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National Strategy for Education Development of the Republic of Tajikistan for the period until 2030

CHAPTER 1. MAIN GOAL AND OBJECTIVES OF THE STRATEGY

§1. Main goal and vision of reforms in the education sector

1. The main and long term goal of the National Strategy for the Education Development (NSED) of the Republic of Tajikistan for the period until 2030 is the creation of an effective education system that provides inclusive and equal opportunities and contributes to the development of abilities, intellectual development, employment, and improvement of the general well-being of the population of the Republic of Tajikistan.

2. The long-term strategy of the education sector is based on the economic and social development priorities of the Republic of Tajikistan, reflected in the National Development Strategy of the Republic of Tajikistan for the period until 2030 and is consistent with the goals and objectives of the Sustainable Development Goals (SDGs) for 2015-2030. The objective of strategic planning, given broader perspective, is to identify priority and key reform measures by identifying opportunities and challenges in the context of socio-economic development.

3. The goal of the reforms is to create an educational system that should be of high quality and accessible to all throughout life, providing the country's economy with competent workers, appropriate infrastructure and based on modern and innovative technologies. The educational system of the Republic of Tajikistan should be economically sustainable and meet the standards of the world's leading educational systems and international quality assessment systems. To protect the interests and ensure the prestige of the country, the education system must ensure the preservation and development of cultural identity, as well as maintaining national identity and cultural diversity. All these are extremely important to integrate the Republic of Tajikistan into the global educational space.

4. Compliance with international standards in line with Sustainable Development Goals for 2015-2030 and the Sendai Disaster Risk Reduction Framework for Priority Actions and Indicators for the Education Sector also

implies addressing the root causes of vulnerabilities for children, including by assessing the risks associated with various sources of hazards; strengthening the capacities of children and systems of their protection in at-risk situations; identifying safety priorities in schools (safe school facilities, disaster management in schools, and risk reduction and resilience training); and ensuring meaningful participation of children in decision-making processes.

§2. Objectives of the Strategy

5. The National Strategy for Education Development of the Republic of Tajikistan for the period until 2030 is the main policy document in education. The Strategy sets medium and long-term goals and objectives for the development of education and determines the guidelines and priority directions for the development of the education system in the Republic of Tajikistan.

6. The National Strategy for Education Development of the Republic of Tajikistan for the period until 2030 will put the emphasis in education towards the quality of the education process, as well as professional skills and competencies that young people and adults receive through education. The personal success of each citizen depends on the ability to adapt to change and learn continuously. Hence, the national education system must provide an environment suitable for the development of these competencies. In the context of economic shocks, external factors and demographic changes, lifelong education is the main task of the education system.

7. The key objectives of the National Strategy for Education Development of the Republic of Tajikistan for the period until 2030 are:

- ensuring equal access and participation in education and science at all levels for all throughout life;
- improving the quality and relevance of education and science at all levels;
- strengthening effective governance of the education sector.

8. Within the framework of the National Strategy for Education Development of the Republic of Tajikistan for the period until 2030, safe and socially inclusive schools and other educational institutions are considered in accordance with the national policy on disaster risk management and adaptation to climate change, implemented at the national, regional, district and local levels. These priorities are provisioned in the National Disaster Risk Reduction Strategy of the Republic of Tajikistan for 2019-2030 and the National Climate Adaptation Strategy of the Republic of Tajikistan for 2019-2030.

CHAPTER 2. SOCIO-ECONOMIC SITUATION AND LEGISLATIVE FRAMEWORK

§1. Socio-economic situation

9. In early 2000s, upon achieving peace and the consolidation of resources, key reforms had been successfully implemented in the field of public administration and the economy, including the education sector. Following the growth of the economy, individual incomes and state budget resources increased, which enabled the government to finance the needs of social sectors. In addition, thanks to the consistent actions of the Government of the Republic of Tajikistan, the absolute poverty incidence in the country decreased from 72% in 2003 to 37.4% in 2012 and further down to 27.4% in 2018. Extreme poverty decreased from 42% in 2003 to 17% in 2018. Poverty reduction had a positive impact on the educational opportunities and access to education of young people and adults, especially from vulnerable families and in rural areas.

10. In general, an extremely difficult transition period in the economy of the Republic of Tajikistan during 1991-2010 and a high population growth rate (the population has almost doubled since the early 1980s, amounting to 8,931,195 people at the end of 2018) directly affected education performance indicators. Despite the fact that the share of state budget resources and other investments in education is gradually increasing, the competitiveness of the economy remains low and is heavily dependent on labor migration, which affects the demand for labor (the demand for professional skills, competencies and knowledge) and employment opportunities for graduates of professional educational institutions.

11. The current growth rate will remain unsustainable unless a strong link is re-established between the national education system and the domestic labor market. In addition, the economy of the Republic of Tajikistan does not create enough jobs for a growing workforce. Despite a significant increase in gross domestic product (GDP), official employment has increased by only slightly more than 8% over the past 10 years, i.e. in the period 2010-2019. According to official statistics from 2017, 74.9% of official unemployment is in the countryside, and 51.8% of all unemployed have not completed secondary education. In fact, an excess of unskilled labor creates significant pressure on the domestic labor market.

12. Early education affects the future employment outcomes of citizens. The relatively low level of enrollment of girls in preschool and primary educational institutions, as well as dropping out of girls from later grades means that they will most likely have fewer job opportunities and lower wages than boys during the course of their professional activity in the Republic of Tajikistan. This seriously affects the dynamics of private sector development and the demand for many

academic specialties taught in vocational educational institutions (primary, secondary and higher professional educational institutions).

13. The working-age population has changed from 60.9% of the total population in 2010 to 62.4% in 2018, however, the average quality of new jobs in the country leaves much to be desired and, in most cases, requires workers to possess formal education. The younger generation is expected to contribute to significant and stable population growth in Tajikistan over the next several decades. Therefore a growing number of young people in Tajikistan require appropriate education and employment opportunities. In response to these challenges, the Government of the Republic of Tajikistan is taking measures to reduce youth unemployment. In the meantime, it should be noted that the share of youth (i.e., the population under the age of 30) in the total population decreased from 70% in 2000 to 65.9% in 2010 and further to 62.9% in 2018.

14. Despite these slowing growth rates, the population growth in the Republic of Tajikistan is expected to continue in the next few decades, which will put a significant strain on educational institutions in terms of the need to provide for and educate young people, especially in rural areas. According to the latest estimates of the UN Population Division, the population of the Republic of Tajikistan will reach approximately 11.6 million people by 2030, 14.2 million people by 2050, and 25.3 million people by 2100.

15. Given that in 2017 about 52.7% of all public sector employees were employed in the education sector, and 9.6% of official employment was in education, it is imperative to restore the prestige of the profession of an education worker and stimulate wage growth so that average wages in the education sector are at least competitive in the public sector.

16. The Republic of Tajikistan is also prone to various natural disasters, including avalanches, droughts, earthquakes, floods, heavy snowfalls, landslides and mudflows that impede sustainable development. In addition, melting glaciers, heavy rainfall and mountainous terrain create flood conditions. The country is located in a seismically high-risk area, and about 63% of the population lives in areas affected by earthquakes. From 2010 to 2015, 145 earthquakes were registered in the Republic of Tajikistan. Despite the fact that earthquakes occur less frequently than floods, their consequences are more serious. UNICEF estimates that over 88% of children in Tajikistan live in areas with high and very high risk of seismic hazard. In terms of vulnerability to climate change, the country ranks first among the countries of Europe and Central Asia, and the situation is exacerbated by limited capacity to adapt and respond to repeated shocks.

17. Climate change is a serious problem for the Republic of Tajikistan. Climate change is expected to increase the number of hydro-meteorological incidences, and increase the frequency and intensity of floods and mudflows,

which are the most common hazards in the country. Of the 180 countries included in the Notre Dame Global Adaptation Initiative (ND-GAIN), the Republic of Tajikistan is the 81st most vulnerable country and the 48th least prepared country. Compared to other countries, current vulnerabilities of the Republic of Tajikistan are manageable. According to the country index of the Global Notre Dame Adaptation Initiative (ND-GAIN country index), which reflects the country's vulnerability to climate change and other global problems and its willingness to increase sustainability, improving preparedness will help the Republic of Tajikistan better adapt to future challenges. In this regard, the risk of natural disasters and climate change jeopardize the most basic rights of children, thus putting at risk their survival and well-being.

§2. Institutional environment in the education sector

18. In accordance with the Law of the Republic of Tajikistan "On Education" (section 2, article 10, point 5), the following types of educational institutions operate in the Republic of Tajikistan:

- preschool institutions;
- general secondary institutions (primary, basic and secondary);
- primary professional educational institutions;
- secondary professional educational institutions;
- higher professional educational institutions;
- professional educational institutions (after graduating from higher professional educational institutions);
- institutions of continuing education;
- institutions of specialized education;
- institutions of adult education;
- other educational institutions, which offer education and care services.

19. The structure of education in the Republic of Tajikistan is as follows:

Table 1: The structure of education in the Republic of Tajikistan

Age category	Years of education, grades	Levels of education
1-3	3 years	Preschool education (nursery and preschool groups)
4-6	3 years	
7-10	1-4 grades	Primary education – 1st level of general secondary education (mandatory)
11-15	5-9 grades	Basic education – 2nd level of general secondary education (mandatory)

16-17	10-11 grades	General secondary education (3rd level; optional)	Primary professional education	Secondary professional education
18-21	4 years	Bachelor's degree		
22-23 (22-24)	2 years (3 years)	Master's degree	On-the-job (i.e. at-work) education and increase of qualification	
23 years and above	3 years	Doctorate degree (PhD)		
25 years and above		Continuing education	Short-term education: formal, informal and self-education	
		Specialized education		

§3. Legislative framework

20. During the country's independence, the Government of the Republic of Tajikistan adopted a number of laws and regulatory documents which determined the state policy in the area of education. In general, all laws and regulations are aimed at modernizing the education system, achieving equal access to education, addressing gender issues, improving the quality of education, and eliminating poverty by raising the level of education among the population. The regulatory environment should be reviewed and, if necessary, amended to provide specific provisions on gender equality and social issues in preschool educational institutions, general secondary educational institutions, primary and secondary professional institutions, and higher education institutions.

21. The Government of the Republic of Tajikistan firmly adheres to the principles of compliance with international standards in the field of human rights and fundamental human freedoms within the framework of the Constitution of the Republic of Tajikistan. The Constitution of the Republic of Tajikistan guarantees free basic education and full equality of men and women. Article 41 of the Constitution of the Republic of Tajikistan also states that every citizen can receive free general secondary, primary professional, secondary professional, and higher professional education in state educational institutions. Other forms of education are provided for by the legislation of the Republic of Tajikistan.

22. The national legislation of the Republic of Tajikistan includes ten baseline laws regulating activities in the area of education: Law of the Republic of Tajikistan "On Education," Law of the Republic of Tajikistan "On Preschool Education and Care," Law of the Republic of Tajikistan "On Primary Professional Education," Law of the Republic of Tajikistan "On Secondary Professional

Education," Law of the Republic of Tajikistan "On Higher and Postgraduate Education," Law of the Republic of Tajikistan "On Additional Education," Law of the Republic of Tajikistan "On Adult Education," Law of the Republic of Tajikistan "On the Responsibility of Parents for Education and Care of Children," Law of the Republic of Tajikistan "On Preparation of Specialists Taking Into Account the Demands of Labor Market," and Law of the Republic of Tajikistan "On Technological Park." Some of these laws were revised more than once, including in the last few years.

23. In addition to the above laws governing the activities of the education sector in Tajikistan, there are other laws that affect processes in the field of education.

24. The Ministry of Education and Science of the Republic of Tajikistan is developing the Education Code of the Republic of Tajikistan, the purpose of which is to systematize the entire regulatory framework governing the field of education.

CHAPTER 3. STRATEGIC FRAMEWORK OF REFORMS

§1. Link with national and sectoral priorities

25. Reforms in the education sector are largely reflected in current state programs which, in turn, contribute to the quality implementation and fulfillment of the goals and objectives of the long-term strategy for education development. The NSED for the period until 2030 is fully consistent with the National Development Strategy of the Republic of Tajikistan for the period until 2030.

26. In accordance with the National Development Strategy (NDS) of the Republic of Tajikistan for the period until 2030, the Government of the Republic of Tajikistan is firmly committed to creating a stable, prosperous, internationally connected, united and fair society by 2030. The NDS of the Republic of Tajikistan for the period up to 2030 also demonstrates full commitment to the implementation of the Sustainable Development Goals (SDGs) for the period until 2030. The main performance indicators of the NDS of the Republic of Tajikistan for the period until 2030 include the reduction of absolute poverty by 50% and the elimination of extreme poverty; a significant increase in government spending on social protection of the population; increasing the proportion of the middle class to 50% of the population; and achieving transformational growth, which will enable to move away from dependence on agriculture and towards greater diversification of the economy.

27. The National Development Strategy of the Republic of Tajikistan for the period until 2030 recognizes that the quality of educational services in the Republic of Tajikistan is far from perfect. This Strategy highlights that access to

education remains challenging due to reasons such as insufficient growth in the number of preschool institutions, the poor quality of school infrastructure in the regions, and the relatively low qualifications of teachers. Other barriers to improving education outcomes are low attendance rates, inadequate access to improved sanitation and water supply in rural schools, physical, financial and cultural barriers to overcoming social exclusion, and gender inequality in terms of access to education at all levels.

28. The National Development Strategy of the Republic of Tajikistan for the period until 2030 formulates strategic priorities for the education sector in the chapter "Development of human capital" (social block) as follows:

- ensuring equality and access to education;
- improving quality of education at all levels;
- increasing financial stability and effectiveness in the education sector;
- creation and development of the national professional network of scientific and technical developments, focusing on resource-saving technologies in the context of excess labor force and mountainous terrain.

29. The Founder of Peace and National Unity - Leader of the Nation, the President of the Republic of Tajikistan Emomali Rahmon in his address to the Parliament of the Republic of Tajikistan on December 26, 2019 and aiming to improve the process of studying the natural, exact and mathematical sciences, as well as the development of technical thinking of the younger generation, has proposed the declare 2020-2040 "The Twenty Years of the Study and Development of the Natural, Exact and Mathematical Sciences." The Ministry of Education and Science of the Republic of Tajikistan is committed to paying special attention to the implementation of activities related to the study and development of natural, exact and mathematical sciences, including through annual republican, oblast, city and rayon competitions in these disciplines at all levels of education, as well as through appropriate encouragement and incentives for the winners of these competitions.

30. In addition, the President of the Republic of Tajikistan in his address to the Parliament of the Republic of Tajikistan on December 26, 2018 highlighted that: "Strengthening the country's scientific potential, introducing inventions into production, strengthening the material and technical foundations of scientific institutions, improving the quality of education at all levels of education, attracting young talents to the study of modern technologies, creative and technical activities are the most important tasks of the field of science and education. Therefore, we attach paramount importance to the fields of science and education, and we will gradually continue reforms at all levels of education and confidently eliminate existing problems."

31. Comprehensive school safety is essential for breaking intergenerational poverty and building the capacity and resilience of children and their communities. The goals of comprehensive school safety are to protect students and educators from death, injury, and harm in schools; plan for continuity of education through all expected hazards and threats; safeguard education sector investments, and strengthen risk reduction and resilience through education.

32. A Comprehensive School Safety Framework (CSSF) - i.e. The Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector (GADRRES) and The Worldwide Initiative for Safe Schools (WISS) - is addressed through the NSED for the period until 2030 and practices aligned with disaster risk management at national, regional, district, and local school site levels. The CSSF rests on three pillars:

- safe learning facilities (disaster-resilient infrastructure);
- school disaster risk management;
- risk reduction and resilience education.

33. Safe learning facilities can be established through a holistic design approach, taking into consideration disaster-resilient design, safe and uninterrupted access, and quality control, among other factors. Collaboration among stakeholders is essential, including education authorities, architects, engineers, builders, and school community members, to guide safe site selection, design, construction, and maintenance.

34. School disaster risk management - national and sub-national education authorities and local school communities (including children, teachers, and guardians) are integral to school disaster risk management. Working with their disaster risk management counterparts, each stakeholder plays a vital role to maintain safe learning environments and plan for educational continuity while adhering to international standards. Actions include preparedness and early warning systems, hazard mapping, mock drills, and establishing DRM plans and standard operating procedures for each school.

35. Risk reduction and resilience education is critical to nurturing resilient communities and a culture of safety. Examples include the development of educational tools for security and preparedness, integration of climate-smart disaster risk education into formal and non-formal curricula, teacher training, and other measures appropriate to the extracurricular and community-based fora.

§2. Link between education and international development priorities

36. The Republic of Tajikistan has developed and adopted for implementation the National Development Strategy of the Republic of Tajikistan for the period until 2030, which defines the main directions for achieving the

Sustainable Development Goals (SDGs) until 2030. The issue of further enhanced development of human capital was raised in the National Development Strategy of the Republic of Tajikistan for the period until 2030 as a comprehensive, inter-sectoral priority, which addresses issues of education, health, social protection, and gender equality.

37. On January 1, 2016, the 17 Sustainable Development Goals (SDGs) for the period until 2030 had been formulated in the new Agenda for sustainable development, which was adopted by world leaders at the United Nations summit in September 2015. The new Agenda focuses on the transition of countries to sustainable development, based on the identification of priority areas of development. The SDGs are pushing for global and national policies to be developed and implemented in an integrated way, combining social, economic, and environmental sectors to achieve them. The SDGs are based on the intention to "leave no one behind," inviting countries to direct development and financing policies to address issues of the most vulnerable population groups.

38. Universal access to quality education (SDG-4) remains a priority for public resource allocation and reforms. SDG-4 implies "ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all" and consists of the following objectives (according to the SDG Table).

Table 2: Sustainable Development Goals in the education sector (SDG-4) in Tajikistan until 2030

#	Brief description of the goal
SDG 4.1	By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.
SDG 4.2	By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.
SDG 4.3	By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.
SDG 4.4	By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.
SDG 4.5	By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.
SDG 4.6	By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.
SDG 4.7	By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality,

	promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.
SDG 4.8	Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.
SDG 4.9	By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries.
SDG 4.10	By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States.

39. In addition to main SDG 4 indicators, all levels of education in the Republic of Tajikistan, without exception, can have a significant impact on the achievement of other SDGs, such as: SDG 5 (gender equality), SDG 8 (decent work and economic growth), SDG 10 (reduced inequality), SDG 11 (sustainable cities and towns), SDG 12 (responsible consumption and production), SDG 13 (combating climate change) and SDG 17 (partnership for sustainable development). Achieving the SDGs in many countries - and the Republic of Tajikistan is no exception - requires both vertical and horizontal reforms in the area of public administration.

40. In 2018, the Government of the Republic of Tajikistan prepared the voluntary National Report on the implementation of strategic documents of the country in the context of the Sustainable Development Goals (SDGs) until 2030, which is available on the official UN website. The report emphasizes the gender imbalance between men and women in initial vocational education and training, the low level of education among labor market participants, and other issues inherent in education and science.

41. Great strides have been made in expanding access to education at all levels and in increasing school enrollment, in particular for women and girls. At the same time, the reasons that impede the provision of education are the lack of qualified teachers and the lack of access to adequate educational institutions. Investments are needed for the provision of scholarships for rural schoolchildren, teacher training, the construction of modern educational institutions, and the improvement of water supply, and the electrification of schools. Obtaining quality education lays the foundation for improving people's living conditions and ensuring sustainable development.

