

Tajikistan Education Sector Analysis

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Glossary

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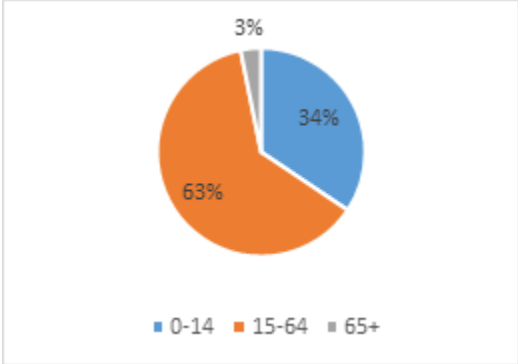
Executive Summary

Introduction

Demographics

The Republic of Tajikistan, hereafter referred to as Tajikistan, is a mountainous, landlocked, low-income country in Central Asia, sharing borders with Uzbekistan, Afghanistan, Kyrgyzstan, and China. It is inhabited by around 8,735,000 people¹ of various ethnic groups. The majority of the population is Tajik (84.3 %), followed by a significant Uzbek minority (13.8 %); the remaining 2 % includes people of Kyrgyz, Russian, Turkmen, Tatar, and Arab origins, among others.² The country remains primarily rural, with only around 27 % of the population living in urban centres.³ Tajikistan is a fairly young country, with 34 % of the total population aged 0-14 years old (Figure 1). Tajik is the country’s official State language, but Russian is regularly used as the language of business and is recognized by the Constitution as the “language of international communication” (Constitution of the Republic of Tajikistan, Art. II).

Figure 1. Age structure of the population of Tajikistan (2016 estimates)⁴



Tajikistan counts a population of 8.7 million people (as of 1 January 2016), having effectively doubled since the late 1980s. The period between 2000 and 2016 saw particularly rapid growth - the population having increased by 40% in the intervening years. Owing significantly to large birth rates in rural areas, the population of Tajikistan is one of the most rapidly growing in Central Asia and the world, with its total fertility rate at 3.064 in 2015 and nominal population increase at 2.1% between 2010 and 2016. Sixty-five % of the population inhabit the country’s two largest regions: the Soghd and Khatlon oblasts.

This rapid growth affected the education system, creating large demand for education that remained unmet due to the economic crisis that followed the said war. Furthermore, the education system could not recruit enough teachers, since a huge fraction of the population born before 1998, from which teachers would have been recruited, left the country en masse.

¹ United Nations Department of Social and Economic Affairs, 2016 estimate.

² Central Intelligence Agency World Factbook, 2014 estimate.

³ United Nations Population Division, 2018 estimate.

⁴ Data taken from EMIS; author’s calculations

The median age of the population is 22.3 years, and the number of working-age inhabitants (ages 15 to 64) has been increasing at higher rates than other segments of the population. In 2016, 62.5% of the population of Tajikistan were of working age. The young population is expected to generate large and stable growth in the number of working-age citizens for several decades. However, the increasing number of young people in Tajikistan demands that the economy create jobs and guarantee education for a larger number of learners. In response, the government has taken measures to reduce youth unemployment. Nevertheless, it must be noted that the share of youth (ages 12 to 24) in the population has decreased from 50.7% in 2007 to 41.3% in 2016.

Notwithstanding, the pace of population growth in Tajikistan is slowing. The UN Population Division (UN, 2017) estimates that Tajikistan's population will reach 14.5 million by 2050. The age-specific fertility rate (ASFR) for Tajikistan has declined on average across all age groups by 7.7 % between 2010 and 2015, reaching 67.8 births per 1,000 women (UN, 2017). The total fertility rate (TFR) will fall within the replacement level of 2.1 births per woman only after 2050. Demographic trends indicate that the net reproduction rate (NRR) is steadily declining over time (1.7 between 2000-2005, 1.6 between 2005-2010 and 1.5 between 2010-2015) and the net population growth rate has also steadily gone down mostly due to immigration. Yet, despite these slowing rates, the growth of young population is expected to continue, which positions school with a unique challenge to maintain enrolment rates in pre-school and primary educational institutions, especially in rural areas given relatively high TFR, ASFR and NRR estimates.

Historically, girls are encouraged to marry, abiding by societal norms and sometimes financial pressures of their respective families. Divorces are on the rise (from 6,019 in 2010 to 8,346 in 2015) and the average duration of marriage is 8.8 years according to latest data from 2015, significantly lower than the average of 11.3 years ten years ago. Nearly a quarter of all divorcees had at least one child at the time of separation, and living in a household with divorced parents tends to adversely affect children's education.

Due to labor migration, school attendance is sensitive to income and in particular remittances, where it is universally high in primary (1-4) and falls as students move to higher grades (5-11) (Mirzoev, 2017). This reinforces the common view that poverty and financial vulnerability are regarded as the determinants of attendance in general secondary education. Children also report missing school largely because of illness, paid labor, and household work. In particular, school-aged girls in rural areas are least likely to further their education beyond basic education in comparison with other population groups in Tajikistan. In some regions, school-aged girls are put under pressure not to attend school in favor of undertaking domestic work, due to increased male labour migration.

The significant regional variations in births and migration rates is catalyzing demographic shifts within the country. Despite the most recent economic slowdown, beginning in 2015, many residents continue to migrate from rural to urban areas (e.g., from GBAO or Khatlon to Dushanbe) due to better employment prospects, wages, and public service provision in the latter. As a consequence of this rural flight, school enrolment rates have increased in urban areas and hence decreased in rural areas. Such migratory movements have a huge impact on the distribution of educational opportunities in Tajikistan. Migratory trends between 2007 and 2015 are summarized in Table 1 below.

Table 1. Migratory trends in Tajikistan, 2007-2015⁵

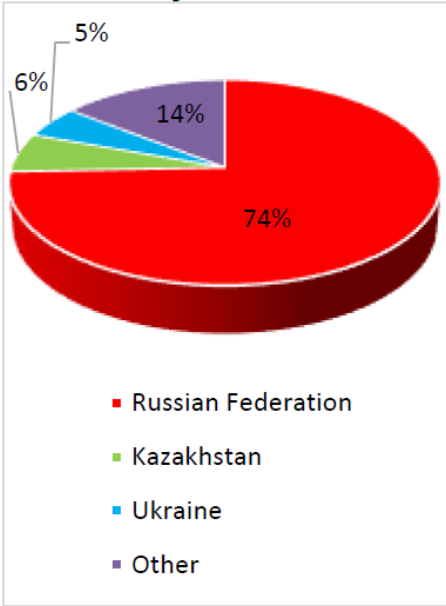
	2007	2010	2011	2012	2013	2014	2015
Emigration (per '000 immigrants)							
<i>of which:</i> GBAO	5,897	3,298	2,115	2,663	2,312	3,044	2,873
<i>of which:</i> Soghd oblast	1,771	1,269	1,250	1,263	1,333	1,311	1,296
<i>of which:</i> Khatlon oblast	2,696	1,656	1,517	1,510	1,416	1,456	1,390
<i>of which:</i> Dushanbe	638	861	559	734	583	578	580
<i>of which:</i> RRS	1,314	847	807	873	849	794	847
Domestic migration (in %)							
<i>of which:</i> men	62.4	57.0	53.5	55.4	54.4	53.3	52.3
<i>of which:</i> women	37.6	43.0	46.5	44.6	45.6	46.7	47.7

International migration also has a major impact on demographic shift in Tajikistan. Although there is no consensus on the number of labor migrants, evidence from the International Organization for Migration (IOM) indicates that over 1 million Tajik citizens work outside the country, predominantly in seasonal low-productivity and low-paid occupations in the Russian Federation. A typical Tajik migrant worker is a relatively young married man who has secondary education and has a family living in a rural area. Often, he is not employed prior to migrating, and ends up working in construction, trade, housing and cleaning services, agriculture, or maintenance. These trends differ significantly from migration patterns globally, where roughly half of the migrants are women (UNDESA, 2013). In the case of Tajikistan, rural women in some cases are forced to take up the hard physical labour that would otherwise be done by men who have migrated (Malyunchenko, 2015). In recent years, Kazakhstan, Ukraine and a few other countries has become another destination for migrant workers from Tajikistan, likely due to more flexible migration

⁵ Table taken directly from Mirzoev, S. 2016. *Tajikistan Joint Sector Review Education Sector Synthesis Report*. Dushanbe, Tajikistan.

regulations that came with the establishment of the Eurasian Economic Union in 2015 as shown in the figure below. Although Tajikistan is not an EU member state, its labour market is deeply integrated with the Russian Federation's. Rapid increase in the working-age population is believed to have contributed to increasing male labor migration from Tajikistan, but more recent data indicates that slowing business activity in Russia led to a contraction in the overall number of emigrating labor and volume (and value) of remitted incomes during 2015-2016.

Figure 2. Tajikistan's leading migration destination (2013)



Source: UNDP 2015 calculations, based on World Bank data (for regular migrants).

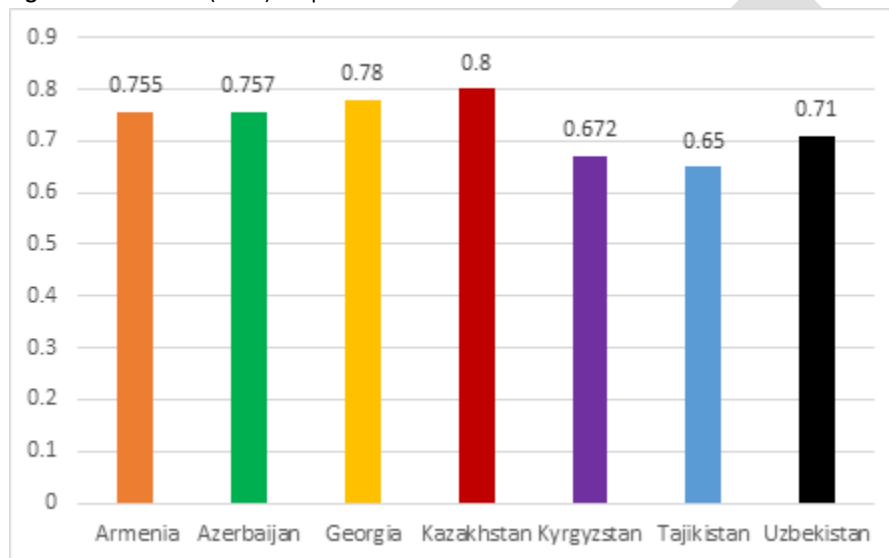
The Listening2Tajikistan Survey found that 53 % of 3,000 surveyed families reported at least one labor migrant which demonstrates significant dependency on the Russian economy and remittances (World Bank, 2017a). Households with at least one parent who has migrated abroad are more financially vulnerable; such household setup positively correlates with child labor (World Bank, 2017a). In turn, children who must work to support their families often have poor attendance in educational institutions, as they are more likely to enter the informal labor market at the expense of schooling hours. Therefore, the link between migration and school dropout rates is significant; girls from migrant households are likely to complete fewer years of schooling, and boys are more likely to drop out altogether once their migrant parent stops sending money back home.

