce informality. Quite often the SMEs do not know how to formulate their needs in labour and skills.

When the NPPT was formed a labour market analysis was carried out in order to determine the needs of the labour market and to link VET closely with the labour market needs. Since 2005 a big number of vocational schools have been established for the regional economies. Thus, agricultural and textile vocational schools have been built or renovated and equipped in the regions with cotton production. However, until now there exists a fundamental mismatch between the qualification structure of integrated labour markets and the supply of knowledge and skills in the education and training system. The challenge will be to ensure that the system responds to the different levels of qualifications in the labour market, matching these with education and training opportunities at corresponding levels of secondary and post-secondary vocational education and higher technical education to ensure that the Uzbek economy has a balanced blend of skilled workers, technicians and middle managers.

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<sup>4</sup> Meeting Tashkent, June 2010.

Education and business cooperation has been developed in order to train qualified graduates. In all the academic lyceums and vocational colleges School Boards comprise representatives of enterprises. Through the efforts of School Boards practical training in companies is developed and employers are involved in final qualification exams. Those successful in practical training and qualification exams are employed in these companies. In 2001-2009 the total of 1 million 369 thousand 649 students were trained for the various sectors of the national economy. In the academic year 2009/2010, 431 706 students completed secondary school, of whom 30 742 graduated from academic lyceums and 400 964 completed vocational colleges (SSVE Centre).

Furthermore, the government is supporting the development of graduates' entrepreneurial competences. In order to create conditions for opening own businesses, for developing entrepreneurial activity and self-employment of graduates, the "Principles of Entrepreneurship and Business" course has been introduced. Vocational college graduates are granted subsidised loans from "Mikrokreditbank" Joint-Stock Commercial Bank for opening own business (SSVE Centre).

The focus group meetings organised by the ETF in Uzbekistan in June 2010 with the support of the SSVE Centre demonstrated high commitment of education and business representatives to continue with the reforms. Issues that were addressed included:

- A most urgent requirement is to ensure a better match between VET provision and labour market needs. Therefore it is crucial to start working in defining and setting up a certification/national qualifications framework recognised by all the stakeholders, including employers.
- There is a lack of capacity of skills needs assessment. Employers, in particular SMEs need incentives and capacity building through training and retraining for skills need analysis and training provision.
- The service sector is developing and growing. The service sector should be further integrated in the VET system.
- There is a need for a more flexible education system to facilitate transition from general education to VET.

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

#### Equality of access

The high enrolment rates in primary and secondary education indicate how effectively the education reforms have been implemented in Uzbekistan. Legally speaking all the citizens have the same opportunities and rights to attend school and to get education and training. NPPT intends to provide learning opportunities for all in the framework of continuous education which covers all education, from pre-school to higher education, skills upgrading and extra curricular education (NPPT, 1997)<sup>5</sup>.

In practice inequalities may however exist between urban and rural areas regarding access to education which is relevant in a country where 60% of the population lives in rural areas. First, direct parental expenditures on education, both formal and informal fees and charges, in-kind contributions, parental labour etc. have increased limiting access to schools for students from poor families which mostly live in the rural area. Government has indeed provided for example free winter clothes and textbooks to enhance school attendance of children from poor families. Student contract fees are now standard for state higher education institutions too. Second, education is largely financed through decentralised local budgets, which depend on the ability to collect local taxes and this may result in regional disparities in terms of quality of education. Third, taking into consideration the transport costs and other obstacles related to distance from home, in particular for girls, there is less freedom of choice for the school specialisation in the rural areas, the available schools having been created according to the needs of the local economy. Furthermore, there is no easy access to nearby

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<sup>5</sup> The concept of continuous education refers in Uzbekistan to continuity of levels of education from pre-school to academic lyceums and vocational colleges and to Master degrees at the university.

institutions for special needs education in the rural area undermining school attendance of disabled children in the poorer regions<sup>6</sup>.

No data was available for education and training nor employment differentiating rural and urban areas.

According to the UNESCO analysis of 2009 there is an overall gender equity in the public VET system but there are education profiles mainly attended by girls (girls representing 81% of enrolled in education, 80% in health care and sports and almost 100 % in textile) and by boys (agriculture, construction, industry, transport and communication) (UNESCO, 2009). Women's employment and education is under the influence of gender stereotypes related to the women's role in patriarchal society (Alimdjanova, 2009). Most of offered courses are for "male" occupations and there are still limited options for girls, due both to traditions in the choice and opportunities for new occupations (UNESCO, 2009). The most popular areas of study in VET in general are agriculture, processing and healthcare (UNDP, 2005a).