42. The Ministry of Economic Development and Trade of the Republic of Tajikistan has estimated average indices of direct and inverse correlations in

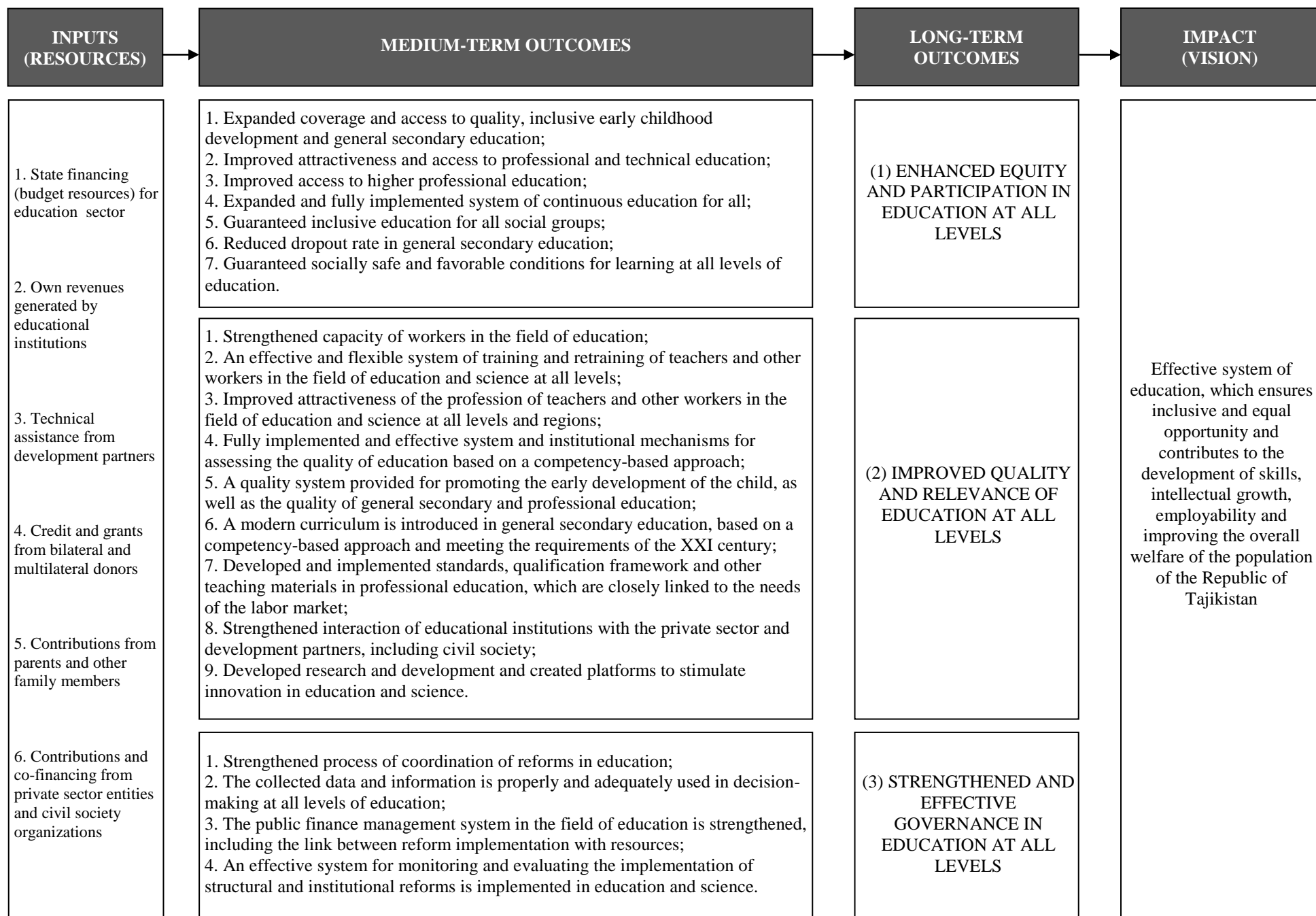
achieving the Sustainable Development Goals (SDGs), as well as the compliance of national strategic goals and priorities of the National Development Strategy of the Republic of Tajikistan for the period until 2030 and the SDGs for the Republic of Tajikistan. This work has been carried out in collaboration with development partners and experts, based on the outcome of thematic consultations. This allowed to identify priority SDGs for the Republic of Tajikistan, which have a significant positive multiplier effect. SDG-4 (education) is one of the priority Sustainable Development Goals that has the maximum impact on the achievement of other goals and objectives (see Table 3).

Table 3: The scale of correlations between the Sustainable Development Goals (SDG)s in Tajikistan.

Degree of correlation	Description of correlation	Explanation of correlation
+3	Indivisibility	Creates inevitable link with the achievement of another goal
+2	Strengthening	Helps to achieve another goal
+1	Creation of conditions	Creates conditions for the advancement of another goal
0	Compatibility	Yields no significant impacts
-1	Deterrent	Offers limited opportunities for promoting other goals
-2	Counteraction	Establishes a negative encounter with another target
-3	Mutual exclusivity	Unable to achieve another goal

43. SDG-4 (quality education) has one of the most significant multiplier effects for achieving other SDGs in the Republic of Tajikistan - with an index of 1.63.

§3. Strategic framework for reforms in the education sector for the period until 2030



CHAPTER 4. KEY REFORM AREAS

§1. Preschool education

44. Given the predominance of young people in the Republic of Tajikistan and high birth rates, the Government of the Republic of Tajikistan is taking steps to eliminate human capital constraints through investments in the younger generation. Investments in high-quality early childhood development, early education and childcare are vital because they will lead to high economic and social returns due to improved children's health, access to preschool education and its quality, as well as through cognitive, mental and social development of a child from an early age.

45. Preschool education is focused on providing child development services and is one of the priority areas of the education sector for the Government of the Republic of Tajikistan. In the Republic of Tajikistan, preschool education covers children aged 1.5 to 7 years. In addition to 87% of preschool education services which are provided by state institutions, private fee-based preschool institutions also successfully operate in the country. According to the Education Management Information System (EMIS), 67% of children enrolled in preschool education are in full-time kindergartens, 32% are in child development centers and 1% are in stationary preschool facilities.

46. In the 2018-2019 academic year, there were 2,433 preschool educational institutions and preschool education programs in the Republic of Tajikistan with the total coverage of 151,896 children (aged 1.5 to 7). Most of the preschool programs comprise 1,771 child development centers (72.7% of the total), which have operated since 2010 and are supported by development partners. The number of early childhood development institutions rose from 511 in 2010 to 1,771 in 2018. As a comparison, less than 6.9% of preschool institutions were private and 3.3% were departmental (sectoral), and all these institutions are mainly located in cities and rayon centers.

47. From 2010 to 2019 preschool coverage has more than doubled and continues to expand. At the same time, the total number of children under the age of 7 has increased by 25.7% between 2000 and 2019. In 2019, coverage of children aged 3-6 with preschool educational institutions amounted to 15.9% of the total number of preschool-aged children in the Republic of Tajikistan. The low level of enrollment in preschool education, except in GBAO, is mainly due to three key factors:

- low access, especially in rural areas;
- poor quality of service;
- poverty level.

48. On average, there are 5.5 kindergartens per each rayon. At the same time, their actual number can vary from 1 to 45 depending on population density and other factors (not taking into account Dushanbe with its 132 kindergartens). In some areas, there is only one kindergarten for 10,000 or 12,000 preschool-aged children.

49. Coverage of children with preschool educational programs, including school preparation and other forms of preschool education for children aged 1-6, comprised 11.3%, which is 2.1% more than in 2015, but 1.1% less than in 2012. Similarly, the coverage of children aged 3-6 is 14.7%, which is 0.9% less than in 2012 but 6.7% more than in 2015. Moreover, the coverage of children in urban areas is several times higher than in rural areas. The provision of private preschool education services is growing, but still lagging behind the level envisaged in the National Development Strategy of the Republic of Tajikistan for the period until 2030.

Table 4: Types of state preschool educational institutions in 2018 (by type)

Types of institutions	Number of institutions	Type of institutions		
		State	Private	Departmental
Nursery	1	1	0	0
Nursery-kindergarten (including specialized institutions)	336	294	23	19
Kindergartens	286	204	64	14
Kindergartens - primary school	13	6	6	1
Child development centers (CDCs)	1,697	1,594	60	43
TOTAL:	2,333	2,034	153	77

Note: excluding inpatient facilities (i.e. stationary institutions).

50. The Child Development Centers (CDC) program is designed for children aged 6 years and above, but the centers cover children aged 4-6. Thus, children aged 4-5 who attended CDCs in the previous year can take the same curriculum the next year. Both programs - the "Ranginkamon" program and the program for the CDCs - aimed at promoting the full development of the child: cognitive, physical, social and emotional development, as well as the ability to learn. At the same time, the planned implementation of the curriculum in kindergartens and CDCs has not been completed in full, mainly due to skills' shortages among teachers. In particular, the model of child development centers (CDCs) is aimed at improving access to preschool institutions via the coverage of children from remote rural areas with the lowest access to early childhood education in the country. The cost-effectiveness of the CDCs is explained by the fact that early childhood development groups use empty classrooms in existing general secondary

educational institutions and provide low-cost educational materials, while mobilizing parents to ensure the continued provision of educational services to children at home.

51. The compulsory and main program in preschool institutions is the Ranginkamon (translated from Tajik as "Rainbow") curriculum, which was approved in 2012 for all types of full-time preschool institutions. The program, which has been developed using the State Standard for preschool education in the Republic of Tajikistan (2014) and the Standard for development and early learning for children from birth and up to 7(6) years (2010), focuses on physical, emotional, social and personal development, as well as speech development and preparation for learning for children aged 1.5-6. Currently, the program needs to be updated with modern approaches to preschool education and development of methodical recommendations.

52. In 2019, 536 children with disabilities attended kindergartens, including 234 girls. Among them were 366 children with mental and intellectual disabilities, 170 visually impaired children, 55 children with hearing impairment and deaf children, 41 mute children and 19 children with spinal injuries. However, inclusive education approaches are still poorly embedded in service delivery and the system of preschool education does not ensure their effective promotion. This situation persists despite the fact that priorities have been identified for creating suitable physical conditions for children with special educational needs in mainstream preschool institutions. In general, there are no conditions for access to education for children with disabilities in all types of preschool institutions.

53. The adoption of the National Concept of inclusive education for children with disabilities (for 2011-2015 and for 2016-2020) had contributed to the creation of conditions for children with disabilities in kindergartens and general secondary schools. However, the capacity of preschool institutions to provide services to children with disabilities remains relatively low.

54. In order to meet the needs of preschool children with health deviations, state authorities have opened specialized preschool institutions that provide medical and educational services to about 1,285 children (including 535 girls) aged 2-8. Some specialized kindergartens have 24-hour groups and can reach children from nearby rayons. Four specialized institutions provide free services and childcare, and all related expenditures are provided by the general government budget of the Republic of Tajikistan. However, parents who decide to enroll children who meet the criteria not to specialized, but to mainstream state kindergartens, will not be exempted from payment for education and health care services.

55. The poor infrastructure of preschool institutions, as a rule, reduces the attendance of children. In particular, the new construction of preschool institutions

and those preschool institutions which were built during the Soviet period continue to rely on previously developed construction standards for preschool institutions that were built mainly for healthy children. These standards have a strong tradition based on sanitary and hygienic norms and child-centered development concepts. In this regard, despite successful implementation by the Republic of Tajikistan in the past ten years, compliance with sanitary and hygienic norms remains a rather difficult task.

56. The increase in the number of preschool institutions is often a direct consequence of the opening of private preschool educational institutions. Based on EMIS data for 2019, there were 107 private preschool institutions in Tajikistan. Each year, new preschool institutions are being built and opened through financing from the republican and sub-national budgets. In comparison with general secondary education, preschool educational institutions are being opened at a much slower pace. This is due to the high cost of preschool institutions for a full-day stay. Building and equipping a standard 150-seat preschool facility costs about 8 million somoni, while its average annual cost of maintenance is an additional 380,000 somoni. This is several times more expensive than building an child development centers (CDCs) center or a school for the same number of students. For example, the minimum operating cost of a single 25-seat CDC equals 100,000 somoni per year. Nutrition for children entails additional costs that kindergartens today cannot provide, unless at the expense of compromises regarding complying with mandatory food quality standards.

57. A broader discussion of kindergartens' design and the innovative design of early learning environments is very important. Modern schools and preschool educational institutions should be designed in such a way as to ensure economic and energy efficiency, openness and flexibility of educational spaces, which is very important, as well as freedom of movement in these spaces.

58. The total number and quality of the teaching staff is an important factor in the development of preschool education and is closely related to the development of the child. In 2019, there were 8,299 teachers in state preschool institutions. In accordance with the regulatory documents of preschool educational institutions, all pedagogical workers in preschool institutions must have secondary or higher professional pedagogical education with "knowledge of preschool psychology and basic correctional pedagogy." In 2019, out of 8,299 employees of preschool institutions, only about 35.3% of them had a degree in pedagogy (secondary professional education and higher professional education).

59. Despite the unsatisfactory quality of pedagogical education, access to pedagogical education is not a significant issue. Preparation of pedagogical specialists is offered by several universities and pedagogical colleges located in a

number of regions of the Republic of Tajikistan, including distant rayons. Accordingly, access to pedagogical education in Tajikistan is not a problem.

60. In 2019, 249 out of 496 heads of preschool institutions had higher pedagogical education. In addition, the total number of educators increased between 2015 and 2019 by 11.9%, but at the same time significant regional differences remain. The level of education of preschool employees in urban areas is higher than in rural areas.

61. Data on 46% of professional personnel with non-pedagogical education and 1.6% with general secondary education offer an understanding of the lack of qualified personnel, which is more pronounced in rural areas. According to the Education Management Information System (EMIS), 98% of preschool teachers are women. However, data on the average age and work experience of personnel in preschool educational institutions are not available, which limits the analysis and planning of training.

62. The quality of pedagogical education in the Republic of Tajikistan needs to be evaluated. There is no systematic approach to assessing the quality, relevance and effectiveness of education. For example, the lack of pedagogical competencies among certified teachers indicates the insufficient quality of teacher training. In the absence of a National Qualification Framework (NQF), the State Standards for preschool education, Standards for early learning and development, and the "Ranginkamon" program are used in the design of skills development courses for teachers of preschool institutions.

63. In recent years, higher educational institutions of the Republic of Tajikistan have increased the output of specialists in speech therapy and sound pedagogy, which are needed by preschool institutions. The capacity building of pedagogical workers of preschool institutions can occur through retraining of personnel who have worked in preschool institutions for at least 5 years through the Institute for Professional Development and Re-Training of Education Workers and its respective branches. In addition, recruitment of personnel in preschool institutions should take place in accordance with regulatory documents. Ultimately, a teacher working with preschool-aged children must have knowledge of preschool psychology, pedagogy and the basics of correctional pedagogy. In the meantime, the big challenge today is the training of specialists for working with children with disabilities.

64. In fact, activity of preschool institutions show that three positions are key in the process of teaching and raising children:

- senior educator who provides assistance to educators;
- subject teacher;
- educator.

65. According to EMIS, in 2019, on average, 51% of employees in all three positions had pedagogical education, of which: 55.6% of senior educators, 61.2% of subject teachers and 49.5% of educators. However, the position of an assistant educator remains incomprehensible because it does not correspond to its functional duties. In addition, currently there is no document containing clear official functional responsibilities and qualification requirements for staff of preschool institutions.

66. Further education courses for professional educators are systematized and on-the-job training is conducted and regulated by the Ministry of Education and Science of the Republic of Tajikistan. At the same time, the needs of specialists of preschool institutions require more flexible provision and development of educational materials.

67. In accordance with the regulations, each school and preschool teacher must complete centralized courses every 5 years, while the course program should be updated at least every 3 years. The professional development program courses lack flexibility both in terms of development and in terms of the mechanism for the provision of educational services. In spite of this observation, instructional documents and the mechanism for taking courses are mandatory for all types of preschool institutions. However, professional employees of private preschool educational institutions are not particularly actively attending professional development courses. The development of generalized professional development programs for public and private preschool educational institutions will facilitate the exchange of information and practice between them and the development of professional network of preschool workers.

68. The Guide to Education Financing (1987) is the only document containing the staffing table and examples of remuneration. The "Procedure for remuneration of workers in the field of education", adopted in 2017, determines the amount of remuneration for various categories of full-time employees of preschool educational institutions, but does not include the staffing schedule. At the same time, legislation and regulatory documents provide opportunities for flexible staffing depending on genuine needs, but they are used only by experienced and proactive heads of preschool institutions. The new per-capita financing mechanism, which has been introduced in preschool education, encourages the modernization of staffing schedule and their functional responsibilities.

69. Moreover, service quality assessment remains problematic among preschool institutions. To date, no studies have been carried out at the national level in this area. An assessment of preschool institutions and services in 2016 demonstrated that the quality of services is generally low, with a significant gap between the CDCs and kindergartens, between rural and urban preschool institutions, as well as between public and private preschool institutions. This

assessment was carried out within the framework of the Global Partnership for Education (GPE-4) project by the Ministry of Education and Science of the Republic of Tajikistan in cooperation with development partners, and covered 73 preschool educational institutions and CDCs. The analysis further showed that the problems in urban and rural state preschool institutions are very similar. Private and departmental (sectoral) preschool institutions benefit from a more developed infrastructure and quality of service against the background of state preschool institutions. This also leads to the ability to attract more qualified personnel and provide higher-quality teaching aids and methodological guides.

70. The quality of preschool education in the child development centers (CDCs) is lower than in mainstream kindergartens, regardless of their location (rural or urban). Most CDCs are aimed at teaching children to read, write and count, rather than providing readiness for school enrollment. This is explained by the fact that most CDCs are hosted in schools, and the lessons are taught by school teachers who do not know the preschool program and who in many cases do not work with primary classes.

71. Specialized and other preschool educational institutions use the "Ranginkamon" preschool education program, which is not adapted for the needs of children with disabilities. There are no special instructions for preschool specialists or illustrated materials for children.

72. There are 6 specialized preschool institutions in the country, which include 1,285 children, of which 535 are girls: for visually impaired children; for children in contact with patients with tuberculosis; and for children with speech impairments but who do not have mental or intellectual disability. Other obstacles to the inclusion of children with disabilities in the educational process arise due to the lack of qualified specialists and the low social awareness of preschool education professionals about the benefits and importance of inclusive education.

73. The quality of food in preschool institutions is also strictly regulated, but there are trade-offs due to the lack of financial resources. Based on 2017 prices approved by the Ministry of Health and Social Protection of the Population of the Republic of Tajikistan, the model menu cost 18 somoni per child per day (or about 20 somoni per child per day if 2019 inflation is taken into account). Nevertheless, the actual distribution of funds for meals in preschool institutions - on average and taking into account parental contributions - amounted to 4.7 somoni per child per day in 2017.

74. The number of girls enrolled in preschool institutions is lower than the number of boys. The share of girls in the total coverage of kindergartens and other preschool institutions in 2011 and 2019 was 43% and 45% respectively. At the same time, significant challenges remain in terms of improving gender equality, since the Gender Parity Index (GPI) in preschool education had in fact declined

from 0.823 in 2010 to 0.775 in 2019. In addition, the coverage of all girls in the corresponding age group by preschool institutions has been historically relatively low and averaged 4.9% between 2010 and 2019.

75. The differences are also more significant in rural areas, where only 43.9% of girls (out of the total number of girls of respective age) attended preschool institutions in 2019, compared with 45.3% in 2010. On average, 46.5% of girls attended preschool in the early 2000s. Rising prices and the cost of living, and a shortage of preschool educational institutions (including child development centers) in remote areas of the Republic of Tajikistan in combination with other socio-economic factors have contributed to this decline.

76. The gender parity index (GPI) is slightly higher in rural than in urban areas, although its explanation is hampered by the fact that the total fertility rate, population growth, average marriage duration and gender composition of the population suggest that rural areas dominate the country's population structure. At the same time, GPI differences in urban and rural areas may be explained by the fact that many younger groups with higher expected birth rates prefer to migrate to large cities and towns, where access to preschool institutions is relatively higher.

77. In preschool institutions of all types, Tajik, Uzbek, Turkmen, Kyrgyz, Kazakh, Russian, Tatar and other nationalities are currently enrolled. Tajiks comprise 83.3% (125,552 children, of which 56,718 are girls) and Uzbeks make up about 16.6% (25,040 children, of which 11,575 are girls), while all other nationalities represent about 1% (1,304 children, of which 594 are girls).

78. Measures undertaken by the Government of the Republic of Tajikistan to ensure the use of different languages of instruction could contribute to education of national minorities, especially in terms of the provision of relevant educational materials. At the same time, language is not viewed as one of the main barriers to access in preschool education. Such language problems arise mainly due to the lack of teachers who speak minority languages, as well as due to the lack of teaching materials in the state language and in languages of national minorities.