The return of a potentially large number of labor migrants due to the slowing economy in Russia may arguably benefit female-headed households with one migrant parent abroad and potentially reduce out-of-school children, but it also runs the risk of saturating Tajikistan's domestic labor market, which has an insufficient number of jobs to absorb returning migrants (Mirzoev, 2016).

Socio-economic context

Tajikistan is a low-income economy with a relatively low human development score. Human development can be measured along three dimensions: a long and healthy life, being knowledgeable and having a decent standard of living. In 2017, the country was assigned a Human Development Index (HDI) value of 0.650, registering the lowest HDI value amongst the post-Soviet states in Central Asia and the southern Caucasus region. Its weakest scores fall under standard of living, but tends to meet its neighbors in quality of health and education. Figure 3 below shows the HDI values in the said post-Soviet states.

Figure 3. HDI values (2018) for post-Soviet states in Central Asia and the southern Caucasus region

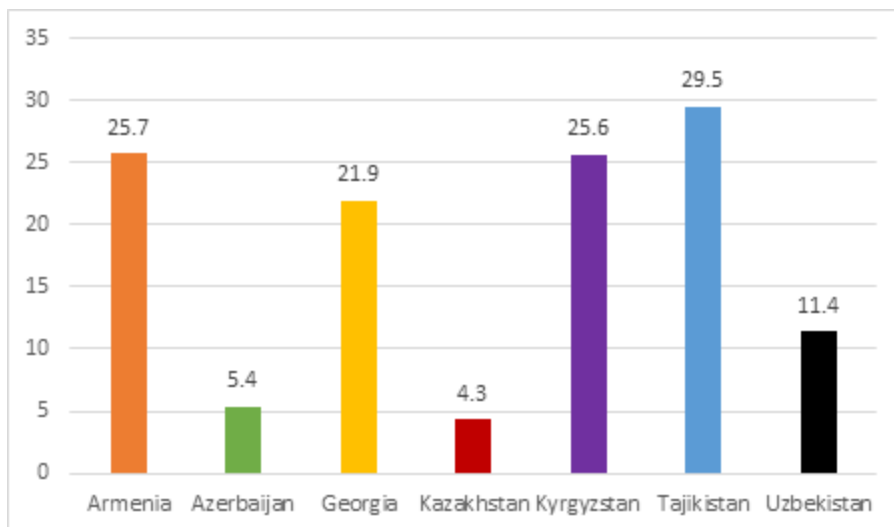


When Tajikistan's HDI value is adjusted to account for inequality, it drops to 0.562. Amongst the aforementioned post-Soviet states, Tajikistan also has the highest percentage of its population living below the national poverty line (at 29.5%). A comparative graph is found in Figure 3 below.

Figure 4. Percentage of population living below the national poverty line, select post-Soviet states^{6 7}

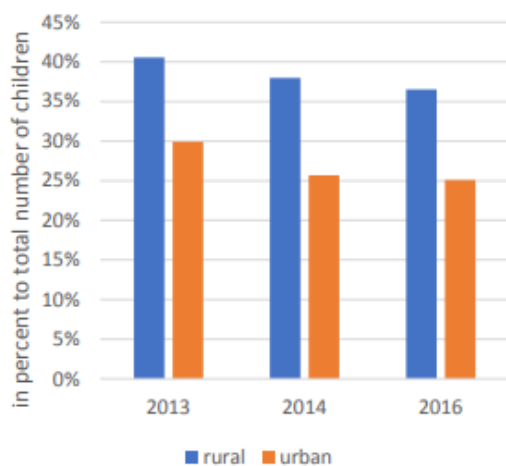
⁶ Data from Asian Development Bank, *Basic Statistics*, 2019.

⁷ Kazakhstan and Uzbekistan, 2018 data; others, 2017 data.



Inequality in Tajikistan has a marked geographical dimension, with rural households disproportionately affected by poverty. A 2016 joint report, developed by The World Bank, UNICEF, and the Tajikistan Agency on Statistics (TAJSTAT), revealed an almost 10 % gap in poverty incidence between children in urban and rural households (World Bank, UNICEF, & TAJSTAT, 2016). This gap is illustrated in Figure 4 below. However, since the population of Tajikistan is overwhelmingly rural, this gap is even starker; there are between 135,000 to 177,000 poor children living in urban centres, compared to 514,000 to 949,000 in rural areas (World Bank, UNICEF, & TAJSTAT, 2016).

Figure 5. Poverty incidence among children in urban vs. rural households in Tajikistan⁸

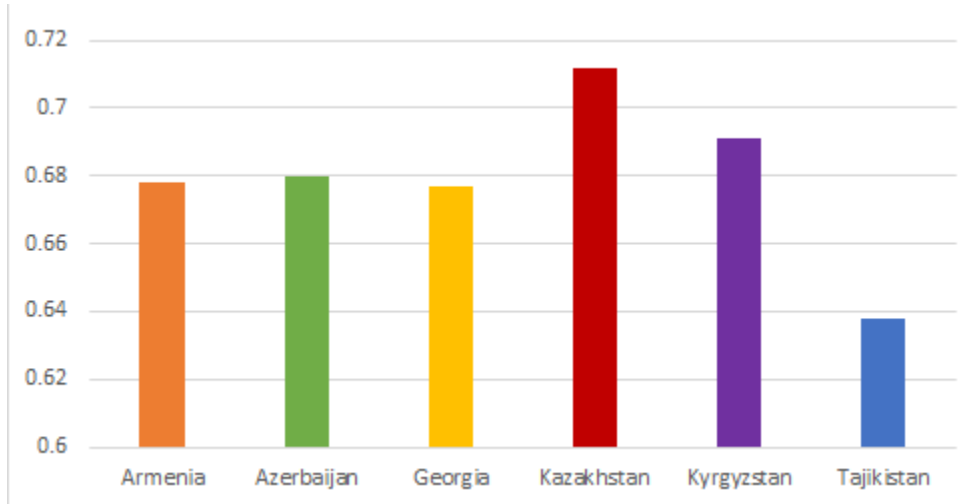


Women and girls are disadvantaged by the significant inequalities in Tajikistan. The most recent Global Gender Gap Report of the World Economic Forum (WEF), which was published in 2018, benchmarks 149 countries on their progress towards gender parity across four dimensions: economic participation and opportunity, educational attainment, health and survival, and political empowerment. Tajikistan scored

⁸ Graph directly taken from World Bank, UNICEF, and Tajikistan Agency on Statistics. 2016. *Child poverty in Tajikistan*.

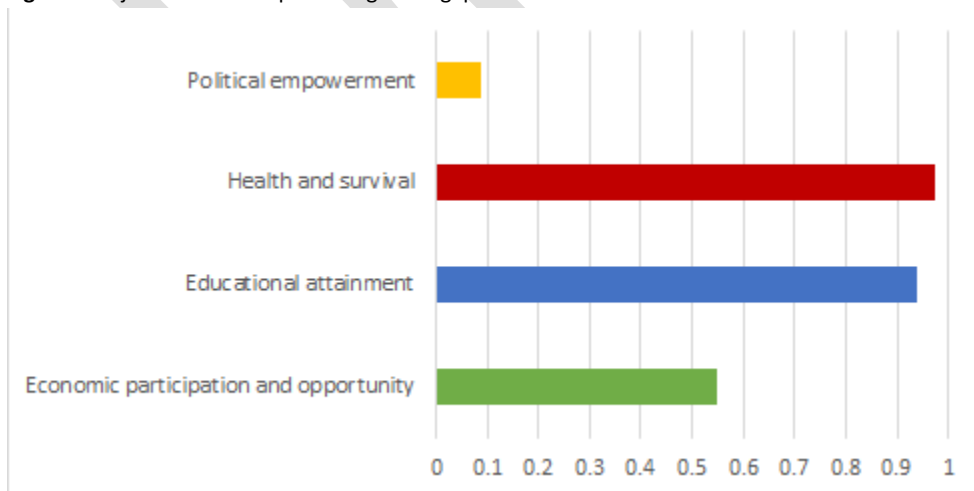
0.638, placing it at 123rd out of the 149 participating countries and rendering Tajikistan’s gender gap the largest in the Eastern Europe and Central Asia region (WEF, 2018). Figure 5 below compares the gender gap in Tajikistan against other post-Soviet states in the Central Asia and southern Caucasus region that participated in the WEF report.

Figure 6. WEF Global Gender Gap Index 2018, select post-Soviet states



The large gender gap in Tajikistan can be mainly attributed to widening disparities in economic participation and opportunity for women (WEF, 2018). The country also scores relatively low in terms of women’s political empowerment, placing 121st out of 149, which indicates weak political representation of women. It fares slightly better in terms of health and survival and educational attainment outcomes, for which it places 74th and 118th, respectively. The breakdown by WEF’s gender gap sub-indices are shown in Figure 6 below.

Figure 7. Tajikistan’s scores per WEF gender gap sub-index



Legal and policy frameworks for education

Legal frameworks

In Tajikistan, free and compulsory general basic education is guaranteed in the Article 41 of Tajikistan's Constitution which states that 'Everyone shall have the right to education. The basic general education shall be compulsory. The state shall guarantee the free of charge general basic compulsory education in the state educational establishments. Everyone shall get free of charge general vocational, primary specialized, vocational specialized and higher specialized education in the state educational establishments, within the framework determined by law. Other forms of education shall be determined by law.' The same Article also guarantees the right to free general vocational, primary specialized, vocational specialized, and higher specialized education. Currently, general basic education starts at age of 7 and lasts for 9 years. The Law on Education (Law No. 1004, 2013), which was revised in 2013, guarantees the right to education for all, "regardless of nationality, race, sex, language, religion, political beliefs, and social and material provisions". The Law on Preschool Education and Care (Law No. 1056, 2013) guarantees the right to early childhood care and education (ECCE) to all Tajik citizens regardless of nationality, race, sex, language, religion, political position, social and property status of parents/guardians. Foreign citizens and stateless persons also have the right to receive ECCE in accordance with the procedure established by the national legislation. Annex 1 shows a list of national legislative documents with relevance to education.

As shown in Annex 1, the Republic of Tajikistan has ratified a series of International Conventions and Covenants related to education and human resource development.