In 2006 (UNDP, 2005b), girls represented 47% of students in vocational colleges (and 36% in academic lyceums). This data is quite interesting because in most countries around the world more girls participate in general secondary than in vocational education. However, one should consider that there are much fewer academic lyceums than vocational colleges in Uzbekistan, which reduces access to girls because parents, in particular in rural areas, are reluctant to send girls away from home to study and have them live in dormitories.

## **Demographic pressure and mobility**

The demographic pressure is high. About 60 % of the population is under 25 years of age. Every year between 450.000 and 500.000 young graduates from vocational colleges (and academic lyceums) join the labour force. To alleviate the employment problems in the labour market, the Government issued a plan called "Territorial Programmes on Quality Training and Employment of Vocational College and Academic Lyceum Graduates for 2006-2010". Under this programme, Coordination Councils for quality training and employment of college and lyceum graduates and for the proper employment of university graduates were set up under the Chairman of the Council of Ministers of Karakalpakstan Republic, Hokims of the regions and of Tashkent. Similar Coordination Councils were set up at district and municipality levels. The Coordination Councils are responsible for coordinating, management and monitoring of the implementation of territorial programmes on quality training and employment of college, lyceum and university graduates, as well as for the assessment of demand and supply at the labour market (SSVE Centre).

Regarding external mobility, it can reduce demographic pressure on the labour market. For this purpose, the Government has signed agreements with the Russian Federation, Poland and Kazakhstan to facilitate migration. Five Employment Offices focus on external migration. Potential low skilled migrants are provided with training for example in the field of construction, mostly in the premises of vocational schools. However, external mobility can normally produce only short terms solutions. The Uzbek government had to address the problem of returning migrants in its 2009 anti-crisis programme by creating for them 248.000 jobs. Migration also provides mostly solutions for low skilled people. Most of the low skilled Uzbek emigrants are employed in construction sector in Russian Federation Kazakhstan and Poland. Due to the lack of international recognition of Uzbek diplomas, even the skilled emigrants often end up in low skilled jobs abroad.

## **Unemployment**

The general level of unemployment was 5% in 2009 (Ministry of Labour and Social Protection). That year 658.300 unemployed contacted the Employment Offices under the Ministry of Labour and Social Protection (the network of Employment Offices consists of 199 local district offices and 1900 provincial village employment inspectorates). 596.000 or 91% of them were employed (Ministry of Labour and Social Protection).

According to the law, every business should report monthly to the employment offices about vacancies and since 2007 a computerised system connects the employment offices into the network. Training is also provided to the unemployed either in the Tashkent training centre of the Ministry of

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<sup>6</sup> The problem of poor families is exacerbated by the fact that sending a child to a specialized or boarding school means also losing the disability allowance.

Labour or in vocational colleges (217 vocational colleges provide training for unemployed). Training is organised in groups of at least 10 unemployed, and in 2009 about 2 billion Uzbek soms were invested by the Ministry of Labour and Social Protection in training or re-training of unemployed. However, only 2.6% (16.800) of 658.300 registered unemployed were re-trained (Ministry of Labour and Social Protection).

The Government declared the year 2010 as the “Year of Harmoniously Developed Generation”. The Action Plan of the Ministry of Labour and Social Security foresees the creation of 950,000 new jobs with focus on the youth.

The Republic of Uzbekistan is making huge efforts to ensure equality of access to education, to respond to the demographic pressure and unemployment. Future challenges regarding the external efficiency identified by the ETF include:

- Equal access to education and school attendance in particular in the rural areas and among the poor families
- Career guidance and freedom of choice of the specialisation, in particular in the rural areas and for girls who are supposed to attend the near-by schools
- Gender segregation by occupation (female and male specialisations)
- Schooling of the disabled people in particular in the rural areas and poor families

## 4. Internal efficiency, quality, governance and financing

### Principles

Fundamental reform of education, abandonment of its ideological narrow-mindedness, creation of the national system for training of highly qualified workforce to the standards of developed democratic countries, with high cultural and moral values are the purposes of the National Programme of Personnel Training in the Republic of Uzbekistan (NPPT, 1997). The challenges for reaching this objective include the establishment of regulatory infrastructure and information base to provide the required level and quality of education, guarantee the functioning and sustainable development, priority of the training system in the new socio-economic conditions, as well as the development of mutually beneficial international cooperation in training.