79. According to the legislation of the Republic of Tajikistan, the formation of such minority groups is carried out in their native language. Parents, at their discretion, can enroll children in groups with any language of instruction available in preschools. However, even in kindergartens where groups are taught in Russian, preschool specialists use Russian language methodological literature from the 1980s. For other languages of ethnic minorities, the lack of training programs and methodological literature are the main problems, because their number and availability are very limited. In addition, the lack of respective development programs is a concern - for example, programs for children from migrant families; refugee children with a language barrier; stateless children; children who are asylum seekers; as well as street children and orphans.

80. The overall goal of the National Strategy for Education Development of the Republic of Tajikistan for the period until 2030 is to ensure access for preschool children, regardless of gender and social and ethnic belonging, especially at the age of 6, to quality systems for the development, care and inclusive preschool education of children and their preparation for school. Based on the National Development Strategy of the Republic of Tajikistan for the period until 2030, the main priorities of preschool education for 2021-2030 include, in particular, the need of preschool education to contribute to the early development of children and be accessible to all. By 2030, coverage with high-quality and affordable preschool educational services should increase to 50% for children aged 3-6. This will be achieved through the provision of new and existing facilities, including inclusive preschool educational institutions.

81. In accordance with the National Development Strategy of the Republic of Tajikistan for the period until 2030, breakthrough institutional points of growth should become:

- alternative forms of preschool education (including non-state);
- introduction and development of Centers of creativity for children and youth, such as institutions of additional education;
- optimization and rational use of available space (i.e. ensuring that the space becomes more open, flexible and multi-functional);
- implementation of an inclusive education system;
- development of a targeted assistance system to financially disadvantaged families, aimed at stimulating the education of children.

82. The achievement of these goals is due to the opening, rehabilitation and reconstruction of existing preschool educational institutions; the return to the educational system of preschool buildings used for other purposes; optimization and rational use of existing premises; the opening of new alternative and inclusive preschool educational institutions, as well as a broader involvement of the private sector.

83. Preschool preparation of 6-year-old children will be the main part of preschool education. As part of the possible transition to 12-year education, compulsory one-year preschool education will increase the coverage and provide the best opportunity for effective preparation and readiness of children for school. Currently, the Ministry of Education and Science of the Republic of Tajikistan is considering possible scenarios for the transition to 12-year education, including the introduction of compulsory one-year preschool education (for children aged 6).

84. In addition, the Ministry of Education and Science of the Republic of Tajikistan will develop alternative programs for professional development courses, including on inclusive education and approaches in accordance with international best practices, taking into account the experience, level of education, and potential

of the participants. In addition, specialists from the Institute for Professional Development and Re-Training of Education Workers under the Ministry of Education and Science of the Republic of Tajikistan will be trained to work on the developed programs for alternative and inclusive preschool institutions on the use of modern educational technologies. The advanced training course programs for employees of preschool institutions will be finalized through the use of innovative methods applied in private and inclusive preschool educational institutions. Thus, the compliance of qualification requirements (such as the level of education and specialization) with the requirements of inclusive preschool education in the Republic of Tajikistan will be ensured.

85. The Ministry of Education and Science of the Republic of Tajikistan is developing a unified staffing table for preschool educational institutions, taking into account the needs of preschool institutions and determining the functional responsibilities of all employees; and the functional responsibilities of caregivers' assistants and their corresponding remuneration. The staff unit of a substitute teacher will be introduced on a payroll for 12 months. The substitute teacher will provide support to the main teacher during the classes on a rolling schedule. This initiative will improve the quality of education. The active use of school sites will significantly improve public awareness of the importance of preschool education, inclusive preschool educational institutions, and the specifics of the development of preschool children. Visual materials will be developed for teachers working with parents and for parents, and will be distributed across preschool institutions and through them.

86. The Ministry of Education and Science of the Republic of Tajikistan plans to improve coordination of the activities of all development partners, which will also improve the quality of services provided. Inclusive preschool education will meet quality standards, contribute to the early development of children of all social, ethnic and cultural groups, as well as children with special needs, and will be accessible to the general public. There will be a review and updating of standards and curricula for the care of children, their development and education. In addition, an analysis of the existing legislative and regulatory framework will be carried out, which will be updated in accordance with new training programs, teaching aids, alternative and inclusive forms of preschool institutions, as well as the involvement of parents and communities in the educational process.

87. In the framework of the National Strategy for Education Development of the Republic of Tajikistan for the period until 2030, and in accordance with principles of inclusivity and gender equality, the Ministry of Education and Science of the Republic of Tajikistan identified the following key priorities (disaggregated by key results) in preschool education.

88. Priorities in the area of ensuring equal access and participation in education:

1) priority reform measure 4.1.1 - improving and developing the regulatory and legislative framework for regulating the activities of alternative and inclusive forms of preschool educational institutions:

- development of legislative and regulatory documents for the functioning of alternative and inclusive forms of preschool educational institutions and, accordingly, the amendment of existing legislation and regulatory acts ensuring the activities of all types of preschool institutions, and overcoming barriers to inclusive education and creating favorable conditions for attracting children with disabilities and children from other vulnerable families to regular schools and preschool institutions;

2) priority reform measure 4.1.2 - improving the physical capabilities of preschool educational institutions and eliminating the barriers to inclusive education:

- modernization of the organization of space and daily routines in kindergartens to promote flexibility and a child-centered approach;

- rational use of the premises of preschool institutions (e.g. combining play areas with a sleeping room by using transformer furniture and others);

3) priority reform measure 4.1.3 - improving compliance with sanitary and hygienic standards in preschool educational institutions:

- revision of sanitary and epidemiological rules and norms of the Republic of Tajikistan regarding the organization of space and daycare in kindergartens;

- raising children's awareness of disaster risk reduction.

4) priority reform measure 4.1.4 - raising awareness of the values and importance of preschool education among parents, especially in rural areas:

- raising the awareness of parents, which will allow them to change their attitude towards early development of children and increase the need for parents (and/or guardians) in enrolling their children in preschool education;

5) priority reform measure 4.1.5 - updating and revision of the legislation regarding learning outcomes, child protection and safety, educational standards, physical infrastructure, good nutrition and an inclusive environment:

- development of new, innovative and more affordable preschool educational models, based on principles of social inclusivity, that provide access to educational services for vulnerable population;

- ensuring the involvement of local communities and sub-national governments in the organization of inclusive education (e.g. outreach activities and educational work among parents), as well as expansion of the content of preschool education in order to meet the educational interests and needs of all categories of children regardless of gender, special needs, social status and ethnicity;

6) priority reform measure 4.1.6 - improving infrastructure and overcoming physical and cultural barriers in inclusive preschool education:

- improvement of the infrastructure and overcoming physical and cultural barriers in inclusive preschool education, taking into account: the rights and interests of all children regardless of their age, special needs, social status and ethnicity, gender aspects, the need to ensure a safe and secure learning environment for all children, the needs of children with special needs and developmental deviations;

- repair of sewer systems, facilitation of access to quality drinking water and provision of quality lighting;

- analysis of the existing infrastructure of preschool educational institutions in order to carry out the reconstruction of premises on the basis of the concept and standards of inclusive education;

- the construction of new preschool institutions in rural areas, especially in most vulnerable regions, which will increase the coverage and equitable access of children by inclusive preschool education.

89. Priorities in the area of improving the quality and relevance of education:

1) priority reform measure 4.1.7 - improving the operational efficiency of workers of preschool institutions of all types and forms in order to meet modern educational requirements:

- development and adoption of a document that meets the requirements of modern and inclusive education, with the functional responsibilities of all employees of all forms of preschool institutions and preschool education programs;

- the introduction of the position of a substitute teacher, as well as a social teacher, special teacher, psychologist and speech therapist to accompany children with special needs in the development and educational process;

2) priority reform measure 4.1.8 - improving and modernizing curricula, age standards and teaching materials, taking into account the educational needs of all children and principles and approaches of inclusive education:

- review and update of standards and curricula for the care of children, their development and education;

- development and distribution of teaching materials for the provision of a new curriculum;

- the development of a program to increase parents' knowledge on child development, parental involvement in the education process and educating parents about the skills of playing with children, which allows (through gameplay) to develop children's mental, physical and aesthetic skills;

- the development of adapted programs, methodical and visual aids/guides for educators and children with special educational needs;

- development and utilization of an expanded curriculum for preschool children using modern educational technologies;
 - revision of the unified educational program "Ranginkamon" taking into account all children's early development needs, so that the program becomes understandable for use and perception and increases awareness of inclusive education, the importance and benefits of inclusive educational institutions, as well as equal rights of all children, regardless of ethnicity, with particular attention to socially vulnerable groups;
 - development and implementation of alternative and inclusive educational programs for preschool educational institutions;
 - revision of the program of child development centers (CDCs), taking into account the age characteristics of children and an individual approach;
 - the provision of educational and visual materials for preschool educational institutions with the state language of instruction, as well as preschool educational institutions providing services for children of national minorities;
 - changing the training plans as new programs are developed and approved;
- 3) priority reform measure 4.1.9 - improving on-the-job pedagogical education of teachers of preschool and primary institutions in accordance with the new curriculum and inclusive and non-discriminatory principles and approaches in the educational process:
- improving the system of training and professional development of teachers and other workers of early development and preschool education before and during the start of professional activity, taking into account inclusive education;
 - continuing on-the-job training of teachers, developing methodological aids for the professional development of preschool education workers (in an inclusive context);
 - development of alternative programs of professional development - before and during professional activity - in accordance with the experience and level of education of teachers in preschool educational institutions;
 - the development of teachers' professional standards, which indicate what teachers should know, be able to do, and the characteristic qualities that they should possess;
 - revision and improvement of preschool pedagogical education in accordance with the standards;
 - development of an introductory and mentoring program for new teachers entering preschool institutions, including on an inappropriate educational and pedagogical approach, the negative consequences of humiliation, physical and psychological abuse of children, as well as the legal consequences of such actions and the treatment of children;

4) priority reform measure 4.1.10 - implementation of a tool for assessing the quality of services provided in preschool educational institutions in the context of developing a monitoring and evaluation system in preschool education:

- development and implementation of a comprehensive monitoring and evaluation system in preschool educational institutions, including the instruments for evaluating the provision of inclusive educational services in preschool institutions of various types;

- teachers' on-the-job work appraisal and preparation of their needs-based professional development program aimed at bringing them in compliance with standards.

90. Priorities in the area of strengthening effective governance of the education sector:

1) priority reform measure 4.1.11 - stimulating entrepreneurs in order to attract investment in preschool education:

- review and update the legislative framework in order to stimulate the provision of non-governmental services in the field of preschool education;

- continuation of work with the private sector and civil society, and development of a system for reducing payments in private preschool educational institutions;

- training of educational administrators in the implementation of the new legislative framework and regulatory documents, as well as concepts and principles of gender equality and inclusive education;

2) priority reform measure 4.1.12 - strengthening the Education Management Information System (EMIS) in the field of preschool education and its harmonization with other levels of the education sector:

- supplementing the Education Management Information System (EMIS) of the Republic of Tajikistan with information on the need for personnel in preschool educational institutions. Monitoring by the EMIS of statistics on the coverage of children in state and private child development centers;

- monitoring by the Education Management Information System (EMIS) of statistics on the coverage of children with additional education through the developed mechanism in accordance with concepts and principles of gender equality and inclusive education;

3) priority reform measure 4.1.13 - improving the efficiency of financing of preschool institutions, including the management of extra-budgetary funds of preschool institutions:

- development, approval and implementation of state minimum standards for per-capita financing in state preschool educational institutions, including developing and enhancing respective legislative framework;

- bringing the allocated cost of meals per child to the established requirements, which will contribute to improving the health and full development of children;
- the development of a funding mechanism for child development centers, as well as financing mechanisms for alternative forms and programs of preschool education, which will consolidate the social status of educators working in these institutions and ensure the sustainability of their functioning;
- ensuring that funding for child development center (CDC) workers will go through the general government budget, and the number of children attending the CDCs will be added to the contingent of children under which the CDCs operate;
- completion of the development of a multi-sectoral national nutrition plan in state preschool institutions for the period until 2022 and its due implementation;
- revision of parents' contributions to preschool education in accordance with their economic opportunities and undertaking measures to reduce their financial burden;
- development of a targeted assistance system for impoverished families in the direction of stimulating the education of children, which will allow impoverished households to enroll more children in preschool institutions;
- encouraging contributions from successful graduates, migrants, volunteers, and others with financial capabilities and close ties to the local community (at district, jamoat, makhalla, school level, and others).

§2. General secondary education

91. General secondary education in the Republic of Tajikistan is a priority for the Government of the Republic of Tajikistan in terms of both geographical coverage and resource allocation. In accordance with the National Development Strategy of the Republic of Tajikistan for the period until 2030 and other strategic programs, the main objective of the Sustainable Development Goals (SDGs) until 2030 is to ensure universal primary education, providing children with primary education (i.e. grades 1-4 in general secondary educational institutions). These SDGs to achieve universal primary education also include eliminating inequalities in access for boys and girls at all levels of general secondary education.

92. In the 2019-2020 academic year, there were 3,884 general secondary educational institutions. Of the total number of full-time educational institutions, 3,299 (85%) are located in rural areas, with enrollment of more than 1.4 million students. 3,127 full-time educational institutions (81%) provide a full cycle of general secondary education (grades 1-11), while 315 schools (9%) offer education only in primary grades (grades 1-4). At the same time, progress has been noted in

expanding access to primary and basic education in the Republic of Tajikistan (see Table 5).

Table 5: Select indicators in general secondary education in Tajikistan, 2010-2019.

	2010	2015	2016	2017	2018	2019
No. of general secondary institutions (units)	3,747	3,855	3,865	3,870	3,869	3,884
<i>including: state (units)</i>	3,698	3,805	3,810	3,813	3,808	3,821
<i>including: non-state (units)</i>	49	50	55	57	61	63
Enrollment in general secondary education ('000 pupils)	1,694.0	1,784.4	1,837.8	1,903.3	1,966.9	2,033.9
<i>including: in GBAO ('000 pupils)</i>	41.8	38.0	37.8	37.2	37.8	36.9
<i>including: in Khatlon oblast ('000 pupils)</i>	643.4	666.2	680.8	707.2	729.1	751.5
<i>including: in Soghd oblast ('000 pupils)</i>	462.6	482.3	499.7	517.8	533.7	538.4
<i>including: in Dushanbe ('000 pupils)</i>	167.8	180.4	185.4	190.6	196.9	194.7
<i>including: in RRS ('000 pupils)</i>	378.4	417.5	434.0	451.3	472.6	486.4
<i>including: in urban areas (in %)</i>	28.6	28.8	29.3	29.3	29.3	29.0
<i>including: in rural areas (in %)</i>	71.4	71.2	70.7	70.7	70.7	71.0

93. Enrollment in general secondary educational institutions is high. Nevertheless, school dropouts before completing education and greater gender differences exist, which result in decreased attendance and a higher dropout rate for girls. In the 2019-2020 academic year, 47% of girls were enrolled in grades 1-4, 51% in grades 5-9 and 46% in grades 10-11. In 2017, on average, 4 out of 10 teenage children missed classes, mainly due to illness or housework.

94. According to the Education Management Information System (EMIS) of the Republic of Tajikistan, a large number of children are enrolled in the first grade of primary education, but in fact enrollment (boys and girls) begins to decline after the completion of primary classes. This can be explained by the large scale of migration of people outside the country, which affects the likelihood of educating children from families with labor migrants; poverty and the inability of households to pay for the education of their children in higher grades; remoteness of educational institutions and distance to school; and poor material and technical base (e.g. lack of heat and electricity in educational institutions, especially in rural areas, lack of toilets, and so on).

95. The right to education for children with disabilities is recognized and secured by the Republic of Tajikistan in various legislative, regulatory and other documents, including the National Development Strategy (NDS) of the Republic of Tajikistan for the period until 2030. In particular, according to the NDS of the

Republic of Tajikistan for the period until 2030, the limited social integration of children with disabilities is one of the key factors of social inequality in Tajikistan. The NDS also emphasizes the importance of creating an inclusive education environment. In addition, article 22 of the Law of the Republic of Tajikistan "On Education" stipulates that children with physical, mental and psychic disabilities can attend secondary schools with the consent of their parents, and that special institutions of compulsory education, boarding schools and special classes should be open for those children with impaired physical, mental and psychic development who cannot study in general secondary educational institutions.

96. The efforts of the Government of the Republic of Tajikistan led to a steady increase in the number of children with disabilities entering general secondary educational institutions by 2.4 times in 2010-2018 (2,988 children in 2010 compared to 7,278 children in 2018). In the 2019-2020 academic year, 5,702 children with disabilities were admitted to general secondary educational institutions. However, comparing the EMIS and the school records, not all children with disabilities were included in the EMIS reports: according to the EMIS, only 447 children with disabilities were enrolled in target schools in the 2018-2019 academic year, compared with 974 children based on school records. School management believes that these differences in statistical reporting are partly due to the fact that only children whose disabilities are documented are included in the EMIS. Such developmental disorders may be mental development issues, blindness or another form of visual impairment, deafness or another form of hearing impairment, dumbness or speech impairment, and polio disease.

97. However, children with special educational needs and disabilities continue to face significant challenges. According to a 2016 UNICEF study, social and psychological discrimination and negative perceptions of special needs and disabilities are some of the barriers faced by children with disabilities in accessing education in the Republic of Tajikistan. Discrimination against children with disabilities still prevails - for example, there are doctors and teachers who admit that children with disabilities should be placed in specialized institutions, as only such institutions are able to provide special care and education that cannot be provided by parents and mainstream educational institutions. Currently, 8275 children with disabilities are enrolled in various types of specialized educational institutions (see Table 6).

Table 6: Enrollment in state boarding educational institutions in the Republic of Tajikistan, 2010-2019

	2010	2015	2017	2018	2019

Enrollment in state boarding schools, total (in '000), including:	12,118	14,103	12,640	11,738	8,275
orphan children	5,422	6,068	5,802	4,728	4,752
with hearing and visual impairments	243	383	353	382	1,214
with mental disabilities	172	205	214	586	614
boarding schools (sanatoriums)	760	955	261	237	227
with polio	285	313	366	375	312
maladjusted children	37	180	153	34	38

98. Graduates of educational institutions belonging to national minorities have difficulty in further admission to higher educational institutions, as the National Testing Center under the President of the Republic of Tajikistan provides tests in Tajik and Russian languages. There is lack of additional resources in schools for reading in the state language and languages of national minorities, which affects the further opportunity of students to continue their education in professional educational institutions.

99. The National Strategy for Education Development for the period until 2030 further emphasizes the lack of alternative forms of education and accelerated development programs, e.g. for children with migrant siblings who return to their homeland; children from remote areas studying in small schools; refugee children with a language barrier; stateless children; children seeking refuge; as well as street children (i.e. children without a permanent residence) and orphans.

100. In 2018-2019 the vast majority of students attended double-shift schools (82.2%) - only 6.6% attend single-shift schools, and the remaining 5.2% attend three-shift schools. However, the dynamic population growth and the consequent burden on educational institutions often leads to two-shift, and in some cases three-shift and overcrowded classes in schools. For example, in accordance with the data of the UN Population Division, the nominal population of the Republic of Tajikistan will increase, on average, by 2.1% per year and reach 14 million people by 2050. This will also lead to increased occupancy in classes, which is why it is not possible to divide them into subgroups based on individual subjects. In general, the work of general secondary educational institutions in several shifts indicates that the availability of school premises is limited, because enrollment has grown. Such educational institutions face problems that impede the quality of service delivery, in particular: the forced reduction in the duration of lessons to accommodate 2-3 shifts; the sharing of classrooms and furniture by students of different age groups; and lack of extracurricular activities and groups.

101. In addition, limited access to quality and safe nutrition also affects access to education. Not all educational institutions have canteens and buffets. The issue of access to meals in primary schools is problematic. To this end, the

Government of the Republic of Tajikistan has approved the Strategy for the Sustainable Development of School Meals in the Republic of Tajikistan for the period until 2027, which is currently being successfully implemented in partnership with international development partners, such as the UN World Food Program (WFP), which provides meals for more than 370,000 pupils in primary classes and 2,000 schools in 52 districts which are most vulnerable in terms of food insecurity.