Policy frameworks

Education sector development is governed and regulated by the overarching National Development Strategy (NDS) 2016-2030, National Strategy for Education Development (NSED) 2012-2020 and a number of corresponding medium-term implementation action plans and state programmes. Thus NDS and NSED define the Republic of Tajikistan's commitment to the provision of educational services to its population, and set the overall direction and pace of reform in the education sector.

Tajikistan's National Development Strategy 2030 (NDS-2030) presents its commitment to create a sustainable, prosperous, internationally connected, united and just society by 2030. NDS-2030 also shows its full commitment to implementing the 2030 Agenda for Sustainable Development (SDGs). The key targets include: reducing poverty rates by 50 % and eliminating extreme poverty; significantly increasing spending on social welfare of the population; bringing the share of the middle class up to 50 % of the population; and achieving transformational growth which enables a shift from dependency on agriculture towards greater complexity and diversification of the economy. The education sector is considered as the

driving force for bringing about these changes. At the same time, the strategy also recognizes that the quality of education service is far from perfect. For instance, it mentions that access to education is hindered by insufficient increase in the number of pre-school institutions, poor quality of school infrastructure in the regions, and poor qualification of teachers. Other impediments to improved education outcomes are low attendance rates, inadequate access to improved sanitation and water supply in rural schools, and gender disparity at all levels of education.

NDS-2030 articulates the strategic priorities for education under the chapter on human capital development (social block) as follows:

1. Ensuring equality and access to education;
2. Improving the quality of education at all levels;
3. Enhancing financial stability and efficiency in the education sector; and
4. Establishment and development of national professional network of scientific - technical developments with emphasis on resource saving technologies in the context of labor surplus and mountainous country.

The key quantitative targets for education under NDS-2030 are presented in the below table.

The National Strategy of Education Development of the Republic of Tajikistan (2012-2020) positions education as a key resource of national development. The national priority for 2020 is to create conditions to ensure functional and effective provision of educational services and access to appropriate quality education for all to: (1) ensure well-being of citizens and social stability; and (2) establish skilled personnel base for economic growth in priority sectors, developing technologically effective productions and attracting investments into the country's economy. In order to achieve these objectives, the following priority directions were identified:

- Modernization of the education system (e.g., curriculum, pedagogy, special education, etc.)
- Structural changes in the education system, including introduction of preschool education for children at the age of 6
- Ensuring the accessibility of quality education

The Government outlined a number of concrete aims to ensure the implementation of the National Strategy within the framework of priority directions will be aimed at the following objectives: 1) changing the structure of education; 2) structural adjustment of the education system and business mechanisms; and 3) ensuring equal access to quality education. Under each of these objectives are tangible and specific ways that the Government intends to gain momentum toward the priority directions.

Based on the commitments and progress made since 2012, the Medium-Term Education Action Plan (MTEAP) 2018-2020 was developed covering final stage of the National Strategy on Education Development (NSED) 2020. Building on the achievements of the previous stages, the document is designed to guide the implementation of the NSED in achieving the set objectives. The MTEAP 2018-2020

focuses on 2 cross-cutting priorities of the education sector, namely: (1) ensuring access to education for all categories of the population and age; and (2) improving the quality of education for all learners at all levels of education.

MTEAP 2018-2020 set ambitious targets, some of them presented in Table 4 below. The major expansion is planned in pre-school and ECE with quality enhancement. Various policy interventions to expansion and improve the technical and vocational education and training (TVET) at all levels (initial, secondary and higher) are also planned. They are consistent with the national development strategies discussed above, and the close review of the implementation of the MTEAP 2018-2020 will guide the development of the next National Strategy for Education Development (2021-2030).

Table 2. MTEAP 2018-2020 Target Outcomes

	2018 Baseline	2020 Targets
Early childhood education		
Coverage rate of children aged 3-6 years with preschool education,%	12.5%	30%
Level of participation in organized types of education one year before reaching the official age of entry to school) by gender (children aged 6 years), %	24%	50%
Gender Parity Index	0.82	0.85
Teacher / child ratio	12	12
Proportion of teachers with secondary vocational (pedagogical) education, %	14%	25%
General secondary education		
Gross coverage ratio in primary, basic and secondary education, %	105,3% 96,4% 78%	105,3% 96,4% 85%
Gender parity index in primary, basic and secondary education	0.93 - primary 0,91 - basic 0,84 - secondary	0.93 - primary 0.91 - basic 0.86 - secondary
Transition ratio in grade 10, including girls, %	81% (Girls - 79%)	85% (Girls - 83%)
Proportion of children with disabilities in general education, %	0.004%	0.006%
Share of teachers working with grades 5-11 who have benefited from advanced training in new subject standards (%)	39%	100%

Share of subjects taught based on the competence-based standards (grades 1-11), %	34%	100%
Availability of new textbooks in grades 5-11, %	0%	100%
Technical and Vocational Education and Training (IVET and SVET)		
Proportion of unemployed population with secondary technical education among the unemployed population, %	14.5%	12%
Proportion of graduates of initial and secondary vocational schools working in their specialization, %	N/A	<5%
Share of teachers and mentors from secondary vocational schools (SVET) who received advanced training in the use of credit model, %	21.6%	50%
Share of teachers and mentors from initial vocational schools (IVET) who received advanced training, %	23%	100%
Coverage of young people aged 14-35 with IVET and SVET, including rural population, %	3%	3%
Gender Parity Index in IVET	0.302	0.35
Gender Parity Index in SVET	0.618	0.75
Coverage of young people, adult population, including vulnerable groups, with additional education courses during 12 preceding months, by gender, %	5% increase	5% increase
Higher vocational education		
Gross enrollment rate of higher education, %	15%	20%
Transition of graduates of general secondary schools, initial and secondary vocational education and training to higher education, %	33%	48%
Number of university students - including women per 10,000, person	220 (Women - 76)	250 (Women - 100)
Gender Parity Index in higher education	0.547	0.7
Share of graduates employed in the country	N/A	< 10%
Proportion of the unemployed with higher education among the unemployed population, %	8%	7%

Share of bachelor degree graduates who continued to study Masters' programmes	9%	15%
Coverage with programs of additional education (people aged 25-63), %	1.5	10
Share of persons engaged in research and development in the total number of employed population	0.15	0.3
Management and financing		
Progress made towards targets, %	N/A	100%
State budget expenditures for education	3 581 109,0 somon	4 577 215,0 somon
State budget expenditures on education, % of GDP		

Structure of the national formal education system

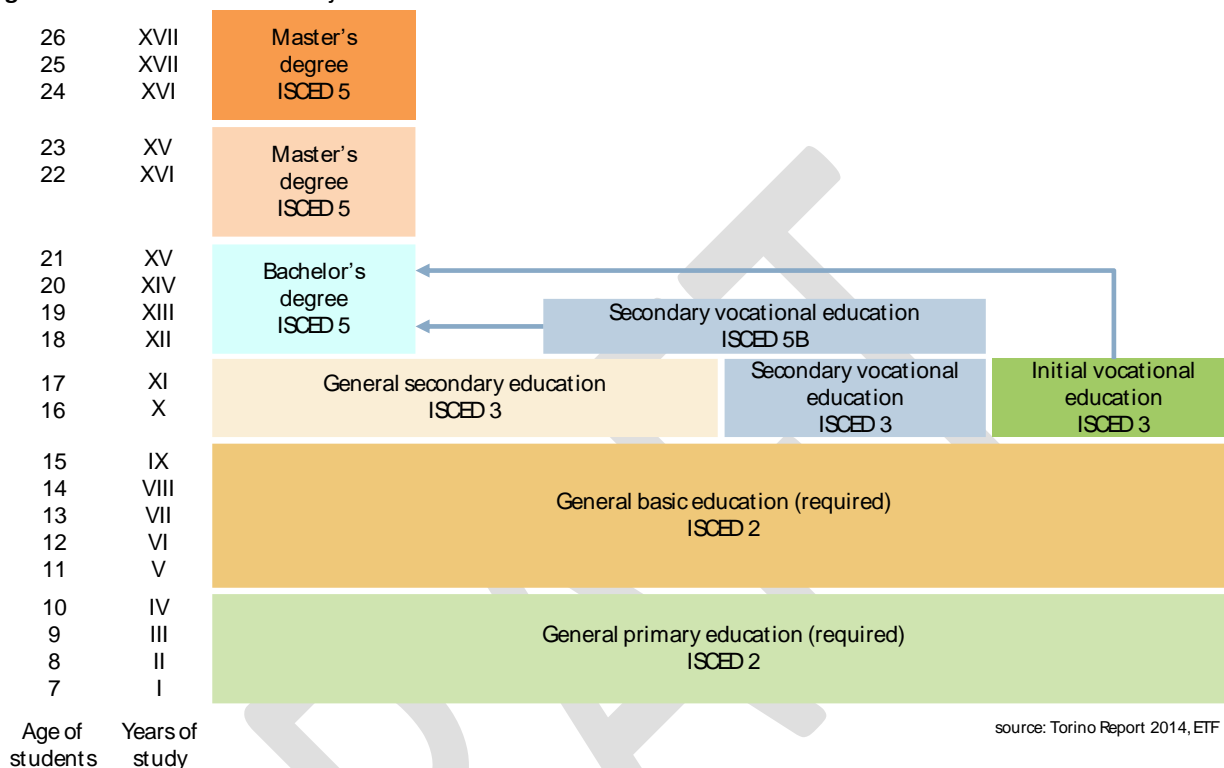
Children in Tajikistan begin school at the age of seven, marking the beginning of compulsory education at Grade 1. Compulsory education lasts nine years, which runs from primary school (four years), to lower secondary education (five years), to finally upper secondary education (two years) – this one is not compulsory.

After the first nine years of compulsory formal schooling - that is, after lower secondary education - students can follow one of two streams: (a) general secondary education or (b) vocational and technical education. A student that has completed upper secondary school can then transition to higher education, which is, as in most countries, divided into three levels: the bachelor's degree (lasting four years), the master's degree (lasting two years), and the doctorate degree. The alternate path, vocational and technical education, is comprised of two levels, initial (or primary) and secondary. Pursuing the vocational and technical education stream therefore adds two years to secondary education, at the successful completion of which the student obtains, a general secondary certificate and a TVET certificate allowing them to enter the job market.

Currently, Tajikistan is preparing for transition to a 12-year-education system. The National Strategy for Education Development (NSED) 2012-2020 in Tajikistan notes that "fundamental changes should occur in the education structure of the primary school (1-5 grades), general education school (6-10 grades) and secondary school (11-12 grades)." It is stipulated by the inconformity of traditional "academic" education structure to modern requirements and objectives to provide vocational education to the population in conditions of industrialization of economy. These changes are in response to the growing demands of the modern industrial economy for citizens to attain vocational skills.

