

REVIEW OF EDUCATION SECTOR DEVELOPMENTS IN BELARUS

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REVIEW OF EDUCATION SECTOR DEVELOPMENTS IN BELARUS

Working Document

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The contents of this report are the sole responsibility of the authors and do not necessarily reflect the views of the ETF or the European Union.

Foreword

This report is the result of two short visits to Belarus and desk research undertaken in between. The visits consisted of several interviews and consultations with the main stakeholders in Minsk and a number of discussions with local experts, who gathered some statistical information and legislative documents. The main authors of this report are Galina Borisova (ETF consultant) and Timo Kuusela (Country Manager for Belarus, ETF) who also edited the report.

The analysis is mainly done on the basis of a desk study of the legislative documents and information materials provided by the local experts and stakeholders. Limited time and access of the authors to information and research did not allow for a more comprehensive analysis of the on-going developments and many issues require further clarification and study.

Nevertheless, the report contains the official data, studies and policy papers presented and identified for the research work (a list of references can be found at the end of the document).

Acknowledgments are due to all those who provided valuable information, constructive comments and shared their views on the education sector in Belarus. Most of them preferred to remain anonymous for confidentiality reasons. Xavier Matheu de Cortada, Jens Johansen, Manuela Prina and Siria Taurelli from the ETF have made helpful comments and suggestions for improvement and Cristiana Burzio has provided invaluable support at all stages of the drafting and preparation. In addition, thanks are also due to all interviewees whose feedback and views helped in the compilation of this report.

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Executive summary

Over the last years, socio-economic development in Belarus has started to show rapid growth leading to an increase in the well-being of the Belarusian population. Together with economic growth, the employment rate has risen. In turn, this has led to a greater focus of national policy on human resources development where education at all levels plays a leading role.

The Belarusian education system, centrally managed and controlled by the state, still bears many features of the Soviet system. The education reforms, initiated around 10 years ago, are developing unhurriedly and have focused on preserving the traditional education system and structures rather than undertaking any major changes. Belarus has kept high attainment rates in secondary and higher education since independence. Enrolment in higher education in particular has been increasing in recent years and the labour force is well educated overall.

The most drastic change in education has been the recent reduction of the 12-year secondary general education by one year. The Code of Education, which is a new comprehensive law (being discussed in the parliament in September 2009) covering the whole education system, aims at "improving the system gradually and smoothly rather than reforming it". The Code describes Belarus's education policy making spirit for external readers rather well.

In the future, Belarus has the potential to provide very high levels of income for its population. Located strategically in the corridor between Russia and the EU, Belarus is a major transit route for energy and other products. It has access to growing regional markets. It can benefit from a greater degree of regional integration for example in trade, energy and environment. The country has also ample natural resources (e.g. wood). Last but not least, the population is highly educated.

Economic development

The economic model of Belarus differs from many other former Soviet countries with a strong public presence through government interventions and ownership of enterprises and a limited private sector. Despite the growing service sector and the incorporation of new technologies in industry, the traditional sectors of the economy have driven economic growth in Belarus in recent years. With the revitalisation of some of the conventional commercial partners (mainly Russia, and other former Soviet countries) the traditional industrial sectors have generated new demands for production. As a result the growth has been more of a recovery than a clear change in the development model and economic structures. During Soviet times Belarus was characterised as a "raw materials processing centre with well developed industrial enterprises which were equipped with contemporary and innovative technologies". This model has not changed to a large extent. Recent strong growth in labour-intensive sectors backed by government wage and income policies indicates that the government policy on price setting and the relations between sectors and companies has had a bigger influence on economic development than market mechanisms themselves. The preserved supply structure in education has therefore served the demands of the growing economy relatively well.

The labour market and its links with education

The Belarusian labour market is characterised by low levels of unemployment, and a decreasing labour force due partly to demographic dip. As in other transition countries Belarus has been suffering from a demographic decline, with a reduction of around 40,000 people per annum. As in many other transition countries, the labour market in Belarus faces the challenges of an ageing population and labour shortages.

The assignment of labour force to certain jobs and the labour demand forecast based on vacancies continue from Soviet times. Compulsory jobs offered after the completion of training is not very compatible with the concept of a labour market or any type of learner-centred education encouraging individual choices and freedom. Such a model may work as far as the labour market is heavily controlled by the government and therefore remains relatively predictable. However, with an emergent private sector and employment growth outside the public sector and state-owned enterprises, Belarus needs to look for new flexible solutions in the future to reduce the imbalance between supply and demand on the labour market.

The number of graduates from higher education is higher than the rate of job creation at higher skills levels, in a context where there is no regular and systematic information provision on the skills needs of the labour market and where employers are not particularly concerned by “what to train”. They simply seem to give a preference to higher education graduates and prevalence to formal qualifications rather than to actual competences possessed by individuals.

The growth of new jobs particularly in industrial sectors requires a more knowledgeable and highly skilled workforce in areas such as modern production and new technologies. There is also a need for key competencies such as information technologies, initiative taking and operational independence. Economic development towards new technologies and the increasing need for higher qualifications could suggest that the skills mismatch on the labour market might become a problem if the education system does not respond accordingly.

Education policy

Due to the strong tradition of centralised governance and lack of regular stakeholder consultation, civil society and the education community do not seem to be sufficiently engaged in the debate on future education policy directions. The reluctance of the Belarusian government so far to join the Bologna process or follow the Bologna principles in modernising its higher education indicate that the priorities are to preserve old practices rather than follow international trends or learn actively from the experiences of other countries. On the other hand during the years of political isolation, Belarus has not been able to fully participate in or benefit from international cooperation, which in many European countries has boosted major reform initiatives and mutual learning in education and training. However, in 2009 Belarusian minister of education has announced that Belarus intends to join the Bologna process in 2010 and discussions on this are underway.

The latest legislative initiatives such as the Code of Education are a positive phenomenon. The purpose of the Code is to create a unified national system of education and lay down the basis for ongoing development. However, the Code, as a concept, along with many other strategic documents, could go deeper in analysing the origins of the system and providing a vision for future actions. The majority of education programmes are stronger in policy priority setting than in implementation arrangements, showing only moderately how the education system would finally achieve its main targets. They seem to focus on administrative regulations that merely make the development of certain mechanisms for the implementation of the education policy possible.

Vocational education and training

The main priorities in vocational education and training are to increase its relevance to the labour market, revise curricula and teaching materials, renovate buildings and equipment, upgrade teachers' and trainers' skills and their salaries to prevent shortages. The Ministry of Education has put a lot of effort into strengthening cooperation between vocational education stakeholders and employers in order to involve them in development. In order to make the vocational education system more attractive for students and parents and increase the access to VET, the Ministry of Education is enlarging its structure and merging vocational institutions with higher education institutions. As in many other former Soviet countries, students prefer higher education to vocational training which is proven by declining enrolment in vocational education and rapidly growing enrolment in higher education over the last years. The vocational education and training system still has major challenges ahead to prove its relevance to economic and social needs and increase its attractiveness for young people as an alternative.

Social partnership development in education is a key priority stated in all strategic documents. New structures have been developed to strengthen cooperation between national and local administrations, public organisations and schools contributing to the relevance of vocational education. The views of employers on the need to invest in human capital and their growing interest in participating in vocational education policy development are positive indicators. Better information exchange and improvement of communication between the education community, stakeholders, non-governmental organisations and employers' units is an issue that needs to be addressed more intensively in the future.

International cooperation in education

The Belarusian education community as well as the education authorities regard the previous experience of international cooperation in education and training highly. The experience they gained through education projects has had a positive impact on the capacity building of local experts, raised awareness of new tools and mechanisms for education reform and strengthened cooperation with education partners and institutions with different countries. During its years of political isolation Belarus has had reduced possibilities to participate in international cooperation. Improving relations with the EU may provide opportunities for Belarus to review its achievements in the education system by being exposed to international benchmarking and learning from practices of other countries.

There is a growing awareness among Belarusian policymakers in education that the following issues need to be more in focus: better access of students and adults to all levels of education, compatibility of qualifications and recognition of diplomas as well as diversity of curricula and enhancement of foreign language teaching. International cooperation is valued as a means of achieving these objectives.

1. Introduction

After a tense period in relations between the EU and Belarus, recent developments suggest that political and economic relations are improving and both parties are exploring new ways to normalise and strengthen cooperation. In 2008, the European Commission opened a permanent diplomatic mission in Belarus. Moreover at the end of 2008 Belarus was invited to take part in the EU's Eastern Partnership together with Armenia, Azerbaijan, Georgia, Moldova and Ukraine, (EC Communication and Commission Staff Working Document on "Eastern Partnership" published on 3 December 2008¹) which aims at deepening bilateral cooperation and creating an institutionalised forum for multi-lateral co-operation. It includes a more comprehensive institution-building programme, a free-trade area, mobility and security pacts, with a particular emphasis on supporting mechanisms for economic and social development and energy security. It thus provides new opportunities for Belarus.