102. The Republic of Tajikistan also offers additional education, which is enshrined in legislation by the Law of the Republic of Tajikistan "On Additional Education" which was adopted on April 16, 2012. Additional education, as a variable part of general education, allows to develop creative inclinations and abilities of children. Additional education is represented by various centers for out-of-school education. In 2018, for example, 1,387 children attended music and sports schools. In the 2018-2019 academic year, the total number of thematic groups (i.e. clubs) equaled 6,562 (including groups on technical creativity, young naturalist, local history and tourism, artistic creation, and so on), of which 253 groups are fee-based. These groups (i.e. clubs) were attended by 119,736 pupils, including 54,791 girls. Coverage of schoolchildren by sports sections of state general secondary educational institutions (i.e. mass military and sports clubs) represents 1.4% of the total number of pupils in these institutions.

103. In addition, favorable educational conditions have been created with the introduction of talent development and identification centers in all towns and regions of the Republic of Tajikistan. These centers facilitate the identification of talented schoolchildren and prepare them for national and international competitions. These centers are equipped with computer classes, as well as educational and research laboratories.

104. During the functioning of the centers, 650 thematic, cultural and educational sections have been organized in 24 broad areas, which covered 9,610 schoolchildren. In some towns and regions, the necessary measures have not yet been taken to organize regular work, allocate separate rooms, organize and equip technical classes, ensure financial independence, and finance such centers from the general government budget.

105. The state enterprise "Republican Center for the Identification and Development of Talents" regularly takes effective measures to identify and develop talented schoolchildren, motivate children to take part in school competitions, strengthen the Olympic movement and create a favorable basis for the development of logical thinking among schoolchildren. At the same time, a number of measures will be taken in the future to revitalize national and international competitions. With the expansion of the Olympic movement in the

Republic of Tajikistan, the number of Olympiads and the participation of students increased, which is three Olympiads and 1,427 more participants than in 2010.

106. Schoolchildren from the Republic of Tajikistan took part in international Olympiads in Kazakhstan, Belarus, Thailand, Russia, Malaysia, Romania, Italy, India, Latvia, United States, Israel, Hungary, United Kingdom and Northern Ireland, Uzbekistan, France, South Africa, and other countries. In general, schoolchildren of the Republic of Tajikistan take part in international competitions, which are often represented by more than 90 countries, and have achieved significant success.

107. Issues related to quality are one of the factors negatively affecting general secondary education. The Ministry of Education and Science of the Republic of Tajikistan has taken critical measures to significantly improve educational materials and the overall material and technical base of schools, which has led to an increase in the average class size and the ratio of classrooms and schools.

108. Primary and secondary education in the Republic of Tajikistan continues to bear the brunt of the lack of qualified teaching personnel. The Government of the Republic of Tajikistan has developed and implemented measures to train teachers, develop curriculum, ensure compliance with new teaching standards, and increase remuneration in general secondary education. These measures undertaken by the Ministry of Education and Science of the Republic of Tajikistan have contributed to a steady and gradual annualized increase in the number of teachers and their qualifications in general secondary educational institutions. However, securing educational institutions with pedagogical personnel is not yet fully addressed, and sometimes ground-based teachers are not familiar with modern teaching methods. There are instances when teaching specialists without specialized pedagogical education enter into a job as a teacher. It is very important to keep in mind that the pre-training of the teaching personnel of educational institutions (i.e. before they begin to work) should be based on a competency-based approach and consistent with their professional development.

109. Insufficient number of teaching personnel in educational institutions is explained, first of all, by low salaries, poor motivation of teachers (low pay for the work of class teachers or checking notebooks, and no pay for leading methodological associations), the uneven distribution of hours for teachers (i.e. work in two shifts), and the unreasonable requirement of school principals that teachers should remain in the school premises after schooling hours. In addition, the relatively low quality composition of students of pedagogical faculties of professional educational institutions also has an impact on the overall supply of pedagogical personnel.

110. The total number of teachers of primary and secondary education in the Republic of Tajikistan increased by 30.8% between 2010 and 2018, and amounted to 124,593 teachers in the 2019-2020 academic year. Of the total number of teachers, 74% (or 92,224 teachers) have higher professional education. Notwithstanding the growth in the teaching personnel, there was a slight increase in the average number of students per teacher (from 16.7 in 2010 to 17 in 2019). This indicates that the demand for general secondary educational institutions exceeds supply.

111. To assess the quality of teaching experience, especially for young teachers, the Ministry of Education and Science of the Republic of Tajikistan identified motivation for them by rewarding and providing other incentives, including awards for outstanding achievements in education (for example, state and industry awards, badge "Excellence in Education and Science of Tajikistan" and others). In the 2018-2019 academic year, 41,883 teachers of state general secondary educational institutions (of which 50.4% were women) received state awards, "Excellence in Education," honorary certificate of the Ministry of Education and Science of the Republic of Tajikistan and its subordinate bodies, and other rewards. In total, 280 teachers (31.4% women) received state awards in education. Decree of the Government of the Republic of Tajikistan #433 from July 2, 2015 "On the amount and procedure for paying supplementary salaries to young teachers working in rural areas" establishes a monthly surcharge of 10% for young specialists. In addition, teachers are eligible for subsidized loans.

112. The lack of a standardized national assessment of learning outcomes and the minimal participation of the Republic of Tajikistan in international assessments of learning outcomes inevitably affects the quality of general secondary education. The national assessment of learning outcomes was nationally representative and covered 14.2% of primary school students and 20.7% of general secondary educational institutions.

113. At present, there is no systematic methodology for assessing learning outcomes nationally and internationally in the Republic of Tajikistan, which makes it difficult to measure the learning outcomes of schoolchildren in general secondary educational institutions. In this regard, the Ministry of Education and Science of the Republic of Tajikistan, in cooperation with development partners, is currently developing a National Standardized Assessment of Learning Outcomes, which will be the basis for assessing student learning outcomes in general secondary education. In December 2019, relevant materials were developed to evaluate the results of training in a number of subjects such as mathematics and the Tajik language (for schoolchildren in grades 5 and 11), which will be piloted in several schools. The results of this pilot will enable the full implementation of this methodology in the Republic of Tajikistan.

114. Elementary grade reading assessment (EGRA) was carried out in 2012 and 2019. The 2019 assessment revealed low reading fluency among half of the 2nd grade cohort and 80% of students in the 4th grade, and an even larger percentage of students not reaching standards for reading comprehension. The assessment was supported by the United States Agency for International Development (USAID), based on a sample of 207 educational institutions with Tajik as the language of instruction. Tests were conducted in Tajik and Russian, depending on the language of instruction used in the sampled schools. The data are disaggregated by gender and regions of Tajikistan, including the city of Dushanbe. The average reading fluency scores in 2012 hardly met the national standard for each class and did not meet the international benchmark scores and the Dynamic Indicators of Basic Literacy Skills (DIBELS). In 2019, the average reading fluency score already met the national standard for 2nd grade, but reading fluency among 4th grade students was significantly lower than the national standard.

115. Currently, no additional reading literature is available in schools and libraries throughout Tajikistan, especially in the state language. Children's reading skills do not develop only from textbooks and for the development of a number of semantic skills that meet the requirements of competent national standards, a set of books of different genres and serious educational literature are needed.

116. Consistently conducting training seminars for teachers on the use of handouts in their professional practice is an important factor, since a certain share of teachers is not sufficiently aware of the main goals and importance of the materials provided to them. Within the framework of the Global Partnership for Education (GPE-4) project 5,000 teachers are involved in training workshops on the principles and methods of competency-based teaching.

117. Nevertheless, at the national level, there is still a lack of new high-quality resources and alternative programs, textbooks and educational and methodical resources that are appropriate to each level of education. There are differences in student learning, i.e. the results of grades for the same knowledge of schoolchildren are evaluated differently. Laboratories and classrooms (e.g., physics, chemistry, mathematics, physical education, labor training, music, languages, and others) are poorly equipped, and in most cases are non-existent. To this end, with the support from development partners, in 2019, 72 schools were equipped with laboratories in chemistry, biology and physics, i.e. one laboratory in each rayon of the country. These schools could potentially be regarded as a technical center in the respective rayon so that schoolchildren have the opportunity to use laboratories for educational purposes and prepare for various competitions.

118. The lack of specific uniform standards for determining the level of competencies of teachers during their hire, the lack of national standards for teachers and school principals with clear descriptions of what they need to know

and be able to do, hinders the growth of their capacities and leads to inefficiency of the existing procedure for the selection and appointment of leadership of general secondary educational institutions. In this regard, the Ministry of Education and Science of the Republic of Tajikistan with the support from development partners has developed and adopted the Competency Framework for Teachers, which made it possible to clearly define the competencies required by teachers for their successful training and professional development. Based on the designed self-assessment tool, teachers can now independently assess their competencies and identify gaps or shortcomings. This is an extremely important element of reform in general secondary education.

119. The process of selecting and hiring teachers in the field of general secondary education in Tajikistan is currently not strict. In particular, the main criterion is still the academic criterion, i.e. the presence of a diploma corresponding to knowledge of the subject. Pedagogical skills and experience, as a rule, do not play a meaningfully significant role.

120. The remuneration of teachers, as noted above, remains one of the lowest among other sectors in the Republic of Tajikistan. The remuneration of teachers is determined on the basis of category (which is in turn determined on the basis of certification results), and the transition from one category to another is feasible only through the certification system. To date, when a teacher passes certification and is promoted to the next category, he/she receives a salary increase of about 12%. An analysis of the remuneration of teachers in primary and secondary educational institutions revealed inconsistency: despite the fact that the required qualifications for primary school teachers are lower than the requirements for secondary school teachers, primary school teachers receive a higher base salary than secondary school teachers. This is due to the average stavka (i.e. load) of teachers in primary and secondary schools. The basic income of teachers forms only a part of the full amount that they receive. In this regard, the remuneration system for the teaching staff of institutions of general secondary education should be reformed.

121. The Ministry of Education and Science of the Republic of Tajikistan has developed conceptual approaches in connection with the need to address a number of problems related to:

- streamlining the modern infrastructure of the system of general secondary education and increasing its accessibility, including for persons with special needs, psycho-physical development, gifted and talented students;
- the introduction of information educational technologies and copyright methods;
- the development of an independent system for assessing the quality of education and human resources.

122. Nevertheless, there are still shortcomings in the existing modernized curriculum, which would reflect the key competencies and general knowledge required for schoolchildren, as well as shortcomings in the existing mechanism for re-training teachers of general secondary educational institutions. In this regard, the Ministry of Education and Science of the Republic of Tajikistan continues to develop modules and procedures for the re-training of unskilled teachers in general secondary education. This work is being supported by the European Union. The introduction of various forms and re-training of teachers, as well as variative programs designed for different approaches in covering teaching material, is also required.

123. The gender parity index (GPI) for all schoolchildren is 0.929 in general secondary education in the Republic of Tajikistan. For primary and basic secondary education (grades 1-9), the ratio of boys and girls is approximately the same and amounted to 0.940 and 0.936, but unequal access to education is much more prevalent in upper secondary education (grades 10-11) - 0.870. Overall, the GPI score has improved from 0.883 in the 2010-2011 academic year to 0.929 in the 2018-2019 academic year. The gender parity index peaked in 2018. Notwithstanding existing issues in education which girls face in the context of the country's socio-cultural restrictions, this indicates the success of the measures taken by the Ministry of Education and Science of the Republic of Tajikistan to improve access to general secondary education (at all levels of education) for girls and boys.

124. In the 2018-2019 academic year, the transition rate to the 10th grade for boys was 80.4%, and for girls - 77.1%, compared to 66.6% for boys and 60.1% for girls in the 2010-2011 academic year. A higher transition rate to the third level of general secondary education indicates improved access to education or a higher level of transition from basic education to grades 10-11. These numbers for the 2018-2019 academic year demonstrate the successful transition of pupils from primary education and their subsequent study in grades 10-11, thus completing the full cycle of general secondary education. However, the transition rate from 9th to 10th grade in rural areas is still relatively low, especially among girls. In the rayons of republican subordination (RRS), for example, the transition rate of girls was 56.2% in the 2018-2019 academic year, compared with 74.9% among boys.

125. Removing social, economic and cultural barriers to inclusive education remains a challenge. Many children with disabilities and children from ethnic minorities are marginalized. Therefore, according to the Strategy, additional efforts and resources will be made to narrow this gap. Children with mental disabilities should have access to education and development in accordance with their needs and capabilities; children with disabilities who have only special physical needs should be enrolled in regular primary and secondary schools with the provision of

services and assistance in accordance with their needs. All children from minority groups should be enrolled in regular schools to facilitate their integration into Tajikistan's society. Schools should be built in those communities and those areas where the distance from communities to educational institutions is substantial.

126. According to the National Development Strategy of the Republic of Tajikistan for the period until 2030, the key resources of the field of education and science should be innovation and competence, employer engagement in the educational process, parental and community participation in the educational process, and effective feedback-based governance practices. By 2030, the number of children in primary and secondary school age will grow, on average, by 2.3% annually, and their number will reach approximately 2.58 million people. At least 30% of school graduates (i.e. about 58,000 people annually) should be involved in primary and secondary professional education, which will require a twofold expansion of general secondary education.

127. In accordance with the National Development Strategy of the Republic of Tajikistan for the period until 2030, breakthrough institutional growth points should become:

- ensuring the effectiveness of the system of professional development of teaching personnel, and stimulating the attractiveness and effectiveness of teaching profession;
- formation of a unified system for testing the knowledge of schoolchildren, including for the purposes of international comparisons;
- development of mechanisms for assessing the quality of education at the institutional level (public-professional examination, systems of self-assessment of institutions and continuous monitoring of the status and trends of educational development, taking into account the criteria of inclusiveness and competitiveness);
- ensuring the introduction and monitoring of state requirements and state standards for the quality of general secondary education;
- securing all institutions with broadband Internet access and increasing the equipment of classrooms with computer equipment;
- provision of network content for most academic subjects and the widespread introduction of interactive training formats using information and communication technologies (ICT), including distance learning (online) and creation of educational platforms in state language;
- development and implementation of programs aimed at improving the knowledge of foreign languages;
- development of additional education of children through creativity development centers for children and youth, focusing on the development of knowledge, skills, increasing the interaction of state and non-state forms of

additional education, as well as the exchange of experience, the introduction and use of best international practices and techniques, and joint events.

128. To achieve the set objectives in the field of additional education, the Ministry of Education and Science of the Republic of Tajikistan and development partners will undertake the following activities:

- increase the competitiveness of institutions of additional education for children and youth through the active introduction of new forms, methods and technologies in the educational process, and the opening of new, sought-after associations based on interests and new activities of schools;

- update the content of educational programs for additional education of children and youth in accordance with their interests, the needs of the family and society;

- expand the network of interest-based associations in accordance with various profiles in educational institutions, and expand the list of school activities;

- introduce modern forms of professional guidance, ensure occupancy of children and youth in their free time from school, and support their creative and entrepreneurial initiative;

- create conditions for the implementation of socially significant and social projects, and children's and youth initiatives;

- form mechanisms to support innovation, contests, competitions and Olympiads in the system of general secondary education;

- create the State Program for the identification and development of talents of the Republic of Tajikistan for 2021-2025;

- equip and provide talent development centers with hostels;

- provide financial independence for the effective functioning of talent identification and development centers of the Republic of Tajikistan, and grant them with the status of a legal entity in oblasts, towns and rayons;

- develop state educational standards, new educational programs, comprehensive textbooks for presidential schools, lyceums and gymnasiums for gifted students.

129. The Ministry of Education and Science of the Republic of Tajikistan, in the framework of implementing the National Strategy for Education Development of the Republic of Tajikistan for the period until 2030, plans to transition to a 12-year general secondary education based on a competency-based approach, and, consequently, develop and implement a respective state standard and subject standards. Supported by development partners, the Ministry of Education and Science of the Republic of Tajikistan developed several possible scenarios for the transition to 12-year schooling and carried out a preliminary assessment of the total cost implication on the basis of value for money considerations. According to this assessment, the most acceptable and economically attractive scenario is the

introduction of compulsory one-year preschool education (children aged 6) with a smooth transition over a 6-year period, which will exert the least burden on the general government budget and provide the best opportunity for effective preparation and readiness of children for school. Preliminary work to prepare the education sector and relevant educational institutions for the transition to 12-year education will be carried out in 2023-2025, and the transition itself is planned to be fully implemented until 2030 with the support from development partners. Currently, the Government of the Republic of Tajikistan is considering possible scenarios of transition to a 12-year education.

130. The state educational standards of primary education and primary school are planned to be revised, and the new curricula, which follows the competency-based approach, will be developed in primary, basic and secondary education. In general, the state educational standards should be results-oriented, ensuring personal self-development and independence in the acquisition of knowledge, forming communicative skills in managing information and technologies, problem solving, as well as entrepreneurship and creativity. The state educational standards should be based on an agreed set of competencies for all levels of education in accordance with the international frameworks.

131. In the framework of the National Strategy for Education Development of the Republic of Tajikistan for the period until 2030, the Ministry of Education and Science of the Republic of Tajikistan identified the following key priorities (disaggregated by key outcomes) in general secondary education:

132. Priorities in the area of ensuring equal access and participation in education:

1) priority reform measure 4.2.1 - construction and repair of schools taking into account the needs of children with disabilities:

- strengthening cooperation between public and private sector, especially in the construction and repair of general secondary educational institutions;

- ensuring the adequacy and quality of the infrastructure of general secondary educational institutions throughout the country (basic needs, hygiene and sanitation), taking into account the needs of children with disabilities and ethnic minorities;

- the installation of special devices in general secondary educational institutions (e.g. lifting devices, ramps, handrails, etc.), as well as provision of appropriate human resources (psychologists, educators, speech pathologists, specialists in psychological and pedagogical support of children, and others);

2) priority reform measure 4.2.2 - ensuring socially safe and favorable conditions for learning and ensuring inclusive education for all social and ethnic groups:

- improvement of the system of inclusive education in general secondary education;
 - designing development and inclusive education programs for children with special educational needs;
 - development of accelerated development programs for children of labor migrants, street children (including deviant behavior), children of stateless persons, refugees, ethnic minorities (including asylum seekers), and others;
 - creation of mechanisms to improve the quality of studying the state language, as well as English and Russian languages, in schools and classes of ethnic minorities;
 - improvement of the system of early and comprehensive care for children with special needs;
 - formation of adaptive educational environment in general secondary educational institutions, taking into account the characteristics and development needs of each pupil;
 - the development of inclusive processes in education and facilitation of the readiness of all subjects of the educational process to implement the ideas of inclusion;
- 3) priority reform measure 4.2.3 - encouragement of gifted children as a tool to increase participation/enrollment in education:
- development of criteria for determining the pupil's giftedness;
 - designing special development programs for gifted children;
 - equipping and provision of talent identification centers with dormitories;
 - provision of financial independence for the effective functioning of centers for the identification and development of children's talents;
 - granting the status of a legal entity to the centers for the identification and development of talents of oblasts, towns and rayons;
 - development of state educational standards, new educational programs, comprehensive textbooks for presidential schools, lyceums and gymnasiums for gifted students;
- 4) priority reform measure 4.2.4 - reducing the schoolchildren's dropout rate in general secondary education, especially girls and children from poor and vulnerable groups:
- development and implementation of programs to identify, prevent and work with children who do not attend or drop out of school;
 - providing economic and psychological support to children who drop out of school due to problems at school or family;
 - review of legislation and creation of mechanisms to support schoolchildren so that they receive general secondary education in accordance with their age.

