

National Strategy of Education Development of the Republic of Tajikistan till 2020

Introduction

In the modern world education is becoming the most important resource for economic and social development of countries, improving wellbeing and individual development of citizens.

Paying particular attention to the development of the education system and implementation of educational sector reform programs, the President of the Republic of Tajikistan notes that, “one truth should be kept in mind during this process: in today’s world, only those countries will achieve great success which pay great attention to improving the level of education in the society and introduce new methods and latest technologies”¹.

National education development strategy of the Republic of Tajikistan (National Strategy) was developed in accordance with the goals, set forth by the President of the Republic of Tajikistan and the Government of the Republic of Tajikistan in the area of education and also in line with major goals and objectives of the National Development Strategy of the Republic of Tajikistan up to 2015. The National Education Development Strategy of the Republic of Tajikistan up to 2020 takes into account the main priorities of Millennium Development Goals, goals and objectives of “Education for All” and other significant strategic documents in the Republic of Tajikistan. This document should contribute to solving existing problems to ensure that, properly coordinated activities of the Government of the Republic of Tajikistan, interested ministries, agencies and the society are focused on education development priorities and implementation of long-term goals of reforming of the education system. This document is also the foundation for more rational allocation of public resources and involvement of donor funds to deal with current challenges, faced by the system of education. The National Strategy is aimed at renewal of the education system, so that education could implicitly perform the mission of the key resource for improving the wellbeing of the society and citizens, as well as effectively respond to economic challenges of the developing country and globalization process. The National Education Development Strategy of the Republic of Tajikistan until 2020 has been developed considering the positive world experience and its adaptation to real conditions and perspectives of the country development.

CHAPTER 1. EDUCATION – PRIORITY OF THE STATE POLICY OF THE REPUBLIC OF TAJIKISTAN

1. Fundamental aspects of socio-economic development of the Republic of Tajikistan.

¹ Message of the President of the Republic of Tajikistan from April 24, 2010.

The Government of the Republic of Tajikistan pays special attention to solving problems related to economic wellbeing and social prosperity of people of Tajikistan. The Republic of Tajikistan, according to the Constitution, is proclaimed as a social state and pledged to provide every person with conditions for decent life and free development. Therefore, one of priorities of the state domestic policy is to gradually solve social problems of the country.

When it comes to providing social protection of people, development of education and health, expansion of information technologies network, health promotion, youth education and training of quality specialists who fit the requirements of present time, it is crucial to create for that required favorable conditions².

It is impossible to solve social problems without the development of country's economy. Lately, there has been an intensive development of the energy and communications sectors in Tajikistan: reconstruction works at Rogun hydropower plant (HPP), construction of Sangtuda hydropower plant and small hydropower units in the remote and hard-to-reach areas, restoration and building transnational highways, establishment of free economic zones. Specific attention is given to creation of favorable conditions for development of small and medium business in Tajikistan: restoration and establishment of new enterprises, thus providing the population with new jobs, and other activities, which are important for economic development of the country.

The Message of the President of the Republic of Tajikistan³ states that the main goal of the State economic policy is ensuring the sustainable economic development and all policy arrangements are based on three strategic objectives:

- Achieving energetic sovereignty;
- Overcoming the country communication deadlock;
- Ensuring the food security.

It means the priority should be given to the development of energy, industry, agrarian sector, infrastructure and other fields, which will help to establish the resource base for stable and high economic growth of the country and to reduce the poverty level among the population. Simultaneous development of mentioned sectors will increase the possibility for higher level of domestic employment, diversification of the economy, export, and will improve accessibility and quality of social services for the population.

At the same time, the country's economic development is associated with increased demand for skilled workers for various fields of economy. Therefore, the development of education sector was announced as one of priority directions of the social policy of our State⁴.

Education plays an important role in generating qualified workforce and building capacity for a stable society.

Education is directly associated with social life and is important for overall socio-economic and scientific progress, as well as the potential to realize intellectual possibilities of every individual.

Ensuring the availability of highly qualified specialists in science, production and management is one of priority objectives of functioning of the education system, since intellectual potential becomes a determinant of the possibility for progressive development of the society.

² Message of the President of the Republic of Tajikistan from April 20, 2011.

³ Message of the President of the Republic of Tajikistan from April 24, 2010.

⁴ Message of the President of the Republic of Tajikistan from April 20, 2011.

2. Education as a key resource of national development

International experience, mainly the experience of developing countries, shows that the key resource of accelerated socio-economic development of the country is **education** of the nation. Investments in the economy with low level or not meeting up-to-date requirements education of the population may only lead to the formation of ineffective and technologically slow production effects and greater deceleration of the country, as compared to knowledge-based world economic development trends.

In present conditions of development of knowledge-based economy, education becomes one of the factors of economic success of the State. Development of the society, guarantee of the security of the society and the State, provision of the required quality of life for people, attainment of the world level of economy, mastering of new technological possibilities and social progress in general - directly depend on the level of education, organization of systematic and quality education and training process of schoolchildren and students and, eventually, the level of nation's literacy.

Hence, there is an increased role and influence of education in global socio-economic development, democratic rebuilding of the world, creating of fair public systems and national achievements of the State.

The important role of education in socio-economic development of modern Tajikistan predetermines the notion that, the future of the country depends on how effectively the national education system will be capable to create the intellectual potential as the basis for the development of abilities of the majority of citizens and to ensure the wellbeing of people. National Education Development Strategy up to 2020 defines the role of education as the key resource of socio-economic development of the Republic of Tajikistan and its citizens, describes the current status of the education system, issues and challenges and also, formulates education development goals and objectives.

CHAPTER 2. ANALYSIS OF THE SITUATION IN THE EDUCATION SYSTEM

1. Characteristics of the education system

The education system of the Republic of Tajikistan is characterized by significant levels of population coverage, developed network and variety of educational institutions, abundant traditions and active modernization processes during the past years.

During the years of independence the Republic of Tajikistan - preserving its rich traditions – made certain achievements in education sphere by initiating different reforms, including some of the following:

- development and approval of regulatory and legal framework of the national educational system of Tajikistan;
- establishment of new legal framework;
- development and enactment of new state educational standards of preschool, basic secondary, primary, secondary and higher vocational education: new two-level system of higher vocational education (bachelor and master degree, while preserving specialty in some cases) was introduced, new curriculums and programs at all educational levels were developed and implemented in practice;

- development and enactment of concepts for the use of information technologies in the process of education management system and education activities;
- introducing the practice of licensing of educational activities as well as state certification and accreditation of educational institutions: establishment of the basis of national education quality monitoring system;
- capital repairs and building of new schools;
- development of the network of non-governmental educational institutions;
- development and publication of new generation books.

Between 2000 and 2010, the Government of the Republic of Tajikistan enacted several laws and regulatory acts, which specified the State policy in the education sphere. These laws are mainly aimed at renewal of the education system, achieving equal access to education, solving gender problems, improving the quality of education, elimination of poverty by increasing the education level of the population.

An important role in improving of the educational system played newly adopted Law of the Republic of Tajikistan “On Education”, the Law of the Republic of Tajikistan “On Higher and Postgraduate Vocational Education”, “National Concept of Education in the Republic of Tajikistan”, “National concept of inclusive education for children with disabilities in the Republic of Tajikistan for 2011-2015”, “Implementation Plan for Education System Reform for 2004-2009, Concept of Transition to the New System of Basic Secondary Education in the Republic of Tajikistan”, State Education Development Program of the Republic of Tajikistan for 2010-2015”, “State Program on Construction, Repairs and Renovations of Schools for 2008-2015 – for schools located in private houses, carriages, administrative buildings”, State Program on Provision of Study Rooms and Scientific and Research base to Educational and Scientific Institutions”, “State Program on Development and Publication of Books for 2007-2010”, “State Program on Development of Vocational Education for 2008-2015”, “State Program on Computerization of Educational Institutions of Basic Secondary Education of the Republic of Tajikistan for 2008-2010”, “State program on the study and teaching Russian and English languages in the Republic of Tajikistan for 2001-2014” and etc.

According to the PRS-3 implementation, the schools computerization program was completed for 83% in the first half of 2010.⁵ As a result of programs implementation, there is an increase of supplied computers in the classrooms of the 7 to 11 grades of the general education school – currently, there are 22 students per one computer. In 2010 only, 195 schools of the Republic were connected to Internet. The computerization Program for general education institutions of the Republic of Tajikistan for 2011-2015 was approved and is currently being implemented.

The system of education of the Republic of Tajikistan (see Table 1.) is comprised of preschool, primary, basic general and secondary education, basic and secondary vocational education, higher vocational education, vocational education after higher professional institution, and also specialized and extended education for children and adults⁶. The system of general secondary education involves institutions focusing on various needs of children – and educational institutions, providing advanced (in relation to educational standard) level of

⁶ The Law of the Republic of Tajikistan “On Education”, Article 10, Chapter 2, from April 17, 2004, №34.

education (lyceum or vocational schools, gymnasiums), and educational institutions for children with disabilities.

Таблица 1.

Levels of education	Duration of education	Age	Educational institutions
Preschool education	1-3, 3-6	1-6 (7)	Kindergarten/Day nursery
General education:	11 years	7-17	Comprehensive schools, gymnasiums, lyceums
• primary	4 years	7-10	
• general basic	5 years	11-15	
• general secondary	2 years	16-17	Clubs, sport halls at schools. Centers of extracurricular activities.
Supplementary education			
Special education			Orphanages (for children suffering from tuberculosis, HIV/AIDS and etc.), Boarding schools, special schools
Vocational education:			Vocational colleges, lyceums, centers, colleges, Universities, academies, institutes
• primary	1-3 years	from 16 years	
• secondary	2-4 years	from 16 years	
• higher	4-6 years	from 18 years	
Postgraduate education			Postgraduate study, doctoral candidacy

The population coverage by preschool education programs, including preschool children training and other forms of education, makes over 10%, including preschool educational institutions - 5,1% (at the age of 1-6) and 6,5% at the age of 3-6. With that, the coverage of children in the cities is several times higher than in the rural areas. Educational complexes have been established in the country, such as school-kindergarten, child development centers, short-term stay programs for children at the age of 3-6 and 16 private kindergartens. The total number of children in preschool institutions reached 62451, out of which 27514 are girls.

Today, there are 3747⁷ functioning general education schools in Tajikistan (6 of them are correspondence schools). From the total number of schools – 549 are primary schools, 702 are general secondary schools (among them, 12 schools are non-governmental, 89 are gymnasiums, (28 are non-governmental), 58 are lyceums (6 are non-governmental), 21 are residential schools for orphans (1 is non-governmental), 4 are restored sanatorium-type residential schools, 11 are functioning residential schools for children with mental and physical developmental disorders, 1 specialized school for indocile children and 33 boarding schools for children at preschool age.

Total number of students in general secondary schools is 1 694 696 people, 796 182 are girls.⁸ In 2010, 17496 students were taught in non-governmental full-time attendance educational institutions.

⁷ Statistical collection of the Ministry of Education of the Republic of Tajikistan for 2010 – 2011 school year.

⁸ Statistical collection of the Ministry of Education of the Republic of Tajikistan for 2010 – 2011 school year.

Practically all children receive primary education: the graduation ratio in primary schools is close to 100%.

Supplementary education as part of elective general education allows to develop creative inclinations and abilities of children. Today, supplementary education is represented by 75 various centers of extracurricular education of children. The number of children attending these centers is 30922. A total of 865 teachers work in the system of supplementary education (the ratio of student/teacher is 29,5:1). The total number of study groups on different areas is 973.