This report analyses the current situation and developments in education and training in Belarus. It was prepared by the European Training Foundation in 2008 and finalised in 2009 in response to a request from the European Commission. The aim is to provide an overview of education sector developments over the last five years, including general secondary education, vocational education and training (VET) and higher education. The first chapter briefly looks at socio-economic developments in the country which has had a GDP growth of above 9% over last few years. The impact of economic growth for employment opportunities is presented in chapter 2, while chapter 3 analyses developments in education sector.

2. Socio-economic situation

Belarus has a population of 9.7 million, a territory of 207,600 m² and borders with Latvia, Lithuania, Poland, Russia, and Ukraine. Until the global financial crisis Belarus successfully sustained economic growth with GDP growing at around 9% per annum. Since bottoming in 2006 at 7%, inflation has been rising in line with developments in other countries in the region and reached 16% in 2008.

During the boom, external vulnerabilities were not addressed: international reserves remained low, some Russian energy prices were unwound, and exports to Western markets remained concentrated on oil products, while higher value-added exports were mostly to the Commonwealth of Independent States (CIS). Recent global developments have exposed these vulnerabilities, and as a result, the currency peg to the U.S. dollar came under pressure towards the end of 2008. In January 2009, the IMF approved a US\$2.5bn loan to support Belarus' economic programme² which is designed to facilitate adjustment to external shocks and reduce the vulnerabilities, and also includes a number of structural reforms. A sharp economic slowdown is forecast for 2009, with GDP projected to grow at 1-2%. It reached 10.5% in 2008.³

Socio-economic reform in Belarus started in 2003 when the growth rate of GDP went beyond that of the early 90s (see Annexes – Table 2 'Indicators of GDP in 1990 and in the period 2003-07'). In 2000, economic growth was – 13% compared to 1989, which was estimated as the year with the maximum production rate in the Soviet period. Since independence Belarus did not undergo the same economic transformation process as its neighbours and there has been no such dip as there was for example in Latvia, Lithuania or Poland.⁴

Economic structure

The transition from a planned to a market economy stimulated economic restructuring in favour of the service sector. Although the industrial sector is still a driving force for economic growth, confirmed by its 31.4% of GDP, the service sector now accounts for around half of GDP (49.9%).

¹ EC Communication on Eastern Partnership, COM (2008) 823/4, 03.12.2008; and the Commission Staff Working Document accompanying the EC Communication on Eastern Partnership, SEC (2008) 2974/3, 03.12.2008

² The economic programme strengthens the social safety net to protect the most vulnerable people and supports the private sector development by reducing the distortion of taxes and the regulatory burden on private companies

³ IMF Press Release No. 09/05 of 12 January 2009

⁴ Source: Umansky, I. A., Artamonova, N. M., Collection of statistics and information "Russia and NIS countries at the beginning of the 21st century", Moscow, 2007

By 2005 the industrial structure had changed considerably: for example, fuel and energy production accounted for 28% compared to 5% in 1991, chemical production 11% compared to 7%. In 2008 though, machine building and metal processing, forestry, wood processing and the pulp and paper industry as well as the production of building materials accounted for most industrial production, the share of the raw materials sector in the national economy is growing as is the case in other CIS countries. However, as several economic surveys indicate, these industrial structural changes might lead to a heavy dependence on raw material production prices, displacement of labour and a loss of competitiveness.

Together with the changes in the structure of the national economy, the labour force is being redistributed in favour of service sector. Consequently the education sector is facing an increase in demand and high expectations for its services.

Belarus economic phenomenon

In the former Soviet Union Belarus was a raw materials processing centre with well-developed industrial enterprises which were equipped with contemporary and innovative technologies. The country has a mature agricultural sector and one of the highest living standards of the former Soviet republics. These historically favourable factors together with some internal and external drivers helped to overcome the crisis of 90s and retained degree of steadiness in economic development:

After independence from 1991 to 1995 with the support of international organisations, Belarus initiated preliminary reforms to transform to a market economy. From late 1995 onwards, however, the government sought to insulate its population from the pain of reform by protecting jobs and wages. The state retained control over most production resources, and a significant share of GDP was allocated to social expenditures and subsidies whereas market-oriented reforms were very limited⁵.

Economic growth between 1996 and 2000 could be explained largely by (i) active political re-integration with Russia, which resulted in improved market access; and (ii) government policies that provided sizeable net benefits for many leading exporters through the real depreciation of the rouble and subsidised interest rate. The role of these initial growth drivers has gradually been declining but new factors have emerged that have helped sustain growth, namely: (i) a drastically improved external environment; (ii) strengthened domestic demand; and (iii) improved financial performance of domestic enterprises.

Strong growth in labour-intensive sectors (such as services, food processing, and machinery), backed by government wage and income policies, ensured a broad sharing of recent growth across the population. The result has been a rapid decline in poverty rates with inequality remaining stable and low.

In recent years better than expected performance is explained by a number of external and internal factors, including the following: (i) improved export prices (particularly for fertilizers, food products, and metals) and continued strong growth of Belarus's major commercial partners, namely, Russia and other CIS countries; (ii) sustained access to external financing (through foreign direct investment (FDI) and loans) to finance current account deficit and increase reserves; (iii) increased budget revenues and tightened fiscal policy; (iv) improved energy efficiency which helped cushion the impact on the budget of higher gas prices and led to a more moderate rise in total import costs.

The five main traits of the Belarusian economic model were named in President Lukashenko's message in 2008: (i) strong state governance, providing the security of citizens; (ii) development of a private economic sector parallel to that of the state on condition that entrepreneurship doesn't contradict state interests; (iii) privatisation - a call for interested investors and effective proprietors; (iv) integration processes with Russia and CIS countries; and (v) socially-oriented state policy.

The Belarusian government is seeking independence in its economic development and this has been strongly emphasised by President Lukashenko. A new perspective will be to improve the profitability of the transit route between the EU and Russia. Already today 30% of oil is transported through the country to Europe. In 2007 Belarus, China, Mongolia, Poland, Russia and Germany set up a new Beijing – Hamburg railway route. In this project Belarus regards China as a perspective partner using the shortest transit through the country to EU markets.

⁵ World Bank's Country Brief 2008

Although the competitiveness of exported products in both CIS markets and outside has recently been deteriorating, the Belarusian government is still prioritising the development of export oriented production to compete in the world market. According to the bulletin "Economy of Belarus" N1, 2008 Belarus's main export partners are Russia (49.7%), Netherlands (10.9%), Ukraine (7.3%), Germany (4.3%), Poland (3.2%), United Kingdom (3.0%), Latvia (2.5%) and China (2.1%). Export to non-CIS countries amounts to 55.8% and exports to other CIS countries 44.2%. Russia remains the main import partner for the country. Other main import partners are Germany, Ukraine, Poland, Italy and China.

Accession to the World Trade Organisation is a foreign policy priority and viewed as the most important stage of integration into the world economy. However, the improvement of economic legislation to comply with WTO regulations and provide more open access of foreign goods and investments to the domestic market still remain critical in the WTO negotiations.

Private sector development and future sustainability

According to the international agencies the Belarusian economy has remained among the least reformed of the transition countries. The development of the private sector and the privatisation process has been slow. According to a survey of the Belarusian Union of Entrepreneurs and Employers in 2006-07, price control, complicated and non-transparent certification and licensing systems were mentioned as the most threatening factors. The government has constrained competitiveness by setting high taxes and tariffs which led to difficulties for medium-sized enterprises and the deterioration of small ones. SMEs work mostly in the service, trade and catering sectors. At most, SMEs accounted for 8-9% of GDP. The government has recently lifted some regulations and pressure on SMEs with a view to stimulating economic development in line with anti-crisis measures agreed with the IMF.

Although the Belarus government has opted for a strong state regulation of the economy and slow economic reforms to reach certain social objectives the future of high and sustainable economic growth may be affected and further restructuring might be needed to sustain the competitiveness of the Belarusian economy. However, at present the reduced social consequences of the transition have helped people to meet their development needs and the policy has had a positive effect on the investment, attention and resources allocated to the education sector in general, and vocational education in particular compared to many other CIS countries.