133. Priorities in the area of improving the quality and relevance of education:

1) priority reform measure 4.2.5 - creation of an effective and flexible system of professional development (i.e. training and retraining) of teachers and other workers in general secondary education in accordance with principles of inclusive education:

- strengthening government support and stimulating the work of pedagogical personnel;

- development and implementation of pedagogical technologies aimed at personality development and based on competencies;

- development and implementation of the professional development program for teachers in order to improve access and quality of skills development programs;

- creation of a system for assessing the needs of teachers and bringing the system of training, retraining and professional development of teachers in accordance with their needs, including for the effective teaching of subjects in natural, exact and mathematical sciences;

- improving the curricula/syllabi of programs for the professional development (training and re-training) of teachers in order to bring them into line with the competency-based and inclusive approach;

- improving the content, forms and methods of professional development;

- implementation of the transition to a three-year system of advanced training for educational workers;

- development of professional development programs of education workers partially in distance learning mode;

- creation of a system of professional re-training of teachers;

- development of forms of competition for professional development to ensure quality education;

- introduction of an advanced credit-modular professional development system;

- development of research work in order to identify effective ways to improve the professional skills of education workers;

- improving the mentoring and coaching system of teachers (personal approach, child support, the formation of consciousness of academic performance, etc.);

- developing a system in which higher educational institutions that prepare teachers have a close relationship with general secondary educational institutions by providing an effective internship program and practice. Upon completion of specialties related to general secondary education, graduates must have effective teaching experience for at least one year and be interested in teaching;

2) priority reform measure 4.2.6 - preparation of competency-based and inclusive standards and teaching materials in general secondary education:

- implementation of a modern curriculum in general secondary education based on a competency-based approach (and with emphasis on scientific, technical, engineering and mathematical specialties, as well as coding, robotics and entrepreneurship, including the organization of innovative clubs, Olympiads, etc.);

- development of the National Curriculum Framework; completion of the transition to a competency-based approach;

- development and printing of new textbooks and other teaching materials for relevant classes based on a competency-based approach;

- development of standards, curricula, programs, textbooks and teaching aids for early childhood development, based on an effective education model;

- creation of new textbooks, provision of alternative textbooks in order to provide a choice of textbooks for students and teachers, and updating of existing educational standards to ensure a smooth transition to 12-year general education;

- development of scientific and educational methodological support for the educational process, contributing to the implementation of the educational potential of training sessions and the achievement of personal educational results by students (didactic and diagnostic materials, and methodical recommendations for their use in the educational process);

3) priority reform measure 4.2.7 - elevating the prestige of the teaching profession in general secondary education:

- development and implementation of state programs "Competent Teachers and Teachers," "Competent Heads of Educational Institutions" and "Competent Parents" in order to enhance the prestige of the profession of teacher and educator, as well as for systematic pedagogical and psychological work with parents in order to support pedagogical activities aimed at sustainable development of children;

- improving the teacher promotion and remuneration system based on their activities (for instance: a teacher remuneration and encouragement system based on student learning outcomes and other measured indicators);

- improvement of the system of recruitment and career growth of teachers in general secondary educational institutions;

4) priority reform measure 4.2.8 - implementation of an effective system and institutional mechanisms for assessing the quality of education based on a competency-based approach:

- development of the national quality assessment framework of education in 2021, which will include standardized national assessments for measuring student learning outcomes, and competency standards, such as in primary grades (literacy, math) and secondary grades;

- development and testing of standardized national assessment tools of acquired knowledge, skills and competencies in 2022 for teaching literacy and numeracy in primary grades and for individual secondary subject areas;

- conducting literacy and numeracy assessments for primary grades every few years, starting in 2023. For secondary grades, assessments every two years may also be suitable, and subject areas can be defined for each assessment depending on initiatives to update textbooks, teaching methods, and teaching materials. Education quality assessment will be carried out by trained specialists based on the developed national framework. The data and results of national assessments will be made publicly available to ensure transparency and accountability, as well as to inform decision-makers, stakeholders, donors and parents to understand the needs, problems and opportunities for improved targeting of reforms and resources and equitable improvement of learning outcomes;

- considering the participation in international educational assessments of general secondary education (e.g., PISA, TIMSS, PIRLS, etc.).

134. Priorities in the area of strengthening effective governance of the education sector:

1) priority reform measure 4.2.9 - development of new mechanisms for financing education aimed at improving the quality and accessibility of education regardless of age, social and economic status, and ethnicity:

- review of national legislation in the field of public finance management and taxation in order to provide benefits to private investors and entrepreneurs in general secondary education;

- an institutional review of financing general secondary education and, on its basis, the formulation of recommendations to provide general secondary educational institutions with a greater degree of financial discretion and the possibility of increasing available resources for recurrent and capital expenditures;

- improve and formalize the system of parental contributions in general secondary educational institutions (except children from poor and vulnerable families, as well as families with more than one child) in order to reduce corruption, improve transparency, and encourage efficient use of external resources;

- facilitate contributions from successful graduates, migrants, residents of local communities and other persons with financial capabilities and a desire to contribute to general secondary educational institutions;

2) priority reform measure 4.2.10 - transition to a 12-year general secondary education, supported by updating the content of education:

- development and implementation of a new standard for the 12-year general secondary education based on a competency-based approach;

- the development of textbooks and education and methodology courses for experimental platforms according to the 12-year education model, electronic textbooks;

- development of textbooks and improvement of educational and methodological materials for piloting according to a 12-year education model, electronic textbooks, translation and adaptation of textbooks and complex educational materials for correctional educational institutions;

- separation of the development and examination (expertise) of textbooks;

3) priority reform measure 4.2.11 - optimization of school infrastructure and categorization of general secondary educational institutions:

- improvement of the key mechanism for the development of modern infrastructure of general secondary education - the development of technology for the organization of general secondary education, including: technology for schooling, technology for the transportation of students and technology for the educational environment, nutrition and public participation in governance of educational institutions;

- creation of a network of educational institutions: e.g., through roads and vehicles, transportation routes, telecommunications, and libraries;

- addressing the problem of small-staffing schools;

- optimization of the types of general secondary educational institutions;

4) priority reform measure 4.2.12 - professional development of principals and administrators in general secondary education:

- creation of mechanisms for improving school management, taking into account governance and pedagogical needs;

- the development of a new system, which should be based on the definition of professional managerial competence, a comprehensive study of educational needs, the definition of the content of professional development in governance, the specifics of typical managerial situations of different categories of school managers and their modeling in the process of training, differentiation of content and organizational forms of training for different categories of schools, and the organization of active managerial interaction to form the main components of professional competence;

- development and implementation by administrations of general secondary educational institutions of project teams, distance and Internet projects, seminars, classes and webinars;

- development of professional standards for principals of general secondary educational institutions and the organization of a professional development program for principals and their deputies, and heads of methodological associations;

5) priority reform measure 4.2.13 - implementation of an effective system for monitoring and evaluating the implementation of structural and institutional reforms in education and science:

- creation of a modern educational information environment in general secondary educational institutions;

- automation of the educational process associated with the use of electronic forms of journals and a diary for recording academic performance, remote monitoring of attendance, and tracking the time of arrival and departure of schoolchildren in all general secondary educational institutions;

6) priority reform measure 4.2.14 - the proper use of the collected data and information in decision-making in general secondary education:

- improvement of the Education Management Information System (equipment, reliable data collection, data analysis and presentation, and school and district indicator panels);

- professional development of educational workers in the collection and use of data for decision-making;

- improving the system of analysis of the quality of education in oblasts and rayons to determine the causes of differences and address these problems;

- creation of an online portal or information management system that connects all general secondary educational institutions with regional and district level education departments/divisions and the Ministry of Education and Science of the Republic of Tajikistan for management purposes, as well as for the exchange of experience and best practice.

§3. Primary and secondary professional education

135. The employer needs in the Republic of Tajikistan in labor and mid-level specialists are extremely important, because ultimately they are key to addressing the problem of underemployment and poverty in Tajikistan. The main challenge is how to ensure a sufficient number of adequately educated/trained workers to meet the needs of the labor market both domestically and abroad.

136. In order to increase the status of initial and secondary vocational education and training (IVET and SVET) institutions in the Republic of Tajikistan, new types of educational institutions have been formed - in particular, vocational technical schools were transformed into professional-technical lyceums, and technical colleges and schools into colleges. The activities of these newly transformed professional-technical lyceums and colleges are governed by the standard provisions and the state standards.

137. According to the Education Management Information System (EMIS) of the Ministry of Education and Science of the Republic of Tajikistan, during the

2018-2019 academic year, 61 IVET institutions enrolled 23,385 students who were taught by 2,508 teachers and masters of vocational training. In 72 SVET institutions operating in the same academic year (56 state and 16 private educational institutions) in the Republic of Tajikistan, enrollment equaled 85,579 students and they were taught by 5,775 teachers (see Table 8). Among existing educational institutions, 61 IVET are part of the Ministry of Labor, Migration and Employment of the Population (MoLME) of the Republic of Tajikistan; out of 72 educational institutions, 24 are IVET institutions that belong to the Ministry of Education and Science (MoES) of the Republic of Tajikistan, 15 to the Ministry of Health and Social Protection of the Population (MoHSP) of the Republic of Tajikistan, 6 to the Ministry of Culture of the Republic of Tajikistan, 2 to the Ministry of Agriculture of the Republic of Tajikistan, 2 to the Ministry of Internal Affairs of the Republic of Tajikistan, and one educational institution belongs to the Ministry of Labor, Migration and Employment of the Population (MoLME) of the Republic of Tajikistan, the Ministry of Industry and New Technologies (MoINT) of the Republic of Tajikistan, the Ministry of Energy and Water Resources (MoEWR) of the Republic of Tajikistan, as well as state unitary enterprises (SUEs) "Tajik Aluminium Plant," "Rogun Hydroelectric Power Plant," the Committee on Youth and Sports Affairs under the Government of the Republic of Tajikistan, the Central Committee of the Public Organization for the Defense of the Republic of Tajikistan, and 16 private educational institutions.

Table 7: Total enrollment in IVET and SVET institutions, 2015-2018

Academic year	No. of educational institutions		Enrollment					
			Total		Including girls			
	IVET	SVET	IVET	SVET	IVET		SVET	
					girls	%	girls	%
2015-2016	62	65	26,973	68,325	4,813	17.8	40,361	59.1
2016-2017	62	66	22,779	73,333	5,214	22.9	43,372	59.1
2017-2018	61	68	24,176	80,432	5,617	23.2	49,696	61.8
2018-2019	61	72	23,385	85,579	5,301	22.7	54,621	63.8

138. During 2011-2018, the growth in the number of students in IVET institutions averaged 11.2% per year. This growth rate is ensured via increasing the number of SVET institutions and the demand of young people, including girls, for medical and pedagogical specialties, as well as for culture and arts specialties. The gradual increase in the number of students in IVET institutions indicates the importance of this level of professional education, because it ensures socialization and employment of young people in the labor market at an earlier age. This is

especially important for young people from single-parent, socially vulnerable or disadvantaged families when there is a need for an additional source of income.

139. In the 2018-2019 academic year, 22 and 17 IVET institutions operated in the Soghd and Khatlon oblasts respectively with coverage of 32% and 26% of the total number of students in the country. In Dushanbe, 11 IVET institutions covered 26.4% of students, and the remaining 15.6% were distributed between one IVET institution in GBAO and 10 IVET institutions in RRS. On average, there are 383 students per IVET institution with a small regional difference.

140. In the 2018-2019 academic year, there were 72 educational institutions of the SVET system as follows: 1 SVET institution operates in GBAO, 21 in the Khatlon region, 21 in the Soghd region, 13 in Dushanbe, and 16 in the RRS. Enrollment in each SVET institution averages 1,188 students, with the exception of GBAO where there was one college with 302 students.

141. The strengthening of the network of vocational education and training (VET) institutions is ongoing, and the creation of multi-level educational institutions is very important. Accordingly, on the basis of article 18 of the Law of the Republic of Tajikistan "On Education," primary vocational education departments have been created on the basis of 11 SVET institutions. They provide vocational training in 16 professions. In addition, 9 colleges - i.e. structural units of higher educational institutions (HEIs) - are training mid-level specialists.

142. In the 2018-2019 academic year, SVET institutions expected to enroll 29,182 students. In fact, 26,764 students were enrolled, which is 2,418 less than the planned indicator, i.e. the admission plan was executed at 91.7%. At the same time, the admission of students to SVET institutions in the 2018-2019 academic year increased by 1,330 compared to the 2017-2018 academic year and 12,151 compared to the 2010-2011 academic year. Nevertheless, the rate of enrollment of school graduates by IVET and SVET institutions compared with higher professional education remains low, accounting for 9.9% and 16.4% respectively.

143. The share of students in daytime SVET institutions has gradually increased to 80% of the total number of students in secondary professional education, while in the regions this indicator has varied. While the share of students in daytime SVET institutions was 82% in Dushanbe and 82.1% in RRS, it equaled about 79% in Soghd oblast and 74.4% in Khatlon oblast. In GBAO, all students enrolled in colleges (i.e. SVET institutions) study on a full-time basis.

144. In the 2018-2019 academic year, 84% of students in IVET institutions studied in budget groups (i.e. groups which are financed through the state budget), while among SVET institutions this number is two times less and amounted to only 35.6%. Thus, more than 60% of students in the VET system independently financed their professional education in the respective VET institutions. At this time, IVET and SVET has become more financially accessible to applicants.

Tuition fees for pursuing studies in various specialties of IVET and SVET institutions are several times lower than in higher education institutions (HEIs), and range, on average, from 400 somoni to 3,000 somoni. The only exception is tuition at private colleges, where tuition fees range from 4,000 somoni to 11,000 somoni.

145. In the 2018-2019 academic year, the coverage of graduates of general secondary educational institutions by IVET and SVET institutions equaled 10% and 16.4% respectively.

146. Since 2014, in line with the license of the Ministry of Education and Science of the Republic of Tajikistan on undertaking educational activities - issued by the Agency for Supervision of Education and Science under the President of the Republic of Tajikistan - IVET institutions, regardless of their location, have offered only full-time programs, and SVET institutions offered full-time, evening and distance learning programs. However, to date, international experience proves the dual form of training as the most effective in the case of IVET institutions.

147. In order to efficiently use the available resources and attract a larger number of applicants into primary professional education, IVET institutions have transitioned to two-year education on the basis of general secondary education (9th grade). As a result, standard curricula for more than 50 specialties were developed and approved for primary professional education.

148. According to the results of the 2018-2019 academic year, only 7,400 out of 12,700 graduates of IVET institutions were assigned to specific jobs (i.e. 58.3% of the total number of graduates). Graduates receive referrals from line ministries for further employment in the formal sector. Of these, 23.9% were assigned a job placement in industry, 35% in agriculture, 17.8% in transport, and the remaining 23.3% were assigned to job placements in other sectors, such as construction (including construction materials), retail and wholesale trade and catering, housing and communal utilities, and others.

149. According to the Education Management Information System (EMIS) of the Ministry of Education and Science of the Republic of Tajikistan, approximately 50-60% of college graduates are employed in the labor market in pedagogical or medical spheres, 20% continue their studies in higher educational institutions, and 10% choose to serve in the military or are taking care of a child. The graduate of a pedagogical college is directed to work in a general educational institution, and the graduate of a medical college is directed to work in a medical institution. Graduates in technical, technological and economic specialties are often self-employed.

150. The number of adult population who completed training, re-training and professional development is increasing annually. In the Republic of Tajikistan, there are 25 adult learning centers (ALCs) with branches and representative offices

in areas under the Ministry of Labor, Migration and Employment of the Population of the Republic of Tajikistan. ALCs offer short-term training for individuals of working age, with approximately 50,000 students enrolled each year.

151. Statistics show that coverage of adults with education is not high. For example, during 2016, adult participation in education comprised only 94,997 people or 2.5%. At the same time, 40% of the country's population are adults (i.e. individuals aged 25 years and older). In addition, almost all professional and technical lyceums, professional colleges and higher educational institutions also conduct short-term courses (lasting from 1 to 6 months). But statistics on them are not carried out and are not systematized. Under the license of the Ministry of Education and Science of the Republic of Tajikistan, about 260 non-state educational institutions offer short-term training services (e.g., language courses, driving courses, vocational training, etc.). However, statistics on short-term and on-the-job (i.e. enterprise) training - an integral part of professional and technical education - are not systematized and are not aggregated in the Education Management Information System (EMIS) of the Ministry of Education and Science of the Republic of Tajikistan. Therefore, a more comprehensive analysis has not been feasible.

152. Since 2016, 4 professional training centers with a modern material and technical base have been operational in the Republic of Tajikistan, training students in 15 working professions - namely, in the city of Nurek at the Tajik State Pedagogical University named after Sadriddin Aini, in the Muminabad rayon at Kulob State University named after Abuabdullohi Rudaki, in the Khuroson rayon at Bohtar State University named after Nosiri Khusrav, and in the Rasht rayon at the Tajik Pedagogical Institute. In these 4 professional training centers, equipment has been installed to train on working professions, such as a seamstress, cook, pastry chef, welder, electrician, and others.

153. Access to education for citizens of the Republic of Tajikistan in IVET and SVET institutions also depends on the availability of the appropriate material and technical base. According to the Ministry of Education and Science of the Republic of Tajikistan, there are 3,398 computers in the IVET system and 4,260 computers in SVET, of which 1,318 and 2,496 units are computers in computer classes. The majority of these computers are connected to Internet. For every 100 students in IVET and SVET institutions, there were 14 and 25 computers respectively. Implementation of the state computerization program for IVET and SVET institutions had been postponed because of the financial and economic crisis, but its implementation has resumed. Despite the difficulties in secondary professional education, modern laboratory equipment (such as electronic boards, language laboratories, projectors, etc.), computer technology, furniture and repairs

are procured and financed out of the state budget and special funds of educational institutions.

154. According to the Law of the Republic of Tajikistan "On primary professional education" (Article 25) and the Law of the Republic of Tajikistan "On secondary professional education" (Article 17), in primary and secondary professional education "state control is aimed at improving the quality of preparation of specialists." The IVET and SVET institutions are quality assured through the passage of state certification and accreditation and obtaining a license to conduct educational activities. The Agency for Supervision of Education and Science under the President of the Republic of Tajikistan is authorized to conduct certification and accreditation of IVET and SVET institutions once every 5 years. The Address of the President to the Parliament of the Republic of Tajikistan on December 26, 2018 stated that "... mentors and teachers and all education workers throughout the country, starting from the apparatus of the ministry and its local structures to educational institutions, despite the forms of their ownership, must pass certification once every three years."

Table 8: The total number of teachers in IVET and SVET institutions, 2010-2018

Academic year	Number of teachers						Number of students per one teacher	
	Total		Of which women		Highest category (IVET)	Staff teachers (SVET)	IVET	SVET
	IVET	SVET	IVET	SVET				
2010-2011	1,160	3,710	349	1,537	453	2,239	19.5	16.8
2015-2016	1,834	5,119	666	2,289	528	2,505	14.7	27.3
2016-2017	2,205	5,091	774	2,153	431	3,282	10.3	22.3
2017-2018	2,458	5,188	874	2,182	521	3,273	9.8	24.6
2018-2019	2,508	5,775	931	2,494	527	3,914	9.3	21.9

155. The teaching personnel and engineering and pedagogical staff of IVET and SVET institutions undergo professional development training once every 5 years at the Center for Advanced Training of Workers in Labor, Migration and Employment of the Population, the Republican Institute for the Professional Development of Education Workers under the Ministry of Education and Science of the Republic of Tajikistan, as well as in higher educational institutions and enterprises. For the continuous professional development of IVET faculty and with the support of the Ministry of Labor, Migration and Employment of the Population of the Republic of Tajikistan and the European Union, 7 additional professional development centers have been created for engineering and pedagogical personnel. The new on-the-job training and re-training centers for teachers were equipped with modern equipment and focus on 9 professional areas across the country.

These centers were created on the material and technical basis of existing lyceums, i.e. institutions of initial vocational education and training (IVET).

156. There is still a steady downward trend, i.e. the outflow of the most qualified and promising masters of vocational training and teachers of specialized subjects from the system of primary vocational education and training. The main reason is low wages, the low prestige and attractiveness of the IVET system for the youngest and most promising specialists in the Republic of Tajikistan.

157. From the 2013-2014 academic year, the credit system of education and training has been introduced in SVET institutions. Credit system is provisioned by the Provision "On the organization of a credit education system in secondary professional institutions of the Republic of Tajikistan (amended on October 1, 2018, #18/35). With the transition of SVET institutions to the credit system of education, the Ministry of Education and Science of the Republic of Tajikistan developed and approved the "Minimum requirements for the state standard of secondary professional education of the Republic of Tajikistan" for the humanities, economics, social, and natural sciences. Moreover, the new editions of the State Standard of secondary professional education and the state classifier of areas and specialties of secondary professional education in the Republic of Tajikistan were approved. Since 2013, the Ministry of Education and Science of the Republic of Tajikistan has approved 112 qualification standards of secondary professional education in the field of pedagogy, engineering, energy, economics, and technology. To date, however, a new generation of standards based on a competency-based approach and modular organization of programs, which obliges employer engagement, has not been developed.