The current structure of the formal education system is illustrated in Figure 8 below.

Figure 8. Education ladder in Tajikistan⁹



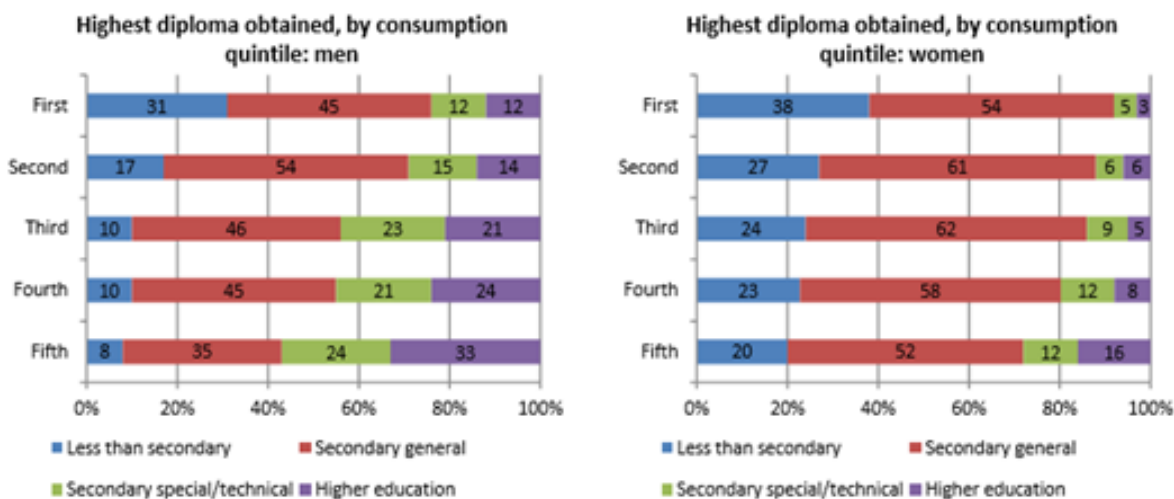
Rural/urban disparities

Wealth is not distributed evenly throughout Tajikistan. Like many countries, wealth is the source of many inequities, including education. The World Bank (2017a) indicates that education completion is correlated with wealth. However, this does not correspond to analysis of transition and completion rates in Tajikistan. While GBAO is, for instance the poorest region of the country, it has the highest transition and completion rates, including among girls. Similarly, in Dushanbe, which is considered amongst the richest with (95%) of its households in the highest wealth quintile faces challenges with transition and completion rates (TAJSTAT & ICF, 2018).

In recent years, the pace of poverty reduction has slowed concurrent with the economic slowdown in the region (World Bank, 2018), which perpetuates the existing patterns of regional inequity.

Figure 9. Highest diploma obtained by consumption

⁹ Diagram directly lifted from European Training Foundation. 2014. *Torino Process 2014: Tajikistan*. Turin, European Training Foundation.



While economic disparities between urban and rural areas in Tajikistan impact the entire population, children are particularly vulnerable to living in poverty. Tajikistan has large cohorts of children, adolescents and young adults, reflecting its high fertility rates. The average age is under 25 years, and 40% of the population is less than 18 years old. With around 30% of population living below the national poverty line in 2016 and significantly higher rural poverty rates than in urban areas, a significant number of children fall into poverty every year (World Bank, UNICEF, and TAJSTAT, 2018). Living in poverty impacts not only educational opportunities, but those that emerge throughout the life course. Yet while poverty can have deleterious direct and indirect impacts on well-being, children with access to high-quality facilities, curriculum, and teachers may fare better than those who do not. This is where strategically targeted policy can have an enormous impact on educational equity.

Tajikistan's engagement in providing universal access to free and compulsory basic education is a demonstration of the country's commitment to improving equity, as education is one of the best pathways out of poverty. However, children with disability (CwD) and students in mountainous areas with dispersed population face difficulties in achieving universal basic education. Databases on CwD is maintained by ASIP, MoES and MoHSPP, which is not compatible and poorly harmonized, therefore, it is not possible to precisely estimate the total number of children with disabilities and the level of engagement of children with disabilities in formal education. Additionally, CwD are mainly accommodated in specialized schools rather in mainstream education and minority language speakers lack access to materials in their language especially in areas outside of Dushanbe (World Bank, 2019).

In recent years, the Government has made strides toward improving educational equity through proactive education policies, reflecting its National Strategy for Education Development which aims to ensure universal access to relevant and quality education. From 2010 to 2015, the Government increased budgetary allocation to this sector from 4.0 % to 5.2 % of GDP during 2010 and 2015 (World Bank, 2018). This increased investment worked in parallel to improved efficiency in the financing and provision of education.

The Government of Tajikistan has introduced additional reforms to the education system that have contributed to equity. It shifted to a system of per capita financing, which is based on the principle of “the money follows the student”. This system has improved equity in public resource allocation across the regions, increased the efficiency of the system, and improved school autonomy. This reform is further discussed in the chapter ‘Cost and Financing’. Additionally, the country has invested in developing and expanding its Education Management Information System (“EMIS”), improving the quality of education data for decision makers and providing valuable input to crafting an education strategy. In 2014, Tajikistan established the National Testing Center under the President of the Republic of Tajikistan and implemented a new higher education admission system, the Unified Entrance Examination (“UEE”), which allows for greater merit-based admissions to universities and consequently increased equity by increasing female admissions (by 10 %) and students from rural areas (by about 40 %). Finally, in 2016 the Government launched a new competency-based curriculum for primary grades and in 2017, for 5-11 grades which is still in its early stages, which could help to improve educational outcomes if it receives sufficient support.

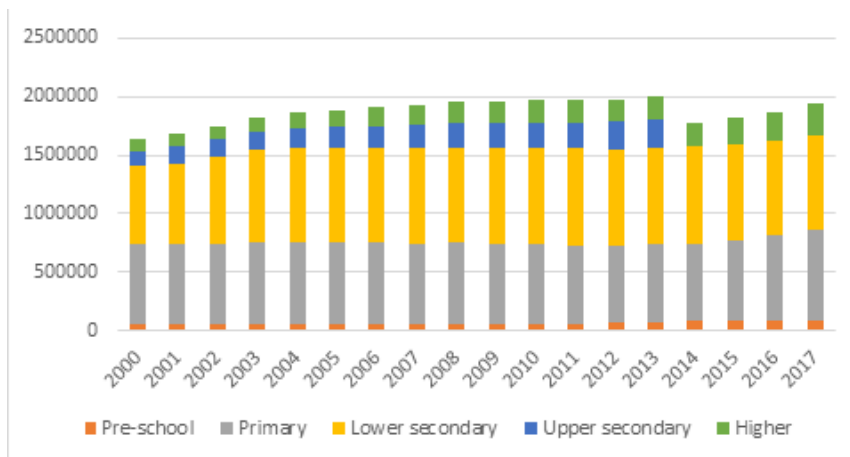
Access and transition

Enrolment

The system of education of the Republic of Tajikistan is comprised of pre-primary, general secondary, primary and secondary vocational education, and higher education.

As demonstrated in Figure 9 below, the size of the education system is constantly expanding in line with the population growth.

Figure 10. Changes in enrolment, 2000-2017.



Source: UIS Data Center

Similar to other Central Asian countries, Tajikistan has shown a high level of participation for primary and lower secondary education (ISCED levels 1 and 2) as well as adult literacy. Primary and lower secondary (general basic education) is nearly universal. However, Tajikistan lags behind of the Central Asian countries as well as lower-middle income countries in the coverage of pre-primary education. In addition, at the upper secondary education level (ISCED 3), male GER is close to the regional average for Central Asia at 77%, while female GER is much lower at 58%, closer to the average for the lower-middle income countries. (UIS Data Center, 2017)

Figure 11. Gross enrolment rate and adult literacy rate (male, 2017 data)

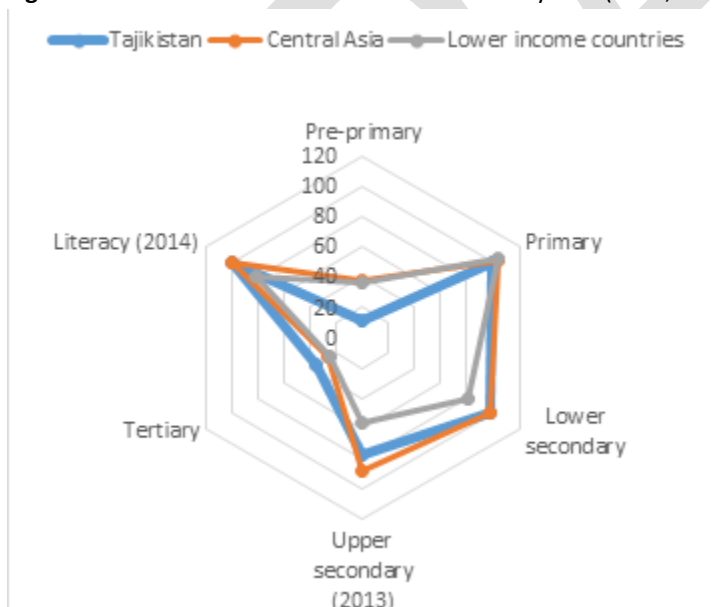
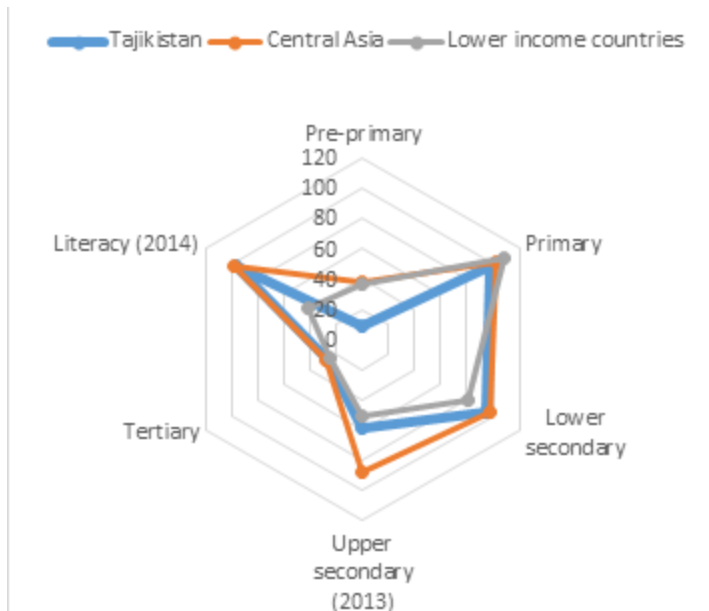


Figure 12. Gross enrolment rate and adult literacy rate (female, 2017 data)



Source: UIS Data Center (accessed on 23 April 2019)

Pre-primary

Pre-primary education is considered one of the priority areas of the education system and it is continuously supported by the Government of the Republic of Tajikistan. The adopted legal and regulatory acts related to the preschool education demonstrate the improvement in the area of monitoring and methodological assistance to the preschool educational entities. The NSED 2012-2020 and the Law of the Republic of Tajikistan "On Pre-School Education" emphasizes the importance of pre-school education. Building on this government priority, the Ministry of Education and Science (MoES) is working closely with international development partners to improve curricula and teacher training facilities, while also making efforts to improve the quality of education and increase coverage beyond the 1990s level of around 16 % of eligible students.