Compulsory vocational education with a three-year training period after general secondary education is an independent type in the system of continuous education. Young people choose themselves where to get secondary specialised education – in academic lyceums or vocational colleges:

- Academic lyceums provide secondary specialised education in compliance with state educational standards for intensive intellectual development, advanced, occupation-oriented, individualised training depending on the capacities and interests of students. In the academic lyceums students have the opportunity to improve knowledge in their field of study (math subjects, natural sciences, foreign philology and other) and build special skills aimed at advanced study of subjects in order to continue training in a particular university, or to apply skills when employed. The graduates of academic lyceums are issued state diplomas, which gives the right to continue education at higher levels of education, or to get employed in the acquired occupation. Two special subjects and a month-long internship have been introduced in the curricula of academic lyceums so that the students could work in a chosen occupation.
- Vocational college is a three year secondary vocational school that provides advanced development of occupational aptitudes and skills of students and leads to obtaining one or more qualifications (worker specialisations) in chosen occupations. The graduates of secondary vocational education are granted qualifications of junior specialist (NPPT, 1997).

## Governance and financing

The Ministry of Higher and Secondary Specialised Vocational Education bears the responsibility for the sector<sup>7</sup>. The Centre for Specialized Secondary Vocational Education within the Ministry is responsible for academic lyceums and vocational colleges. The Ministry of Labour and Social Security is responsible for some programmes aimed at professional training and raising the workers' skills level.

The Centre for Secondary Specialised Vocational Education (SSVE) was founded in 1998. The main tasks of the SSVE Centre are the following:

- Coordination and management of SSVE activity
- Organization and material-technical provision of academic lyceums and vocational colleges
- Ensuring development and control of state education standards
- Selection, training and professional development of teaching staff
- Mainstreaming of international and national experience in staff training

The Centre is responsible for managing the academic, methodological and organizational activities of academic lyceums and vocational colleges, provision to the management of governance bodies of services related to secondary specialised vocational education (as agreed with the local authorities), and also for providing qualified lecturers, teachers and technical trainers. Thus the SSVE Centre has a supervisory and coordinating role in this sector, with the aim of bringing coherence into the education programs, and training and retraining the teaching staff. Regional departments of the Centre are responsible for managing secondary specialised vocation education outside Tashkent (UNDP, 2008).

Public expenditure on education is financed through the state recurrent budget for the education sector, the investment budget, foreign assistance received and the off-budget School Development Fund the revenues of which consist mainly of taxes and contributions from local governments. Public expenditure on education in Uzbekistan as a proportion of the GDP is high. Over the last few years it has constantly exceeded 10% of the GDP. Government expenditure as a proportion of total expenditure on education has always exceeded 80% testifying to the government's commitment to support the education system (UNDP, 2008).

Extra-budgetary funds in education system in Uzbekistan are generated as a result of contributions to educational institutions made by parents, private individuals and local communities. Some sector colleges are 100% funded by the (state-owned or state holding) companies (oil and gas, mining, construction, railway) and the teachers' salaries are considerably higher. Some colleges generate additional revenue (for the schools and teachers) by providing re-training (paid by companies) and training for unemployed (paid by Ministry of Labour). No significant changes are foreseen in the governance and funding of the system.

Regarding stakeholder involvement, the main effort of the Uzbek authorities has been to involve the economic sectors; the role of industry is clearly indicated in the NPPT: "The needs of industry influence the field, level and scale of training, determine the aim, tasks and content of vocational training, put forward qualification requirements, stipulate the choice of adequate technologies and forms of training".

## Efficiency

Currently the system of secondary specialised vocational education comprises 1,508 schools with 1,473,860 students. Out of these, 103 726 students are enrolled in 138 academic lyceums and 1,370,134 in 1370 vocational colleges. The number of schools is being increased: in the academic year 2010/11, 1,536 schools will function, including 139 academic lyceums and 1,397 vocational colleges. In the academic year 2009/10, 431,706 students graduated, 30,742 from academic lyceums (7.1%) and 400,964 (92.9%) from vocational colleges. According to the Ministry of Public Education,

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<sup>7</sup> Ministry of Public Education is responsible for pre-school, extracurricular educational institutions and general education schools.

out of the 595 692 graduates of the 9<sup>th</sup> grade of 2010/11, 95.5% are planning to enter the academic lyceums and vocational colleges and 8,650 graduates will continue on in Grade 10 (SSVE, 2010).