There are 84 boarding schools that function in the Republic of Tajikistan with a total number of children reaching 8367. Out of total number of boarding schools, 76 are under subordination of the Ministry of Education of the Republic of Tajikistan, including 18 mixed type social boarding schools, 13 boarding schools for children with disabilities, 5 sanatorium type boarding schools for children suffering from tuberculosis.

There are 2227 children (543 girls) that are taught in the indicated institutions, 1798 of them are children with disabilities (379 girls).

Also, 13 special preschool institutions function in the country. The children are divided into groups considering hearing, visual, speech defects, and support motor apparatus defects (this type of defect is widely spread in the country).

The orphans, children with disabilities, various diseases and indocile children are mainly taught in the boarding schools. The special education is also received by children who are not able to attend classes in the educational institutions, who are taught at home. These are mainly disabled children suffering from poliomyelitis, Dawn disease, affection of central nervous system and etc.

In order to ensure conditions for the observance of major social rights the Ministry of Labor and Social protection of people of the Republic of Tajikistan gradually puts into practice the use of subordinate social institutions and develops new forms of social services in day care centers for children with disabilities.

Currently, there are 4 day care centers for children with disabilities that function in the country:

- “Oftobak” in Hisor district (children from 3 to 14 years; undergoing rehabilitation - 20 children, home care service - 7 children, receive consultations - 5 children, center’s database - 468 children);
- “Sitara” in Vose district (children from 0 to 18 years; coverage – 20 children; home care service - 5 children; center’s database – 460 children);
- “Noor” in Khorog town (20/home care service – 10);
- “Umed” in Kulyab town (from 0 to 18 years; coverage 22/ home care service – 5; receive consultations 24; database – 520).

Special attention is given to the development of basic and secondary vocational education in the Republic of Tajikistan. Currently, there are 66 functioning institutions of basic vocational training with 22316 students (3 398females). There are 49 institutions of secondary vocational training with 37550 students (20651 females).

The number of institutions of higher vocational education is increasing every year – currently there are 30 institutions with 154832 students, 29% - females. From the total number of students, 94336 study on a contractual basis. Out of 30 institutions of higher vocational education, 21 have well-furnished dormitories for students.⁹

⁹ Statistical collection of the Ministry of Education of the Republic of Tajikistan, “Маълӯаи омории соъаи маорифи ЉТ”, Dushanbe, 2010, p.226.

A total of 67% of young people at the age of 16-18 are covered by all levels of education.

During the period of independence considerable changes have taken place in the system of education management – the focus was shifted from management priorities in educational resources recovery to the management of educational sector development. New divisions were established within the structure of the Ministry of Education (MoE) of the Republic of Tajikistan, such as departments of analysis and development of educational system reforms, planning management, budget administration, planning and forecasting in education, international relations department and EMIS division, investment projects section and other units, which were established under the MoE and are currently functioning.

There are other organizations, which were established and are functioning within the educational system of the Republic of Tajikistan. These organizations directly implement the policy of the Government in the sector of education – Academy of Education of Tajikistan, Republican institute of advanced training and retraining of educational sector employees, Institute of education development, State supervisory service in education, Republican training and methodical center, Information and communication technologies center, Republican center for out-of-school education, Center for work with gifted children, State Institution “Center for international programs”, National educational testing center.

For the purpose of encouraging schoolchildren, students, postgraduates and other interested students, according to the Law “On Education” the Government of the Republic of Tajikistan annually provides international stipends “Durakhshandagon” of the President of the Republic of Tajikistan to support students and to receive education in the foreign countries (Resolution of the Government of the RT “On approval of Resolution on international stipend of the President of the RT “Durakhshandagon”, № 208, from April 2, 2009).

Joining the world community, signing international conventions and instruments, integration into the global education system, exchange of students and academics, recognition of diplomas and many other tasks related to training and researches paved the way for a broad international cooperation, which needs to be fully developed. In the framework of existing agreements in education in the Republic of Tajikistan, the citizens of Tajikistan are annually allocated quotas for further study in the higher education institutions of the CIS (Russian Federation, Belorussia, Kazakhstan, Kirgiz Republic, Ukraine and etc.). There is an increase in the number of HEI cooperation agreements under CIS is growing. The number of students from the Commonwealth countries, studying in higher educational institutions of the Republic of Tajikistan, is also increasing.

Thanks to restructuring and modernization of the educational system, review of regulatory acts, solving problems of teaching staff shortages, provision (whenever possible) of schoolbooks and material and technical base, the quality of education is gradually improving at all levels. It is proved by the fact that, students participate in various All-Russian, Asian and international educational competitions and Olympiads. In 2009, during these Olympiads and competitions in Kazakhstan, Azerbaijan, Turkmenistan, Georgia, Turkey, Russia, Romania, USA, Bosnia and Herzegovina, Bulgaria, Germany and Mexico, out of 86 participants from the schools of the Republic of Tajikistan, 52 students were the prizewinners. From that number: first place (gold medal) – 10 participants, second place (silver medal) – 11 participants and the third place (bronze medal) – 31 participants.

During 2010, the number of participants in international competitions from the Republic of Tajikistan has dramatically increased. Out of 1594 participants, 217 were awarded various merit medals.

Expenses in the system of education have been increasing annually in the period of independence and along with fundamental changes in the financial structure of the education system. According to the Statistics Agency under the President of the Republic of Tajikistan, State budget expenditures for education in 2010 accounted for 17,8% and the share of State budget expenditures from GDP – 4,6% (3,5% in 2005). Expenses for education from the State budget in 2010, compared to 2000, have increased by 26 times (from 42 million somoni in 2000 to 1092 million somoni in 2010, in nominal terms).

Over the 5 year period (2005 - 2010) the volume of fee-based services in education has increased by more than 3 times (in nominal calculation), which indicates the growth in demand for education, perceiving education as a personal resource and willingness of people to invest in their own future.

The Government of the Republic of Tajikistan pays special attention to the development of favorable investment climate in Tajikistan. As a result, the education system of Tajikistan is supported by credits and grants of the World Bank, Asian Development Bank, Islamic Bank, UNICEF, UNDP, USAID, GTZ, GIZ, Saudi Arabia Development Fund, German Development Bank, Catalytic Fund, Aga Khana Fund, Open Society Institute of “Soros Foundation”, Save the Children Fund, ACCELS, Operation Mercy, Red Cross, World Food Program, Mercy Corps and other international organizations.

The Government of the Republic of Tajikistan, as a guarantor, signed agreements and developed various projects, which are being implemented through the Ministry of Education of the Republic of Tajikistan. From 2000 to 2010 the Government of the Republic of Tajikistan implemented a number of investment projects in the sphere of education, which were aimed at renewal of the education system, achieving equal access to education, solving gender problems, improving the quality of education and elimination of poverty by increasing the education level of the population. During that period, 14 credit-grant agreements have been signed for the total amount of 159,7 million USD, including agreements on a grant basis and unrequited support for 90,6 million USD, in a form of credit - 58,1 million USD, as well as the contribution of the Government of the Republic of Tajikistan in the amount of 11 million USD.

Implementation of mentioned projects contributed to building of 148 schools with 939 classrooms for 36 thousands student seats. In addition, 512 schools were repaired, for 3354 classrooms and 130 thousands student seats.

As one of the features of interagency initiative “Education for All” (EFA) until 2015, special funds have been allocated in the form of Catalytic grants under Fast Track Initiative (FTI) to such countries as Tajikistan that experience serious constraints of infrastructure, material support, staffing and training.

Tajikistan was able to successfully attract three tranches of FTI Catalytic financing (FTI - 1 \$9.2 million in 2006-2007; FTI -2 \$9.2 million in 2008-2010; FTI-3 \$13.5 million in 2010-2012).

It is important to note that FTI-3 is currently implemented independently by the Ministry of Education of the Republic of Tajikistan (not by the Project Implementation Unit (PIU)) by targeted technical assistance.

FTI-3 financing accelerated the work on infrastructure and provided important experience in the strategic planning and construction. Remaining overall financing of FTI-2 and FTI-3 is

only \$22.7 million or less than 6% of the cost estimate of updated Mid-Term Action Plan of NSED for 2009-2011 (this plan was estimated to \$417 million).

FTI-3 financing in the amount of \$13.5 million covers less than 10% of planned financial gap of the above mentioned \$140 million of NSED plan for 2009-2011 and it comes at a time when the donor support reflects the impact of global financial crisis.

FTI-3 financing is regarded as one of the main sources of the external funding for such important components of the reforms as PCF and EMIS, while a huge and continuing need to improve school buildings, furniture, equipment and premises can be solved only partially through the projected plans and adequate financial resources.

2. Major concerns, challenges and risks

Overall, the objectives of renewal of the education system were accomplished and today it is called upon to get actively involved in solving the problems, which are stipulated by the country development demands and challenges of the XXI century.

CONCERNS

The level of tasks set for the current education system does not correspond to its capacity and does not allow to fully perform the function of the key resource of socio-economic development of the country and improvement of wellbeing of citizens. The sector is in need of changes.

Integral indicator – average expected duration of education, which is characterized by the continuation of programs and education coverage, is 11 years, which is 2 years less than average indicator in developing countries of Europe and CIS. With that, the average expected duration of education for men and women varies significantly - 12 and 10 years respectively.

From 2005 to 2010, on average 148,3 thousands students graduated from basic education schools and 82 thousands graduated from secondary education schools. The entire system of Basic Vocational Education (BVE), which consisted of less than 66 educational institutions, on average, enrolled 14 thousand students annually in the indicated period of time. Secondary vocational educational institutions could enroll annually, on average, close to 11,64 thousand students and higher vocational educational institutions – 31,1 thousand students. Therefore, for the past 5 years, on average annually, 90 thousand young people did not have access to vocational education of all levels, which makes almost two thirds of graduates of basic and secondary schools. The system of vocational-oriented education of general education schools and training production plants (TPP), availability of equipment in labor training rooms requires fundamental changes. Today, less than 22¹⁰% of able-bodied population has vocational (basic, secondary and higher) education. In addition, there are major differences in the level of education between men and women: the number of men with vocational education is 2.4 times higher, compared to women. Similar difference in the level of education is also observed between urban and rural population¹¹.

¹⁰ Situation on the labor market of the Republic of Tajikistan, Statistics Agency under the President of the Republic of Tajikistan, 2010.