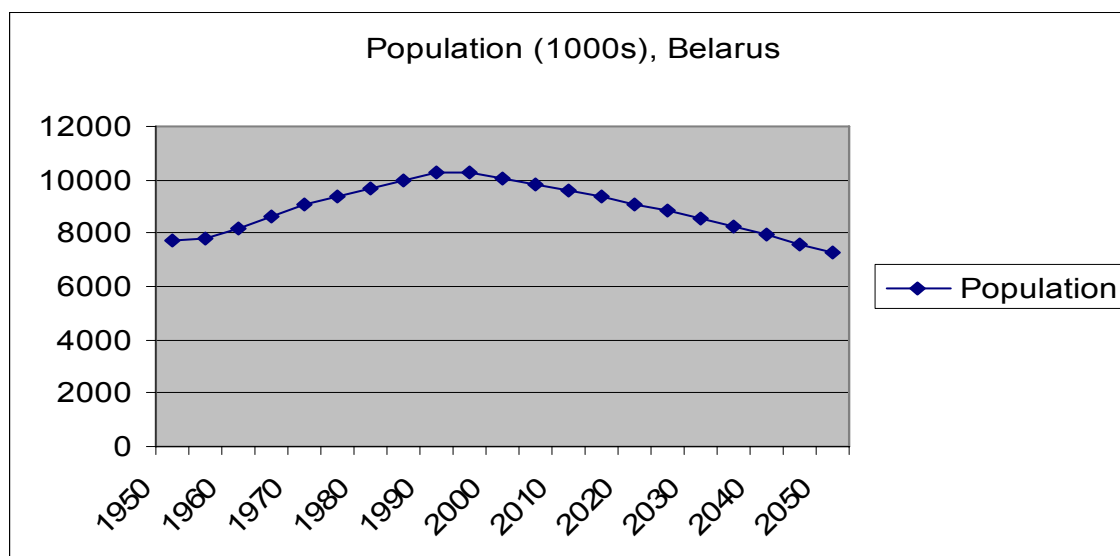
A recent strong growth in labour-intensive sectors backed by government wage and income policies would indicate that the government policy on price setting and the relations between sectors and companies has had a bigger influence on economic development than market mechanisms themselves. The supply structure in education has therefore served the demands of the reviving economy relatively well.

3. Main tendencies of the labour market and demographic situation

Without taking into account the effects of the current global financial crisis, the Belarusian labour market has been characterised by low levels of unemployment and a slightly declining labour force due partly to migration and demography. This chapter gives a general overview of the labour market with a view to trying to understand how it might affect the development of education.

Unemployment, employment and demographic trends

As in other transition countries, Belarus has been suffering from a demographic decline and this is set to continue in the future. Although in the middle of 90's the population was decreasing by about 40,000 people per year, but since then the birth rate has been rising. Since 2003 the birth rate has increased by up to 20%. According to statistics from the Ministry of Healthcare, in the first four months of 2008 the birth rate grew by 6.3% against the same period the previous year. However, UN projections indicate that the population will decrease again in the future, which will be a challenge for both education and employment policies (see the table below).

Table 1. Population of Belarus 1950-2050

Source: UN, The World Population Prospects, The revision 2008.

Since 2003, total labour force and employment rates have slightly improved as illustrated in the table below:

Table 2. Labour force in Belarus

Indicators	2004	2005	2006	2007	2008 ⁶
Total labour force (thousands)	6,182	6,210	6,228	6,241	6,232
Activity rate (%)	71.6	71.3	71.7	72.5	73.3
Employment rate (%)	69.8	70	70.6	71.7	72.5
Unemployment rate⁷ (%)	2.5	1.7	1.4	1.1	1.0

Source: Short statistical collection "Belarus in figures", 2008, p. 77 and 2009, p. 22; ETF staff calculations.

Depopulation trends are mostly noticeable in rural areas and smaller towns. Internal migration from rural to urban areas is 59.7%, and mostly involves young people, who leave to study and work in towns. The population in rural areas is mostly male. The ratio of rural to urban population in 2007 was 27:73. To support rural areas and smaller towns, in 2006 the government initiated a programme including tax remissions and some privileges for entrepreneurs starting businesses, carrying out infrastructure improvements and building apartments in rural areas.

Although migration has slightly increased in recent years according to data from Belstat⁸, the migration balance has remained favourable. Migration has therefore not really affected the labour market in Belarus as it has for example in Ukraine. The main destination countries of Belarusian migrants are Russia, the Czech Republic, Lithuania, Latvia, Poland, the USA, and the UK. Immigrants to Belarus come mostly from Russia, Ukraine, Latvia, Armenia, Georgia, Vietnam, and China.

⁶ Belstat estimates. According to the Ministry of Labour website, unemployment was at 0.8% in January 2009

⁷ Unemployment rate is based on the number of the officially registered unemployed as Belarus does not carry out regular LFS.

⁸ National Statistical Committee of the Republic of Belarus

Low unemployment

Official Belarusian statistics report low levels of unemployment. This data is based on those people registered as unemployed in the Employment Service. Belarus does not carry out regular labour force surveys as other transition countries which makes it difficult to have internationally comparative data on the labour force. The Ministry of Labour and Social Development carried out a household survey using the ILO methodology. The survey showed that the unemployment rate is around 7-8%, which was still below the EU average. It also revealed the growth of the inactive population in Belarus.

The labour demand forecast is based on the number of job vacancies announced by employers and agreements on staff training at vocational and higher education institutions. The government calculates the balance of labour resources annually, also identifying labour demand, the economically active population and the total employment in the economy.

The labour market in Belarus faces the challenge of an ageing population. Table 3 shows the distribution of employed people by age group taking into account the increase of 50-54 year olds in the labour force from 12.7% in 2003 to 13.1% in 2007. The other growing cohorts are the over 55s which constituted 9.7% in 2003 and 11.6 % of employed people in 2007.

Table 3. Distribution of labour force by age group

Years	Total number of employed people	Age groups					
		Under 25	25-29	30-39	40-49	50-54	55 and over
2003	3,919,800	10.8	12.0	25.4	29.4	12.7	9.7
2004	3,986,700	11.0	11.9	24.8	29.1	12.5	10.7
2005	3,994,300	11.4	12.1	24.6	28.7	12.5	10.7
2006	4,065,200	11.6	12.2	24.0	28.3	12.8	11.1
2007	4,126,600	11.8	12.3	23.8	27.4	13.1	11.6
2008	3,987,500	11.6	12.4	23.4	26,6	13.6	12,4

Source: Statistical data collection "Regions of the Republic of Belarus", 2009, pp. 74, 194, 318, 439, 556, 636, 757.

Allocation of labour

The labour market grew by 5.3% in the period 2003-07. As previously mentioned, the structure is changing in favour of the service sector. In 2006, the service sector had increased to 53.3 % from 49.6% in 2000 whereas employment in production decreased from 50.4 % to 46.4 % in the same period⁹.

The following economic sectors have witnessed the largest growth in terms of workforce over the last 10 years: consumer services, housing and communal services, trade and catering, telecommunication and construction. At the same time agriculture, light industry, production of construction materials, machine building and metal processing are losing workers.

⁹ Annual statistics, 2006, Mn. 2006, pp. 199, 124.

Table 4. Distribution of employed people by economic sector

	2004	2005	2006	2007	2008
Total of employed in economy	100	100	100	100	
Industry	26.8	26.7	26.5	26.4	26.6
Agriculture	10.7	10.5	10.2	9.9	9.4
Forestry	0.7	0.8	0.7	0.7	0.7
Construction	7.7	7.8	8.1	8.4	8.7
Transport	6.1	6.0	6.1	6.2	6.3
Telecommunication	1.5	1.5	1.5	1.4	1.4
Trade and public catering	13.3	13.7	14.1	14.3	14.5
Education	10.7	10.5	10.3	10.1	10.8
Culture and arts	1.8	1.9	1.9	1.9	2.0

Source: Statistical yearbook of Belarus 2009, p. 111.

Private sector and job creation

According to the EBRD the share of workers in state-owned enterprises in 2007 prevailed (53.2%), outnumbering the share of private enterprises (47.5%) and foreign companies (1.4%). Belarus also continues to have the lowest number of small and medium-sized enterprises in the region, and employment in these enterprises has stagnated over the past few years. Nevertheless, recent trends in the redistribution of the workforce among sectors show a slight tendency towards the growth of the private sector.

According to the Programme of Socio-economic Development in for 2006-10, issued in June 2006 by Presidential decree, the main priority of state policy is to enhance the effectiveness and efficiency of human resources development to meet production demands. The development of occupational standards is seen as the preferred mechanism for making Belarusian qualifications comparable at European level.

A recent Employment Service report points to a decrease in underemployment at enterprises and growing interest in human resources development from employers. In 2007, new jobs grew to 153,400, with 19% of them in smaller towns and about 12% in rural areas. In 2008 the National Employment Programme planned to create more than 155,000 jobs.

Government managed job allocation

The assignment of graduates to certain jobs followed by their resettlement is still used to provide the economy with adequate labour and prevent labour shortages. In principle a graduate who has completed a government financed education programme has to accept the job allocated by the government and stay in the job for a minimum of one year. The redistribution of young vocational training graduates is implemented in line with requests from

employers, firstly of state owned enterprises, in line with training profiles and authorised qualifications.

In 2006 the Council of Ministers introduced a measure to reserve work places to support citizens that need social protection and are considered unable to compete equally in the labour market. This kind of government-managed job allocation mechanism is possible when large numbers of jobs are in state-owned enterprises or in the public sector, which makes the labour market more predictable and stable. However, with a gradually increasing private sector and employment growth outside these traditional areas new flexible solutions need to be found in the future to reduce the imbalance between the supply and demand on the labour market

Education levels of unemployed people

In terms of education in 2007, 24.2% of employees had higher education, 19.8% initial vocational and 29.7 general secondary education, 22.8% secondary vocational education, and 3.5% basic education¹⁰. People with a higher education background seem to take priority over all other levels of vocational education in the labour market.