In the 2017-18 academic year, there were 615 state pre-school institutions and 1,671 early childhood education centers in Tajikistan serving 136,719 children. The number of state preschool institutions increased resulting in an increase of enrollment rate by 2.2 % during 2016-2017.

Table 3. Enrolment data, state preschool institutions

	2010	2011	2012	2013	2014	2015	2016	2017
Pre-school institutions, total	488	494	508	527	550	578	602	615
Children in state pre-schools ¹⁵	62,451	67,864	74,448	80,442	85,777	92,024	91,081	93,053
<i>of which:</i> in GBAO	1,369	1,400	1,497	1,508	1,613	1,617	1,828	1,979
<i>of which:</i> in Khatlon oblast	25,689	27,349	29,507	13,335	14,497	15,987	15,139	14,601
<i>of which:</i> in Soghd oblast	10,924	11,426	12,427	33,323	36,132	38,691	39,930	40,654
<i>of which:</i> in Dushanbe	18,632	21,115	23,880	24,586	25,895	27,499	25,939	27,312
<i>of which:</i> in RRS	5,837	6,574	7,137	7,690	7,640	8,230	8,245	8,507
<i>of which:</i> in urban areas (in %)	84.3	84.5	84.6	82.2	81.5	80.1	78.8	78.9
<i>of which:</i> in rural areas (in %)	15.7	15.5	15.4	17.8	18.5	19.9	21.2	21.1
Gender Parity Index, state pre-schools	0.788	0.849	0.775	0.827	0.839	0.803	0.819	0.802
<i>of which:</i> in urban areas	0.799	0.838	0.771	0.836	0.837	0.809	0.822	0.808
<i>of which:</i> in rural areas	0.728	0.911	0.798	0.787	0.848	0.780	0.806	0.781
No. of children per 100 seats (ratio)	89.4	96.2	97.8	107.7	106.9	103.5	100.3	99.7
No. of children per teacher, state (ratio)	13.0	12.6	13.5	13.9	14.4	10.9	11.4	10.2

Source: Mirzoev, S. 2017. *Republic of Tajikistan Education Joint Sector Review 2017 Update*. Dushanbe.

The recent increase in the coverage can be partly attributed to the considerable expansion of various models of pre-school institutions such as community-based or school-based Early Childhood Education (ECE) centers, private kindergartens and family-based kindergartens as well as double-shift kindergartens. Especially, the enrolment in ECE centers increased rapidly in the recent years, from 6,955 in 2011 to 43,448 in 2016. As most of the ECE centers are located in rural areas, they have contributed significantly to improve access to pre-school education in those disadvantaged areas.

Table 4. Enrolment in ECE centers

	2011	2012	2013	2014	2015	2016
Children in early child education (ECE) centers	6,955	14,796	25,616	31,312	39,789	43,448
<i>of which:</i> GBAO	...	1,183	1,895	3,554	3,978	3,678
<i>of which:</i> Soghd oblast	...	5,771	8,317	11,250	12,200	14,905
<i>of which:</i> Khatlon oblast	...	6,634	9,988	11,671	16,083	16,560

<i>of which:</i> Dushanbe	...	0	80	0	0	0
<i>of which:</i> Rayons of republican subordination (RRS)	...	1,208	5,336	4,837	7,528	8,305
Number of early child education centers	338	711	1,031	1,400	1,558	1,647

Source: Mirzoev, S. 2017. *Republic of Tajikistan Education Joint Sector Review 2017 Update*. Dushanbe.

According to the Joint Education Sector Review (Mirzoev, 2017), out of all enrolled children, approximately 67 % attend publicly funded state kindergartens and private kindergartens, which are full-day models, with high overhead costs. The remaining 33 % of children are enrolled in ECE centers, which offer only education services, usually on a half-day basis. ECEs are located predominantly in rural areas. At present, public kindergartens are mostly found in urban centers and offer a full-day curriculum. These ECE centers are supported by development partners (e.g., UNICEF, Aga Khan Foundation, and Open Society Institute), local governments, and communities; and tend to rely on parental fees to cover recurrent expenses.

With the high level of commitments from the Government and the development partners, the access to pre-primary education is increasing. The pre-primary education coverage in Tajikistan has grown to 15.6 % in 2017 (from 15.2 % in 2016). However, it is still low compared to other comparable countries (see Figures 10 & 11) and greatly impedes children's academic performance in later years and far from the target of the NSED 2020 (30 %). Access to pre-primary education is influenced by multiple factors. According to a Tajikistan Living Standards Survey (TLSS) 2007, the most common reason for non-enrollment was unavailability of pre-school facilities (52 %) (World Bank, 2013).

According to targets set in the NSED 2020, the access of children of 1-6 years old to preschools should be 20%, 3-6 years old 30%. According to the statistics of EMIS, in 2018 only 10,4 of children of ages 1-6 and only 14,7 of children 3-6 years old were covered with preschool education. The quantity of preschool institutions increases proportionally to the increasing number of children (natural increase in population) every year, however, the percentage of coverage of children with ECE has not reached the indicators of 2012, when it was 12,2% for 1-6 yrs old and 15% 3-6 yrs old.

Table 5. Number of children and percentage of coverage of children with ECE (3-6 yrs old, including in ECE centers)

Indicators/years	2012	2013	2014	2015	2016	2017	2018
------------------	------	------	------	------	------	------	------

Number of preschool institutions	508	527	550	578	602	615	636
Number of children in preschool institutions	74448	80442	85777	92024	91081	93053	96578
Number of ECE centers	-	¹⁰	1400	1558	1647	1671	1697
Number of children in ECE centers	-	-	31312	39789	43448	43666	46360
Total number of PI and ECE centers	508	527	1950	2166	2249	2286	2333
Total number of children in PI and ECE centers	74448	80442	117089	131813	134529	136719	142938
% of 1-6 years old covered	12,2	9,0	9,1	9,2	9,3	9,9	10,4
% of 3-6 years old covered	15	11,4	12,3	12,4	12,5	13,9	14,7

To ensure an increase in the coverage of pre-school education, a positive trend of growth in the number of pre-school institutions is observed not only in the capital and cities of the country, but also in rural areas. This is due to the construction of new preschool institutions, the establishment of ECE centers. For example, in the 2012-2013 school year total of 451 pre-school institutions functioned throughout the country, and in the 2018-2019 school year their number reached 636. For the period from 2012 to 2018 the percentage of growth in the number of pre-school institutions in the country reached 41.3%. The growth in the number of preschool institutions and children in all regions of the country can be analyzed using the table below.

Table 6. Growth in the number of preschool institutions and children in all regions of RT from 2012-2018¹¹.

Academic Year	Total number of PI	Including		Total number of children	Including	
		Urban	Rural		Urban	Rural
All republic						
2018-2019	636	417	219	96578	75348	21230
2012-2013	450	323	127	74448	55951	10752
Increase in the number of PI and children	186	94	92	22130	19397	10478

¹⁰ No data on ECE centers for 2012-2013

¹¹ EMIS, Part 1, 2019 P.4 and estimations of the author

% increase	41,3	29,1	72,4	28,3	34,6	97,4
GBAO						
2018-2019	26	6	20	2109	1002	1107
2012-2013	20	5	15	1497	705	792
Increase in the number of PI and children	6	1	5	612	297	315
% increase	30	20	33,3	40,8	42,1	39,7
Khatlon						
2018-2019	142	87	55	15482	11262	4220
2012-2013	109	94	15	12427	11455	972
Increase in the number of PI and children	33	-7	40	3055	-193	3248
% increase	30,2	-7,4	26,6	24,5	-1,6	33,4
Sughd						
2018-2019	261	147	114	42282	28497	13785
2012-2013	210	107	76	29507	21247	8260
Increase in the number of PI and children	51	40	38	12775	7250	5525
% increase	24,2	37,3	50	43,2	34,1	66,8
Dushanbe						
2018-2019	132	132	0	27576	27576	0
2012-2013	109	109	0	23880	23880	0
Increase in the number of PI and children	23	23	0	3696	3696	0
% increase	21,1	21,1	0	15,4	15,4	0
RRS						
2018-2019	75	45	30	9129	7011	2118
2012-2013	60	39	21	7137	5659	1478
Increase in the number of PI and children	15	6	9	1992	1352	640
% increase	25	15,3	42,8	27,9	23,8	43,3

Analysis of the table indicates that in the period from 2012 to 2018, in the republic as a whole shows an increase in the number of pre-school institutions by 41.3%, and in rural areas by 72.4%. There is also a significant growth trend in the number of children in rural areas 97.4%. This trend applies to all regions, with the exception of the Khatlon region. In the Khatlon region, for that period there was a regression: the number of pre-school institutions decreased by 7 units, which is -7.4%, and the number of children in urban pre-school institutions decreased by 193 children, respectively -1.6%.

In order to increase access to quality education programs for young children, Medium-term plan of the

NEDS until 2020, in clauses 1.2.1.1 and 1.3.1.1. mentions provision of equipment and educational materials to create material and technical base of preschool institutions and ECE centers. From 2014 to 2018 the number of ECE centers increased from 1,400 to 1,697, and the number of children in them from 31,312 to 46,360.

Table 7. The % of the growth in the number of children and ECE centers in the republic

Indicators/year	2012	2013	2014	2018	% of growth
Number of ECE centers	-	-	1400	1697	12,1
Number of children in ECE centers	-	-	31312	46360	14,8

Analysis of the coverage of preschool education in ECE centers of the Khatlon region tends to decrease. For example, if in the 2017-2018 school year 767 ECE centers, pre-school preparation covered 19,644 children, and in the 2018-2019 school year 783 ECE centers, and 18,611 children were educated, which is 1033 fewer than in the previous school year.