¹¹ According to OPC data, 2004

Preschool education. Regardless of efforts, undertaken in the Republic of Tajikistan during the last years to support and develop children of early and preschool age, the following problems are still remaining in this area:

- low coverage of preschool age children by programs of preschool education;
- 90% of children go to school without prior training at preschool institutions;
- insufficient budget financing; relative financing index for the sector of preschool education in Tajikistan have reduced from 0,14 % of GDP in 2005 to 0,11% in 2010¹²;
- difficult access to resources of preschool education for children with disabilities and children from rural areas;
- obsolete programs and technologies in educational process; there are no programs for children under 3; unavailability of quality children's and scientific-methodical publications and periodicals for employees of preschool institutions;
- lack of qualified teachers (28,1% have higher education, 14,8% have only basis education) and incompatibility of training of teachers to modern child development requirements for children of early and junior age;
- lack of teachers with specialized education (methodists, psychologists, music teachers and medical workers) and insufficient number of preschool specialists in rural and urban education departments;
- Salaries of kindergarten teachers are equal to salaries of teachers of initial classes, however, still very low, compared to salaries of production workers.
- obsolete furniture, sports equipment, library stock, toys, visual learning aids.
- buildings of kindergartens require major repairs, nutrition and sanitary conditions in preschool institutions are unsatisfactory, uniform water and heat supply systems are not available in rural areas;

Primary, general and secondary education. Despite of significant support from the Government of the Republic of Tajikistan on these stages of education, there are still serious problems related to access to education, sustaining education and strengthening of material and technical base. The following are the main concerns:

- insufficient number and low qualification level of teachers;
- shortage of teachers in such subjects as math, physics, chemistry, Russian and other;
- old material-technical base does not always conform to latest requirements;
- lack of required equipment in laboratory and subject classrooms;
- scarcity of furniture and necessary equipment in specialized general education institutions;
- low motivation of teachers;
- remote location of schools in rural and mountain areas, lack of transportation for children in these areas;
- attendance compliance still remains a major concern. According to estimates of the Center of strategic research under the President of the Republic of Tajikistan¹³, the numbers of "street children" in studied cities are: Dushanbe – 6000; Khujand – 2000; Kurgan-Tube – 1000; Kulyab - 500-600 children. The majority of children in studied cities are boys (86,2%), the number of girls is lower (13,8%). Practically all street children were of preschool age. 52,4% of children stated they did not attend school.

¹²Source: Ministry of Finance of the Republic of Tajikistan

¹³ "Comprehensive situation analysis of street children in Dushanbe, Kurgan-Tube, Khujand cities", 2007.

- from the total number of students 4,35% are children-orphans and children without parental care.¹⁴
- there are no special State programs on integration of special needs children into basic, secondary and higher vocational education, their specialization and measures on their valuable inclusion into adult life.

General education is truly universal and involves practically all children and teenagers, however, in the 9th grade teenagers start leaving school. As a result, compulsory basic education is received only by 84% of teenagers. Less than a half (48%) of young citizens of the Republic receive a complete general secondary education. In addition, the length of the secondary education in the Republic of Tajikistan is shorter than in the number of countries, where schools were transferred to 12 year education. Moreover, the study load in the schools of the Republic of Tajikistan is lower, compared to developed countries and Russia. The teaching plan in hours for children at the age of 7 - 15 in the Republic is 14% lower than in Russia and is lower by quarter than in the countries of Organization for Economic Cooperation and Development (OECD).

Involvement of girls in education is of special attention to the Government of the Republic of Tajikistan, all international programs and initiatives. Equality of access to education both for boys and girls was stressed as one of priority Millennium Development Goals: “Eliminate gender inequality by 2005 in primary and secondary education and no later than by 2015 – at all levels of education”¹⁵.

However, statistic data comparison of the Republic of Tajikistan with indicators of other Central Asia countries show that despite a certain progress achieved by the Republic during the past years, involvement of girls in general secondary education in Tajikistan is lower than in Kazakhstan and Kyrgyzstan, especially in 10-11 grades.

Less than 10% of children and adolescents have the opportunity to receive advanced level of education. The education institutions implementing such programs (lyceums, gymnasiums, schools with advanced study of separate problems) are mainly concentrated in cities. Involvement of girls in the advanced level of education (lyceums and gymnasiums) is in average lower for 1,5-2 times than boys in the regions.

The tools for the assessment of educational achievements of students at school and republican level are not developed yet. Individual projects that were conducted in the country to assess the students’ level of knowledge make the education quality assessment both nationally and in dynamics impossible due to the differences of measurement tools and arrangement of assessment procedures. However, the data on the results of national assessment¹⁶ (testing) to assess the knowledge of 4th grade students indicate that only 54,6% coped with task on mathematics and native language

Supplementary education.

Supplementary education solves a number of educational and socialized tasks: ensures meeting of individual needs of families in the development of children’s abilities, promotes

¹⁴ Ministry of Education of the Republic of Tajikistan. Statistical collection. Dushanbe, 2009, page 17.

¹⁵ Report on implementation of development goals, formulated in the UN Millenium Declaration, 2010. <http://www.un.org/russian/millenniumgoals>

¹⁶ A detailed report on the results of national assessment (testing) to assess the knowledge of 4th grade students under Education Modernization project. Dushanbe, 2008.

socialization of children and adolescents from the risk group and as numerous surveys indicate improves study results of the schoolchildren.

Currently, supplementary education in Tajikistan is not able to fully resolve these issues. The network of institutions is represented by 75 centers on out-of-school education, from which only 42 institutions have individual knowledge built in Soviet period. The rest are located in the premises of education departments, kindergartens, basements, private houses and shops. Practically all system of supplementary education in the country does not have necessary equipment and teaching aid for teachers. There is a lack of skilled staff and training of such specialists. The need for supplementary education has not been assessed for the past 20 years.

Special education.

Psychological, medical and pedagogical consultations are provided in Dushanbe, Khujand city of Sugd oblast and Kurgan-Tube city of Khatlon oblast for timely detection of children with different abnormalities. However, despite this work, there are still a number of problems to be addressed:

- lack of these consultations in other cities and districts of the country;
- lack of specialists – speech pathologists (teachers on mental deficiency, teachers of deaf-and-dumb), psychologists, speech therapists;
- lack of early intervention rooms within medical and prophylactic institutions.
- lack of basic, special and education institutions with classes or groups for advanced study for children with development abnormalities to develop and test new methodologies of assessment and training;

There is an acute shortage of skilled specialists in the area of special education. There are practically no skilled speech pathologists and psychologists. The specialists on logaedics, deaf-and-dumb pedagogy, teaching methods of blind, oligophrenopedagogy are not trained in the higher vocational education institutions of the Republic of Tajikistan.

Material and technical base of these special educational institutions is very week and most of the institutions need repair. As a result, the issue of educating children is not satisfactorily solved due to lack of seats in the network of preschool and school institutions for children with disabilities and lack of seats in the specialized general education institutions.

Most of the disabled children do not have opportunities for receiving vocational education

Basic vocational education (BVE). The Government of the Republic of Tajikistan views basic vocational education as one of major components in the sphere of education, which provides national economy with qualified specialists and significantly contributes to the development of socio-economic and wellbeing of its citizens. However, currently there are some serious concerns, such as:

- lack of seats in the network;
- acute shortage of industrial training specialists;
- low qualification level of teachers;
- unconformity of the graduates training on the structure of specialties to the quality of labor market requirements;
- lack of educational and methodical literature and equipment;

- employers and other social partners are insufficiently involved in meeting training requirements for specialists among technical and service personnel;
- no mechanism to attract financial resources from the private economy sector to organization of vocational education and staff training;
- current mechanism of organization of education process is characterized by its economic irrationality and lack of effective management controls.

Secondary vocational education (SVE). This education is also aimed at providing the economy with qualified specialists. Current condition of secondary specialized vocational education institutions is characterized by the following problems:

- physically and morally obsolete training and production facilities;
- lack of modern textbooks, visual and learning aids especially in state language, which leads to the worsening of education process;
- there is no uniform and strong training plans developed for each occupation;
- the system of advanced teacher training has not been developing and teachers did not have an opportunity to improve their teaching skills and knowledge;
- lack of teachers and low level of their qualifications;
- unconformity of professional structure of training to the labor market requirements and others.

The institutions of basic and secondary specialized vocational education, which are called to provide the economy with skilled labor workers, enroll around 4% of general secondary education school graduates. It sharply differs from the global trends – in countries, especially developed countries, the share of those people who, along with the secondary education¹⁷ receive a professional and recognized at the labor market certificate, make from 30% to 60%. The volume of workers training does not meet labor market demands and the quality of this training (according to surveys) does not respond to modern training requirements. Tajikistan today is a rare example of the country where the level of education of older generations is higher than the education level of youth.

Inconsistence with labor market demands reduces the effect of basic and secondary specialized vocational education.

Low population coverage with basic and secondary specialized vocational education is explained, on one hand, by limitations of material and technical base, and, on the other hand, due to low awareness among the youth about the possibilities to quickly receive a profession. School graduates do not fully realize that in current socio-economic conditions, prompt and timely profession acquiring will become a guarantee of their further successful working career. At the same time, inflexibility of this system and its incompatibility with the demands of labor market reduces the effect from getting such education.

For comparison, the following figures may be introduced: if in 1991, enrollment to the institutions of basic and secondary specialized vocational education made 47,9% from the total number of people, enrolled in educational institutions of the specialized vocational education system, by 2010, this indicator was reduced by 2 times and the enrollment rates in higher educational institutions, on the opposite, increased by more than 2 times – from 24,7% to 52,7%. Therefore, it may be stated that the formed structure of vocational education - where more than a

¹⁷ In accordance with International Standard Classification of Education (ISCE-97) – basic vocational specialized education on the school base falls into upper level of secondary education.

half of higher education graduates, and less than a quarter of graduates, who have basic and secondary specialized vocational education – does not conform to the state of economy and professional structure of the labor market.

During the past years gender inequality has been observed in the access to basic vocational education (BVE). The share of female students of BVE institutions from 2005 to 2009 decreased from 28,1% to 15,4%. At the regional level, the decreased numbers of female coverage are even higher. During this period, the representation of female students reduced from 23.6% до 11,6% in Khatlon oblast from 38,2% to 18,1% in Sughd oblast, from 53,4% to 24,3% in GBAO.

From the total number of students in secondary specialized vocational institutions, girls represent over a half of students - 56,9%. However, the gender imbalance in the occupation breakdown is very significant. If, in 2009 and 2010 the share of girls in secondary specialized vocational institutions for health, physical culture and sport made 70%, for specialties in education, art and cinematography - 66%, then, for the economy and law – only 27%, for industry and construction – 16%, and for agriculture – 7%.

Higher vocational education is aimed at supporting the need for dynamic development of human capital assets of the Republic and it is an important factor in achieving competitiveness of the country and raising its international image.

Despite the support of the Government of the Republic of Tajikistan and annual budget financing growth, negative trends in the system of higher vocational education are still developing. There are some problems and resolving them will allow improving the effectiveness of the higher education system and bring qualitative and quantitative indicators of graduates close to labor market requirements. Main concerns of further development of higher education - which should get a priority attention - are the following:

- the level of material and technical base in the majority of higher educational institutions, inadequate training and methodical literature, insufficient modern and connected to Internet computers, the level of staffing remains fairly low, which do not meet established educational standards requirements;
- higher education is poorly integrated with scientific activity of the Republic, which negatively affects the quality of specialists training and, at the same time, reducing scientific research development capacity;
- lack of clear organization system of advanced training and retraining of teachers;
- availability of a gap between the higher education system and the labor market, which is defined by the transitional period in the economy;
- advanced and effective management methods are poorly used in the higher education management system, insignificant attention is paid to the issues of HEI internal planning, management and assessment of education quality;
- lack of effective public education quality management system, which is aimed at adequate and open evaluation of performance results in educational institutions;
- lack of distant learning system at the Republican level;
- underdevelopment of continuous vocational education as a mechanism to meet current and potential needs of dynamically developing society and economy;

The scope of higher vocational education in the Republic is relatively low: higher education covers around 18% of the population of relevant ages, which is 2,5 times lower than in developing countries of Europe and Central Asia.

There are also significant disproportions, which accumulated in the higher education: Basic masses (52%) are students specializing in humanitarian and social sciences, art and 16% in natural sciences. Students of engineering and construction specialties make only 15% from the total number of students. Agriculture is the largest and fast-growing sector of economy; however, the share of students in agrarian specialties is only 3%. Service sector specialties make 1%.