National employment programmes pay special attention to the issues of young unemployed people, launching active labour market projects and special measures. Table 5 shows that most unemployed people have only general education. The projected increase of employment in industry will probably mean a higher demand for professionals and specialists with vocational education in the mid and long-term.

Table 5. Distribution of unemployed people by level of education in %

	2003	2004	2005	2006	2007	2007
Total number of working population	100	100	100	100	100	100
Levels of education						
Higher education	9.1	10.3	10.2	10.3	9.9	10.3
Secondary vocational education	18.0	18.2	18.2	18.0	17.1	15.6
Technical vocational Education	-	22.4	21.4	22.0	21.9	23.0
General education	60.7	36.2	38.5	38.7	39.5	39.6
Basic education	12.2	12.9	11.7	11	11.6	11.5

Source: Statistical Yearbook of "Belarus 2009", National Statistical Committee, Minsk, 2009.

Skills mismatch

There is no regular or systematic provision of information on the skills needs of the labour market. Due to the limited information exchange mechanisms among line ministries and different levels of administration, the education sector periodically collects information on skills needs for internal purposes. Thus, in 2007 the national vocational training institute, RIVET, took the initiative of compiling the information on employers' requirements for job seeker competences collected by different bodies to inform the ministry and the public.

The analysis shows that although the professional knowledge and competences of young employees meet labour market requirements in general, their poorly developed key competences, lack of commitment to working life and poor labour discipline is of great concern to employers. An earlier enterprise survey (carried out in 2005) of the labour demand in different economic sectors showed the need for better knowledge and skills in modern production methods (67%) and new technologies (83%) as well as improved competences, such as

¹⁰ Data provided by the Republican Institute of VET development.

initiative taking (64%), operational independence, information technologies, and creative working (16%).

4. Education and training

Education policy and legal framework

The Belarusian education system, centrally managed and controlled by the state, still has many features of the Soviet system. The education reforms which began around 10 years ago are developing unhurriedly and have focused on preserving the traditional education system and structures rather than undertaking any major changes. The state's education policy and reform strategy are formulated in the following documents approved by resolutions of the Council of Ministers for each level of education:

- The main directions of national education development adopted in 1999, which started the reform process;
- Law on education issued in 2002 which has been updated with amendments.
- Law on initial vocational training issued in 2004.
- Law on general secondary education issued in 2006.
- Law on higher education of June 2007.
- The programme for general secondary education development 2007-2016 issued on 31 May 2007.
- The programme for secondary vocational training development 2006-2010 issued on 19 August 2006.
- The programme for initial vocational training development 2006-2010 issued on 23 March 2006.
- The 2007 draft programme for the development of innovative education 2008-2010 in the perspective of 2015.

The draft Concept of the Code for Education of the Belarus Republic (hereafter the Code) was approved in April 2008 by the Council of Ministers with a view to providing an overall education strategy in Belarus regulating all levels of the education system. In September 2009 the Code was discussed in the Parliament. It is a draft of the legislative document setting out the contents of each chapter of the Code. It was developed as a Uniform Education Code to regulate independent elements of the national education system. It is based on the legislative framework in education, international agreements of the Belarus Republic and the principle statements of the United Nations, UNESCO and other international organisations. A final adoption and endorsement of the Code is expected to take place in 2010.

The content of the draft Code as stated in the document is based on the laws approved earlier in the education system and it is not designed to introduce conceptual changes. It also fills the legislative gap in the education sphere as regards special education, primary education and adult education.

The Code coordinates all levels of the education system undergoing reform. It sets out the norms and standards of relations between all the actors in education. It proclaims variety, openness, accessibility of education services for people, and underlines the significance of the social function of education. It regulates the main features of teaching programmes for all education levels, as well as all types of education institution.

According to the Code, the milestones of education policy are compulsory basic education and the transfer to compulsory general secondary education, continuity in education, priority of human values, human rights and the human character of education, which means free choice in teaching methods for trainers and education institutions, a training profile, and an education for students.

It is significant that together with the democratic principle of governance in education, schools and education institutions, staff and students are described as actors of education relations. However, the document does not specify what that means in practical terms.

It regulates the status of private schools, the participation of public organisations and enterprises in the governance of the education system. It identifies the development of adult education as part of continuing education and underlines the main role of retraining and further training of postgraduates in the state education system. Together with formal adult education, the Code regulates non formal adult education.

Priorities highlighted in legal framework

The legal framework assumes that the education system is already facing, or will soon face, the following challenges:

- Modernisation of content and development of education standards, improvement of teaching processes introducing modern teaching methods and information technologies;
- Development of school networks and structures in response to demographic trends and projected socio-economic development;
- Creation and production of new textbooks, teaching manuals and school supplies
- Improvement of education facilities and teaching equipment;
- Development of vocational education, including the variety of vocational education services corresponding to economic demands and public and private expectations;
- Upgrading of the competences of teachers, trainers and school directors.

The two vocational education and training development programmes issued in 2006 have the overall aim of responding better to the needs of the economy and increasing cooperation with social partners to meet labour demands.

The latest legislative initiative in education is in itself very positive. Its purpose is to create a unified national system of education and lay down the basis for ongoing development. However, the Code as a concept, along with all the other documents, could analyse the origins of the system in more depth and provide a vision for the future. The measures and expected results are clearly determined but indicators to monitor the implementation process are not well defined in the programmes.

The majority of education programmes are stronger in policy priority setting than in implementation arrangements, showing only partially how the education system would finally achieve its main targets. They focus on administrative regulations that merely make the development of certain mechanisms for the implementation of education policy possible.

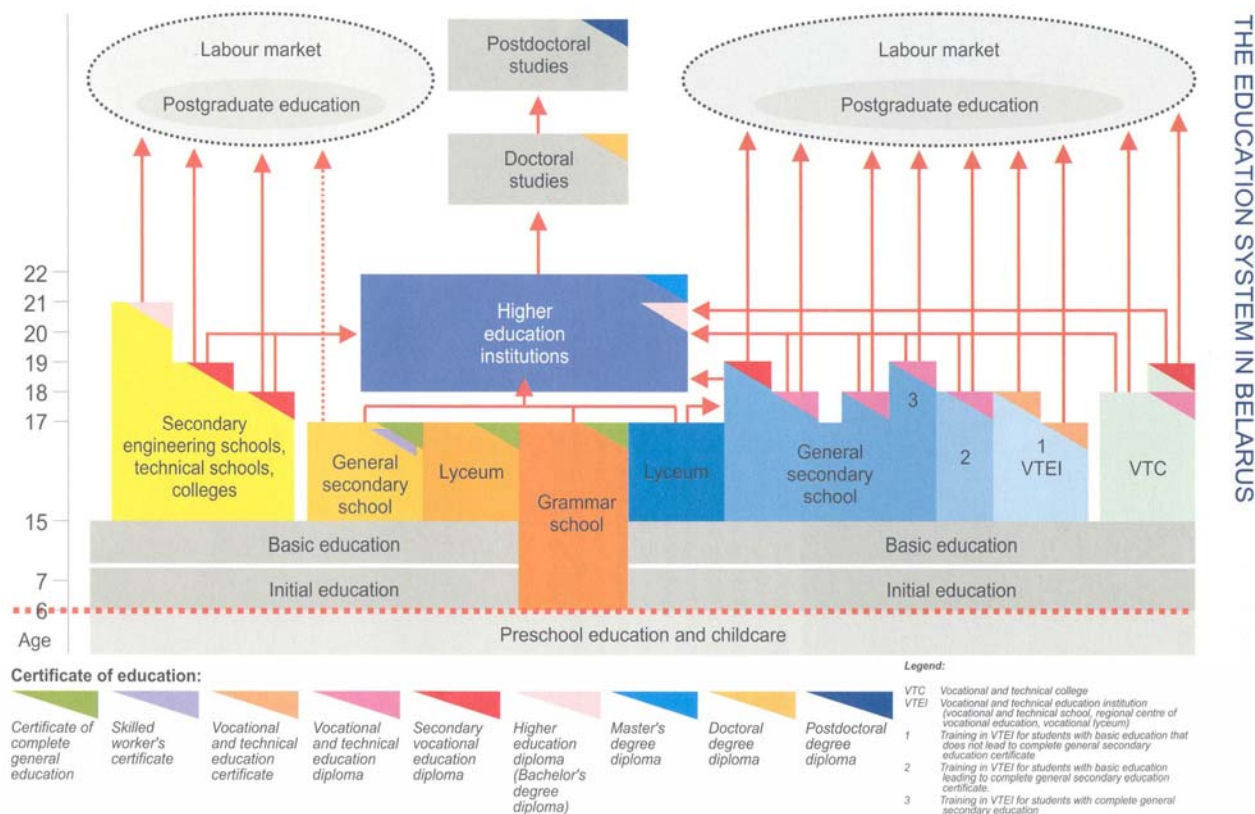
Education system

The levels of schooling in Belarus are: primary education, general basic compulsory education, general upper secondary education, vocational technical education, secondary special education, higher education, and tertiary education.

Pre-school education covers children from birth to age six or seven (ISCED 0). In 2005, the overall enrolment in pre-school education was more than 80% of children in this age group (see annex).