Table 8. % of increase and decrease of the number of children in ECE centers in Khatlon region

Indicators/years	2017-2018	2018-2019	Growth trend	% of growth
Number of ECE centers	767	783	16	2,08
Number of children in ECE centers	19644	18611	- 1033	-5,25

The reason for decrease in coverage in ECE centers in Khatlon education department was explained by the fact that the cost of staying children in ECE centers is not funded by the state budget and therefore, the coverage of children in ECE centers always depends on household income.

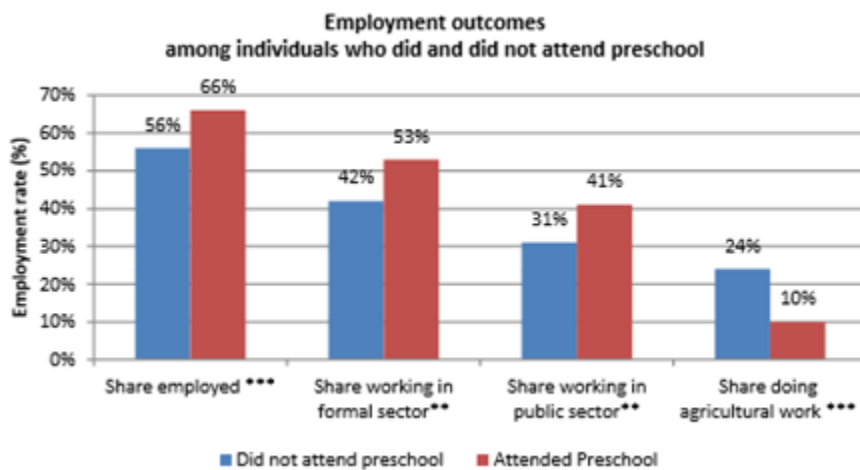
The key constraints on pre-primary education in Tajikistan are: (i) a lack of qualified teachers and specialists, (ii) lack of adequate physical space and (iii) access to preschool is even more limited for children with special needs, children of migrants, refugees, and street children. For example, in 2017, regular KGs enrolled 484 CwD, including 211 children with a mental disability, 155 weak-sighted children, 50 deaf or hearing-impaired children, 40 dumb children, and 28 children with spinal trauma. The Early Learning Centers (ELCs) enrolled around 60 CwD. Still, capacity of regular preschools to accommodate CwD is low. (EMIS Data, 2017)

Additionally, there is an insufficient number of trained personnel with appropriate skills to nurture the development of young children and prepare them for lifelong learning. Moreover, the lack of teaching-learning material and poor facilities makes the ability of teachers to deliver quality services even more difficult. However, it is not only the availability of public preschools that act as a binding constraint to

coverage, but also the population’s attitudes towards the added value of this education—especially, since preschools charge fees that are a financial burden on poor households with multiple school-aged children (World Bank, 2018). The Joint Education Sector Review (Mirzoev, 2017) also reports that while the state created 10,557 new seats in state kindergartens during the last three years, 5,253 seats were left vacant during 2014-2016. The reasons were not known, but the report points out the possibility of the supply-demand mismatch and unaffordability of the fees. The report also mentions the rural families’ reluctance to cater their children to pre-schools in favor of keeping them at home, partly due to the distance and poor quality of facilities. Further analysis is needed.

There is increasing evidence for the positive impact of early childhood education in Tajikistan and globally. Ajwad and colleagues (2014) reported that, based on 2013 household survey data, adults who attended pre-school are more likely to be employed compared to adults who did not. They are more likely to be found in the formal and public sector, and much less in the agriculture sector. According to , participation in ECEC in Tajikistan has been lagging behind of the neighboring countries, which poses a problem is Tajikistan is to meet its targets under the direction of the Medium-Term Education Action Plan (MTEAP) 2018-2020.

Figure 13. Employment outcomes: individuals who attended preschool vs individuals who did not attend preschool



Source: Ajwad, et al. (2014), p.24

General Secondary Education

The Government provides free and compulsory basic education (Grades 1 – 9). Gross and net school enrollment rates near universal, access to basic education is widespread across all income groups, though some mountainous areas with dispersed populations and CwD still face difficulties.

Data from the JSR, 2017 indicates that in the academic year 2017-18, there were 3,870 general secondary educational institutions with 1,903,269 students enrolled and over 78.3 percent of these institutions

provide students the full cycle of general secondary education (grades 1-11), while 9.1 percent of schools offer education only in primary grades (1-4). Progress has been made to increase access in primary and basic education.

Table 9: Select indicators in general secondary education 2010-2017

	2010	2011	2012	2013	2014	2015	2016	2017
No. of general secondary institutions	3,747	3,791	3,813	3,836	3,845	3,855	3,865	3,870
Children in secondary, total (in '000)	1,694.0	1,703.4	1,712.9	1,715.9	1,741.6	1,784.4	1,837.8	1,903.3
<i>of which:</i> in GBAO	41.8	41.4	40.0	38.9	38.4	38.0	37.8	37.2
<i>of which:</i> in Khatlon oblast	643.4	647.9	648.6	647.9	654.2	666.2	680.8	707.2
<i>of which:</i> in Soghd oblast	462.6	463.5	464.3	463.8	471.4	482.3	499.7	517.8
<i>of which:</i> in Dushanbe	167.8	168.4	171.9	172.3	175.6	180.4	185.4	190.6
<i>of which:</i> in RRS	378.4	382.1	388.1	393.1	402.0	417.5	434.0	451.3
<i>of which:</i> in urban areas (in percent)	28.6	28.3	28.5	28.5	28.7	28.8	29.3	29.3
<i>of which:</i> in rural areas (in percent)	71.4	71.7	71.5	71.5	71.3	71.2	70.7	70.7
Gender Parity Index (GPI), all schools	0.883	0.890	0.891	0.907	0.911	0.912	0.915	0.922
<i>of which:</i> in primary (1-4)	0.924	0.930	0.930	0.936	0.935	0.933	0.934	0.935
<i>of which:</i> in lower secondary (5-9)	0.895	0.897	0.903	0.908	0.914	0.919	0.922	0.931
<i>of which:</i> in upper secondary (10-11)	0.718	0.758	0.743	0.818	0.839	0.833	0.837	0.850

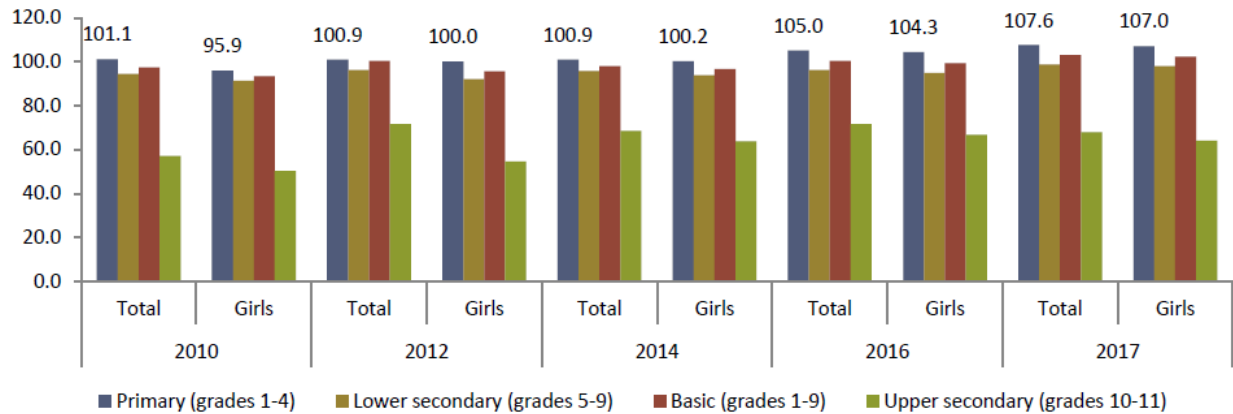
Source: JSR, 2017

Enrollment

Enrollment rates have been historically high in Tajikistan, yet there is evidence of dropouts and greater gender imbalances which result in lower attendance and higher dropout rates of girls. In 2017, 48.3 percent of girls enrolled in primary grades, 48.2 percent in lower secondary grades and 46 percent in upper secondary grades. (See figure below)

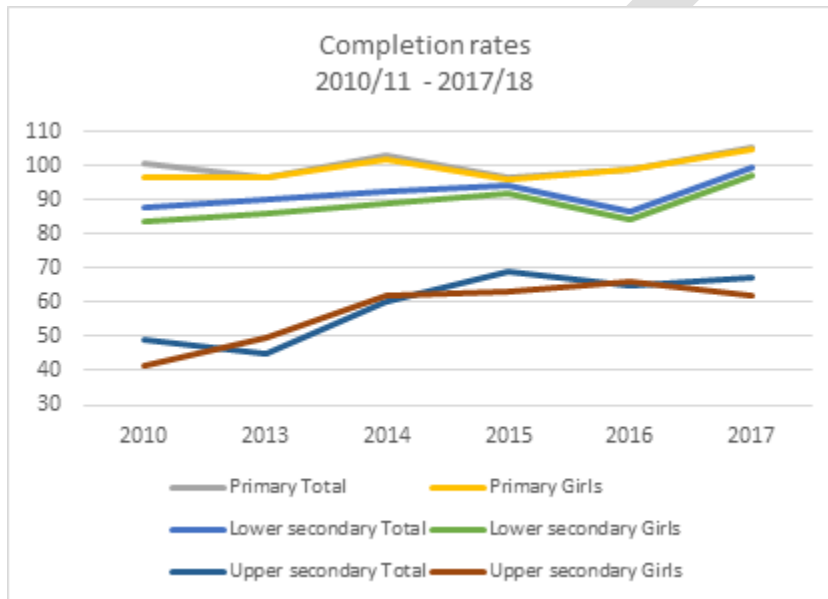
Lower attendance rates can be seen in rural areas where educational facilities are remote and not within a reasonable distance. For example in GBAO, enrollment rates in general secondary education has been steadily declining for 12 consecutive years, such as more recently from 37,806 enrolled students in 2016 to 37,151 students in 2017. EMIS reports show that there are in fact more students enrolling in the first grade of primary but enrollment rates (among boys and girls alike) start falling significantly beyond primary grades. This could be partly explained by: (i) high rates of migration from GBAO to other regions within the country; (ii) prevalence of poverty and inability of households to pay for education of their children in higher grades; (iii) remoteness of educational facilities and distance to school; and (iv) poor infrastructure (e.g., heating and electricity shortages)

Figure 14: Net Enrolment Rates (NER) by levels of General Secondary Education, 2010-2017



Source: JSR, 2017 update

Figure 15. Completion rates for general secondary education, 2010-2017.