Current labor market is not capable to provide workplaces for the majority of HEI graduates in accordance with the specialty and level of their qualifications. As a result, higher education in the country is being devalued and the quality of education is decreasing due to lack of demand, and surplus education means ineffective expenditures. Good specialists leave the country –Tajikistan, therefore, finances the economic development of other countries.

The above stated structural disproportions of the education system are coupled with staffing level problems of the education system. The staffing “hunger” is experienced by the institutions of all levels of education, and most acutely the shortage is felt in the biggest sector – secondary education.

In 2010-2011 academic years 94,253 teachers worked in general education schools, 54% of them were women. The overall shortage of teachers in the Republic, is estimated at the level of 9%, which is over 3 thousand teachers of primary classes, including 2,5 thousand teachers in rural schools. The deficit of teachers in secondary schools is even higher and make 15% of teachers, which is equivalent to 11 thousand full-time teachers, including 8,8 thousand in rural areas¹⁸. Qualification level of the teaching staff does not meet modern requirements – one fifth of primary school teachers do not have higher or secondary specialized vocational education and almost 40% of secondary school teachers do not have higher education. About the third of teachers do not have specialization on a teaching subject, only half of them had advanced vocational training. Schools do not have teachers-psychologists and speech therapists, and in establishments, implementing special education programs, there is a shortage of logopedists, defectologists, surdopedagogists and typhlopedagogists.

Development of basic and secondary specialized vocational education is constrained by acute shortage of highly qualified personnel, teachers and on-the-job training specialists, as well as by incomplete conformity of qualification level of technical training staff (of the vocational education system) with latest training requirements for skilled workers.

From the number of teachers of BVE system only 66,8% have higher education and 18,1% among on-the-job training specialists. Basic specialized vocational education is distinguished by a high turnover of employees. Only 2 engineering-pedagogical colleges with affiliates are functioning within the system of vocational-pedagogical education of the Republic. These colleges train on-the-job training specialists in addition to a number of higher educational institutions, which train specialists, who are capable to combine the functions of theoretical and on-the-job training specialists.

Successful implementation of the Government RT initiatives in the education system largely depends on competent, motivated education management system; a well organized structures and procedures of effective allocation of functional obligations, authorities and responsibilities throughout the system – starting from ministerial level to subordinate institutions

¹⁸ Calculation based on NSE data

to the regions and districts, cities as well as communities and schools. Today, different problems are observed practically at all above-mentioned levels mainly associated lack of professional management.

One of the main tools to improve the efficiency of education management and validity of decision making is management information system (EMIS). Thereby, development of comprehensive EMIS becomes a requirement for effective strategic planning, policy analysis, monitoring and evaluation. At the moment, only general secondary education is covered by EMIS. There is a lack of data base management, which is quite necessary for modernization of the education management system.

The other important tool for schools management is the school council. In accordance with the law “On Parents Responsibility for Education and Children Upbringing” (2011), there is a need for support and promoting the movement of public councils, parents and teachers associations (PTA) and trustees boards both by the Government of RT and by the donors.

The education system does not have appropriate National education monitoring system which is to implement a systematic monitoring of the situation in the education system and conditions of its functioning, education outcomes, economic and social effects on the national and regional level.

Financing of the education system of the Republic of Tajikistan is executed from three main sources: budgets of all levels, international assistance and funds of families. Budget expenses for education, in relation to gross domestic product, make about 4,6%, which is a little lower than the average value of this indicator for developing countries. However, taking into account, primarily, low volume of GDP and specific demographic situation in the Republic, where close to 30% of population make children, teenagers and youth at the most active for getting education age (7-18 years), the level of financing is very low. It is sufficient to say that budget expenses in the RT for primary and general secondary education, in calculation per 1 student in 2008 was 215¹⁹ somoni. In conversion into international dollars, based on purchasing power parity, this amount makes 159 dollars²⁰ and, compared to other countries, these expenses are not high, almost 10 times yielding to average indicator for developing countries.

Two financial instruments are applied in the education system: input-based and per capita financing. The first is not focused on the result and induce inefficient use of funds. Today input-based financing continues to be major instrument for all levels of education, except for comprehensive schools which moved to normative financing in calculation per 1 student.

The objective of the coming years must become the transition of all level of education to per capita financing.

The condition of Material and Technical Base of the education system is characterized by the shortage of student seats and unsatisfactory state of premises. More than third of school buildings are in emergency condition or require capital repairs. Less than 10% of students go to schools, which have electricity, water supply system and sewage, organized meals and medical service. Essential problem for the education system of the Republic of Tajikistan is

¹⁹ Estimate is based on correlation of budget expenses in 2006 and financing of general education establishments in 2008.

²⁰ Under international comparison of financial indicators in absolute expression, figures in national currency are converted to so the called international dollars by using the purchasing power parity (PPP) – ratio, reflecting the purchasing capacity of a national currency in relation to the US dollar. Purchasing power parity is calculated on the annual basis by the World Bank for over 200 countries. PPP may significantly differ from an exchange rate of a national currency to USD, set by national central banks. For Tajikistan, in particular in 2008, PPP made 1,35 under the official exchange rate of 3,43 somoni to 1 USD.

overcrowding of schools, especially in urban area and district centers. Excess of actual number of students, as opposed to scheduled numbers, is maintained at 20% in basic schools and over 40% in secondary schools.

According to medium-term priorities of MDG Needs Assessment for the period of up to 2015, the construction of approximately 850 new schools was planned in the sector of general secondary education. Latest data show that, during the period of 2006 to 2009, 562 schools (3751 classrooms for 108794 seats) were built in the Republic. The average number of newly built schools is 194 students. Based on the fact that, in 2003-2004 academic years there was a shortage of 600 thousand students²¹, construction plans for new schools for more than 500 thousand students need to be finalized before 2016.

Despite considerable support of international organizations, there is a constant shortage of schoolbooks. Annually, books are published in bulk issue and are supplied to schools. On average, a primary school pupil has less than three books on hand, while there are 5 subjects studied in the first grade and 8 subjects in the fourth grade. The situation with the schoolbooks supply in basic and secondary schools require changes.

Introducing modern **information and communications technologies** in education sphere is hampered not just by insufficient resources and qualified teaching and technical personal, but also by problems with the supply of computer equipment, especially in basic and secondary specialized vocational education institutions, as well as by power supply and possibility to connect to Internet in many rural population centers of the Republic.

Challenges

Today, the Republic of Tajikistan, as many other countries, faces both external and internal challenges, which cannot be addressed without the involvement of education.

Globalization brings both positive results as well as creating new possibilities for the development of countries along with threats, which entail the risk for economies with advanced lag behind when these economies turn into primary supplements of more developed countries, “brain drain” and other threats. High level of birth rate in the Republic of Tajikistan leads to surpassing growth of the population size at the age of acquiring education. It means that, even, in order to support the current state of the education system, larger volumes of resources are required. In conditions of severe budget limitations the country should find the way not just to maintain, but to develop the education system.

High level of unemployment and poorly developed labor market lead to the situation when the labor market is not capable to clearly dictate to the education system with regard to requirements for graduation specialties and content and quality of professional staff training. It means, in particular, that higher specialized vocational education institutions do not have natural incentives for development and lack of demand for graduates lowers the image of vocational education. Graduates are forced to seek an employment overseas, and the government, as a result, is financing economies of other countries.

Aggravation of political situation in the world and especially in the countries of Islamic world, use of religion in the interests of various anti-humane groups through radicalism and terrorism, require from education systems development of such content of education, which can shape a person with the mentality of a humanist and a constructive personality capable to withstand political, social and religious provocations.

²¹ MDG Needs Assessment. Dushanbe. May. 2005.P.62.

In this situation a new education development strategy is necessary, which is aimed at liquidation of indicated problems and responding to challenges of XXI century on the basis of modern achievements and world experience.

Risks

Implementation of National Strategy may face risks, which will place in jeopardy the achievement of set goals and success of implementation of specific objectives. These risks, primarily, involve the following:

- lack of resources for systematic implementation of the NSED up to 2020, as a result separate measures will be undertaken and the systemic effect will not be achieved;
- lack of support from private sector to solve existing problems in the education system;
- unwillingness of educational community to accept innovations and change routine life and work methods;
- poor or improper media coverage of information in the education system, which result in lack of support for education reforms from the part of the community due to low understanding of essence and objectives of the reforms;
- insufficiently trained management personnel to solve large-scale complex tasks, as a result - implementation measures will not be well coordinated, specific results will not be on the required level, monitoring of National Strategy implementation will be behind schedule and may become more of a correction tool, instead of performing a feedback function in a process of management.

3. Priority goals of National Education Development Strategy of the Republic of Tajikistan up to 2020

In difficult social conditions the education system of the Republic preserved achievements of the past years and demonstrated the capacity for development. Today, Tajikistan has educational resources and the level of development of these resources allows raising a question about their targeted use to achieve the main goals of socio-economic development of the State – elimination of poverty, reduction of unemployment, improving living standards and quality of life of the population. National Strategy is the tool for development of the education system to achieve set goals. Renewed education system, formed in accordance with modern world trends, not just knowledge-based but based on a competent approach, should provide students with the possibility of mastering key competencies and social skills, such as accountable decision making and professional career planning, orientation on education throughout entire lifetime, communication skills, professional training, which is in demand on the market, knowledge and skills necessary to engage in self-employment, health promotion skills and understanding civil society values.

Priority goal of National Education Strategy – creating conditions to ensure functional and effective provision of educational services and access to appropriate quality education for everyone. This goal is focused on implementation of the following objectives:

- Ensuring wellbeing of citizens and social stability in the society.

- Establishing skilled personnel base for economic growth in priority sectors, developing technologically effective productions and attracting investments into the country's economy.

Based on the goals and objectives of turning the education system into the key resource of socio-economic development of the country and improving wellbeing of its citizens, the following priority directions of the National Strategy are identified:

- Modernization of the education system
- Structural changes in the education system
- Ensuring accessibility to quality education.

Implementation of the National Strategy within the framework of priority directions will be aimed at the following objectives:

1. Changing the structure of education:

- development and implementation of new generation programs to ensure early development, physical and mental training of children for systematic cognitive activity;
- upgrading of general education content on the ground of transfer from knowledge-based to competency-based education model and focusing on:
 - developing of worldview based on modern scientific notions, democracy principles and civil society;
 - principles of moral behavior;
 - mastering vitally important skills and healthy lifestyle and developing skills for acting in emergency situations;
 - training for professional activities;
- modernization of supplementary education considering broadening children's view on the environment, entering the world of professions for their conscious selection in their future;
- modernization of special education based on the interagency approach to education, rehabilitation and socialization of children's with special needs, assistance in the demonstration of various initiatives, supporting individual development, creation of necessary conditions to support families in socialization of children, use of internal resources of the child and his family members;
- modernization of content of basic and secondary specialized vocational education with orientation on domestic labor market demands, family educational needs and successful adaptation at external labor;
- modernization of higher vocational education content in accordance with demands of economy and objectives of formation of brainpower of the country.

2. Structural adjustment of the education system and business mechanisms:

- introduction of preschool education system for children at the age of 5-6;
- establishment and introduction of new remuneration system in education, which increases the differentiation based on quantity and quality of labor;
- establishment of the students' participation system in the elective supplementary classes, which must be provided in the school's training plan;
- development of systematic and diagnostic framework for the supplementary education institutions activity based on the program and targeted approach;

- creation of the appropriate system of special education for training children with disabilities;
- introducing inclusive education;
- developing the system of labor market assessment;
- turning BVE and SVE into the system of large-scale education of population;
- improving practice-oriented higher education and connecting it to national and local labor markets, making higher educational institutions a determinant of territorial development;
- introduction of two-level secondary specialized vocational education (secondary specialized vocational education and bachelor) and higher vocational education;
- improving financial mechanisms in vocational education;
- expanding involvement of labor market representatives in development of vocational education;
- transition from institutions management to the program management in vocation education;
- development of state-public management of education;
- establishment of the national education quality monitoring system of all-levels;
- improving the quality of education management focusing on final results.