Preparation for school is compulsory from the age of five. The concept of pre-school education adopted in 2000 began a ten-year reform process. Now the priority for pre-school education is its further development in the third stage of the process. The main target is to raise the image of this level of education among parents and develop a variety of pre-school education institutions to meet the needs of the main customers (parents) particularly in rural areas. To achieve this, the pre-school education system will preserve the existing pre-school education network, develop standards for pre-school education, up-date teaching programmes and teaching methods, up-grade the professional competences of teaching staff and managers. The main areas of reform in pre-school education are in line with the main trends in general education.

Table 6. The education system in Belarus¹¹



General secondary education

There are two levels and three steps in the structure of general secondary education. The two levels of general secondary education are compulsory basic education and upper secondary education (senior school). Three steps of general secondary education cover grades 1 to 12 (11). These steps are:

1. *primary education* for children from the age of six which lasts for four years (**ISCED 1**). It is provided at general schools, boarding schools, general school-colleges of art. Age group: 6 (7) to 10 (11).
2. *compulsory basic education* for five grades (**ISCED 2**) for students aged 10-15. It is provided at general schools, gymnasias, boarding schools, gymnasias-colleges of art, general school-colleges of art.
3. *general upper secondary education* comprises the last two (three) years of schooling (**ISCED3**) for students aged 16-18. It is provided at general schools, boarding schools, general school-colleges of art, gymnasias-colleges of art, lyceum, evening schools, vocational schools and colleges.

Reduction of general education by one year

Education reform started ten years ago following the Presidential decree “On the preparation and implementation of general education reform” issued in January 1996. After hot debates the reform was accepted and recognised across the country. It widened school curricula, introduced

¹¹ Republican Institute of VET

profile learning in senior classes, a 10-point assessment system, five days of studies a week plus one day of extra curricula activities and sports. Nevertheless, after ten years, the reform was declared inexpedient and Belarus has now taken the decision to return to an 11-year general education programme in line with the Presidential Decree No 15 of 17 July 2008, "Of several issues of general secondary education". Although implementation of the reform was positively assessed overall, the results were considered negative. Therefore, an analysis of the situation in the education sector was called by the government and the results of an opinion poll among parents and teachers showed that 65% of respondents did not support 12-year schooling and 50% were against the ten point assessment system. The 12-year period of study was considered a reason for delaying the entry of young people into working life and requiring a substantial annual increase of the state education budget.

According to the authors of the government resolution, the return will be accompanied by an improvement in the quality of the content of education, efficient subject arrangements and a reduction in the load of the national curriculum. The curriculum will be 32 academic hours shorter than it is now. Some subjects will be excluded or merged with others. The academic year will be one week longer and last from 1 September until 1 June. The fact that this decision was unexpected for us is an example of the vulnerability of education system to the changing views of politicians which may have a serious long-term impact. In order to avoid similar situations and improve public confidence in education policy making, Belarus could do much more to engage civil society and the education community in a structured dialogue on future education policy directions and to carefully analyse international experience.

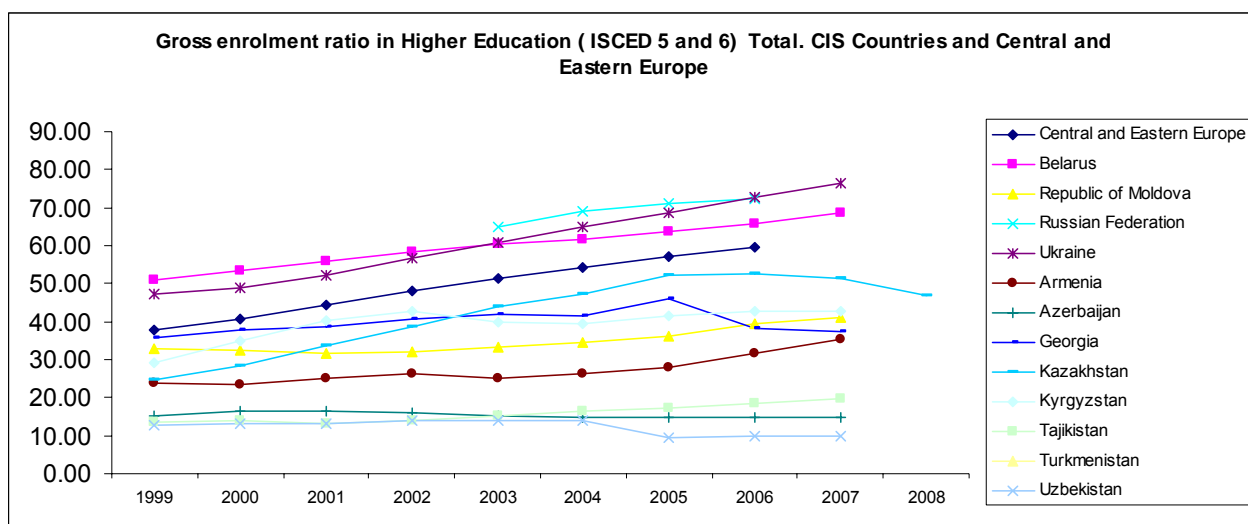
Length of schooling and GDP growth

There is international evidence and research that proves that the length of schooling contributes to the prosperity of individuals and the national economy. Individual earnings tend to increase quite sharply with higher levels of education. According to the OECD, economies benefit and over time may experience a 3% to 6% rise in output for every additional year that individuals spend in education. While reviewing the information available on this topic our opinion is that the reduction of general education was not duly justified or supported by sufficient evidence. Usually substantial changes in education policies in Europe are based on strong evidence and research and there is a clear correlation between education research and policy which subsequently supports the decision and policy making process.

Reference: OECD Policy Brief on Lifelong Learning and Human Capital, July 2007

Higher education

The Belarusian government recognises the achievements of higher education in the country. The variety of higher education institutions has recently been increased and access to higher education is widely available at regional level. Higher education enrolment rates are high and actually exceeding those of many EU Member States.



Source: UNESCO Institute for Statistics.

There are 44 state higher institutions under 11 different line ministries in Belarus. Training is arranged in fifteen economic areas covering 357 professions with more than 1,000 specialties. There are also 12 private institutions providing higher education¹².

Higher education is structured in the following types of higher education institution:

- Classical universities provide training in programmes for different profiles and occupations on two levels (4-5 year specialist and 2 year master degree)¹³, as well as PhDs;
- Profile universities provide training in programmes for one or two profiles at two levels (specialist and master) and post-graduate degrees;
- Institutes provide training on two levels (specialist and master) for one or several occupations;
- Higher colleges provide training in 2-3 year junior specialist programmes with integrated higher and secondary special education programmes.

Belarus and the Bologna Process

Although Belarus has bilateral agreements on the recognition of diplomas with many countries around the world, it is the only European country, which has not committed itself to the Bologna Process and its higher education reform principles. It is worth noting that there was no explicit reason why the country has not joined the Bologna process has been given. Although the Bologna Process is not based on an intergovernmental treaty and is loosely structured, the participating countries agreed in Berlin in 2003 that the countries party to the European Cultural Convention (governed by the Council of Europe) are eligible for membership of the European Higher Education Area provided that at the same time they declare their willingness to pursue and implement the objectives of the Bologna Process in their own higher education systems. Belarus has signed the European Cultural Convention but as it is not a full member of the Council of Europe, it has dropped behind other countries in European higher education cooperation and policy dialogue. However, in April 2009 Minister of Education Alexander Radkov said that Belarus intends to join the Bologna process in the near future. According to him the two-cycle higher education system in Belarus is based on the European models and "joining the Bologna process will not considerably touch the structure, content and ideology of the Belarusian higher education". He stressed that it is important for Belarus to follow the Bologna principles because the European HE has traditionally been considered as effective and professional. Moreover, many Belarusian students continue their studies in European universities. According to Mr Radkov the Bologna process will also open new opportunities for the Belarusian higher education export as there is interest abroad e.g. towards technical and medical studies, in the oil and gas, agricultural fields and science education in Belarus.

Higher education is the most wanted choice

As elsewhere in the former Soviet Union, enrolment in higher education has substantially increased in Belarus. For the last ten years the number of students has doubled and now amounts to more than 400,000 people. In table 7 the enrolment rates indicate the growing public interest in higher education both in public and private institutions. The increased number of students in fee-based programmes in public higher education institutions indicates that the state actively encourages this level of education and people are indeed keen to invest in higher education.

¹² Statistics of the Ministry of Education

¹³ According to the ISCED definition, these programmes are at the **ISCED 5B** level, and universities at **ISCED 5A, 5B, 6**. The two level system of higher education is approved by legislation (specialist and master) and, as stated in the state programme, this is "in line with the world standards and requirements of an innovative economy"

Table 7. Higher education enrolment

	2006/2007	2007/2008	2008/2009
Total number of students	396910	413658	420697
Including state institutions	338935	354988	362920
Including private institutions	57975	58670	57777
Number of students in government financed programmes in state institutions	153953 (45.4%)	150951 (43%)	148726 (41.0%)
Number of students on fee based programmes in state institutions	184982 (54.6%)	204037 (57%)	214194 (59%)

Sources: Statistical Handbook "Higher education institutions of the Republic of Belarus (at the beginning of 2007/08 academic year) – GIATS Ministry of Education of the Republic of Belarus, 2008, p. 8; Statistical Handbook "Higher education institutions of the Republic of Belarus (at the beginning of 2008/09 school year) – GIATS Ministry of Education of the Republic of Belarus, 2009, p. 8.