Source: JSR 2017

Issues related to quality is amongst one of the concerns affecting the general secondary education system, the MoES has taken critical steps and significant improvement of learning materials and overall school infrastructure which led to higher average class size and classrooms-to-school ratio. (See table below)

Table 10. Classrooms, class size and other indicators in general secondary education (2010-2017)

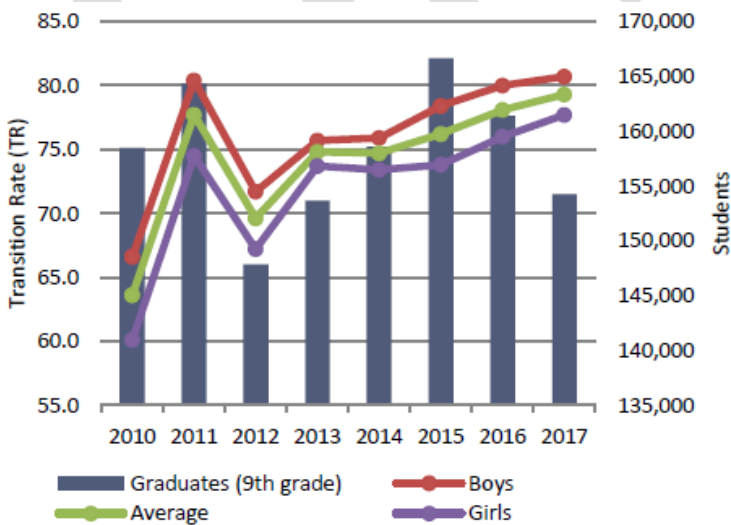
	2010	2011	2012	2013	2014	2015	2016	2017
Number of classrooms, total	75,946	76,257	76,819	77,098	78,498	79,828	82,060	83,989
of which: grades 1-4 (in percent)	41.4	41.1	40.9	40.9	41.2	41.6	42.6	44.0
of which: grades 5-9 (in percent)	47.1	46.4	46.6	46.5	45.8	45.0	43.8	42.9
of which: grades 10-11 (in percent)	11.5	12.5	12.5	12.5	13.1	13.4	13.6	13.1
Average class size (pupils per classroom)	22.3	22.2	22.2	22.3	22.1	22.3	22.4	22.7
of which: primary (1-4)	21.1	21.0	21.0	21.1	21.1	21.6	22.0	22.7
of which: lower secondary (5-9)	23.1	23.0	23.1	23.1	22.9	22.7	22.5	22.6
of which: upper secondary (10-11)	22.9	23.0	23.1	22.9	22.8	22.9	22.8	22.7
Average no. of classrooms per school	20.3	20.3	20.2	20.1	20.4	20.7	21.2	21.7
of which: primary (1-4)	57.2	57.7	58.4	61.9	69.9	82.2	96.1	104.9
of which: lower secondary (5-9)	49.7	50.6	53.1	56.8	60.6	64.3	68.9	73.7
of which: upper secondary (10-11)	3.5	3.8	3.7	3.6	3.7	3.7	3.7	3.6

Source: JSR, 2017 update.

Transition Rate

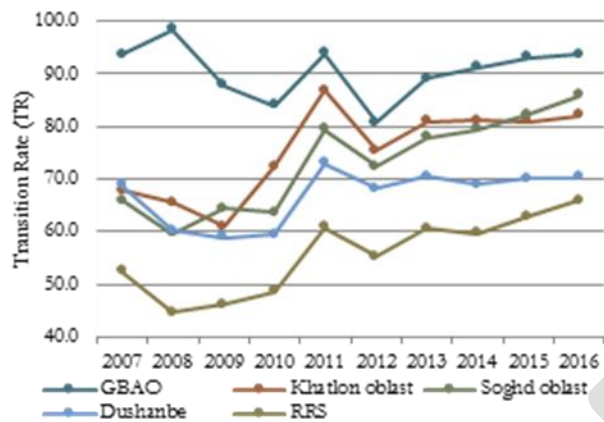
In 2017, the transition rate for boys was 80.7 and for girls 77.7, compared to 80.0 and 76.0 respectively back in 2016. Higher transition rates indicate greater access to education, or higher level of transition from basic education (grades 1-9) to upper secondary education (grades 10-11). These figures suggest that more students successfully transitioned from basic education and continued their studies in 10th and 11th grades during 2016-2017, therefore completing the full cycle of general secondary education. TRs in rural areas are a concern especially among girls. In RRS for example, the transition rate for girls was 60.9 in the 2017-18 academic year. A closer look into assessing the quality of educational facilities and the availability of qualified teaching personnel is essential in providing equal opportunities for all.

Figure 16: TR from basic to upper secondary education by gender



Source: JSR, 2017

FIGURE 18: Transition rate (TR) from basic to upper secondary education (9th to 10th grade) by region 2007-2016

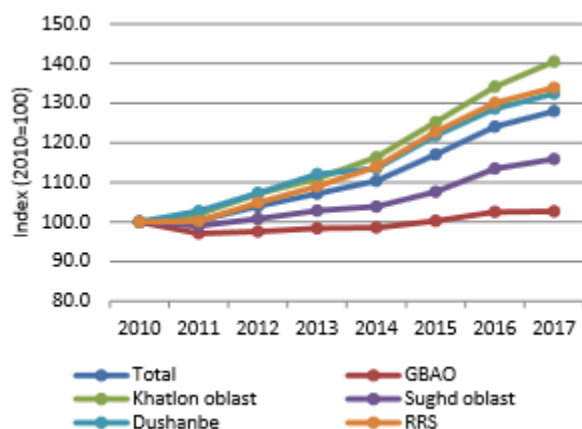


Teachers

Primary and secondary education face the same shortage of qualified teaching personnel. As such, the government developed and implemented a strategy that focused on teacher training, curriculum development, enforcement of new teaching standards, and increased remuneration; this strategy steadily increased the number of teachers and improved their qualifications (Mirzoev, 2017). According to Mirzoev (2017), the number of primary and secondary teachers in Tajikistan increased by 3.2% between 2016 and 2017. He also noted that, of the total teacher population, 70.9% had at least a university degree in 2017, as compared to 69.7% in 2016. However, in spite of the steady increase in the number of primary and secondary school teachers, a significant percentage of these teachers (14.2% in primary and 20.7% in secondary) had less than three years of teaching experience (Mirzoev, 2017). The increase in the number of primary and secondary school teachers between 2010 and 2017 is illustrated in Figure below.

Figure 19. Increase in number of primary and secondary school teachers (2010-2017)¹²

¹² Graph directly taken from Mirzoev, S. 2017. *Republic of Tajikistan Education Joint Sector Review 2017 Update*. Dushanbe.



This steady increase in primary and secondary school teaching personnel has naturally led to a steady decrease in student-teacher ratios, except in the Soghd region, where population growth is highest and thus demand outstripped supply (Mirzoev, 2017). The decrease in student-teacher ratios per region between 2010 and 2017 is illustrated in Figure 34 below.

Figure 20. Student-teacher ratios per region, primary and secondary school (2010-2017)¹³

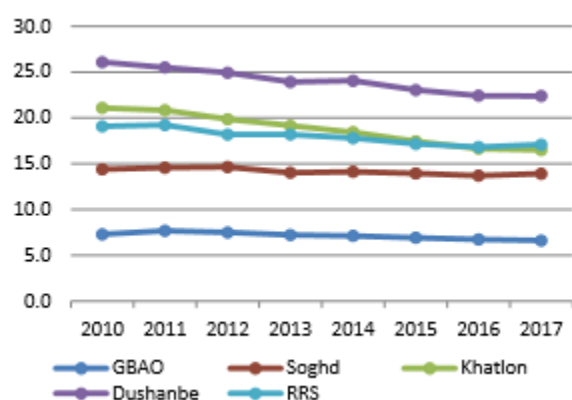


Table 11: Teachers in general secondary educational institutions, 2010-2017

	2010	2011	2012	2013	2014	2015	2016	2017
Teachers in secondary education	94,253	94,604	97,990	100,990	104,031	110,317	116,498	120,635
of which: men (in percent)	44.6	43.8	43.5	43.6	43.5	43.9	43.6	42.9
of which: women (in percent)	55.4	56.2	56.5	56.4	56.5	56.1	56.4	57.1
of which: in GBAO	5,454	5,298	5,322	5,366	5,377	5,469	5,594	5,600
of which: in Khatlon oblast	30,466	31,071	32,642	33,811	35,442	38,153	40,868	42,806
of which: in Soghd oblast	32,097	31,781	32,357	33,017	33,337	34,551	36,428	37,192
of which: in Dushanbe	6,424	6,601	6,894	7,202	7,296	7,825	8,262	8,508
of which: in RRS	19,812	19,853	20,775	21,594	22,579	24,319	25,769	26,529

Source: JSR, 2017

¹³ Graph directly taken from Mirzoev, S. 2017. *Republic of Tajikistan Education Joint Sector Review 2017 Update*. Dushanbe.

Despite the improvement in the number and qualification of teachers between 2010 and 2017, the system had to absorb more teachers due to the growing demand, younger teachers were selected, often recent graduates with no prior teaching experience. As such, in 2017, 14.2 percent of teachers in primary grades (1-4) and 20.7 percent in higher grades (5-11) had less than 3 years of teaching experience. To assess the quality of teaching practice, especially for newcomers into the system, the MOES decided to incentivize teachers, by issuing a number of awards: state awards, local education awards, and excellence in education. In the 2017-2018 academic year, 120,185 teaching personnel (including instructors) received these prestigious awards, including 68,867 women. While one in three teachers received some form of professional award last year, only 1,443 teachers (of which 46.5 percent women) received State Award and 4,858 teachers (of which 40.1 percent women) were awarded with Excellence in Education certificates. (JSR, 2017)

Primary and Secondary Vocational Education and Training

Tajikistan's network of TVET providers comprises mainly public institutions including: (i) 61 primary vocational education schools (lyceums) and 66 secondary vocational education schools (technical colleges) under the Ministry of Education (MOE); and (ii) 25 adult learning centers with branches in the districts under the Ministry of Labor, Migration and Employment (MoLME). The National Adult Training Center (NATC) in Dushanbe serves as the model and as a central resource center. In addition, the State Service for Quality Supervision provides on-demand licenses for newly proposed specialties, as well as indication of the maximum number of students to be trained.

Enrolment

Between 2010/11 and 2017/18, enrolment in primary TVET remained constant around 20-25,000. Share of women increased from 15.4% to 23.2%. On the other hand, enrolment in secondary TVET more than doubled during the same period. Share of women increased from 55% to 61.8%. But this cannot hide the fact that enrollment in TVET has been historically very low. Generally, primary vocational education has the lowest coverage of secondary school graduates than other levels of professional education in the country. This is partly explained by: (i) limited absorptive capacity of the TVET system because of chronic underfunding and obsolete infrastructure and (ii) minimal role played by TVET in responding to growing market demand.