3. Ensuring equal access to quality education:

- introduction of various administrative and legal forms on provision of preschool education services;
- establishment of the system of early detection and correction of developmental disorders at children;
- improving the quality and equality of resources' provision to general education institutions;
- creating motivation and conditions to continue education for girls after they receive compulsory education;
- development of supplemental education system for children as a tool to respond to individual needs of students and socialization of children and teenagers, including the ones from risk groups;
- establishment of the support system for rural area students, who are involved in vocational education programs
- creation of the system of identification and support of talented children, including incentives and subsidies for them to get basic and secondary specialized vocational education;
- ensuring access of national minorities to receiving education in their native language, preserving cultural and language diversity in educational area;
- introduction of the enrollment system to institutions of basic and secondary specialized vocational education based on national testing results;
- support for children with limited capacity and their integration in regular educational institutions.

CHAPTER 3. EDUCATION SYSTEM DEVELOPMENT PRIORITIES

1. Modernization of education structure

During the viewed period of time there will be a principle modernization of the education system at all levels.

New requirements for running education programs, conditions for children's stay, educational programs, new generation textbooks and etc. should be developed in the system of preschool education (PE).

The system of preschool education will be performing the functions of early development, physical and mental training of children for systematic cognitive activity, initial formation of basic literacy and numeracy to level the starting conditions for children from various social groups and with different standards of living.

Fundamental changes should occur in the education structure of the primary school (1-5 grades), general education school (6-10 grades) and secondary school (11-12 grades). It is stipulated by the inconformity of traditional "academic" education structure to modern requirements and objectives to provide vocational education to the population in conditions of industrialization of economy.

The education structure in the primary school (1-5 grades) will ensure mastery of new types of educational activity and leveling of starting conditions. Transition to earlier start of education in schools will require the development and implementation of new programs and educational methods of work with 6-year old children, education through play, establishment of appropriate material and technical base and staffing capacity. The main outcome of study in the primary school will be a developed skill of effective reading and work with numbers.

Main education objectives to be achieved in the **general education school** (6-10 grades) will be the following:

- shaping of social moral worldview of the younger generation, which is based on humanistic and national values;
- development of skills for healthy lifestyle and action in emergency situation;
- orientation of education on successful social and labor adaptation, upbringing of responsible, creative and tolerant citizen of the country and the world;
- introduction of pre-specialized, vocational-oriented education and compulsory professional development.

General secondary school, including boarding schools (for children without parental care and children with disabilities) (11-12 grades) provides education with the base objectives of conscious choice of professional career and pathway of vocational education based on specialized training, development of social roles and key competencies as a resource of success.

Development of supplementary education system for children plays an important role in improving the quality of education. At all levels of general education this system should create conditions for social, cultural and professional self-determination, creative self-actualization of personality and its integration into the world and national culture.

The system of supplementary education has the following objectives:

- prevention of child and adolescence deviance;
- strengthening of mental and physical health of children;
- developing individuality, communication skills of a child, child's talent;
- correction of psychophysical and mental development of special needs children.

Today, the system does not have resources for implementation of these objectives. The coverage with supplemental education in the Republic makes less than 1% from the total number of school age students.

The principle of voluntary and free education in children's establishments paradoxically, reduces the interest of parents. The system of parents involvement in programs of supplemental education is yet to be developed.

In order to increase by 30% the coverage of children by supplemental education, the following activities will need to be implemented by the year of 2020:

- develop standard and alternative programs of supplemental children's education, including programs for children with special educational needs;
- actively implement programs of supplemental education in general education establishments through the creation of the system of participation of schoolchildren in additional studies of their choice, which should be specified in a school curriculum;
- establish institutions of supplemental education for children in those areas where there are no such institutions;
- actively involve resources of local state authorities and business, non-governmental organizations and parents to improve the coverage of children by the supplemental education and restoration of material and technical base of current supplemental education institutions.

The following tasks will have to be implemented by the system of special education:

- develop standards and special programs for children with disabilities, disabled children and difficult children;
- develop and gradual implementation of occupational training programs for this category of children;
- actively involve resources of local state authorities and business, non-governmental organizations and parents to improve the coverage of children by the supplemental education and restoration of material and technical base of current supplemental education institutions.

The content of vocational education will be revised in accordance with current and projected needs of economy, internal and external labor market demands, society and families.

New State Educational Standards (GOST) will be introduced at all levels of vocational education. Their development will be based on current situation with upgrading of vocational education and taking into account latest achievements in science and technology.

In order to ensure access to education throughout the lifetime, the coverage of young people, adults, disabled people and other persons with vocational education will be expanded, which will also include training through short-term courses with the involvement of private sector. The term of "adult education" in Tajikistan encompasses the complex of progressive process of formal and other type of education which help adults (for the purposes of education, this includes population aged 25 years and older) to develop their abilities, enrich their knowledge and improve technical and professional skills or apply them in new areas to satisfy their society needs. Adult education covers both formal and continuous education, informal education and a whole spectrum of informal and auxiliary education.

The system of basic specialized vocational education will have the following activities to be implemented:

- development and approval of educational standards of new generation, designed on the basis of professional standards and competency-based approach with mandatory involvement of employers;
- development of flexible and alternative educational programs on the basis of implementation of modular organization of programs;
- inclusion in educational programs of BVE the components on management and business;
- expansion of admission to the vocational training program, including expanding the education via short-term courses for youth and adults.

The system of secondary specialized vocational education will have the following activities to be implemented:

- improving the specialty classifier in accordance with labor market demands and perspectives of society development;
- ensuring continuity of secondary specialized vocational education with other levels of education with mandatory inclusion of entrepreneurship principles;
- introducing new generation state educational standards on specialties of secondary specialized vocational education;
- developing educational, programmatic and methodical support of the educational process, new generation schoolbooks and training aids, means of instruction;
- developing a variety of training forms (intramural/evening courses/extramural and non-residency) and their flexible combination in the educational process, and distant learning;
- introducing new technologies and methods of education (including personality-oriented, modular, intensive and information technologies);
- expanding self-sufficiency of education institutions in developing the education content;
- supporting and developing innovative vocational educational programs and technologies.

It is planned to develop a wide spectrum of educational programs of basic and secondary specialized vocational education and duration of education, focusing these programs ultimately on development of professional competencies.

System of higher vocational education will have the following activities implemented:

- modernization of structure of vocational education in accordance with requirements of economy and objectives on formation of brainpower of the country;
- improvement and training of the teaching staff through master's program, special postgraduate training, PhD and the system of production-and-training courses ;
- support and development of innovative vocational educational programs and technologies;
- improvement of material and technical base with the purpose of meeting the state requirements for personnel training;
- creation and development of open access database on electronic training aids.
- increase the proportion of independent students in mastering of training programs, including wide use of information resources and ICT. The role of a teacher will be shifted from transmission of knowledge to organization of educational activity.
- transition to new generation standards based on competency-based approach and modular arrangement of programs with mandatory involvement of employers.

Education qualification requirements based on availability of educational programs: programs of basic vocational education and training – basic general education, programs of secondary specialized vocational education – complete general education, programs of higher vocational education – complete secondary education, secondary specialized vocational education.

2. Structural changes of the education system

Preschool education in various forms, by 2020, should become widely accessible to the public, with maximum increase in coverage of children by general education programs at senior preschool age (preschool training).

Infrastructure and programs of preschool education should bear a major load of early correction of deviations from the normal development of children. Priority attention will be given to identifying children with special educational needs, including developing a *system of medical-psychological-pedagogical follow-up of children with special educational needs*:

- detection and correction of children with abnormal development in early preschool age, when correctional intervention is most effective, establishing *early assistance service* for children (0-3 years) and their families;

- developing *integrated and inclusive forms of education of preschool children* with limited abilities, creating sufficient program-methodical, material and technical, staffing capacity in the institutions involved in such education.

The state will create conditions promoting the development of private sector in the preschool education. Different forms of preschool education will be introduced – from around-the-clock institutions to short-term stay groups..

Using these forms of organization of preschool education, by 2020 it is necessary to reach the coverage of children by educational programs by 30%, at senior preschool age (5 years) – up to 50%. Solving of this large-scale task requires considerable expansion of forms of provision of preschool education services: further development of private kindergartens and child development centers, development and implementation of new forms of family and double-shift kindergartens.

The cardinal changes within next 5 years are expected in the system of general education. It is connected with the transition to competency-based approach to increase competitiveness of Tajikistan's citizens.

Decreasing by one year of the regular education age (from 6 years) and increasing the length of primary school should significantly improve the quality of education and compensate for low coverage by preschool education.

Every educational stage implements a specific set of objectives:

Primary school – increasing the duration of education up to 5 years – for training and mastering of new types of educational activities and leveling the starting conditions for children.

Basic school – from 6th to 9th grades – with its main objectives of forming the worldview, development of health promotion skills, orientation of education on successful social and labor adaptation, acquiring compulsory vocational training.

General secondary school – 10th and 11th grades, with primary objectives of conscious selection of professional career and trajectory of vocational education, mastery of social roles and key competencies as a resource of success.

Vocational training programs provide mastering of work professions and will be introduced in general education programs of secondary education system. Their implementation will be supported by the resources of basic and secondary specialized vocational education, own school funds and production facilities of the territory served by the school.

Special education.

- develop the network of psychological, medical and pedagogical commissions (PMPC);
- establish the system of medical, social and educational institutions that ensure correction and access of individual with special needs to receiving education;
- training of pedagogical personnel, medical and social employees that have knowledge and skills on inclusive education;
- creation of social, pedagogical, economic models, training and education technologies of inclusive education;

The main task of primary and secondary vocational education system is to develop qualified workforce and maintain relevant skills of the body of specialists. The key priority for promoting PVE and SVE is to restructure the existing network in order to turn the system of mass education of population and focus on vocational training of population according to the needs of economy and considering the regional factors.

Programs under implementation:

- basic vocational education;
- secondary specialized vocational education;
- supplementary vocational education: vocational training, retraining and advanced training of appropriate qualification level;
- adults education based on the achievements of andragogy

It is necessary to design and introduce a rational network of basic and secondary specialized vocational education institutions, ensuring geographic and programmatic accessibility of this level of education.

Multi-level and multi-specialty education institutions will be formed to implement programs of all types. In addition, there will be institutions, specializing in specific type of a program. Various forms of organization will be used for this purpose – transferring of BVE institutions in a status of SVE while maintaining BVE programs, opening of SVE programs in higher educational institutions, and others.

It will be necessary to develop at the earliest possible date a wide network of education centers providing broad specialty training, change of profession and advanced training, including trainings in short-term courses. Such centers may be created under state regulatory authorities, nongovernmental structures, private persons at effectively functioning enterprises of various forms of ownership, including agricultural enterprises, for use of production facilities of enterprises in educational activity. The services provided will be financed both by an employer and an employee acquiring a profession.

It is planned to develop and introduce the systems of government support of production organizations, which provide quality services of continued vocational education or provide production facilities, equipment and personnel for organization of vocational education.