158. Over the past decade, the primary and secondary professional education system of the Republic of Tajikistan has experienced significant changes in specialization. At present, IVET institutions educate/train workers and specialists in 14 areas (economics, engineering and technology, transport, electronic equipment, energy, chemical industry, light industry and mining, architecture and construction, agriculture, metallurgy, telecommunications, tourism and hospitality, consumer services, and catering) and in 96 specialties. At the level of SVET institutions, specialists are educated/trained in 7 areas (economics, engineering and technology, pedagogy, medicine, agriculture, culture, and sports) and 166 specialties. Employers are invited to chair state final exams and provide students with apprenticeship opportunities. Nevertheless, still there is a very weak connection between professional education and the needs of employers in various sectors of the economy of the Republic of Tajikistan, as well as the lack of regulatory measures to ensure the link between the labor market and primary and secondary professional education.

159. Working professions in vocational education and training of the Republic of Tajikistan are classified in three different documents:

- the state educational standard of initial vocational education and training, which determines the list of professions and specialties in IVET (adopted by the Resolution of the Government of the Republic of Tajikistan #388 on August 2, 2010;

- State classifier of occupations of workers, job positions of employees and tariff categories, adopted by the Resolution of the Government of the Republic of Tajikistan #86 on March 2, 2013;

- the republican classifier of occupations adopted by the decision of the Board of the Ministry of Labor, Migration and Employment of the Population of the Republic of Tajikistan #36 on November 27, 2003.

160. The current Classifier of occupations of workers, job positions of employees and tariff categories does not comply with the International Standard Classification of Education (2013 ISCED-0). Consequently, in the context of reforming the professional education system, a common methodological basis for the definition and classification of qualifications (professions and specialties of professional education) becomes an obvious necessity.

161. In IVET institutions of the Republic of Tajikistan, only 15% of the total enrollment represented girls in 2010, compared to 17.8% in 2015 and 22.7% in the 2018-2019 academic year. The pattern of girls' enrollment is similar in SVET institutions. There is a significant increase in the proportion of girls enrolled in SVET institutions between 2010 and 2018: 55% of total enrollment represented girls in 2010, 59.1% in 2015, and 63.8% in 2018. This demonstrates the positive trend with respect to access to secondary professional education and the effectiveness of measures undertaken by the Ministry of Education and Science of the Republic of Tajikistan.

162. In the 2018-2019 academic year, about 84% of students in IVET institutions and more than 35% of students in SVET institutions were educated/trained in budgetary groups. Budget groups are groups in which the cost of students' study is covered by the general government budget. This is due to the fact that applicants are represented mainly by graduates of 9th grade of general secondary education, i.e. those schoolchildren who obtained basic education. In this regard, the Government of the Republic of Tajikistan largely subsidizes education in initial vocational education and training. In the meantime, the low enrollment rate in budget groups in SVET institutions confirms the limited access for those who cannot financially afford the tuition fees in SVET institutions.

163. The breakdown of enrollment in SVET institutions by language of instruction in the 2018-2019 academic year was as follows: 81,024 students studied in the state language, which comprised 96.8% of the total enrollment in

SVET institutions; 2,452 students studied in Russian and another 268 students studied in other languages (e.g., English). In general, the proportion of students studying in other languages has not practically changed between 2010 and 2018.

164. The initial vocational education and training has a special technical lyceum in Dushanbe for people with disabilities, which educated/trained 271 students, including 80 girls. In addition, 2 professional and technical lyceums in prisons and one specialized professional and technical lyceum for maladjusted children function in the IVET system. These institutions exist to ensure adequate coverage of vulnerable population with initial vocational education and training. In secondary professional education, 48 people with disabilities, including 12 girls, are currently enrolled.

165. According to the National Development Strategy of the Republic of Tajikistan for the period until 2030, at least 30% of school graduates (annually about 58,000 people) should be involved in primary and secondary professional education. In addition, taking into account the need to develop a professional development system of mid-level specialists of working specialties and labor migrants, the burden on primary and secondary professional education will increase by less than twofold. Besides, if the requirements for improving the quality of training are taken into account, then the need for serious modernization of the system becomes obvious.

166. In accordance with the National Development Strategy of the Republic of Tajikistan for the period until 2030, breakthrough institutional growth points should become:

- development of a system of certification of teaching personnel and accreditation of educational institutions;
- ensuring the flexibility of educational programs, including through the introduction of modular organization of programs;
- ensuring the interdependence of professional knowledge and practical skills (the formation of educational and qualification standards in various specialties by engaging enterprises and organizations, and the implementation of education/training system based on large enterprises and the creation of production training platforms);
- supporting the development of the system of primary and secondary professional education, aligned with the priority areas for the development of the country's economy (strengthening the material and technical base; relations with enterprises and organizations - future employers of graduates; developing and improving the effectiveness of the youth vocational guidance system; and creating a system of regional competitions for working specialties);
- identification of needs and the introduction of new educational programs aimed at creating qualifications and re-qualification for the use of technologies

related to the environment, energy and resource efficiency, forming the cohort of specialists for "green employment";

- formation of a sustainable package of actions/incentives towards ensuring access for people with disabilities to quality professional education;
- strengthening research components and international integration of professional education.

167. In line with the National Strategy for Education Development of the Republic of Tajikistan for the period until 2030, the Ministry of Education and Science of the Republic of Tajikistan and the Ministry of Labor, Migration and Employment of the Population of the Republic of Tajikistan identified the following key priorities (disaggregated by key results) in the field of primary and secondary professional education:

168. Priorities in the area of ensuring equal access and participation in education:

1) priority reform measure 4.3.1 - construction of new and reconstruction of existing IVET and SVET institutions:

- the construction of new educational institutions with modern infrastructure and the reconstruction of existing educational institutions, taking into account the anticipated increase in coverage of graduates with primary and secondary professional education, including people with disabilities;
- equipping IVET and SVET institutions with modern equipment;

2) priority reform measure 4.3.2 - implementation of electronic governance elements and modernization of the system of information and communication technologies (ICT):

- search and conclusion of contracts with software companies in order to improve the management of the educational process in IVET and SVET institutions (i.e. promoting elements of the electronic governance system);

- fully-fledged implementation of ICT in all IVET and SVET institutions - in particular, in all classes using ICT equipment and using the ICT-based learning process, as well as distance learning;

- ensuring 100% Internet coverage and full student access to the Internet;
- providing incentives for donors and investors, such as customs privileges and value added tax exemption for the supply of ICT equipment for educational purposes and contracts with software companies, as well as free supply of software for educational purposes;

- creation of electronic educational materials and the use of cloud technologies (electronic educational materials), electronic libraries, electronic textbooks and all supporting materials in parallel with paper-based publications;

- reinforcing innovation with relevant legislative changes in the system of primary and secondary professional education;

3) priority reform measure 4.3.3 - ensuring the inclusiveness of primary and secondary professional education:

- development of effective and sustainable mechanisms for the integration of students with disabilities in IVET and SVET institutions;
- reconstruction of the material and technical base of IVET and SVET institutions, and, if necessary, the construction of new educational institutions taking into account inclusive education for all;
- creation of a special learning environment, i.e. the presence of pedagogical personnel with specialized education who possess innovative methods and information and communication educational technologies; a set of individual training programs, plans, teaching materials, and literature; the creation of adequate external conditions (the necessary level of comfort, specialized vehicles, as well as the organization of adaptive training places and distance learning tools);

4) priority reform measure 4.3.4 - increasing the prestige of working professions in primary secondary professional education:

- strengthening and expanding vocational guidance campaigns aimed at informing graduates of general secondary educational institutions about popular professions and specialties in IVET and SVET institutions;
- familiarization of young people with various international initiatives for skills contests, skill fairs, and other events; formation of ideas about the world championship in professional excellence, e.g. according to WorldSkills standards;
- introduction of engineering and technical professions, which appeal to girls, in IVET and SVET institutions;
- promoting the importance of computer technology and engineering professions not only among girls, but also their parents.

169. Priorities in the area of improving the quality and relevance of education:

1) priority reform measure 4.3.5 - development of a systematic mechanism for tracking the employment of graduates by profession using digital technologies in the domestic and international labor market, including people with disabilities:

- implementation of an appropriate mechanism in the structural units of primary and secondary professional education, which collect and analyze information on the employment of graduates (i.e. timely monitoring and evaluation, preparation of analytical information on the employment of graduates and their publication on websites), as well as in the structural unit of the Ministry of Education and Science of the Republic of Tajikistan and the Ministry of Labor, Migration and Employment of the Population of the Republic of Tajikistan to collect information on the employment of graduates from IVET and SVET institutions and their publication in statistical booklets and on these ministries' websites;

- development and implementation of a mechanism to finance a successful transition of graduates from an educational institution to the labor market - employment of graduates and the formation of their skills for finding their first job upon graduation;

- creation and operationalization of the Labor Market Information System (LMIS).

2) priority reform measure 4.3.6 - updating the educational programs of primary and secondary professional education, which form the general and professional competencies of graduates and which meet the requirements of the external and domestic labor market based on the requirements of the National Qualification Framework and professional standards:

- updating the educational programs of primary and secondary professional education jointly with employers: conducting a comparative analysis with global standards (e.g. WorldSkills), developing the structure and content of the educational program, developing a competency matrix, developing a procedure for assessing learning outcomes, and other measures;

- creation of industry skills councils;

- development and implementation of relevant legislation, delegation of authority, institutionalization, and financing (pertaining to industry skills councils);

- development and implementation of mechanisms for the development and continuous updating and maintenance of professional standards in vocational education and training based on international practices and models (globalization of qualifications and their mobility): methodological basis, methodology, guidelines, separation of duties, service bodies, and capacity building of institutions and specialists in order to develop and implement sustainable mechanisms for interaction with real sectors of the economy, and other measures;

3) priority reform measure 4.3.7 - implementation of a sustainable system of continuous professional development in IVET and SVET institutions:

- organization of training and seminars for engineering and pedagogical personnel and teachers with the aim of delivering new teaching methods that allow to build the competencies of graduates, the development of tests and training materials, the use of electronic boards in the educational process, the use of electronic journals, and so on;

- development of a training program and methodological support for engineering and pedagogical personnel;

- the introduction of new teaching methods in IVET and SVET institutions, focused on the formation of competencies of graduates;

- implementation of an information management system for engineering and pedagogical personnel;

4) priority reform measure 4.3.8 - development, approval and implementation of the National Qualification Framework for professional education:

- creation of a working group from among the representatives of the Ministry of Education and Science of the Republic of Tajikistan, the Ministry of Labor, Migration and Employment of the Population of the Republic of Tajikistan, and other interested parties;

- development and approval of the National Qualification Framework in accordance with international models suitable for the Republic of Tajikistan (globalization of qualifications and their mobility) - development of a methodological basis, methodology and guidelines, separation of duties, definition of maintenance bodies, and others;

5) priority reform measure 4.3.9 - development of a new mechanism to facilitate the employment of graduates, including people with disabilities:

- conclusion of contracts with labor market entities (private sector) and organization of coordinated events (job fairs, internships and job placements, vocational guidance, etc.) with labor market entities;

- improving regulatory documents that facilitate the employment of graduates of IVET and SVET institutions, including people with disabilities;

- development and approval of a state program to ensure employment of IVET and SVET graduates, including people with disabilities;

6) priority reform measure 4.3.10 - development and implementation of a common policy in ensuring the quality of professional education in IVET and SVET institutions, based on international approaches and requirements:

- creation of a working group consisting of specialists from primary and secondary professional education, and other interested parties, to develop the quality assurance system in IVET and SVET institutions that meets international standards;

- development of a system for monitoring the quality of leadership and management in primary and secondary professional education; internal self-assessment mechanisms (at the macro, meso, and micro level) and external independent assessment (macro level); certification and qualification (macro level), and so on;

- consideration of a meso-level (regional) structural reform of the system of primary and secondary professional education - separation and delegation of roles and functions at the intermediate system level (level of policy implementation);

- introduction of a new system for assessing students' knowledge, skills and competencies;

7) priority reform measure 4.3.11 - modernization of professional and educational standards based on international standards and practices. Implementation of practice-oriented programs (dual training) in SVET institutions:

- improving professional and educational standards (educational programs) based on international practice, in particular, the European Union;
- revision of a unified Classifier of specialties and professions of professional training and education based on international practice, taking into account professions and specialties for people with disabilities;
- development of a new unified National Classification of professions in professional education in line with international classifications of standards - ISCED и ISCO;
- development and implementation of innovative tools and methods for assessing student learning outcomes in IVET and SVET institutions;

8) priority reform measure 4.3.12 - preparation and completion of independent program or institutional accreditation with the participation of employers from various sectors of the economy:

- conclusion of an agreement with an independent international accreditation agency;
- organization of seminars and training for IVET and SVET employees on the preparation for independent programmatic and/or institutional international accreditation. Preparation of self-assessment reports;
- certification of educational programs by an independent international accreditation agency;

9) priority reform measure 4.3.13 - reform of primary professional education, elimination of duplication in the content of IVET programs with program blocks of general secondary educational institutions, taking into account the transition to 12-year schooling. Achieving higher levels of qualifications consistent with labor market requirements:

- review and update of primary professional educational programs, taking into account the transition of general education institutions to 12-year education;
- in addition to modernizing educational materials to meet the expectations and needs of the labor market, the development and inclusion of new educational materials (plans and curricula), such as culture for family creation, family planning, and so on;
- ensuring the presence of psychologists in each IVET and SVET institution for the provision of support to at-risk children and their parents.

170. Priorities in the area of strengthening effective governance of the education sector:

1) priority reform measure 4.3.14 - development of programs to attract additional resources:

- development of programs by IVET and SVET institutions to attract financial resources of labor market entities for the purchase of computer equipment and equipment for training workshops and laboratories, to attract employers in the learning process, to provide students with internships and for professional development of teachers and masters of industrial training directly at employers' facilities;

- development of mechanisms for sectoral dialogue in primary and secondary professional education;

- strengthening the potential and role of social partners, sectoral and regional associations in order to facilitate their engagement in the process of education and pedagogy in IVET and SVET institutions;

2) priority reform measure 4.3.15 - training of specialists from among the employees of IVET and SVET institutions on the development of investment projects and attracting investments:

- completion of seminars and training with the participation of representatives of higher educational institutions and international experts in the development of projects for attracting financial resources from international programs and other donors (labor market entities);

3) priority reform measure 4.3.16 - revising the state funding mechanism for primary and secondary professional education:

- implementation of a new mechanism of state financing of IVET and SVET institutions, taking into account a differentiated approach by professions and specialties;

- introduction of differentiated financing by professions and specialties in primary and secondary professional education;

4) priority reform measure 4.3.17 - meeting the need for a sufficient number of engineering and pedagogical specialists and teachers of IVET and SVET institutions, taking into account the increase in the coverage of graduates of general secondary educational institutions to 30%:

- development of a motivational mechanism for attracting highly qualified engineering and pedagogical workers and teachers to primary and secondary professional education.

§4. Higher professional education

171. The challenges facing the modern system of higher education are related to the need to ensure its competitiveness internationally, which can be achieved through improved interaction and involvement of employers from various sectors of the economy (in the development of programs, training and evaluation of work outcomes of higher educational institutions), and the creation of innovative

development centers in the Republic of Tajikistan. At the same time, it is necessary to take into account the growing technological capabilities, the active introduction of digital technologies in everyday life, as well as the changing roles of the student and teacher.

172. Despite the fact that the laws of the Republic of Tajikistan do not limit the participation of the private sector, including in the field of higher professional education, the private sector participation is limited. Higher professional education allows to get the following degrees - undergraduate (4 years of study), Master's program (2 years) and doctoral studies (3 years).

173. The Government of the Republic of Tajikistan has identified that the goal of the future higher education system is becoming a tool for the formation of human capital, which will contribute to economic growth in a rapidly changing world. The Ministry of Education and Science of the Republic of Tajikistan has set the task to improve and modernize the content of higher education with a focus on the development of professional skills in order to fully meet the demand of the labor market and develop the country's potential.

Table 9: Total enrollment and admission to higher professional educational institutions in the Republic of Tajikistan, 2010-2018

Academic year	Number of institutions (total)	Enrollment		Admission	
		Total	Girls	Budgetary	Contractual
2010-2011	35	146,535	43,691	12,159	16,462
2011-2012	35	151,207	43,118	12,719	18,635
2012-2013	36	151,003	42,015	13,921	24,817
2013-2014	38	157,791	42,925	16,202	25,439
2014-2015	38	167,660	53,217	13,397	22,078
2015-2016	38	178,109	58,881	12,590	26,120
2016-2017	39	189,711	65,501	14,988	33,088
2017-2018	39	191,550	67,780	13,956	35,514
2018-2019	40	209,800	73,906	15,304	38,990

174. In order to develop the system of higher education and ensure its integration into the European higher education environment, the Government of the Republic of Tajikistan is currently actively pursuing to join the Bologna Declaration. Since 2007, the Ministry of Education and Science of the Republic of Tajikistan has begun to implement some important reform measures, such as the introduction of a three-tier education system and the implementation of the European Credit Transfer and Accumulation System (ECTAS). However, other important measures, such as the creation of a reliable quality assurance system and a national qualification system, have yet to be developed, approved and

implemented. Thus, the main work related to the revision of higher professional education - especially in relation to governance, quality assurance, teaching, training and assessment of students' knowledge - should be done during the implementation of the NSED for the period until 2030.

175. By the time of independence, the Republic of Tajikistan had 13 higher educational institutions (HEIs) with the total enrollment of 69,300 students and 5,400 teachers. The total enrollment began to grow rapidly only after 2000. In the 2018-2019 academic year, there were 40 HEIs, including 17 universities, 14 institutes, one conservatory, 4 higher institutions of law enforcement agencies, and 4 branches, comprising in total 209,800 students and 9,061 teachers. Of these 209,800 students, 69.9% were enrolled in full-time programs and 30.1% in correspondence (i.e. extramural) programs.

176. Between 2010 and 2018 the number of HEIs and the total enrollment has tripled. However, the proportion of female student enrollment in HEIs remains relatively low. For example, in the 1991-1992 academic year, the proportion of females was 34%, whereas in the 2018-2019 academic year the proportion of females increased only slightly and amounted to 36.4%. This is one of the problems of higher professional education and society as a whole. In this regard, state policy in higher professional education is aimed at increasing the coverage of women with higher education.

177. The interplay between the increase in the number of HEI students and the population growth of the Republic of Tajikistan suggests that during the same period the number of students per 10,000 population increased from 124 in 1991 to 232 in 2018. Thus, since the country gained independence, the total number of students per 10,000 population has grown by 1.87 times. Regional dynamics indicate that 57.8% of all students in the Republic of Tajikistan are located in Dushanbe, 19.6% are studying in HEIs of the Soghd oblast, 17.9% in Khatlon oblast, 2.2% in GBAO and 1.6% in rayons of republican subordination (RRS).

178. Despite the increase in the number of HEI applicants, the proportion of graduates of general secondary educational institutions and the system of primary and secondary professional education entering HEIs has lagged behind the previously planned indicators. In the 2018-2019 academic year, this figure amounted to 34.4%, which is 3.1% higher than the previous year, but 5.6% lower than the target set by the Government of the Republic of Tajikistan. The reason for this is the persistent variation in access to quality educational services due to a number reasons - e.g., according to the place of residence (town or village) and the economic situation of the family. In accordance with the Education Management Information System (EMIS) of the Republic of Tajikistan, between 2010 and 2018 admission to HEIs of the Republic of Tajikistan increased from 31,354 to 54,294 people, i.e. grew by 1.7 times. At the same time, it should be noted that some of the

graduates of educational institutions decide to enroll in higher educational institutions abroad.

179. One of the most successful reforms in higher professional education was the creation of the National Testing Center (NTC) under the President of the Republic of Tajikistan in December 2013. This reform measure has strengthened transparency and helped to introduce digital technologies in the process of undertaking uniform entrance examinations and admission to higher educational institutions in Tajikistan. The creation of the NTC under the President of the Republic of Tajikistan was supported by the World Bank, the Russian Federation and the Open Society Institute - Assistance Foundation (OSI-AF). The NTC's mandate includes the management of reliable and valid forms of student learning assessment, including unified entrance examinations at HEIs, assignment of final grades at various levels of education and based on large-scale national and international assessments.