The main priorities of higher education are presented in the draft State Programme for the Development of Innovative¹⁴ Education 2008-10 and in a 2015 perspective. The programme was drafted in 2007 and presented on the website of the Ministry of Education. Although it has not yet been adopted and needs further development, it sets out new targets for the education system to train people capable of operating in an innovative economy. For the first time, the programme proclaims the value of innovative activities and mindsets as well as the need to create an entrepreneurial climate in Belarus. Moreover the programme identifies the following shortcomings of the current higher education system:

- Priority is given to knowledge but not to skills and competences. Learning is focused on long lives rather than lifelong learning.
- Provision of knowledge: students are not learning, they are being taught.
- Priority of subject oriented training and a lack of training in synthesising knowledge and inter-disciplinary relations.
- Weak links between the education system and the innovative development of economic sectors and the labour market.
- Priority is given to fundamental academic knowledge over practice oriented and experience-based learning.
- Poorly developed relations between further training and retraining institutions and specialised institutions and economic sectors. Low responsiveness to change in socio-economic development.

The Nordic Council of Ministers in cooperation with the European Commission gave a critical overview in their 2006 report on the state of higher education in Belarus. The report claimed that "higher education institutions continue to produce technologically skilled specialists and workers, a large number of whom cannot be placed in jobs within the country boundary". The report also argued that "as a heritage from the Soviet style system, there is excessive standardisation of the curricula, which has given students few opportunities to develop their individual talents and inclinations".

Higher education and other levels of education are facing big challenges in terms of bringing their content and structures in line with present economic needs according to the priorities set

¹⁴ As stated in the programme, according to Belarusian legislation, the term **innovation** means newly created and updated technologies, kinds of production or services, as well as administrative or business decisions, promoting products and services to the market.

out in the Draft Programme for higher education. However, any concrete action will depend on the political will of the Belarusian government which in March 2008 announced that “no major changes to higher education or general education are foreseen in the near future”. The priority is therefore given to renovating buildings and upgrading equipment and facilities. The future trends in higher education are ambiguous due to the unpredictability of political decisions as well as the lack of structured dialogue with higher education stakeholders.

VET structure

Upon completion of compulsory basic education students in Belarus have a number of options including general upper secondary, vocational and technical education, or combinations of these. Vocational education programmes are given in different types of school where students can enter free of charge or on a fee-paying basis depending on the results of competitions for limited places.

The vocational education system includes the following types and levels of schooling:

- **Vocational Technical School (PTU)**, have two types of programmes: a programme of vocational education with a certificate of professional qualification (1-2 years) programme of vocational education with a diploma of vocational training and general secondary education (3 years). Age group: 15-17 years.
- **Professional lyceums**, which carry out 3-year training program for in-depth technical and vocational education with a diploma of vocational and general secondary education, by assigning appropriate qualifications. Age group: 15-17 years.
- **Vocational and technical colleges** to provide four types of programmes: a programme of vocational education with a certificate of professional qualifications; programme of vocational education with a diploma of vocational training and general secondary education; training programme working with secondary special education, programme of secondary special education, integrated with the programme of vocational education with a diploma of qualification of technician. Age group: 17-19 years.

The secondary specialized vocational education includes **technical colleges (Technicum)** which provide secondary vocational education and issue a diploma on qualifications (technician level) and complete secondary general education. Age group: 17-19.

Vocational training is arranged on the basis of the third step of general education during the last two (three) years of schooling for students aged 16-18 together with upper secondary education, or without for students at any other age. It is provided for example, at general comprehensive schools, at training and production workshops, at initial training schools and at centres of professional education and career guidance. A total of 33.3% of students at age 15-17 receive professional training and 72.9% of them acquired an initial training qualification in 2006-07.

The classification of Belarus vocational education institutions is, as in many countries of the former Soviet Union, very confusing. Although all of them train students for certain qualification levels, the whole vocational education system is focused on qualifications at ISCED level 3 (and 4). This may also prove that there is no clear distinction between different types of qualification. The vocational education system is mostly school-based and the type and status of institution determines its programmes, financing, structure and operations.

Vocational education and training reform

In contrast to other countries of the CIS where vocational education and training systems suffered from a lack of government attention more than any other level of education, in Belarus the traditional vocational education and training system has survived the period of poor economic growth. This is partly due to regulations which recommended companies to follow old staff development policies. According to these policies, companies are responsible for arranging vocational and continuing training in vocational schools and they report to line ministries on their support to these schools. On the other hand, companies themselves did not destroy the existing cooperation channels with vocational training institutions and the vocational education system did not collapse or become completely isolated as in many other countries of the former Soviet Union.

Furthermore, at the end of the 90s, international donors and the European Training Foundation were active in their support to vocational education and training in the country. The National Observatory which aimed at analysing links between vocational training and the labour market and supporting vocational education reforms was established in cooperation with the Ministry of Education and one of the leading institutions - the Republican Institute of VET Development (RIVET). The cooperation had a considerable impact on the capacity building of the local experts and in raising awareness about new tools and mechanisms in vocational education reform. Links established through this cooperation with Belarus's neighbouring countries are still strong.

Generous government support in 90's gave rise to changes in the vocational education system. A comfortable status quo in vocational education has meant that many features of the system have remained largely unchanged. There is an opportunity for the renewal of some of the legislative framework of vocational education so that it better matches the requirements of the market economy. Therefore, vocational education is going to face future challenges to prove its relevance to economic and social needs and increase its attractiveness for young people.

The main priorities of the vocational education and training system

The main priorities for the two levels of vocational education in Belarus are specified in the Programme for secondary vocational training development 2006-10 and the Programme for initial vocational training development 2006-10, issued in 2006. They are:

- relevance to the economic and social needs of society. Development of tools and mechanisms for closer cooperation with economic and social sectors.
- enlarged education services for different categories of people and customer organisations.
- content review of vocational education, leading to an update and further development of the list of occupations, educational standards and teaching materials.
- Integrating initial training with the vocational training of workers, general education and secondary vocational training.
- Providing methodological support to vocational schools and their staff. Developing tool-kits and handbooks for trainers.
- Re-equipping vocational schools and refurbishing school buildings. Ensuring the efficient use of financial and material resources.
- Further training of school staff and upgrading professional skills.

VET policy priorities have been translated into rather clear implementation programmes with objectives to be achieved and basic financial resources needed. The implementation of the programmes is a high priority for the government.

The meeting held by Prime Minister Sidorovsky in May 2008 was dedicated to the challenges of the growing economy and the capacity of vocational education to meet its requirements. The Ministry of Education report on the progress of achievements in vocational education presented few critical points. One of them was the issue of the information gap and the lack of an administrative body responsible for demand analyses to be used for the planning of training delivery.

The following remarks represent the general current policy discussions on human resources and vocational education development in Belarus:

- Demand – supply approach to VET planning is the leading issue to be addressed. The crucial points are the lack of sufficient information and the inability of employers to provide the education sector with quantitative and qualitative information. The Ministry of Education considers the Ministry of Economy responsible for labour market information. Strengthening partnerships between vocational education stakeholders and cooperation between line ministries is an area for further improvement.
- Due to obsolete equipment and buildings the absorption capacity of the vocational education system is low and needs to be improved. The 225 initial vocational schools work only at 57% of their capacity. Initial vocational school buildings and workshops need restructuring and re-equipping.

- The content of vocational education teaching materials and curricula needs major revision if vocational graduates are to meet employers' requirements in terms of skills and competences.
- The low status of skilled workers and the lack of attention of employers to young vocational graduates cause a high turnover from industry. Employers' human resources policies and social measures are crucial for job stability among young people.
- Wage increases are essential in fighting the shortage of vocational teachers and trainers.

Enrolment in vocational education and training

The allocation of students among the existing levels of vocational education is presented in Table 8.

Table 8. Distribution of 15-29 years old in VET and higher education sector¹⁵

	2003		2004		2005		2006		2007		2008	
		%		%		%		%		%		%
Total number of 15-29 years old	2326,7	100,0	2337,9	100,0	2337,3	100,0	2325,8	100,0	2308,2	100,0	2277,2	100,0
subtotal in vocational and higher education	625,6	26,9	640,1	27,4	652,1	27,9	663,8	28,5	673,8	29,2	677,0	29,7
Initial VET	125,4	5,4	118,6	5,1	114,6	4,9	114,4	4,9	105,1	4,6	99,0	4,3
Secondary specialized VET	162,3	7,0	158,4	6,8	154,1	6,6	152,5	6,6	155,0	6,7	157,3	6,9
HE	337,9	14,5	363,1	15,5	383,4	16,4	396,9	17,0	413,7	17,9	420,7	18,5

Source: Statistical Yearbook of Belarus, 2005 Ministry of Statistics of the Republic of Belarus, Minsk, 2006, p. 57; Statistical Yearbook of Belarus, 2009 National Statistical Committee of the Republic of Belarus, Minsk, 2009, p. 57.