Higher vocational education has objectives to provide training of professional brainpower of the nation and a class of makers of new generation of technical, managerial and socio-cultural graduates.

Programs under implementation:

- bachelor's,
- master's,
- specialist,
- postgraduate training, (including thesis work for PhD)
- doctor's,
- additional (to higher) education.

It will be necessary to find ways of managing the flow of specialists with higher and secondary vocation education., conduct optimization of HEI network, conduct integration of HEI through expansion of trajectory of graduates training, develop strong scientific and research bases, small enterprises and business-incubators.

It is planned to shift activity focus of higher vocational education institutions to participation in regional and republican development; develop and maintain development programs; engage in consulting and scientific and engineering development. The network of higher vocational education institutions is the most essential intellectual resource of territorial development and using this resource will allow expansion of activity area of HEI and strengthen association of training programs with practical experience.

It is planned to continue work on establishing technological parks (university centers), integrating based on territorial (sector) characteristics, HEI, colleges, lyceum, gymnasiums and schools. The basis of network models of organization of educational process will be the consolidation of resources of different level educational establishments, which will ensure their effective utilization. Development of such integrated structures in the system of education will allow accomplishment of complex projects and will assist in organization of advanced training process and implementation of programs of development of territories and branches of industry. Solving the tasks related to research, design and staff training in strategic branches of the country's economy (energy, mining, nonferrous-metals industry and other) followed by adequate financing and accountability for results – will be the responsibility of technological parks.

The most effective is the joint activity of branches of Academy of Sciences of the Republic of Tajikistan, Academy of Education of Tajikistan and higher school. For such an organization, programs of joint research and development (R&D) will be offered, with inclusion of research and postgraduate students in designer teams and introducing results to academic departments of universities.

Education system of the Republic of Tajikistan, reformed in such a way, will have the capacity to provide access for all citizens of the country to education over a period of a lifetime.

3. Ensuring availability of quality education

The disproportion in the equality of access to education requires urgent solving of a number of key tasks.

The plan is to develop and implement a complex of mechanisms of leveling the access to educational resources for early development children. These mechanisms will include:

- priority provision of children from the risk group with education;
- state support of socially vulnerable families through full or partial exemption from payment for a child's stay at the preschool establishment;

- establishment of the system of centers of consultative and methodical assistance to families upbringing preschool age children at home;
- developing a state program of local authorities and communities involvement in organization of educational resources for early age children in rural areas;
- developing a state program for infrastructure and material and technical base development of preschool education, aimed at creating of sanitary conditions (electricity, water supply, sewage, equipment of nutrition unit and other) and equipping with furniture, toys and books the institutions, which implement educational programs and engage in training of early development children;
- expanding the coverage of early age children with education programs through development of nongovernmental and private establishments, creating low cost form of preschool education, such as child development centers, double-shift kindergartens and family kindergartens and etc.

To reduce inequality of access to education, based on social grounds, a package of measures will be developed, which will include:

- provision of one-time hot meals for students of primary classes (preferably 6-year olds, girls, children-orphans and children from low-income families) and children with special needs;
- supplying schoolbooks for children in schools, among them, preferably, ethnic minorities children, children-orphans and children from low-income families;
- training and retraining of teachers working in schools of ethnic minorities, as well as surdopedagogists and defectologists and other pedagogical occupations;
- ensure involvement of local communities and local self-government bodies in the process of organizing inclusive education.

Leveling the education, received by children in cities and rural areas, stipulates improvement in provision of resources for rural schools and development of system of basic and secondary specialized vocational education for teenagers and youth from rural areas.

Development of special programs of identification and support of talented young people from rural areas and low-income urban families in order to continue education under programs of secondary vocational and higher vocational education.

Specific problem is increasing the education level of schoolgirls and teenaged girls. Along with education promotion for girls, there will be developed special programs of vocational training, which make continuity of education look attractive and perspective for girls after the compulsory stage of education. It will also be necessary to develop mechanisms of conducting gender assessment of schoolbooks and programmatic and methodical supply for schools and execute this expertise with further introduction of adjustments.

In the area of vocational education it is expected to:

- bring into compliance the volume of training of specialists of primary, secondary and higher education in accordance with the professional structure of domestic and foreign labor market demands;
- optimize the location of vocational education institutions to improve the coverage of rural population with this type of education;
- expand network of institutions offering short-term education programs;
- use information technologies and distant methods to increase accessibility of higher education programs;

- increase access of girls and women to vocational education;
- develop the system of vocational training and education of people with special needs;
- set up Republican educational Portal, serving all levels of education;

CHAPTER 4. IMPLEMENTATION MECHANISMS OF THE NATIONAL EDUCATION DEVELOPMENT STRATEGY OF THE REPUBLIC OF TAJIKISTAN UNTIL 2020

1. Development of material and technical base

Human capital that predetermines a special importance of investments in development of this resource is a strategic resource of competitive ability of domestic economy.

Development of human capital will require:

- elimination of material resources deficit in establishments of all levels of education for the cohort of students;
- construction and reconstruction of buildings and facilities of preschool education;
- construction of new schools, including schools replacing those in emergency state, completion of construction in progress, expansion in a way of increasing the number of school seats;
- rehabilitation of supplementary education institutions infrastructure;
- repair and rehabilitations of special education institutions infrastructure;
- construction of new and reconstruction of current buildings in the system of general and secondary specialized vocational education, strengthening of MTB;
- development of new set of schoolbooks and educational-methodical materials on all education levels in accordance with changes of the education content, for the purpose of improving availability of all levels of education;
- expanding the use of ICT in the education process and management of education;
- development of training-methodical aids and their publication, translation of schoolbooks to the state language and languages of national minorities;
- establishment of small enterprises, technological parks, consulting centers, program services facilities and etc. within higher education institutions.

Given the limited financial resources, special attention will be given to intensive use of current resource base of the education system. It includes the following activities:

- organization of effective forms of preschool education, stipulating flexible attendance schedule for children (from 2 to 5 times a week with 2-5 hours of study time per day), depending on financial capacity and willingness of parents;
- implementation of resource use network model, based on joint utilization of material resources by several educational institutions of various levels (general education schools, BVE, SVE, HEI);
- transfer of general education programs implementation from the institutions of basic and secondary specialized vocational education to schools; concentrate vocational education on real economy enterprises, using employer's available equipment ;
- focusing vocational education on the enterprises of real economy using the existing equipment of the employers;

- organization of structural units of kindergartens, schools, establishments of supplementary education and public purpose institutions (cultural centers, movie theatres and so on) to increase the coverage of children with preschool education in a form of family and seasonal (during peak employment period for parents) kindergartens;
- organization of “pedagogical intervention” in rural areas, involving trips of teachers or a team of specialists to remote populated areas to conduct lessons with children and consultations for their parents on issues of development and training;
- encouraging private sector to participate in education of all levels, including promoting training on short-term courses.

Funds will be attracted from various sources, including resources of public-private partnership for renewal and development of material-technical base of educational institutions.

By 2020, a certain number of schools and preschool establishments in rural areas will be provided with autonomous power supply systems, which are based on use of renewable energy on the basis of public-private partnership.

It is planned to equip all vocational education institutions with information resources and Internet access points.

2.. New educational technologies

To ensure implementation of new education structure, compensation of resource deficit, including among the personnel, the education system will experience the transfer to new educational technologies, taking into account latest achievements in science and technology and based on the following:

- competency-oriented education, which stipulates the support for goals and objectives of “outcome-based” education, and views the level of formation of key competencies of a student as one of educational results in addition to knowledge, abilities and skills;
- use of information and communication technologies, as a potential for improving the quality of education process and its outcomes, expansion of access to education and improving effectiveness of managerial processes. Computer technologies are powerful means of connecting the education process with real life situations. Internet changes hierarchical communication between a teacher and a student; students become less dependent on qualifications of teachers;
- project method of training, which involves the need for integration of knowledge and skills from different subject areas for specific problem solving by students;
- increased time for independent educational activity, as moving along the levels of education, similar to technologies of formation of key competencies, which are developed and demonstrated in activities;
- development and implementation of individual educational trajectory in a higher level school, as a practice of accountable choice;
- modular organization of educational programs in the system of vocational education, serving as a technology of educational activity management.

3. Strengthening staffing capacity

The most important component of modernization of education system is solving staffing problems and improving socio-economic status of education workers, primarily teachers.

The staff's training and retraining will become key priorities in solving problems with a deficit of qualified personnel: The following are planned activities:

- training of staff for primary education (6-year age group);
- training of staff in rural schools for working in different age classes;
- restructuring of the teacher education system to train personnel in areas of knowledge, to have staff prepared to teach several subjects;
- expanding the use of ICT in education;
- opening new pedagogical specialties (expanding training): teacher – psychologist, teacher – defectologist, teacher of supplementary education, master of in-service training;

It will require:

- bringing the standards of pedagogical education in compliance with new priorities and technologies of general education;
- introducing the teacher training for primary and general school on bachelor's programs, and master's program for work in senior classes of secondary schools;
- reorganization of the system of advanced professional training of teachers: transfer to personalized recording and financing, modular organization of programs;
- reorganization of the system of pedagogical colleges and HEI through their reduction, and, at the same time, stimulating the arrival of graduates to schools;
- attracting classic universities to teacher training process.

Staffing of the system of basic and secondary specialized vocational education should correspond to its goals and principles of educational programs organization. Practice-oriented educational process and modular competency-based organization of programs require participation in education of specialists in corresponding areas of activity. Involvement in pedagogic activity of specialists from real economy sectors is the best way of solving staffing problems. It will be necessary to create conditions of attractiveness of pedagogic activity in vocational education institutions.

Effective operations under market economy conditions require professional management on all levels of organization of the education system. A team of professional administrators will need to be formed in the area of education, using resources of higher school and establishments of supplementary vocational education.

New objectives of higher schools will also require new decisions. It is planned to introduce the practice of inviting foreign specialists to work in universities on a contract basis, thus expanding participation in international education programs. In addition, pedagogical and scientific faculties of the universities will be involving scientific workers of institutes of Academy of Sciences of the Republic of Tajikistan, Academy of Education of Tajikistan, EDI and other agencies, representatives of economy sectors with advanced industrial technologies under implementation.

Advanced training of teaching staff of the higher school will be conducted on the basis of scientific and production institutions of the country and foreign centers. The training will be focused on learning of primarily new technologies and topics of research and organization of training activities. Personnel training should become a part of preparation for implementation of the state order and initiative projects of universities.

For short-term and long-term perspective of restructuring the system of advanced training and retraining of teaching and administrative staff of the education system, the following tasks will be solved:

- necessary staffing conditions are created for development of basic and secondary specialized vocational education, focused on labor market needs and improvement of production technologies;
- social and economic status of professional school workers is brought up to required standard in the country's economy.

The following activities will be accomplished for modernization of the system of advanced teacher training:

- conditions are created for teachers to choose a package of educational services to fit their advanced training needs;
- competitive mechanisms are created in providing modern and quality educational services on professional training;
- mechanisms are created for wide implementation of the teacher support system to help them in professional growth and development, by means of formation of three-level advanced training system: at the regional level, local level and the level of educational institution;
- mechanisms are created for introduction of the credit-modular system of advanced training;
- conditions are created for the mobility of advanced training system with a purpose of prompt response of the system to changing qualifications deficits due to introduction of new educational standards, education technologies and so on.