Out of a total of 332,320 vocational college graduates of the academic year 2008/09, by the first quarter of 2010, 268,216 graduates (80.7%) got a job and 6,504 graduates (2.0%) were in higher education. Also, from 21,778 graduates of the academic lyceum, 5,405 graduates (24.8%) were employed, 6,344 graduates (29.1%) had entered higher education institutions, and 6,142 graduates (28.2%) participated in preparatory courses to enter higher education institutions in the 2010/11 academic year (SSVE Centre).

In 1998-2009 academic lyceums and vocational colleges were equipped with teaching and laboratory equipment for the amount of 94.8 billion Uzbek soms from the government budget. In the framework of investment projects, in 1998-2010 more than 640 SSVE schools were equipped with modern teaching and laboratory equipment. In 1998-2010, for the development of secondary specialised education foreign investments, loans and grants were attracted with the total amount of 234 681 000 US dollars, of which 208 240 000 USD are loans and 26 441 000 US dollars are grant funds (SSVE Centre, 2010).

The Ministry of HSSVE is responsible for overall management, defining ways and methods for improving the teacher training system, registering specialized higher education institutions, training and retraining teachers, and coordinating their activities, regardless of their institutional affiliation. The SSVE Centre serves as the customer and identifies the demand, quantitative and qualitative indicators for training of the faculty of academic lyceums and vocational colleges. In order to improve and coordinate the activities in the area of training, retraining and professional development of teachers and masters in the SSVE system, a Department for monitoring of managerial and teaching staff has been established in the SSVE Centre since October 2008 (SSVE Centre).

The training of the teachers takes place in 43 higher education institutions<sup>8</sup>. As of January 1, 2009, 90 835 teachers work in the SSVE system. Out of them 56% are general subject teachers, 34% general and special subject teachers, 10% masters of industrial training, 99% of general subject teachers, 93% of general and special subject teachers and 54,4% of, masters of industrial training have higher education diplomas. 1,2% of them have advanced degrees, including 95 doctors and 1022 PhDs. About 1% of teachers and masters teach in different than their own subject areas. (SSVE Centre, 2010)<sup>9</sup>.

Monitoring is organised of the employment of graduates from specialised vocational education departments in the universities. From 3900 graduates of special vocational education departments of the universities in 2007/08 academic year, 47% were employed in the academic lyceums and vocational colleges. Of these, 60.2% are graduates whose education was covered by government grants, 38% studied on a self-paid basis. 653 (39.8%) graduates of special vocational education departments of the universities in 2007/2008 academic year, whose study was funded through the state grant, are outside the SSVE system. Of them: 9.3% enrolled in Master's Degree courses, 17.7% work in the education system, 8.7 work in other sectors of the economy, 1% serve in the army, 2.9% on maternity leave and 0.1% went abroad<sup>10</sup>.

To improve the performance of the VET system and the retention of university graduates, a number of activities are organised, such as teaching practice in the academic lyceums and vocational colleges,

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<sup>8</sup>In accordance with the Programme for Training, Retraining and Qualification Upgrading of Teachers, and Masters of the SSVE System until 2010 approved by the Cabinet of Ministers of the Republic of Uzbekistan № 400 of October 4, 2001 "On Measures to Improve the System of Teacher Training for Secondary Specialised Vocational Education Institutions", The Order of the Ministry of Higher and Secondary Specialised Education № 62 dated March 10, 2008 "On Provision of Higher and Secondary Specialised Education Institutions with Teaching Staff" regulate the measures for recruiting teaching staff with higher education to the academic lyceums and vocational colleges. Based on current qualification requirements of teachers and masters, the qualification requirements for basic posts in the SSVE schools, which define knowledge and skills necessary for teaching, were approved on August 25, 2008 by the joint decision of the SSVE Centre, the Ministry of Labour and Social Security of the Republic of Uzbekistan, and the State Test Centre.

<sup>9</sup> In order to improve the efficiency of academic lyceums and vocational colleges and make highly qualified teachers with higher education available, "Procedure for Providing Secondary General Schools, Academic Lyceums and Vocational Colleges with Highly Qualified Faculty with Higher Education" was developed and approved by the joint decision of the Ministry of Public Education, Ministry of Higher and Secondary Specialised Education and the Centre for Secondary Specialised Vocational Education, № 27, 180-1, and 04/PK-27-B of June 14, 2008, and put into force (SSVE Centre).