180. During the first year of NTC's activities from 2013 to 2014, the admission of girls to HEIs increased by 8%, and from 2010 to 2016 the growth in admission equaled 29%. In addition, access to higher professional education was also improved for people from rural areas. According to surveys and feedback from students and their families, with the introduction of a unified system of entrance examinations, interest in continuing education upon completing school has increased significantly. In the following years, the NTC has gradually expanded the scope of entrance examinations to secondary vocational education and training (SVET) institutions.

181. One of the important indicators characterizing the potential of human capital is the gross enrollment ratio (GER) of higher education. The GER of higher education in the Republic of Tajikistan in the 2018-2019 academic year was 15.3%, which is very low, for example, compared with higher education systems of countries in the European Union.

182. Despite the measures taken, higher professional education in the Republic of Tajikistan does not fully ensure the preparation of specialists who can meet the changing requirements of the labor market. Often, HEI graduates lack the skills necessary for successful work in a developing business, possess insufficient knowledge of the economics of enterprises, and so on. There is a lack of engineering and technical workers for industrial enterprises, competent and experienced managers for small and medium-sized enterprises. In general, adapting education to the needs of the labor market remains problematic in other areas as well. The needs of the business environment in the preparation of specialists are more dynamic in comparison to the ability of state educational institutions to satisfy such a demand.

183. Another problem of the higher professional education in the Republic of Tajikistan is the quota system of places for certain specialties, including the fee-based contractual form of education. For example, since the 2011-2012 academic year, the number of students under the quota of the President of the Republic of Tajikistan increased from 5,154 to 7,190 in 2018, while the proportion of girls was 49.1% and 47.8% respectively. Since the government sets additional quotas for admission to higher education, the main task is to increase quotas to meet the growing demand for higher education. In addition, the issue of accessibility to education is seriously complicated by the underdevelopment of externships and distance learning, as well as the lack of non-governmental, alternative educational services in higher education. To that end, the National Strategy for Education Development (NSED) of the Republic of Tajikistan for the period until 2030 prioritizes the resolution of these problems.

184. Yet another problem of higher professional education of the Republic of Tajikistan is the increasing incidence of expelling students for poor performance. Exceptions are largely applied to the annual assessment of student performance - their skills and abilities in accordance with the state education standards developed by the Ministry of Education and Science of the Republic of Tajikistan. For instance, during the 2016-2017 academic year, a quarter of HEI students were expelled due to poor performance. With regards to student dropouts, the two main reasons are academic debt (i.e. poor performance) and non-attendance, especially among female students in rural areas.

185. The availability of computers and computer classes remains insufficient. According to EMIS estimates of the Ministry of Education and Science of the Republic of Tajikistan, approximately 74% of HEIs should increase the availability of computer classes and equipment. In addition, the number of dormitories in HEIs is insufficient. According to the Ministry of Education and Science of the Republic of Tajikistan, 7 HEIs do not have dormitories altogether, while 15 other HEIs have only one dormitory. Hence, the infrastructure in higher professional education is underdeveloped, which may contribute to hindering access to higher education.

186. Higher professional education in the Republic of Tajikistan is under continuous reform. However, reform measures are hampered due to depleted personnel potential and unstable relations between labor market participants. The observed changes in HEIs are most often a reaction to demographic, migration, and socio-economic factors. The choice of an appropriate strategy for further development of HEIs is complicated by the weak feedback mechanism, which is required to improve the efficiency and accessibility of educational services; the lack of innovation in educational technologies and the content of education; the

lack of credible forecasting system and support for managerial decision-making in higher professional education.

187. There are a number of achievements that will determine future development of the system - from the introduction of state educational standards to the shifting of key activity areas on a project basis. Despite a number of long-standing problems, higher education of the Republic of Tajikistan remains a market competitor of international educational services. At present, the formation of a mechanism for building and nurturing youth professionalism, including tools for adapting to the labor market, is underway. According to preliminary estimates, at least 35-40% of specialists, on average, do not meet the requirements of the labor market.

188. In particular, the Ministry of Education and Science of the Republic of Tajikistan in partnership with the World Bank through the Higher Education Project (HEP) is currently piloting a tracking system for HEI graduates in Tajikistan. The HEP is implemented from March 2016 to October 2021. The toolkit is being developed taking into account the practical experience of other countries, but adapts as much as possible to the context and environment of the Republic of Tajikistan. The result of piloting and the full implementation of such a system will be the creation of the basis for the development (or revision) of modern training programs for higher professional education which fully meet the needs of the labor market.

189. In 2019, the national employer survey was carried out with the coverage of 400 employers who had 27,555 workers registered in their payroll. The survey was carried out under the Higher Education Project funded by the World Bank and implemented by the Ministry of Education and Science of the Republic of Tajikistan. The survey covered five major sectors of the economy and various types of employers based on ownership and size. More than 75% of employers stated that a higher education diploma is important in hiring new employees, while about 47% of all surveyed employers were reportedly unsatisfied with the professional skills of their current employees. This suggests that employers not only want to attract additional skills and competencies (which they currently lack), but at the same time recognize that their employees require education and training. This opens up broad opportunities for universities to interact with employers.

190. The main findings of the survey, confirming the thesis about the weak relationship between higher education and the labor market, are that employers (most of which are small firms with less than 30 employees) rarely participate in the training of their employees and even less often participate in the development of curricula and educational programs by specialties in subjects taught at universities of the Republic of Tajikistan. Overall, 90% of all surveyed employers

firmly believe that professional skills are important for their employees and recent university graduates. A study of state educational/professional standards also revealed that for some academic specialties professional skills are generally absent or require substantial improvement in order to meet the needs of the labor market.

191. Quality assurance in the higher professional education is validated through state certification and accreditation, as well as obtaining a license to conduct educational activities. The Agency for Supervision of Education and Science under the President of the Republic of Tajikistan is authorized to conduct certification and accreditation of educational institutions once every five years.

192. Internal quality control system has been introduced in all HEIs in the Republic of Tajikistan, which provides monitoring as soon as students are admitted to an educational institution. In addition, teaching quality assurance is carried out during examination sessions and state final certification, and discussed by educational and methodological councils, in which the content of educational programs, educational technologies, the development of practical skills, and the quality of production and educational practices are considered. At the same time, it is very important to ensure that employers of all forms of ownership are engaged in this process in order to approximate the expectations of higher professional education to the needs of the labor market as much as possible.

193. The analysis of the results of examination sessions and final state examinations is carried out annually by the Ministry of Education and Science of the Republic of Tajikistan, which demonstrates that quality indicators of student learning at HEIs are not sufficiently high. In this regard, according to international standards, it is necessary to introduce a student assessment system according to their final learning outcomes, i.e. implementation of a competency-based approach in student learning. At the present, certification of employees in higher professional education is carried out by specially created commissions (competition commissions), which evaluate the work of the faculty every 5 years. Currently, the teacher certification system should be improved according to new criteria using innovative technologies (e.g. new criteria for rating-based assessment of teaching staff, online work, and others).

194. In general, the quality of services provided in HEIs of the Republic of Tajikistan depends on the composition of the pedagogical personnel, their teaching experience, the number of internships and professional development courses, participation in scientific and practical conferences, and others. Importantly, pedagogical personnel in higher professional education are forced to carry out professional activities in an environment where the content of the curriculum does not meet the needs of the economic sectors of the Republic of Tajikistan. Currently, there are 11,693 HEI teachers in the Republic of Tajikistan, of which 4,125 are women. The pedagogical personnel of HEIs undergoes professional

development once in 5 years at the Center for Professional Development of Workers in Labor, Migration and Employment of the Population, the Republican Institute for Professional Development and Re-Training of Education Workers under the Ministry of Education and Science of the Republic of Tajikistan, as well as in HEIs, production facilities, and labor market actors.

195. The "State educational standard of higher professional education" was approved via the Decree of the Government of the Republic of Tajikistan #94 on February 25, 2017. On this basis, all HEIs have developed and approved state educational standards by specialties.

196. Aiming to enter the common educational environment, starting from the 2015-2016 academic year the credit system of education has been introduced in higher educational institutions (HEIs). By the decision of the Board of the Ministry of Education and Science of the Republic of Tajikistan #19/24 on December 30, 2016, the Provision "On the credit system of education in educational institutions of higher professional education of the Republic of Tajikistan" was approved, which stipulates the rules for undertaking the educational process in the new system. The Provision also presents the basic terms and their interpretation, the organization of the educational process in the context of a credit system of education, the students' grading scale, the rules for exclusion and rehabilitation of students, and so on. With the introduction of the credit system of education in all HEIs across the country, the total number of hours in disciplines were converted to academic credits, and the total number of credits per year was established (60-70 credits), depending on the specifics of each higher educational institution.

197. In the 2018-2019 academic year, the enrollment rate for girls in higher education was 35.8%, in 2017-2018 - 35.4%, and in 2016-2017 - 34.5%. The enrollment of female students in HEIs in recent years has steadied at about 1/3 of the total enrollment. In addition, the total enrollment (including women and girls) in HEIs in 2017 comprised 215.2 people per 10,000 people, which is 2.8 people more than the previous year, and 34.8 people less than the planned figure for the same year.

198. According to the Ministry of Education and Science of the Republic of Tajikistan, 7,190 students were enrolled in HEIs on a quota basis in the 2018-2019 academic year, of which 3,438 are female students and 3,752 are male students. The implementation of recommendations of the Committee on the Elimination of Discrimination against Women has played an important role in expanding access of females to education through increasing the mandatory marriage age threshold from 17 to 18 years. Unfortunately, upon completion of compulsory basic education, girls drop out at high rates, which is a consequence of deeper societal socio-economic problems. Other reasons high dropout rates among girls in

Tajikistan include early marriage, housekeeping obligations, and caring for younger family members.

199. In order to realize women's rights in the last three years, several laws and resolutions have been adopted - in particular, the State Program "Education, selection and placement of managerial personnel of the Republic of Tajikistan from among capable girls and women for 2017-2022" and the Action Plan of the National Strategy for the Promotion of the Role of Women in the Republic of Tajikistan for 2015-2020.

200. Thanks to measures undertaken by the Government of the Republic of Tajikistan, the gender disparity at various levels of education has narrowed. Nevertheless, men still dominate the specialties, which are demanded by the public sector. While girls make up 75.3% of total enrollment in HEIs' pedagogical specialties, and 64.8% in SVET institutions, then girls are only represented at 19% in the group of academic specialty "Law" and at 6% in SVET institutions. In the academic specialty "Economics," girls' enrollment stands at less than 28%. The lowest rates for girls' education are observed in the specialty "Agriculture" - in HEIs, the number of girls pursuing this specialty stands at only marginally above than 5%.

201. Three HEIs have been prepared for the admission and education of people with disabilities in the system of higher professional education. Work is underway in other educational institutions to create conditions for the admission and education of people with disabilities.

202. In accordance with the National Development Strategy of the Republic of Tajikistan for the period until 2030, breakthrough institutional growth points should become:

- development of the certification system of teaching personnel and the accreditation of educational institutions;

- ensuring the flexibility of educational programs, including through the introduction of a modular program development system;

- ensuring the interplay between professional knowledge and practical skills (the formation of educational and qualification standards in various specialties involving enterprises and organizations, and the implementation of education system based on large enterprises and the creation of production training platforms);

- strengthening the industry specialization of higher educational institutions (HEIs) with the creation of a powerful capacity for scientific/research and practical developments;

- needs assessment and the introduction of new educational programs aimed at creating qualifications and re-qualification for the use of technologies related to

the environment, energy and resource efficiency, forming the cohort of specialists for "green employment";

- formation of a sustainable package of actions/incentives towards ensuring access for people with disabilities to quality professional education; and
- strengthening research components and international integration of professional education.

203. In the framework of the National Strategy for Education Development of the Republic of Tajikistan for the period until 2030, the Ministry of Education and Science of the Republic of Tajikistan has identified the following key priorities (disaggregated by key results) in higher education:

204. Priorities in the area of ensuring equal access and participation in education:

1) priority reform measure 4.4.1 - ensuring equitable access and participation in higher professional education regardless of age, social and economic status, and ethnicity:

- creation and implementation of the program for the allocation of thematic scholarships by the public and private sector for study at various levels of higher education;

- expanding access of various population groups, including ethnic minorities, to higher education via quotas and benefits;

- development of the strategy for regular information campaigns among graduates of general secondary educational institutions, lyceums and professional-technical colleges, including open door days and maintaining webpages by HEIs of the Republic of Tajikistan;

2) priority reform measure 4.4.2 - expanding access to higher education through the development and implementation of new courses/specialties based on the needs of the labor market:

- a systematic increase in quotas in higher education and, at the same time, modernization/reform of admission entrance examinations;

- revision and reform of expulsion policies related to academic performance before the final academic year of higher education;

- increasing the total number of seats in higher education to improve coverage, especially for girls;

- development of new courses/specialties by HEIs, based on the labor market needs;

- amending the State classifier of specialties, taking into account the needs of the labor market;

- development and approval of new curricula for new specialties;

- conducting ongoing information campaigns to attract graduates to new specialties;

3) priority reform measure 4.4.3 - expand the coverage of female students enrolled in technical and technological (engineering) specialties of higher professional education:

- conducting ongoing information campaigns to attract female graduates to technical and technological specialties.

- development of strategies by HEIs to provide female students with higher-value scholarships and provide benefits for female students enrolled in technical and technological specialties;

- increasing the number of quotas for women/girls for technical and technological specialties;

4) priority reform measure 4.4.4 - creating favorable conditions for admission and education in HEIs for people with disabilities (infrastructure, access, and trained personnel):

- development of standards for the reconstruction of buildings and classrooms enabling the education of people with disabilities;

- development of the curriculum for faculty in order to educate/train people with disabilities;

- development of distance learning programs for people with disabilities;

- creating special resource information centers for people with special educational needs in HEIs, creating special state programs for the training and employment of people with disabilities, allocating targeted education grants for people with disabilities, creating and expanding specialized vocational and rehabilitation educational institutions, distance learning and increasing the accessibility of education for people with disabilities;

- development of criteria for the provision of scholarships to low-income students;

5) priority reform measure 4.4.5 - expanding access to distance learning in higher professional education with a focus on innovation:

- development and implementation of new distance learning courses/programs, and development of the strategy or provision on the implementation of these courses;

- development of mechanisms for the introduction of courses, taking into account the availability of Internet-based resources;

- provision and allocation of additional (free of charge) broadband traffic for people enrolled in distance learning programs;

- introduction of the need to provide Internet resources in the regions and Internet connectivity for people enrolled in distance learning programs in the financing plan of higher professional education;

- improving the distance learning technology based on the modern Moodle system or other distance learning systems;

- creation of the methodology for assessing the effectiveness of the distance learning system.

205. Priorities in the area of improving the quality and relevance of education:

1) priority reform measure 4.4.6 - development of the new standard for the use of information and communication technologies, distance education and conditions for people with disabilities:

- development of sound multi-media courses for people with disabilities;
- development and filling of the distance learning platform with educational and methodological materials (e.g. narratives, lectures, multimedia materials, guidelines, and others);

- remote undertaking of academic courses/lectures, including interim and final examinations;

- providing the opportunity to conduct video conferences, discuss through chatrooms, and use electronic mail for educational purposes;

2) priority reform measure 4.4.7 - raising public awareness of the importance of higher education:

- continuous provision of information campaigns on the importance of higher education, new specialties and courses;

- seminars, round tables, television broadcasts, and articles in the media about the role and importance of higher education in the context of globalization and internationalization of educational services;

3) priority reform measure 4.4.8 - increasing the capacity of faculty through the introduction of international internships for teachers, improving access to online education, continuous professional development, and attracting gifted and talented graduates to the faculty of higher educational institutions:

- implementation of systematic and targeted competitive hire of personnel and capacity building of personnel;

- attraction and retaining of young scientific/research and pedagogical personnel in HEIs on the basis of non-traditional methods of motivation;

- design of the professional development program for scientific, pedagogical and administrative personnel;

- improving the system of material and moral incentives for teaching and scientific and research activity;

- conducting regular and objective rated assessment of the outcomes of work by scientific and pedagogical personnel;

- providing and introducing internships outside the Republic of Tajikistan into the financing plan of higher professional education;

- the introduction of strategic plans by HEIs for the development of the mandatory online professional development form of faculty members by specialty;

4) priority reform measure 4.4.9 - development of the national quality assessment system of higher professional education based on the education outcomes and competencies for each level of education:

- creation of the national independent accreditation system of educational programs and educational institutions;

- development of the concept of centers for certification and professional qualification, which, together with employers, take part in the examination of HEI students upon the award of diploma in an educational institution for the purpose of independent assessment of graduates' professional qualifications;

- improving the quality of education in the modern process of development of Tajikistan's education system with the use and implementation of the experience of international accreditation of educational programs;

- development and implementation of the new national quality assessment system in higher professional education;

- development by HEIs of an action plan and its implementation to meet international education quality standards;

- implementation in the HEIs of the Republic of Tajikistan of the quality management system and the preparation of legislative and regulatory documents on the processes of HEI activity;

5) priority reform measure 4.4.10 - introduction of modern educational technologies, including electronic, mobile and multi-lingual education in higher educational institutions of the Republic of Tajikistan:

- transition to new educational technologies, taking into account the latest achievements in science, engineering and technology, based on: competency-based education; use of ICT; project method of teaching, which implies the need to integrate by students of knowledge and skills from various subject areas to solve a problem; an increase in the share of independent learning activities as they progress along the levels of education; construction and implementation of individual educational trajectory in a specialized high school; and modular organization of educational programs in the system of higher professional education;

- development and implementation of methodical guidelines for modern innovative teaching technologies for HEIs;

- training of the teaching personnel of HEIs on the use of modern teaching technologies;

- professional development training courses for HEI faculty;

- preparation of guidelines on innovative educational technologies. Creation of the national network of centers for innovative educational technologies;

- digitalization of library collections and their publication in a virtual library. Creation of an inter-HEI foundation of digital educational resources;

- development of blended learning (traditional and e-learning) as the main way to train specialists with the appropriate skills necessary for successful functioning in a digital society;

6) priority reform measure 4.4.11 - strengthening cooperation with foreign universities in higher professional education for the development of joint programs and cooperation in the field of mobility:

- conclusion of agreements and memoranda between by HEIs of the Republic of Tajikistan and foreign HEIs;

- preparation of the plan for the creation of joint educational programs;

- increasing the enrollment and faculty in academic mobility programs;

- development of international educational programs;

- development of educational programs for preparing national and foreign residents for "international" professions (e.g. for work in international companies);

- curriculum development with the compulsory "international" section, which students will obtain in another country from teachers of foreign HEIs;

- development of "twin programs" in the form of concluding agreements between HEIs in relation to joint educational programs, in which same disciplines, same forms of control and same teaching guidelines are present;

7) priority reform measure 4.4.12 - implementation of the dual learning system in technical and technological specialties of higher professional education:

- revision of legislative and regulatory documents governing higher professional education;

- changing the content of educational programs taking into account the dual education system;

- determining pilot HEIs for the introduction of the dual learning system in the Republic of Tajikistan;

8) priority reform measure 4.4.13 - development of the National Qualification Framework (including industry qualification frameworks, state educational standard, curricula and professional standards, certification system, etc.) jointly with stakeholders and in line with international standards, taking into account labor market needs and the proposals of local and international development partners:

- development and implementation of the National Qualification Framework;

- determination of the final learning outcomes at all educational levels;

- development and adoption of the new state educational standard of higher professional education and its enactment into law;

- the development by HEIs of new state educational standards by specialty based on the state educational standard of higher professional education, model curricula and competency-based education materials in accordance with

international requirements (i.e. according to the logic and principles of the Bologna process);

- development of legislation and regulatory documents defining the functions of the National Qualification Framework;

- development of models for standards and qualifications, and prioritization of qualifications development;

- development and implementation of State education standard for higher professional education, and its approval by the legislature;

- development of new standards for educational institutions of higher professional education in specialties based on the State Standard of Higher Professional Education, standard curricula and training materials in line with the competency-based approach in accordance with international requirements (according to the logic and principles of the Bologna process);

- development of legislative and regulatory documents defining the functions of the national qualifications framework;

- development of models of standards and qualifications, determination of priorities in their development;

- development and approval of professional standards by the Government of the Republic of Tajikistan;

- registration of qualifications in the national registry;

- the definition of new specialties by HEIs in line with labor market needs, and amendments/revisions to the State Classifier;

9) priority reform measure 4.4.14 - strengthening cooperation between HEIs and employers through intensification of internships, joint projects, partnerships, and preparation of specialists based on employer needs:

- increase the number of platforms/facilities by HEIs for students to complete practical training (apprenticeships);

- the inclusion of employers in the academic councils and educational and methodological councils of HEIs;

- employer engagement and involvement of alumni associations in the development of educational programs, state educational standards for specialties, final state examinations; the creation of branches of university departments; and the conclusion of agreements on practical training and employment of graduates;

- creation of alumni associations in all HEIs of the Republic of Tajikistan;

10) priority reform measure 4.4.15 - strengthening the research base of higher educational institutions and scientific and research institutes to improve the quality of scientific work:

- attracting investment in research and scientific work;

- equipping educational and scientific laboratories with modern scientific equipment;

- training laboratory staff to work on scientific equipment;
- conducting internships abroad for laboratory staff in order to train them to work with modern equipment;
- opening of new dissertation councils at the Higher Attestation Commission of the Republic of Tajikistan and the Higher Attestation Commission of the Russian Federation;
- increase the stipends for students in Master's and doctoral programs.