According to the data available initial vocational education is becoming less attractive. The decreasing number of students in initial training is only partly the result of demographic decline or the decline of economic sector. The prevailing view is that initial training used to be attractive for its social function, i.e. the provision of schooling and meals to children of poor or low income families. As people's welfare is growing this aspect of initial training is becoming less popular even among students and families with relatively low incomes. Awareness is rising that the social function of the system should not be provided at the expense of high quality training leading to a qualification.

The number of students in 153 secondary vocational schools is also decreasing. This is a result of the restructuring and merges with higher education institutions or initial vocational schools. Recently, 16 secondary vocational schools have been merged into 12 universities. The recent tendency to enlarge vocational training institutions with higher colleges and vocational technical colleges is an indicator of the government's attempt to make the system more efficient and attractive for students and employers. Although the situation is slightly improving the current gap between vocational education and other types and levels of education is continuing to widen.

Students and their parents prefer higher education to any other type of vocational education regardless of the often limited employment prospects. Usually, employers recruit graduates from

¹⁵ This includes all levels of professional education.

higher levels of education to jobs for which vocational graduates can also qualify. As a consequence, the unemployment rate by level of education¹⁶ and its comparison to the enrolment rate in the vocational education sector shows an increase in the number of unemployed people with higher education. The vocational education system faces major challenges to prove its relevance to economic and social needs, guarantee quality and sufficient skills for the career development of students and restructure the network of vocational institutions to provide access to education and training services.

Relevance to economic and social needs

Due to the development of the national economy, employers are looking for qualified workers in all economic sectors. One of the main concerns of the education sector is the restructuring of the current qualification and training structure. To respond to the growing demand of employers, the Ministry of Education has introduced an application system to bring the numbers of trainees by sector and specialisation closer to the needs of enterprises. This means readjusting the training structure to fit current needs. To receive qualified graduates, enterprises have to apply to vocational schools in advance. This application system allows the number of students to be calculated and the training in vocational schools to be arranged in line with demand.

This system may function as far as the economy is largely controlled by the government, enterprises are mainly state-owned and the labour market is relatively predictable and not competitive. However, taking into account relatively long vocational studies and ever changing needs of the work place, such an application system may eventually result in a negative labour market outcome.

Nevertheless, at the moment the Belarus government considers it as an efficient way of reducing the imbalance of supply and demand and this practice is promoted in various ways. The Ministry of Education undertakes measures to increase the amount of training for occupations in construction, metalwork and machine-building. Discussions on how to improve adult training and retraining in working professions within state vocational schools are also underway at national level.

Table 9. Distribution of initial training by economic sector in 2007

Economic sector	Number of workers		Graduates in initial VET in 2007	
		%	Thousands	%
Total	2,399,118	100,0	49,526	100,0
Industry	835,031	34,8	15,695	31,7
– <i>machine-building and metal-working industry</i>	276,186	11,5	7,804	15,8
Agriculture	354,245	14,8	7,815	15,8
Construction	245,117	10,2	11,116	22,4
Services	617,180	25,7	11,614	23,5
Other sectors	347,545	14,5	3,286	6,6

Sources: Collection of statistical material "Regions of the Republic of Belarus", 2009, pp. 73, 193, 317, 438, 555, 635, 756; Statistical Handbook "Institutions of the Republic of Belarus providing vocational and technical education" (at the beginning of 2008/09 school year) – GIATS Ministry of Education of the Republic of Belarus, 2009, p. 52.

¹⁶ See Table 5 above "Distribution of unemployed people by level of education".

To optimise the structure of professional training the following measures have recently been undertaken:

- a special procedure has been developed by the Republican Institute of VET Development to identify the current quantitative demand of employers;
- schools are strengthening their cooperation with enterprises to attempt to anticipate their demands for skilled workers and specialists;
- the Ministry of Education is making an effort to bring together employers' associations, industrial sectors, the vocational education system and its stakeholders to ensure the relevance of vocational education to economic demands.

In 2007 a new National Classification of Economic Activities was developed and introduced by the Ministry of Labour. This classification includes economic activities taking place in different economic sectors after the recent technical and structural changes in the Belarusian economy. Thus it provides the vocational education and training system with valuable information for the development and revision of training profiles and programmes.

In 2008, the Council of Ministers endorsed the act of labour force demand forecast in order to improve planning and forecasting of training. Also in 2008, the Council of Ministers of the Republic adopted two provisions aimed at strengthening relationship between vocational and specialized secondary educational and industry. They concern admission regulations and the use of innovation funds (provided to develop the technical base and facilities of education institutions and to arrange workplace practices and on-the-job learning experience for students). Moreover, the second regulation concerns the "supply organization", which determines the cooperation form and interaction between educational institutions and the attached/assigned organisations/companies to them.

The revision of training programmes is accompanied by an analysis of qualification requirements for specific professions. The training curriculum (training standards) is developed together with employers' representatives, evaluated in higher education institutions and approved by economic sector administrators. Curricula for 73 training fields and training programmes for 77 specialties in initial vocational training have been revised and recently approved. Vocational schools are able to make annual revisions to their training programmes together with employers when there are cooperation agreements between the two entities. The law on initial vocational training provides employers with the right to initiate proposals for changes in the list of occupations for which training is provided in vocational schools.

Cooperation with employers

Social partnership development in vocational education is a key priority in all the strategic vocational education documents. The Ministry of Education has recently set up a number of units and other bodies such as the Council on Staff In-service Training and Retraining, the Coordination Unit on Initial Vocational Training and the Inter-Agency Board for Secondary Vocational Training. Their overall objective is to strengthen cooperation between national and local administrations, public organisations and vocational schools contributing to vocational education and its relevance to economic needs. As vocational schools are under the supervision of regional administrations, each of them has a Coordination Committee on youth vocational training and employment. These committees bring together the local administration, employers and public organisations. All the institutions at different administrative levels focus mainly on quantifying the demand for initial and secondary vocational training. They also develop recommendations for modernisation, scientific research in education and seminars, publications and materials on vocational education development.

Employers have recently been given the opportunity to become members of the Coordination Committee set up by the Ministry of Education where they are able to discuss their needs in human resources. One of the associations of small and medium enterprises interviewed stressed the interest and willingness of employers to participate in vocational education policy formulation. The priority of high-tech enterprises is to find highly skilled workers. There is a shortage of managers with relevant skills and it is especially difficult to recruit highly skilled workers on the labour market. Therefore, employers demonstrate their interest to invest in human capital development and further training which illustrates their requirements for new skills.

Despite these latest initiatives there is still a lack of communication between vocational education stakeholders, non-governmental organisations and employers. The provision of information is not sufficiently effective even between line ministries. For example, the Research Institute of the Ministry of Labour actively collects information on employers' needs that is valuable for vocational education planning. However, this information is not widely known nor made available to planners and schools.

At the same time quantitative labour market data is overvalued for planning. The question "What to train" is not so much a concern of employers', nor is the type of skills and competences the trained people should possess. As mentioned above, skills needs studies or surveys are not regularly carried out. There are only some cooperation initiatives mostly carried out by the RIVET and schools to involve employers and other stakeholders in developing occupational standards and curricula. Although aligning vocational education with the needs of the economy is one of the education priorities, it remains a major challenge and requires attention in the future.

Quality assurance

The Law on Education addresses the issues of control over quality of education and defines state control as a regular activity for measuring how education content and quality correspond to state education legislation and national standards. Quality control, as stated in the Law, is arranged through self-assessment, inspection and attestation.

Self-assessment is a type of quality control implemented at school level in accordance with the strictly regulated procedures set up by the Ministry of Education. The report on self-assessment is produced and presented to the external body during the attestation.

Inspection is arranged mostly by the local administration to control different areas of school activity. It is organised regularly several times per academic year. For example, extra curricula activities with children in vocational schools are often inspected.

Attestation is a type of control and assessment procedure covering the overall activity of schools and mostly tests the extent to which training content, level and quality correspond to education standards. It is arranged once every five years according to the regulations set by the Ministry of Education.

Regardless of the pattern of ownership, all education establishments are subject to an accreditation procedure, which takes place every five years. Accreditation aims at confirming adequate levels of quality and content of education and training, which should meet the requirements of the established educational standards. Accreditation entitles the education establishment in question to issue a standard certificate of education of a corresponding level.

The law on initial vocational training, for example, considers quality in the sense of the effectiveness of learning as it only final assessment and the results of learning are taken into account. Although learning outcomes are key indicators of quality, student marks in final exams and final qualification tests have little to do with the learning outcomes-oriented concept of quality. In vocational education programmes the emphasis is more on input to the system such as the modernisation of curricula and equipment and the upgrading of teachers and trainers' skills as the main factors ensuring quality in vocational education and training.