<sup>10</sup> The destiny of 1,432 (63%) of graduates of special vocational education departments of the universities in 2007/2008 enrolled on a tuition basis and not employed in the SSVE is as follows: 6% enrolled in master's degree, 10,6% work in the education system, 39,4% work in other sectors of the economy, 2,3% serve in the army, 4,8% are on maternity leave and 0,2% went abroad.

that is in the future workplace, meetings of and seminars for the university graduates and the representatives of secondary vocational education institutions. In 2008, the number of teachers with higher education increased by 1% as compared to 2007, and amounted to 92,2%. The number of faculty with advanced academic degrees has increased by 4%. However, as a result of new qualification requirements of the key staff positions in secondary VET institutions, pursuant to the Cabinet of Ministers Resolution № 165, August 1, 2008 "On Approval of an Improved System of Remuneration of the Secondary VET Staff", the number of teachers with the category of "Principal teacher" and "Lead teacher" has decreased by 5% as compared to the previous year. The certification of faculty and awarding qualification categories in line with the Cabinet of Ministers Resolution № 165 of August 1, 2008, is currently underway in the SSVE system.

Provision of qualified teachers meeting the state education standards to the academic lyceums and vocational colleges is ensured through regular training and professional development. Retraining and professional development of teachers is mainly carried out in 46 institutes, departments and specialised university centres commissioned by the SSVE Centre. In 2008, training and retraining of 13,641 people of teaching and administrative staff in the institutes, departments and specialized centres of higher education institutions was planned. In total 13112 (96.2%), teaching and administrative staff underwent training. Of these, 12892 have improved their skills in the institutes, departments and specialized centres of higher education institutions, 245 participated in psychological and pedagogical training, 301 in specialised courses organised by the JICA project in vocational colleges, 111 were trained in the "Istedod", the President's Fund for professional development of promising young teachers and researchers, 69 were involved in retraining courses overseas. Mechanisms are also introduced for improving the qualification of the faculty in academic lyceums and vocational colleges in companies and research institutes<sup>11</sup>. In line with the requirements of the Cabinet of Ministers Resolution № 25, 16 February 2006 "On further improvement of the system of retraining and professional development of teachers" in 2006 curricula in all training areas have been updated in accordance with state education standards of secondary specialised vocational education.

However, due to the lack of explicit guarantees for housing, as well as other aspects of social protection, it is difficult to attract young professional teachers to the vocational colleges located in remote rural areas and a quota mechanism may have to be introduced. Furthermore, while planning enrolment (and the number of graduates respectively) of higher education institutions, geographical factors regarding the needs of academic lyceums and vocational colleges for teaching staff are not considered.

There is a big difference of tariff categories in the payment of teachers. It is difficult to recruit masters with higher education and highly qualified professionals from industry. A mechanism for incentives should be developed to attract staff with higher education and qualified professionals from industry.

The development of teaching and administrative staff is mainly constituted by mandatory refresher courses and 144-hour off-the-job training courses. Other effective ways of staff development such as independent learning and sabbaticals are not used. In 1998-2010 in the framework of investment projects, 1,421 executives, teachers and masters of the SSVE system participated in the overseas training in 13 European and seven Asian countries, and in the CIS countries, the United States and Canada. Some 1,200 vocational teachers and executives were awarded scholarships to study in leading vocational institutions in Europe, Asia and Australia. Some 2,800 college administrators participated in management courses in the framework of the National Scholarship Fund "Istedod". However, the facilities of the universities specialised in improving qualifications of teachers often do not meet the required equipment levels of corresponding academic lyceums or vocational colleges and the opportunities provided by staff development courses are not used to their full potential. E-learning could be a potential tool for improving the situation.

## Quality Assurance

VET quality assurance issues have been addressed by the government in a number of Decrees and Regulations. Overall responsibility for attestation and accreditation of vocational institutions and teaching staff stay with the Centre for Evaluation (Test Centre) under the Cabinet of Ministers. This organisation arranges regular monitoring of the performance of all education establishments in

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<sup>11</sup> The "Instruction on the Organisation of Professional Development of Teaching Staff of the SSVE system in Advanced Educational Establishments and Industrial Enterprises" was approved and put into practice by the Order of the SSVE Centre № 143, 8 August 2008.