By 2020, the advanced training systems for teachers and administrative staff will have the following characteristics:

- widely implemented system of advanced training, consisting of organizations of supplementary vocational education system, establishments of secondary and higher specialized vocational education with facilities where advanced training programs may be implemented, as well as other organizations, including nongovernmental. Educational institutions, through Internet, will have permanent access to methodical materials for teachers and electronic educational resources for professional growth. Advanced training program will be built on modular and competency-based approach. Credit-modular system of advanced training will be introduced, providing teachers with a choice of training programs, meeting the needs of territories and educational institutions and improving effectiveness of use of budgetary funds;
- advanced training will be attached to the certification procedure for teaching personnel and will be conducted on a regular basis, not less than once in three years, in order to satisfy the needs of updating the teaching arsenal with new educational technologies and solving education development tasks;
- advanced training programs will be able to use ICT technologies and distant methods. Staff training for a professional school will be conducted at leading enterprises of the Republic and overseas universities.

4. Modernization of education management system

Intense competition at the labor market requires mobility and dynamism of the education management system. Implementation of results-oriented system of planning will require from managers and teachers new management skills, retraining and advanced training. Wide public

will be involved in education management, such as academic representatives and people from various population segments.

Public participation at various levels of education management will be exercised in a form of public councils, associations (committees) of parents and teachers (APT), boards of trustees involving participation of parents, employers, state bodies and nongovernmental organizations in management of educational institution.

The basis of a modernized management system will be result-based, management, which primarily stipulates improvement of National education quality management system. The objective of this system is to conduct evaluation and management to ensure that quantitative and qualitative education potential of the nation is in line with educational objectives for the population. The following measures will be implemented for that purpose:

- new generation state educational standards will developed and implemented at all levels of education;
- regulatory and methodology framework and infrastructure of national system of education quality assessment, supported by current structures - will be established;
- the national system of evaluation of the achievement level of educational results at all levels of education (as specified by state standards) and the system of analysis of test results and presentation of findings to administrators of education management regulatory bodies, educational institutions, teachers, schoolbooks and programs authors – will be introduced;
- specialists training quality control at the level of educational establishments, based on requirements of International Standard Organization (ISO) 9000 or other quality evaluation and management systems – will be implemented .

It is planned to institute independent professional certification to ensure conformity of educational programs with labor market demands.

Licensing requirements and accreditation provisions will be brought into compliance with new tasks, which will be solved through the involvement of the higher school. It is expected there will be a transfer to external final evaluation of training quality of program graduates of all education levels including training via short-term courses and involving employers.

To solve these tasks it will be necessary to intensify the work and expand the scope of activity of the State service for control and supervision in the area of education under the Ministry of Education of the Republic of Tajikistan and establish within this service the center of education quality management and the accreditation center as organizational, methodical, service and research structures.

The national education monitoring system will be introduced in the form of the management information base and forecasting of development pathways to conduct systematic monitoring of educational results and social effects at the national and regional level. Also, the scope of research work (sociological surveys) on various aspects and trends of education development will be expanded.

Modernization of education management system involves the creation of expanded management information base, built on the basis of monitoring of current situation, analysis and forecasting of education development. For that purpose, a system of indicators will be developed, specifying available resources and effectiveness of their use, efficiency of system performance and conformity of these results to external requests, and the situation with equality of access to education for vulnerable population groups.

Management of educational systems and establishments will be based on broad use of information technologies.

One of institutional mechanisms and means to ensure the conformity of quality of specialists training to labor market demands as well as to promote goods or services in the market, should become marketing. To intensify the marketing approach in management of educational institutions, it is necessary to improve the effectiveness of functioning institutions and envisage the creation (in case of unavailability) of marketing divisions, both in the structure of educational establishments of various levels and in republican, regional, urban and district education management regulatory bodies. Marketing divisions in the system of vocational education will allow forecasting threats and risks on the market of education services, both for producers of services and entities forming the demand for services.

5 Use of new financing mechanisms

Achievement of goals of the National Strategy involves establishment of financing system, focused on ensuring equal access to educational services in preschool, general secondary education and effectiveness of financial relations on other levels of education.

Financing system will include:

- per capita financing on all levels of education;
- multi-channel financing on the basis of diversification of financing sources, including public-private partnership;
- state order for personnel training and its competitive announcement;
- stimulating the enterprises of all forms of ownership, which provide assistance to educational institutions;
- stimulating private sector for participation in the development of education of all levels;
- requirements for investment projects regarding staff training.

Given the critical importance of preschool education and high economic effectiveness of investments in this area, it will be necessary to implement new organization-financial models of preschool education, aimed at improving the quality and availability of preschool education, including:

- financing, based on requirement criterion per one pupil;
- allocating a budget order for services of preschool education in establishments of all organization-regulatory forms, which have an authorization license to implement preschool education programs;
- reducing a tax burden, both for organizations of preschool education, created in various organization-regulatory forms and for organizations and physical bodies, interacting with preschool educational institutions, especially in the area of provision of medical, consultative and methodical services and equipment;
- staff training for preschool education with formation of a state order to improve qualifications of higher-level education personnel of preschool training system;
- supporting nongovernmental institutions by providing premises in various forms (including in the form of a long-term lease) and developing a tax incentive system.

The system of per capita financing of general education establishments was introduced in Tajikistan to effectively use financial resources. To achieve goals and objectives of the National strategy, this practice will be continued and *per capita financing* will become the primary mechanism of allocation of budgetary funds, appropriated for education financing. Results-oriented allocation of funds from the state budget will be the key component of reforms in the area of management of government spending in secondary education. It will allow improving the

effectiveness of budget expenses and will be contributing to increased availability of quality education for various population segments.

Multi-channel financing. In parallel, regulatory documents on multi-channel financing will be developed and enacted to facilitate the access of education institutions to extra-budgetary financial resources and stimulating enterprises and organizations of various forms of ownership to support the education system, including in the non-cash form.

State order for staff training. To improve the effectiveness of state budget resources, the State order for staff training will become a primary program document, organizing activities of educational institutions. The work will be continued on methodical support for the mechanism of development and allocation of the State order. Performing the task of minimization of the disproportion of supply and demand in the domestic labor market, this document will be developed on the following basis:

- programs of socio-economic development of Tajikistan and forecasting of the demand at the labor market, including in territorial and sectoral fields;
- actual capacity of education institutions;
Advantages of this method of use of state budget fund for the education system include:
- guaranteed budget financing of educational institutions, which have appropriate level of staff training and efficiency of research and development activities – it will be supported by a relevant Provision;
- competitive placement of the state order on staff training and implementation of R&D activities with equal access of educational establishments of all forms of ownership, which will create condition for development of competition of educational institutions to get both budgetary and extra-budgetary funding.

For that purpose, regulatory documents will be developed that regulate procedures of competitive allocation of the order, reporting and accountability. State support of nongovernmental infrastructure in the system of education will stimulate not just the improvement of the quality of educational services in competitive conditions, but expansion of opportunities to attract resources into the education system and under the minimal budget requests.

For the purpose of diversification of financing sources of the education system and enhancing accountability of investors for professional staff training, the required component of each investment project in Tajikistan will be availability of the section on the number and nature of created jobs and the need for staff with proper placement of an order on a competitive basis in the educational establishments of the country and funding the overseas education.

Financing criteria will be developed for assimilation of vocational education programs of all levels, specialty groups and professions. Such approach will help to move from financial support of a training process to financing of educational services, introduce organization-financial competition mechanism of programs and institutions at the educational services market, stimulate increase in volumes of specialists training and expand the list of education programs.

Implementation of these measures will allow transition to a new principle of budget development of an educational establishment, oriented on results of its activities.

It is expected to develop and introduce the system of financial relations, stipulating the financing level for HEI, depending on level of their effectiveness. With this objective in view, the evaluation system of criteria and indicators of activity effectiveness of higher vocational education institutions will be developed, and the work on improvement of Provisions on scientific grants for university teams and academic institutes will be continued.

It seems practical to abandon the system of provision of state stipends in higher vocational education, replacing stipends with educational credits. In addition, the government will be responsible for credit repayment, if, after a graduation from HEI, a graduate will work in socially important fields, for-example, as a teacher in a rural area.

It is planned to introduce a partial compensation by a student of the cost of education under programs of higher vocational education. Government's support in developing of professional brainpower will involve provision of free educational grants to most talented and perspective students.

Implementation of above-mentioned activities will ensure:

- development by students and graduates of conscious and responsible choice of a professional future;
- use of state resources in strategically important sectors of economy;
- promotion of competition among HEI to get applicants;
- robust conformity of training processes of highest qualifications staff to labor market demands and state socio-economic development policy.

Employers will be involved in co-financing of education programs and development of flexible mechanisms, stipulating participation of each employee in continuous education. Tax incentives will be reviewed for investors in education.

The normative documents will be developed to regulate rights and responsibilities of all participants of higher school educational services market.

6. Social partnership in education

Restructuring the education system is not possible without involvement of legislative and executive bodies of all levels, employees of the education system, public and, certainly, employers.

Effective coordination of activities of the Ministry of Education of the Republic of Tajikistan with other ministries, institutions, civil society organizations and employers will be organized and will focus on the following areas:

- supplying the economy of the Republic with qualified staff;
- identification and socialization of children with developmental defects and children from socially adverse families;
- search of effective methods to increase education coverage of preschool and school age children jointly with local state executive bodies and social councils;
- targeted social support for children from families of risk groups.

Interaction of the education system with employers should be fundamentally changed. Employers will take active part in formulating the order for vocational education and training based on structure and content of education. Practice may initiate other forms of public private partnership – contracts for staff training, co-founding and participation in public-private management structures and other.

In conditions of fast demand-supply situation in the labor market, a constant adaptation of educational programs of professional training of all levels will be required. This task will be performed by a professional facilitator of educational services and labor markets. It should be a permanently functioning structure, solving a set of tasks, which will help to reduce the disproportion between the demand and supply of the workforce, bring into line qualifications structure of staff training and those employed in the economy of the RT, timely coordinate current and perspective social, industrial and agrarian technologies with educational programs of

all levels of education and reduce ineffective expenditures in the system of staff training. There will be developed and introduced incentive measures for enterprises and organizations of all forms of ownership in providing training facilities of in-service training for students of basic vocational and secondary specialized vocational education, including adult training through short-term courses. The workers of real sector of the economy will be involved to teaching in the institutions of vocational education. Also, measures will be developed on stimulating participation of the private sector in organizing vocational education.

Employees themselves from the real economy sector will be involved in teaching in vocational education institutions.

An important role will be assumed by the employer in developing professional standards and, accordingly, in development of educational standards, as well as results evaluation of graduate training through the system of public-private accreditation of programs and professional certification of workers.

CHAPTER 5. MONITORING AND EVALUATION OF IMPLEMENTATION OF NATIONAL EDUCATION DEVELOPMENT STRATEGY OF THE REPUBLIC OF TAJIKISTAN UP TO 2020

The goal of monitoring and evaluation – providing governmental authorities with timely, complete and accurate information on implementation progress of the National Education Development Strategy until 2020, efficiency of the program implementation and making decisions on performance management of Strategy implementation. Evaluation is conducted based on key performance indicators of the National Strategy:

- increasing the coverage of children at the age of 3-6 by preschool education programs;
- increasing the share of children demonstrating readiness for school education;
- increasing the coverage of “street” children with informal education;
- increasing the education coverage among the population at the age of 16-17;
- reducing the share of unemployed people at the age of 18-24 in the total number of unemployed;
- reducing the share of unemployed in the total number of HEI graduates;
- advancing in the volume of R&D activities, performed by HEI graduates in relation to budget financing of higher education;
- increasing the share of resources of enterprises in financing of higher education;
- increasing the population coverage with programs of BVE, SVE, short-term programs of vocational training, retraining and professional development;
- increasing the share of population with vocational education;
- reducing the respective number of children, not covered by education due to health condition;
- raising the gender parity Index based on graduation ration on all education levels;
- increasing the share of young people from rural areas, enrolled in programs of secondary and higher vocational education;

- raising the share of young people from socially unprotected groups (from poor families, orphans), enrolled in programs of secondary and higher vocational education.