There is a special department in the Ministry of Education responsible for quality concept development and quality regulations in education. As a result, operational department officials show little consideration of quality concept development and stay outside the debates on quality. Instead operational departments are mainly involved in quality control and information provision and they therefore find it problematic to participate in quality concept development as they consider it outside their remit.

Education code¹⁷ emphasises the need to review existing norms in the control system. It presents a quality management system and identifies new quality procedure norms. It introduces new terms such as "independent quality assessment" and "monitoring" in the legal framework. It may also enhance the involvement of all education authorities in quality concept development in the future and make them more active in its implementation.

¹⁷ The decision of the Belarusian government for the adoption of the Code is expected to be postponed to 2010 due to the up coming reform in general education.

Education funding

The Law on Education declares that the budget for education should not be less than 10% of GDP and this is still a target. At present, public expenditure on education in Belarus reaches nearly 6.6% of GDP which is high according to international standards. It is much higher than in Russia (3.6%) and many other European countries and it is above the OECD average. The share of education expenditure on GDP has remained practically stable since 2001 (2001: 6.6%, 2002: 6.8%, 2003: 6.6%).

Due to the considerable growth of economy in 2008 public investment in education has also grown. Since 2006 financial provisions for education have increased along with the adoption of the state programmes (Table 10).

Table 10. Financial provision of state programmes for education

State programme	Amount of financing in million RBL.	
	Total	Local budgets incl.
The programme for general secondary education development 2007-16	1,166.2	964.6
The programme for initial vocational training development 2006–10	249.8	185.5
The programme for secondary vocational training development 2006-10	100.1	18.8
The draft programme for the development of Innovative education 2008-10 in the perspective of 2015	3,470.0	-

Source: Ministry of Education.

Expenditure on technical vocational education alone has increased by 18.8% and on secondary vocational education by 6.5% compared to 2007. In 2008, the share of vocational education of the total budget for education was 12.7% for initial training and 9.2% for secondary training. The education budget estimated 2.2 million roubles as the standard unit cost for training of one student in 2007, which is equivalent to €670. Actual costs in 2007 were 3.5 million roubles (€1,065) per student. In 2008, the education budget already estimated 4.1 million roubles (€1,245) per student in initial training and 4.9 million roubles (€1,490) in secondary training.

The main items for funding are salaries, maintenance and renovation expenses for schools. In 2008 maintenance costs and equipment constitute 12.7% in initial training and 9.2% in secondary training compared to the 2000-05 period when the state budget, for example, could afford to cover only a margin of the necessary renovation and maintenance expenses.

Teachers' salaries are the matter of heated debates between the government and the teachers' trade union.

The trade union has appealed to match teachers' salaries with average salaries in industry. The average salary in education is only 583,000 roubles (272 US\$) which puts it in fourth place among the salaries in the public sector. The lowest paid categories in education are pre-school teaching assistants (115 US\$) and young teachers (130 US\$). Since 2006, the average education salary compared to that in industry has been going down. In 2008, it was 250.8 US\$ in education and 337.1 US\$ in industry. Therefore, every education strategy has set increasing salaries as its first priority along with investments in school buildings and the modernisation of equipment.

What is surprising is that in spite of the high public expenditure in education (6.6% of GDP) teachers salaries are low although they are reported to be one of the main funding items. This could suggest that there are serious inefficiencies in the education system including a large number of low paid teachers. The efficiency of public finances in education would, however, need further analysis which was not possible while drafting this report.

Fee-based education services

Aware that government funding is not sufficient to cover all expenses, in 2006 the Ministry of Education issued a programme for the development of fee-based education services to obtain extra funding for education. The target of the programme is to establish a sufficient basis for quality improvement and provide access to education services for the economy and the population. The programme motivates schools and institutions to increase fee-based education services such as:

- pre-school and extra curricula services,
- advanced learning of disciplines or in-depth studies,
- secondary vocational training in vocational technical colleges,
- initial vocational training for people other than regular students,
- the second higher education degree,
- in-service training and retraining of adults,
- education and training for foreigners.

Educational services are not the only source of additional income in education. Schools are allowed to seek non-education related sources, such as leasing premises or selling products produced by students. In 2008 the planned target for extra budgetary income in initial training is estimated at 14.3% and secondary training at 14.8% compared to 15.4% in initial training and 14.7% in secondary training in 2007.

Funding and institutional autonomy

Public vocational schools are financed from the central and regional budgets. Although vocational schools in Belarus have been under regional supervision since the 80s, the vocational education funding system is still highly centralised and heavily dependent on government funding. Regional authorities draft vocational school budget proposals and present them for the approval of the Ministry of Education. Once the annual lump sum has been allocated to each region, funding is distributed to vocational schools according to statutory rates.

Education funding remains fully under the control of the Ministry of Finance and is regulated in a traditional way. Although statistics show the rapid rise of state expenditure on education, including current and capital costs, the traditional “provision-on-distribution” mechanism in education means that itemised funding does not give financial flexibility at school level. Neither does it motivate school managers to seek additional funding. New financial management mechanisms at regional or school level are not yet planned as part of education development strategies.

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Annexes

Table 1. Main macroeconomic indicators in Belarus (as % of the previous year)

	2003	2004	2005	2006	2007
Gross domestic product	107.0	111.4	109.4	109.9	108.2
Industrial production	107	116	111	111	108.5
Agricultural production	107	113	102	106	104.1
Capital investments	121	121	120	132	115.1
Freight carried	110	107	109	109	106.2
Retail trade turnover	110	112	120	117	115.3
Industrial producers price index	138	124	112	108	116.3
Consumer price indices	128	118	110	107	108.4
Exports to CIS countries	124	135	96	122	130.46
Exports to other countries	124	143	138	125	117.8
Imports from CIS countries	128	148	94	130	130.9
Imports from other countries	125	131	121	141	

Source: Interstate Statistical Committee of the CIS. http://www.cisstat.com/eng/macro_qh.htm.

Table 2. Indicators of GDP in 1990 and in the period 2003-07

Indicators	1990	2003	2004	2005	2006	2007
GDP: TOTAL (billion roubles)	43,000	36,565	49,992	65,067	79,231	96,087
Per capita : (thousand roubles)	4,000	3,703	5,088	6,656	8,145	9,904
Compared prices, as a % of 1990 figures (last year in the USSR)	100	104.2	116.1	127.0	139.7	151.2

Source: Data collection "Republic of Belarus", 2007, p. 34. Short data collection "Republic of Belarus in figures 2008", p. 32.

Conversion rate:

3289 Roubles - average National Bank exchange rate of 1 EUR in 2008

2219 Roubles - average National Bank exchange rate of 1 USD in 2008

Table 3. Export Structure in Belarus in 2007

Machinery, equipment and transport	22.9 %
Chemical industry	14.7 %
Minerals	35.6%
Food stuff and agriculture	7.5 %
Others	19.9 %

From <http://www.belstat.gov.by/>

Table 4. Investment structure by economic sector (% of the total)¹⁸

	Years	Industry	Agricul.	Construc.	Transport	Trade Catering	Others
Belarus	1991	25	26	4	9	2	34
	2005	29	13	3	15	4	36
Ukraine	1991	32	22	3	7	2	34
	2000	43	4	2	19	3	29
Moldova	1991	18	34	2	5	2	39
	1996	30	10	2	12	5	41
Kazakhstan	1991	30	28	4	5	1	32
	1997	61	2	1	10	1	25
Russia	1991	35	18	5	9	1	32
	2001	39	4	4	24	2	27

Source: Umansky I. A., Artamonova N. M., Collection of statistics and information "Russia and CIS countries in the beginning of the 21st century" Moscow 2007, Table 1.18.

¹⁸ Summing up of these figures may not amount to 100 due to rounding.

Table 5. Birth rate information and number of children

Indicators	2003	2004	2005	2006	2007
Size of population (thousands)	9,849	9,800	9,751	9,715	9,690
Total number of children under 17 (thousands)			2,008	1,934	1,869
under 12 months	–	–	88	90	96
Children under 12 months (as a % of the total)	–	–	4.4	4.6	5.2
Births (thousands)	88.5	89.0	90.5	96.7	103.6
Crude birth rate (as % of the total population)	0.89	0.91	0.93	0.99	1.07

Source: Short statistical collection "Belarus in figures", 2008, p. 61. Statistical collection «Children of the Belarus Republic», 2008, p. 22.

Table 6. Distribution of labour force by age group

Years	Total number of employed	age groups					
		Under 25	25-29	30-39	40-49	50-54	55 and over
2003	3,919,800	10.8	12.0	25.4	29.4	12.7	9.7
2004	3,986,700	11.0	11.9	24.8	29.1	12.5	10.7
2005	3,994,300	11.4	12.1	24.6	28.7	12.5	10.7
2006	4,065,200	11.6	12.2	24.0	28.3	12.8	11.1
2007	4,126,600	11.8	12.3	23.8	27.4	13.1	11.6

Source: Statistical data collection "Regions of the Republic of Belarus", 2008, pp. 73, 190, 310, 429, 542, 620, 737.