Uzbekistan and vocational colleges in particular. The Centre for Evaluation has the power to assess institution and teacher performance and has a right to issue/suspend/abolish the accreditation and license of education establishments (UNESCO, 2009).

The main tool for quality assurance is the State Final Attestation (Final Examination) of graduates. According to the Regulation of the SSVE Centre "On State Final Attestation of Graduates" the attestation commissions should comprise representatives of employers (70%) and staff of the college (30%). The head of an attestation commission should be a representative of the concerned industry. The attestation content should be directly linked to job descriptions for relevant occupational profiles. Examination of skills related to production and technologies must be arranged in the workshops and training fields.

In order to streamline and to improve the quality of the educational process, the examination of students' knowledge and skills and to improve all kinds of teacher activities, a new set of normative documentation has been developed and introduced in the educational process: "Teacher's Individual Work Plan", "Rating System for Defining Students' Knowledge Level" "Procedure for Organizing Students' Independent Work", "On Written Work of Students", "Procedure for Open Classes", "On Teacher Evaluation and Rating", "On Practical Examination in Occupation" and "On Time Norms".

Legal provisions for recognition exist only for state owned VET providers. There is no evidence of private-public partnership in VET provision and no coordination of possible non-government VET options. Skills and capacities obtained on private VET courses cannot be recognised within the existing accreditation and recognition structure.

## **Relevance**

Training in vocational colleges is provided for 264 occupations covering 704 specialisations. The specialisation of professional colleges is decided on the basis of actual needs of the labour market and recommendations from the regions. Adjustments are made every year in the areas of training of vocational colleges.

VET curriculum comprises 40 % general education and 60% vocational education subjects and internship. Each college develops curricula in line with the standard curricula approved by the SSVE Centre. According to the national education standard, colleges have the right to introduce changes and amendments up to 15% of "flexibility hours", including "electives" (120 hours) and a "college component" (120 hours) (SSVE, 2010).

The relevance of curricula remains an issue in current public VET system. The Welfare Improvement Strategy of Uzbekistan for 2008-2010 recognises that the quality of the workforce does not meet the occupation and qualification requirements of employers, and that changes need to be introduced in the training of workers at colleges (Republic of Uzbekistan, 2007). Involvement of private sector businesses in curriculum development is still limited. Standard curricula is generally developed by the VET system experts and then reviewed by experts from the economic sectors (normally by the methodology departments of corresponding ministries), and approved by the SSVE Centre. After the approval the curriculum becomes a directive document for colleges and teachers.

Curriculum development is effective in existing fast growing economic sectors, such as mining, oil and gas processing, energy, automobile, finance and banking, textile, construction, public utility, private farm management. These sectors require new skills, and there are examples of cooperation between big companies and the VET system in developing new qualifications. In 2008, 11 new specialties and 43 occupations required in these sectors were jointly developed and endorsed. The system demonstrated its potential flexibility and responsiveness at least for a demand from large employers.

## **The one-level framework**

The vocational college graduate of is awarded a diploma and qualification of "junior specialist" in respective field which should be recognized by any institution in Uzbekistan and provides the right to enter university. The existing Classifier of Educational Fields, Specialties and Occupations of Secondary Specialised, Vocational Education defines only one qualification level for occupations – "master" or "skilled worker / master" (UNESCO, 2009). This contradiction between the level of the college graduate and the only available qualification in the labour market suggests that the level demanded by Classifier (and perhaps by employer) is too high and what the College can offer is too

low. Employers' main complaint regarding college graduates concerns the lack of practical skills and ability to work independently.

The existing VET structure is flat and does not consider multilevel qualification framework. In particular there is no provision for further professional education for "technician" level. Therefore there is a lack of bridges to higher professional qualification after the professional college.

The Law on Education (1997) and the National Program for Personnel Training give outlines of the "National Qualification Framework". NPPT states that only the public education is granted the state recognition and introduces qualification and education levels: Preschool is also considered as part of education (non-compulsory) followed by the compulsory nine year basic school. Basic school graduation certificate provides right to enter secondary specialised level. Vocational college or academic lyceum diplomas gives right for entry examination for the first four years of higher education and the Bachelor's Degree Diploma gives right to the entry exam for the two year Master Degree program. Further education levels provide with the Candidate's and Doctor's degrees (see Annex 1).