Monitoring of the implementation progress is conducted based on objectives and activities indicators, stipulated by the mid-term implementation plan of the National Strategy (*Attachment 3*).

Effective monitoring and evaluation of the implementation of the National Strategy will be exercised by respective department/unit of the secretariat of the MoE of the Republic of Tajikistan. MoE of the Republic of Tajikistan approves the Plan of Monitoring of the National Strategy, as well as forms and reporting procedures on execution of the National Strategy.

CHAPTER 6. FINANCING THE IMPLEMENTATION OF NATIONAL EDUCATION DEVELOPMENT STRATEGY OF THE REPUBLIC OF TAJIKISTAN UP TO 2020

Implementation of the National Strategy requires significant financial resources. The volumes of these resources will be determined on the short-term basis. The main source of financing of the National Strategy is state budget. In implementation of the key projects on development of infrastructure and implementation of institutional reforms, internal budgetary resources will be complemented by external assistance, provided to Tajikistan by the international organizations and donors. To solve the tasks related to education development, attraction of private investments is expected. Effective use of these sources of financing should allow implementation of the goals set by National Strategy.

The key instrument to ensure implementation of the National Strategy and improving effectiveness of the use of resources is the concentration of resources in the most important public policy directions in education sphere (*Attachment 1*). With this objective in view, the priority directions and activities of the National strategy implementation are identified in the framework of a short-term plan of activities, which will be revised and approved by decree of the Government of the Republic of Tajikistan each three years.

Additional expenditures will be needed for the education financing, associated with the implementation of the tasks of Poverty Reduction Strategy in the Republic of Tajikistan for 2010-2012 and in connection with the implementation of the National Strategy, such as bringing education expenditures up to 6% of GDP by 2015 and not less than 7% of GDP by 2020. In the period of the National strategy implementation, the Government of the Republic of Tajikistan will take measures on attracting additional external assistance and resources through activation of private sources of financing of education development.

The information on financial needs of priority activities under the plan of implementation of the National Strategy for midterm perspective (2012-2014) is presented in *Attachment 2*.

The required resources for implementation of the action Plan of the National Strategy, including donor resources, will be reflected stage-by-stage within the framework of Medium-term programs of state expenditures or state budget indicators for medium-term period.

CHAPTER 7. EXPECTED RESULTS OF IMPLEMENTATION OF NATIONAL EDUCATION DEVELOPMENT STRATEGY OF THE REPUBLIC OF TAJIKISTAN UNTIL 2020

Implementation of the National Strategy will allow, by 2020, to lay the foundation for the adaptive education system, demanded by its citizens, oriented on labor market needs and serving

as a resource of socio-economic development of the country. By 2020, the following results are expected for each education level:

7.1. Preschool education:

Expanding the coverage of preschool age children by education programs will be achieved by means of enhancement of network of state institutions and development of network of non-state institutions, creating of low cost types of preschool education, such as short-term stay groups, child development centers.

The mechanisms of leveling of access to education resources of early age children will be developed and implemented, including:

- government support of low-income families and families upbringing children with disabilities due to health status, through full or partial exemption from payment for child's stay in a preschool establishment;
- system of organization and coordination of consultative and methodical assistance to families, upbringing preschool age children at home;
- system of medical-psychological-pedagogical support of children with poor health;
- increase of education coverage percentage among preschool children, especially in rural areas;
- provision of valuable nutrition to children;
- improvement of qualifications of teachers and education employees in preschool institutions.

By 2020, not less than 50 % children will be enrolled in 1 grade following the program of preschool education.

7.2. General education:

Major changes will be connected with general education training of citizens, achievement of new educational results and key competencies, and building the adequate structure for achieving these results. The following are expected results:

- children's education to be started from 6 years;
- educational standards and the complex of curriculums, programs, methodical aids developed based on the standards;
- schoolbooks for 1-12 grades developed and are available for every student;
- monitoring system implemented with conformity of schoolbooks with the curriculums;
- models for organizing specialty education and vocational-oriented education of pupils developed;
- new models on teaching activity of schools developed, tested and approved;
- Provisions and standards on activities of supplementary education institutions revised;
- schools will be equipped with required equipment for 90%;
- around 1000 new schools will be built;
- additional year in primary school (first grade for 6-year old children) substitutes for the majority of students a lack of preschool education and creates conditions for equal education start for children from various social groups;
- programs of basic school (9-10 grades) are completed with specialized professional training, in line with key industries at the place of residence, or (and) orientation on

foreign labor markets; students are given information on how to organize own business, how to be successful in business, in particular, in a small enterprise, and students are informed about challenges on the way to success. Students are trained for work in conditions of shortage or lack of official employment;

- Secondary school curriculum is focused on thoughtful choice of the area of professional activity and training for vocational education and is organized on the principle of specialty education, involving essential part of training time to be planned according to student's choice (individual educational trajectory);

The school infrastructure adequate to the tasks will be prepared, including additional school seats, supply of educational institutions with school furniture, training and methodical aids, laboratory equipment for scientific classrooms. All high schools and education departments / divisions are connected to Internet. Uniform education management information system is created.

7.3. Basic and secondary specialized vocational education:

- an effective network of training of staff and medium level specialists developed in accordance with forecasts of domestic and foreign labor market demands and educational needs of the population;
- new educational standards developed and introduced on the basis of professional standards and competency-based approach;
- modular and integrated multi-level educational programs implemented, including adult education;
- the state order for staff training introduced as a mechanism of state regulation of the labor market;
- the system of external evaluation of education results – certification of vocational qualifications introduced;
- National advisory board on development of vocational education is functioning;
- the network of multi-field and multi-level education institutions and training Centers developed, providing broad selection of professions, change of a profession and advanced training in the field of one profession including training via short-term courses;
- various forms of social partnership used, ensuring participation of real economy sector in staff training;
- IT technologies are actively used in training process and in management;
- achievement of reduction of poverty level, illiteracy and unemployment among population;
- significant expansion of the list of modern occupations in professional institutions of the Republic.

7.4. Higher education:

- transition to the education model in accordance with Bolonsky Declaration completed;
- training of specialists is conducted in line with the state order, formed on the basis of studies of the labor market demands;
- higher school included in the generation of intellectual products for the country's economy – research and development, their commercialization, formation of intellectual property, consulting of authorities and business;

- new generation education standards and R&D activities developed and introduced and training process are brought into compliance with these standards;
- HEI have functioning small enterprises, business-incubators, implementing scientific and technological projects;
- programs of joint research with the Academy of Sciences of the RT and Academy of Education are functioning;
- National scientific and educational computer network “TARENA” and the Republican system of information-education resources cover all regions of the Republic, ensuring introduction of IT technologies in a higher school and providing resources of distance learning;
- development of integrated mechanism to production of institutions of higher vocational education, research institutes.

7.5. Management in education system:

- regulatory and methodical framework and infrastructure of national education quality evaluation system created;
- national system of evaluation of the achievement level introduced, specified by the state standard of educational results at all levels of education;
- management model, stipulating reduction of intermediate management links locally implemented;
- transition from management of institutions implemented to management of programs in the field of vocation education, management of training quality of specialists, such as ISO 9000, or other quality management evaluation systems implemented;
- licensing norms and accreditation provisions revised in accordance with new objectives, set for education system;
- information management base created, built on the basis of monitoring of status, analysis and forecast of education development;
- staffing structure, functional activities of regional, district and city education departments and divisions revised;
- the system of indicators developed, characterizing resources and effectiveness of their use, efficiency of system functioning and conformity of these results to external demand;
- retraining of managers of all levels of education system on the education program management implemented;
- marketing approach in management of education institutions implemented.

7.6. Financial models:

- network models, based on joint use of resources by several educational institutions of various levels implemented;
- conditions for development of competition of educational institutions of various forms of ownership created to get both budgetary and extra-budgetary funds;
- per capita financing will become a key mechanism for allocation of budget funds, appropriated for education system, is implemented without a break down of funds into items of budget classification (“across the board”);

- effective use of funds and staff capacity based on a competitive placement of the State order for staff training, research and development, development of projects and programs to develop branches of economy, enterprises and settlements in the educational institutions of all forms of ownership, and also an equal access to participation in implementation of the State order;
- tax burden reduced both for educational institutions, various organizational and regulatory forms and also for enterprises and physical entities interacting with educational institutions, especially in the area of provision of medical, consultative and methodical services, providing equipment;
- support for nongovernmental institutions in providing premises in various forms (including a long-term lease), and support for development of tax incentives system;
- regulatory documents developed and implemented on multi-channel financing, facilitating access of educational institutions to extra-budgetary financial resources and stimulating enterprises and organizations to support the education system, including in non-material forms;
- incentives provided for activating the participation of physical and legal entities in financing the institutions of all levels of education;
- involvement of private sector at all levels of education is increased.

7.7. Development of staffing capacity:

- attractive conditions created for pedagogic activity in education institutions;
- change of standards of pedagogical education implemented in accordance with new priorities and general education technologies;
- teacher training for primary and general school introduced on bachelor's programs and for work in senior classes of secondary schools on master's programs;
- training programs developed for professional managers in the area of education;
- system of advanced medical training reviewed and renewed for city and district employees (inspectors, specialists, Methodists) of education departments and divisions;
- transfer to personalized recording and financing and modular organization of educational programs implemented in the system of advanced medical training of teachers;
- issues of adult education based on the modern achievements of andragogy are integrated in the system of teachers training.

ABBREVIATIONS

AET – Academy of Education of Tajikistan
AT – Advanced Training
DRS – Districts of Republican Subordination
EDI – Education Development Institute
EEC – Extracurricular Education of Children
EFA – Education for All
EMIS – Education Management Information System
GBAO – Gorno-Badakhshan Autonomous Oblast
GDP – Gross Domestic Product
GIZ – German Agency for International Cooperation
HEI – Higher Educational Institution
HVEI- Higher Vocational Education Institutions
ICT – Information and Communication Technology
INICEF – United Nations Children’s Fund
ISO 9000 – International Standard Organization (a set of international standards specifying requirements for Quality Management System within organizations and enterprises)
IT – Information Technologies
KfW – German Development Bank

MDG – Millennium Development Goals
MoE – Ministry of Education
MTB – Material and Technical Base
NCS – National Census of School
NDS – National Development Strategy of the Republic of Tajikistan
OECD – Organization for Economic Cooperation and Development
PE – Preschool Education
PEMP – Public Expenditure Medium-Term Program
Ph.D – Doctor of Philosophy, degree
PIP – Public Investment Program
PMPC – Psychological and medical-pedagogical consultations
PRSD – Poverty Reduction Strategy Document
PTF – Production and Training Facilities
PVE – Primary Vocational Education
PVEI- Primary Vocational Education Institutions
R&D – Research and Development
RT – Republic of Tajikistan
SES – State Educational Standard
SGEI – Secondary general education institutions
SVE – Secondary Vocational Education
UN – United Nations
UNESCO – United Nations Educational, Scientific and Cultural Organization
USAID – United States Agency for International Development
VTS – Vocational Technical School
WB – World Bank
WFP – World Food Program