206. Priorities in the area of strengthening effective governance of the education sector:

1) priority reform measure 4.4.16 - strengthening the capacity to manage higher professional education in the Ministry of Education and Science of the Republic of Tajikistan and its sub-structures, including higher educational institutions:

- development of programs to improve the qualification of employees of the Ministry of Education and Science of the Republic of Tajikistan and higher educational institutions (HEIs) on issues of education governance, quality management system, human resources management, and others;
- strengthening and modernizing the organizational structure of the Ministry of Education and Science of the Republic of Tajikistan, especially with regards to strategic planning in higher professional education using best practices and result orientation;
- improving the attestation system in HEIs of the Republic of Tajikistan;
- development by HEIs of the electronic system for assessing the achievements of teachers.

2) priority reform measure 4.4.17 - the expansion of the autonomy of higher education institutions (HEIs) and the reduction of state intervention in HEIs' activities:

- revision of the institutional environment. Organization of the learning process through the introduction and development of technologies that meet the modern technical, social and humanitarian development;
- creation of supervisory boards in state-owned HEIs;
- creation of conditions for HEIs to independently form and design their development strategies for decision making with regards to internal administration and financial management;
- ensuring academic mobility of students, teachers and staff, as well as opening up to the world;
- activation of the role of studentship;
- expanding the boundaries of academic freedom of educational programs.

3) priority reform measure 4.4.18 - creation of conditions for the development of private educational institutions in higher professional education:

- the provision of benefits for the creation of private higher educational institutions (HEIs);
 - inclusion in the regulatory and legal documents in the education sector of the list of incentives provided for the creation of private HEIs;
 - the provision of state support for investors to create private educational institutions in higher professional education;
 - the provision of significant state subsidies to support the private sector.
- 4) priority reform measure 4.4.19 - development of the information management system for higher professional education, which should be integrated in the Education Management Information System (EMIS) of the Republic of Tajikistan:
- development of new mechanisms for the implementation of an integrated information system for managing higher professional education.

§5. Governance and financing in the education sector

207. The state budgeting reform began in 2009 in accordance with the instructions of the President of the Republic of Tajikistan and was aimed at improving the budget process, ensuring its transparency, developing a three-year state budget and efficient use of budget funds based on special sectoral programs (see Table 10).

Table 10: Financing of the education sector in the Republic of Tajikistan (in million somoni)*

Level of education	2015	2016	2017	2018	2019
Preschool education	125.9	129.7	201.8	241.2	267.2
General secondary education	1,783.7	1,951.9	2,101.3	2,338.0	2,596.2
Initial vocational education and training	44.0	58.6	59.6	63.1	68.5
Secondary vocational education and training	83.1	100.2	140.2	146.8	176.9
Higher professional education	477.1	556.2	632.8	606.1	716.5
Other expenditures in the education sector	404.9	349.6	445.5	467.8	579.6
Total:	2,918.6	3,146.2	3,581.1	3,863.1	4,404.9

Note: Without special funds and the Public Investment Program (PIP).

208. According to the Public Finance Management Reform Strategy of the Republic of Tajikistan for 2009-2018, the medium-term expenditure framework has been implemented. The MTEF principles in the education sector ensured the stability of the state budget resources and the coverage of the main elements of the

public finance management system. Educational institutions received a certain degree of autonomy in the distribution of funds across the items of the state budget. The Ministry of Education and Science of the Republic of Tajikistan has established an internal audit system, which provides recommendations on improving the budget management processes of all educational institutions in the country.

209. The Ministry of Finance of the Republic of Tajikistan has launched and operationalized the Tajikistan Financial Management Information System (TFMIS), which covers the functions of treasury execution of the state budget at all levels of the education sector, including control over obligations. The Ministry of Finance of the Republic of Tajikistan has yet to organize the process of exchange and provision of budgetary data to the Ministry of Education and Science of the Republic of Tajikistan so that the latter are able to manage the payroll and income generation processes of educational institutions.

210. Following the initiative of the President of the Republic of Tajikistan, the remuneration of workers in the education sector has been constantly increasing: by 15% in 2009, 15% in 2010, 30% in 2011, from 30% to 60% in 2012, from 20% to 30% in 2013, 15% in 2014, 20% in 2015, 10% in 2016, 15% in 2017, and by an additional 15% from September 2020.

211. One of the significant reforms of financing the education system of the Republic of Tajikistan is the transition of general secondary and preschool educational institutions to per-capita (normative) financing. The transition to the normative system of financing was carried out with the aim of improving efficiency in the use of budgetary funds, stimulating competition between educational institutions to improve the quality of education, ensuring that the self-governance authorities and parents control the use of public resources, optimizing the network of educational institutions, as well as creating preconditions for savings and targeted redistribution of financial resources.

212. According to the Decree of the Government of the Republic of Tajikistan #627 dated November 2, 2015 "On the transition of state preschool educational institutions to normative (per capita) financing," the transition of preschool institutions to per capita (normative) financing was piloted. The pilot demonstrated that the introduction of per capita financing can eliminate inequalities in the financing of preschool institutions, expand the autonomy of preschool institutions, and ensure the efficient use of public resources. According to the above-mentioned Decree of the Government of the Republic of Tajikistan, from 2017 all state preschool educational institutions had to transition to per capita financing. However, due to the fact that minimum funding standards of preschool education have not been approved at the national level, the implementation period has been extended and transitional measures are still in place.

213. In 2016, for the first time in the history of the education sector of the Republic of Tajikistan, parental contributions in state educational institutions became subject to regulation at the national level (in accordance with the Decree of the Government of the Republic of Tajikistan #150 dated March 31, 2016 "On payment of funds for upkeep of children in state preschool educational institutions"). This allowed to improve meal expenditures and increase the share of extra-budgetary resources in preschool education from 19% in the 2015-2016 academic year to 34% in the 2018-2019 academic year.

214. From 2004 to 2011, according to the Resolutions of the Government of the Republic of Tajikistan (#502 dated November 20, 2006 "On the transfer of some general secondary educational institutions to new forms of management and financing," #350 on June 30, 2007 "On the stages of the transition of general secondary educational institutions to new forms of management and financing," and #505 on October 1, 2007 "On approval of the rules of normative (per capita) financing of general secondary educational institutions"), all general education institutions, regardless of their type and enrollment, gradually shifted to a new form of financing, i.e. transitioned to financing of educational institutions per child/pupil. The transition to per capita financing of educational institutions has radically changed the governance system at national (macro) and institutional level. At the national (macro) level, the role of sub-national governments and local education authorities in managing financial resources has changed, and at the institutional level the role of heads of educational institutions and sub-national self-government bodies has changed.

215. The education sector of the Republic of Tajikistan is financed from various sources: the state budget (all levels), grants, state loans and extra-budgetary resources. Extra-budgetary resources include family contributions, funds from donor organizations, businesses and own funds of educational institutions from the proceeds of the provision of paid services.

216. The steady increase in financing of the education system has led to an increase in costs per person (pupil, child, schoolchild, student). Costs per person have become significantly higher in the system of higher professional education (3,164 somoni in 2018), primary professional education (2,612 somoni in 2018) and preschool education (2,592 somoni in 2018) than in 2010. The lowest cost per person was in general secondary education (1,226 somoni per student in 2018) and secondary professional education (1,825 somoni per student in 2018).

217. Despite the steady increase in funding for the education sector, financial resource constraint is ever-present and is associated with demographic growth and a gradual increase in financial resource needs. By 2020, the education sector spending will increase to 1.3 billion somoni. The planned reform - the transition to 12-year general secondary education - will require from 3.8 billion

somoni to 5.3 billion somoni in the first 6 years of transition. This indicates that the Republic of Tajikistan currently begs for greater diversification of funding sources and the creation of effective public expenditure mechanisms.

218. In this regard, it is important to attract private (i.e. alternative) sources of financing at each level of education to ease off fiscal pressure. However, private sector participation in education, especially given the current budgetary constraints, is not well understood. Despite the importance of financing educational institutions to ensure the quality of education, private sector participation in the management of educational institutions in Tajikistan is underestimated. The private sector can ease off pressure on educational institutions in the presence of financial constraints to effectively provide educational services. However, to date, public-private partnership (PPP) based projects in education are practically absent. Yet this is despite the fact that the Republic of Tajikistan has a strong regulatory and institutional framework for implementing PPP projects.

219. The reform of the education financing system is ongoing and should take into account the presence of several obstacles that reduce the effectiveness of new mechanisms for financing the education system. Above all, strict regulation of the use of state and extra-budgetary funds within the framework of the public finance management system, complex mechanisms for formalizing extra-budgetary funds, and the absence of by-laws governing the formation, distribution and use of non-state resources, which collectively reduce the efficiency of spending in state educational institutions.

220. The tightening of control over spending of the extra-budgetary funds (and its taxation) is increasingly turning into the need to justify to the state financial authorities each expenditure line of these funds. In turn, this negates the legislatively established autonomy and independence of educational institutions, including the preservation of the balance of funds that was reasonably formed in the educational institution as of December 31 and retained on its financial account. It also undermines the transparency of the public finance management system, because educational institutions have fewer incentives to report/record the real size of their own income from the provision of paid services (including, among other things, from parental contributions).

221. Limited access to the consolidated public finance management information system of the Ministry of Finance of the Republic of Tajikistan does not allow the Ministry of Education and Science of the Republic of Tajikistan to summarize the results of financing educational institutions in the education sector as a whole, as well as to analyze information on budget execution in the education sector in order to better align national policy priorities with budget allocations. Due to the lack of proper access and appropriate analytical capacity, the Ministry of

Education and Science of the Republic of Tajikistan cannot monitor and evaluate the financing of policy priorities and strategic plans.

222. At the same time, the Republic of Tajikistan periodically faces various socio-economic shocks, such as the 2008-2009 global financial and economic crisis and the risk of the coronavirus pandemic (COVID-2019) in 2020. All these shocks lead to restrictions, including financial and fiscal limitations, which ultimately affect the access and quality of education. In this regard, it is extremely important for the Ministry of Education and Science of the Republic of Tajikistan, its subordinate structures and all educational institutions to be prepared for an appropriate and comprehensive response to these challenges and risks. In this direction, special attention should be paid to cooperation with development partners and the corresponding adjustment of mid-term implementation plans of the NSED for the period until 2030 in accordance with the changing socio-economic situation in the Republic of Tajikistan.

223. The current mechanism of planning and forecasting the education system, based on actual results, does not allow financing strategic priorities at the proper level. The correlation between mechanism for planning and forecasting financial resources in the education sector and the processes of monitoring and evaluation of strategic plans and state programs merit improvement.

224. Directive forms of management of the education system and educational institutions, as well as a weak mechanism of state-community administration, have led to a weakening of the management of educational institutions. When conducting monitoring, supervision and control, the functions of various governance structures are duplicated.

225. The main problem of the education sector management system in the Republic of Tajikistan remains the lack of responsibility for the outcomes of state educational institutions. The low qualification of a significant proportion of managers limits the development of the education system based on the introduction of innovative approaches and the application of technology in managerial decisions.

226. At present, the education management system in the Republic of Tajikistan is characterized by low participation of citizens, employers and public associations in the governance of educational institutions and education quality control. There are no conditions and mechanisms for independent education quality assessment. The formation of extra-budgetary resources, state-public administration of educational institutions, and the transparency of the use of public expenditures are characterized by incompleteness and inconsistency of the legislative and regulatory framework regarding the formation of extra-budgetary resources.

227. In accordance with the National Development Strategy of the Republic of Tajikistan for the period until 2030, breakthrough institutional growth points for the education system should be:

- creating a stable legislative and regulatory framework and practice for the development of public-private partnerships in the education sector;
- the formation of a sustainable system to stimulate investment growth at all levels and stages of education;
- implementation of a results-based governance mechanism, i.e. inclusion of procedures for ensuring the effectiveness of education development programs financed out of the general government budget;
- ensuring transparency in the processes of financial and economic management of educational institutions, including through the introduction of public reporting mechanisms/forms on the work of institutions.

228. In line with the new National Strategy for Education Development of the Republic of Tajikistan for the period until 2030, the Ministry of Education and Science of the Republic of Tajikistan identified the following key priorities (disaggregated by key results) in the field of management and financing of education:

229. Priorities in the area of strengthening effective governance of the education sector:

1) priority reform measure 4.5.1 - fully-fledged implementation of the per capita (normative) financing system as the main mechanism for budget allocation in the education sector:

- implementation of normative per capita financing of state preschool institutions and mechanisms for annual updating of normatives;
- analysis and annual changes to per-capita financing normatives;
- implementation of normative per capita financing of state general secondary educational institutions, analysis of trends and annual updating of per-capita financing normatives;
- development and implementation of the per-capita funding mechanism in IVET and SVET institutions;
- implementation of the per-capita financing mechanism in higher educational institutions;

2) priority reform measure 4.5.2 - strengthening the system of multi-channel financing of educational institutions at all levels of the education sector:

- development of financing mechanisms for alternative forms and programs of preschool education;
- development of financing mechanisms for early childhood development centers operating in preschool and general secondary educational institutions;

- development of an effective system (mechanism) for generation, distribution and utilization of extra-budgetary funds;
 - conducting an analysis of the formation and use of extra-budgetary funds in state educational institutions, and making proposals to review the taxation of extra-budgetary funds of educational institutions;
 - development of mechanisms to ensure transparency in the formation and use of financial resources of educational institutions, taking into account new technological capabilities and global experience;
- 3) priority reform measure 4.5.3 - improving the Education Management Information System (EMIS) of the Republic of Tajikistan:
- development and full implementation of online and offline EMIS in all educational institutions;
 - automated compilation of annual statistical reports, as well as automated calculation of specialized indices of the effectiveness of the education sector at each level;
 - identification of critical performance indicators (including indicators of the NSED of the Republic of Tajikistan for the period until 2030) and the updating of EMIS database in order to regularly monitor additional indicators;
 - continuous professional development of education specialists who use EMIS;
 - the development of a system for monitoring and evaluation of education quality, and determining the rating of educational institutions, based on EMIS and the National Testing Center under the President of the Republic of Tajikistan;
- 4) priority reform measure 4.5.4 - improving the education management efficiency by the Ministry of Education and Science of the Republic of Tajikistan:
- a comprehensive functional review of education and science and the formulation of recommendations on the optimization of functions and the accountability system in education and science in order to make the system more efficient, transparent and accountable;
 - review and approval of the modern organizational structure of the Ministry of Education and Science in order to improve the governance efficiency in education and science, as well as the creation of the consolidation function of the state budget and strategic planning;
 - reduction of duplicate functions of the educational authorities;
- 5) priority reform measure 4.5.5 - ensuring closer alignment between policy priorities of the Government of the Republic of Tajikistan and public spending in the education sector:
- the use of medium-term budget plans of the Ministry of Education and Science of the Republic of Tajikistan, which are annually submitted to the Ministry of Finance of the Republic of Tajikistan as an instrument for supporting the NSED

of the Republic of Tajikistan for the period until 2030 through appropriate funding from the general government budget;

- together with the Ministry of Finance of the Republic of Tajikistan, optimization of the number of main administrators of budget allocations (MABAs) in the education sector and entrusting the Ministry of Education and Science of the Republic of Tajikistan with not only policy formulation function, but also monitoring and supervision of the sectoral budgets of MABAs that belong to the education sector;

- possibly creating the department for coordination of reforms and strategic planning in the Ministry of Education and Science of the Republic of Tajikistan;

6) priority reform measure 4.5.6 - implementation of the financial management information system of the education sector (based on financial statements "Moliya"):

- continued development of the education management information infrastructure, and linking education governing bodies to the Internet;

- development and implementation of the online financial reporting program ("Moliya") for preschool, general secondary and professional institutions;

- training in the use of FMIS for education management specialists;

- creation of annual reporting system on the execution of the budget of all state educational institutions;

7) priority reform measure 4.5.7 - exploring the possibilities of introducing new fiscal mechanisms to stimulate investment in the education sector:

- analysis and development of recommendations on the possibility of introducing new fiscal mechanisms to stimulate investment in the education sector (the introduction of educational savings and loans; the formation of private funds, tax benefits, targeted social assistance systems; educational vouchers; new forms of remuneration, and others);

8) priority reform measure 4.5.8 - integration of digital technologies in the education sector management system and the national education quality assessment system:

- development of a legislative and regulatory framework for the introduction of a quality management system ISO-9000 in educational institutions or other systems for assessing the quality of the preparation of specialists;

- development of tools and piloting a system for performance assessing of the educational process upon the completion of primary and basic education as a way to measure the quality of education;

- development of a system for monitoring and evaluating the quality of education and the rating of educational institutions together with the National Testing Center under the President of the Republic of Tajikistan;

- improving the state-public administration of educational institutions by developing new legislative and regulatory documents on self-government and public participation in the management of educational institutions;
- completion of the transition to e-governance in the education sector;
- providing governing bodies with new digital technologies in the field of education sector management.

9) priority reform measure 4.5.9 - introduction of new forms of public-private partnership in the education sector:

- development of guidelines and partnership mechanisms for preschool institutions, general secondary educational institutions, associations of parents and teachers, and parental committees with the private sector and public organizations;
- exploring the possibility of using state property for educational activities in preschool education and general secondary education;
- development of legislative and regulatory documents on public-private partnerships in the education sector;

10) priority reform measure 4.5.10 - integration of a comprehensive school safety into sustainable development and disaster risk reduction policies:

- safeguard learning facilities and site selection, through disaster-resilient design and construction, or (if needed) relocation, reducing risk inside facilities, incorporating access for people with disabilities; safe access to facilities; improve water/sanitation facilities (separated for girls and boys), integrating climate-smart innovations, and regular maintenance;
- development and strengthening of institutions, coordination mechanisms and networks, as well as national capacities to increase resilience to hazards and threats to the education sector at international, national and local levels;
- implementation of risk reduction approaches in the implementation of educational programs for emergency preparedness, response and recovery in the education sector;
- monitoring and evaluating the implementation of disaster and conflict risk reduction initiatives;
- improving the accessibility and access of educational institutions and government education authorities to hazard-related evidence such as multi-hazard early warning systems and disaster risk information;
- raising public awareness of methods to reduce natural hazards and manage them taking into account gender and social issues;
- development of guiding principles for reducing natural hazards taking into account gender and social aspects, information and educational materials for students in general educational institutions and higher educational institutions.

CHAPTER 5. FINAL PROVISIONS

230. Implementation of the Strategy will be based on mid-term education action plans (MTEAPs) for the period 2021-2023 (attached), 2024-2026 and 2027-2030.

231. The Ministry of Education and Science of the Republic of Tajikistan will develop and coordinate with ministries, departments and agencies, and development partners, a monitoring and evaluation mechanism, including a results framework with key performance indicators. This will serve as the basis for monitoring the implementation of this Strategy.