The governance structures and financing for the implementation of the Uzbek educational model, both institutionally and legislatively are firmly set-up. The responsibilities are clearly defined and quantitatively the educational system is responding to the concretely defined objectives. The professional colleges prepare young people to a great number of occupations. The future challenges for the internal efficiency of the system identified by the ETF include:

- Retraining and employability of teachers of professional colleges
- Availability of teachers in the rural areas
- Relevance of the curriculum and the limited involvement of private sector in its development (involvement of business in the quality assurance of VET)
- Recognition of private VET providers
- Lack of multilevel qualifications framework and further professional education for professional college graduates

## 5. Innovation, partnership and entrepreneurship

Some interesting innovative measures have been introduced to the VET system and to its links with the labour market. One measure is the use of vocational colleges as training centres for the unemployed organised by the Ministry of Labour and Social Security. Another example is the possibility of VET teachers to get re-training in companies in order to up-date their skills.

In general, there has been a long tradition of cooperation between education and business in Uzbekistan. After independence, big state-owned or state holding companies have continued cooperation with the vocational colleges. The employers are keen to guarantee that the number of graduates corresponds to their needs and that the students' skills and qualifications follow the changing labour market needs. Vocational colleges are interested in adapting and up-dating their curricula according to the needs of business so that graduates get effectively employed, and the colleges can offer to businesses the re-training services that will provide additional revenue. Close cooperation with state owned companies and some vocational colleges, results in 100% funding by the businesses, which also means better payment for the teachers and up-dated equipment of the vocational colleges. In the best cases, 30% of students of the colleges closely cooperating with companies, have jobs already before leaving the college. The internship periods are paid by the companies. In some sectors companies themselves request trainees from schools during high activity periods.

The donor projects are other cases of close partnership between education and business, such as the Skills Development Project in the automotive sector (2004-2010) of the Swiss Agency for Development and Cooperation and the Improvement of VET in ICT Sector Project (2003-2010) supported by the GTZ.

The Skills Development Project has involved 20 colleges and 150 companies of the automotive sector. In addition to developing curricula and on-site training, the project established, in consultation with the Ministry of Higher Specialised Professional Education, the Ministry of Labour and the Chamber of

Commerce, the so called Regional Competence Centres in 10 colleges. The Centres provide paid educational services to industrial enterprises, organizations and other vocational colleges, with the aim of "training, retraining and modernisation of occupations at the request of the companies, for the graduates to be in demand in the real economy, to ensure their subsequent employment as well as educational services for the development of professional skills of vocational college teachers in the region." An additional advantage is that competent teachers working in the centres, increase their income, and are not keen to leave VET for industry.

The GTZ project has implemented some robust curricula, teaching material and standards reform within the national framework in cooperation with 32 Professional Colleges in ICT, programming and IT and business. It has promoted innovative processes for mid-term and final assessment focused on practice and included in-company training already to the programme of the first year. It has also established an association of IT companies and the 32 Colleges to discuss issues of mutual interest. The project has been extended to cover construction sector which indicates that some successful sector specific projects could be mainstreamed.

The Round Tables organised in Uzbekistan in June showed that there is a need to introduce entrepreneurial learning in the curricula at all levels of education. The basic understanding of students is still to work for somebody; they do not think about working for themselves.

The education and business cooperation has a long tradition in Uzbekistan. The Government clearly sustained the positive heritage of the Soviet system. The future challenges and opportunities regarding innovation, partnership and entrepreneurship include:

- A platform for formally involving private sector in the development of the educational system and the curriculum in particular
- Lack of needs assessment capacity of the private sector
- Mainstreaming of successful donor projects in developing education and business cooperation

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## Annex 1: Education and training system in Uzbekistan

Age	Grade								
25			Post-graduate Education	Post-graduate and Doctoral Studies	Professional Programmes (Medicine up to 12 years)	Candidate of Science, Doctor of Science			
24	18		Higher Education	Masters Degree		Master's Degree			
23	17			Bachelors Degree		Bachelor's Degree			
22	16								
21	15								
20	14								
19	13								
18	G12	Compulsory Education	Secondary Specialised Vocational Education	Academic Lyceum	Professional college	Graduation Certificate (AL) or Diploma (PC)			
17	G11								
16	G10								
15	G9			General Secondary Education	General Secondary School		School Leaving Certificate (G9)		
14	G8								
13	G7								
12	G6								
11	G5								
10	G4								
9	G3				Basic School				
8	G2								
7	G1								
0-6			Nursery and Kindergarten						

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