Table 12. Select indicators in primary vocational education

	2010	2011	2012	2013	2014	2015	2016	2017
Total enrollment, primary vocational	22,630	23,857	23,238	21,850	21,743	26,973	22,779	24,176
<i>of which: women (in percent)</i>	15.4	15.0	20.8	20.0	22.5	17.8	22.9	23.2
Admission in primary vocational	14,041	14,670	12,921	13,600	14,368	17,613	14,407	12,892
<i>of which: women (in percent)</i>	16.5	27.6	29.6	21.4	24.0	22.3	22.5	...
Graduation from primary vocational	10,387	10,596	10,667	11,103	8,893	8,850	15,295	15,511
<i>of which: women (in percent)</i>	22.8	38.3	38.5	16.3	25.9	25.2	22.5	24.5
Gender Parity Index (GPI), all PVET	0.177	0.263	0.240	0.250	0.291	0.217	0.297	0.303

Source: EMIS, as reported by Mirzoev, S. 2017. *Republic of Tajikistan Education Joint Sector Review 2017 Update*. Dushanbe.

Table 13. Select indicators in secondary vocational education

	2010	2011	2012	2013	2014	2015	2016	2017
Total enrollment, secondary vocational	37,550	40,095	42,277	43,777	59,356	68,325	73,333	80,432
<i>of which: women (in percent)</i>	55.0	56.3	60.8	60.0	59.2	59.1	59.1	61.8
Admission in secondary vocational	12,967	14,613	15,266	19,190	23,080	26,146	23,667	25,434
<i>of which: women (in percent)</i>	53.4	57.8	62.8	61.3	55.8	58.0	57.2	63.9
Graduation from secondary vocational	10,601	9,712	11,123	11,792	11,740	12,093	12,670	17,179
<i>of which: women (in percent)</i>	64.2	61.7	63.3	55.0	55.6	61.5	68.5	63.8
Gender Parity Index (GPI), all SVET	1.222	1.289	1.549	1.500	1.450	1.443	1.448	1.617

Source: EMIS, as reported by Mirzoev, S. 2017. *Republic of Tajikistan Education Joint Sector Review 2017 Update*. Dushanbe.

More than 50% of the total enrolment was in “health, physical education, and sport”, followed by pedagogy. Over time, enrolment in “industry and construction” decreased from 19% in 2007/8 to 14% in 2017/18. (EMIS, 2017).

According to Mirezoev (2017), the TVET system faces major constraints including outdated curriculum and learning materials, dilapidated school buildings and, low paid teachers were amongst the few issues challenges to the TVET system. Though a large number of graduates are produced each year, they lack modern skills and qualifications relevant to the labor market demands.

Higher education

In the 2017-18 academic year, there were 39 higher educational institutions in Tajikistan, including 15 universities, 15 institutes (see table below). The enrolment in higher educational institutions has gone up by 0.9 % during 2016-2017, including by 3.5 % for females. This is an encouraging trend, particularly because women are commonly admitted to be severely disadvantaged and are more likely to be unemployed or poor.

Table 14. Number of higher education institutions

	2010	2011	2012	2013	2014	2015	2016	2017
Number of HEIs, total	34	35	36	38	38	38	39	39
<i>of which: universities</i>	13	13	13	14	14	14	15	15
<i>of which: institutes</i>	12	12	11	14	14	15	15	15
<i>of which: conservatories</i>	1	1	1	1	1	1	1	1
<i>of which: state higher institutions</i>	4	4	4	4	4	4	4	4
<i>of which: regional affiliates</i>	4	5	7	5	5	4	4	4

Over 70 % of students were enrolled in full-time day programs in 2017/18, of which 21.5 percent under education and pedagogy; 3.3% in ICT; 8.4 % in Science,; 208% in construction and architecture and 1.8% in mining. The number of extramural students declined since 2016, which contradicts a long-standing

Soviet practice of granting undergraduate students permission to work and study. In addition, the overall completion rate appears to be relatively low and comprises about 80 %. Two major reasons for dropping out are academic failures and non-attendance, particularly among girls in rural areas.

Figure 19. Enrolment in higher education by region, 2012-2017¹⁴

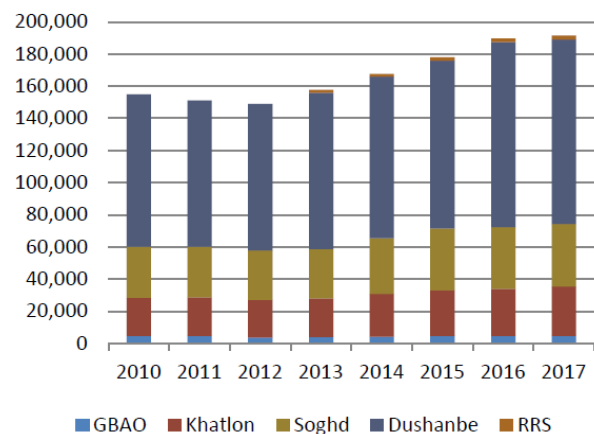
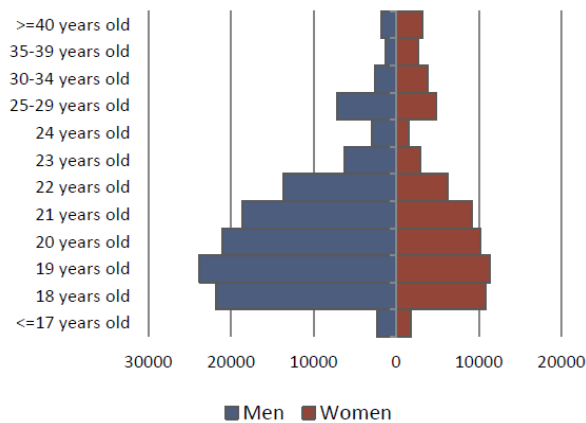


Figure 20. Enrolment in higher education by gender and age, 2012-2017¹⁵



Adult/continuing education

According to the National Strategy for Education Development (NSED) 2012-2020, The term of “adult education” in Tajikistan encompasses the complex of progressive process of formal and other type of education which help adults (for the purposes of education, this includes population aged 25 years and older) to develop their abilities, enrich their knowledge and improve technical and professional skills or apply them in new areas to satisfy their society needs. Adult education covers both formal and continuous education, informal education and a whole spectrum of informal and auxiliary education.

Tajikistan’s Law on Education defines adult education as “a complex formation processes by which adults develop their abilities and knowledge, raise the level of professional and technical expertise, or choose a new direction”, but lacks clear direction about government bodies responsible for it and strategies for improving it. The concept of continuing education includes: the development of a competitive educational environment and with a variety of educational services; creation of infrastructures for continuing education; use of modern teaching technologies and new financial mechanisms.

In 2017, the country adopted a Law on the Education of Adults to “[govern] the public relations connected with the system and management of the education of adults and the organization of a scientific and methodical educational process, as well as the staffing, financial and economic activities, and material and

¹⁴ Table directly taken from *Tajikistan Joint Sector Review*, 2017 update.

¹⁵ Table directly taken from *Tajikistan Joint Sector Review*, 2017 update.

technical resources of institutions of adult education.” This law sought to operationalize the functioning of adult education institutions in Tajikistan. It expands the country’s conception of formal education, in effect recognizing the right of adults to equal educational access at any point in their lives. Currently, the government is working on implementation mechanisms for the Law on the Education of Adults. The following elements are of prime importance in developing the said mechanisms (Qudussov, 2017):

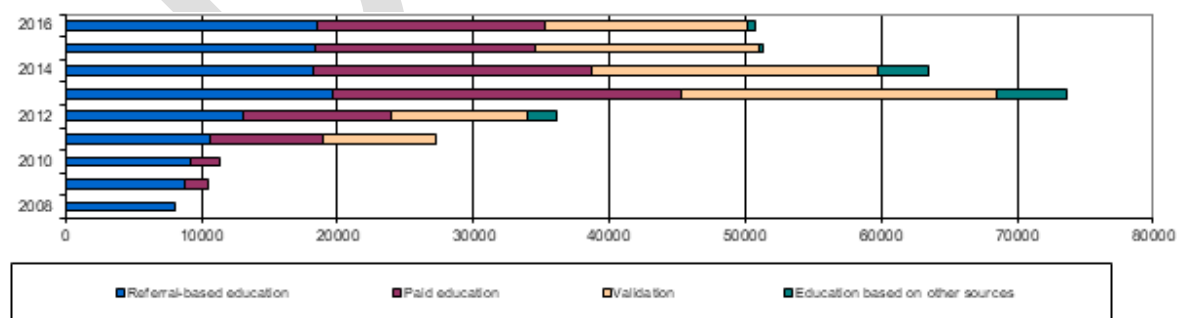
- Raising awareness of policymakers and stakeholders regarding lifelong learning;
- Defining a validation (skills equivalency) procedure for adult education programmes;
- Amending the state educational standards and accreditation processes;
- Recognizing andragogy as a profession;
- Creating training programmes for andragogy; and
- Instituting a system to collect complete statistical information on adult education.

However, even before the official adoption of the Law on the Education of Adults, a network of state-financed adult education centers - the ATCT system - has already been developing in Tajikistan since 2008 (Qudussov, 2017). The development of this network was set into action upon the establishment of the Adult Training Center of Tajikistan (ATCT), which had four branches and 20 partner organizations - an important milestone in the provision of adult education in the country. Adult education centers within the ATCT system administer short-term training courses for working-age individuals, with around 50,000 people enrolling every year (Qudussov, 2017). Qudussov (2017) reported that the ATCT system had three modes of educational service:

- (1) Referral system, wherein adult education is administered for free to individuals referred and sponsored by the Agency of Labor and Employment;
- (2) Services paid for by enrollees; and
- (3) Equivalency-based skills certifications.

Trends in the use of ATCT system services from 2008 to 2016 are illustrated in Figure below.

Figure 21. Use of ATCT system services, 2008-2016.¹⁶



Data from 2012 indicates that 260 non-state adult education institutions exist alongside the aforementioned state institutions; according to Qudussov’s (2017) estimations, these non-state

¹⁶ Graph directly taken from Qudussov, J. 2017. *Tajikistan: Country Research on Lifelong Learning*. Dushanbe: UNESCO.

institutions provide services to more than 160,000 individuals. However, these adult education centers, both state and non-state, are only functioning at about 50% to 70% of their capacity (Qudussov, 2017).

Despite the existence of these adult education institutions, it must be noted that updated data available about the state of adult education in Tajikistan is barely available. This absence of updated information about adult/continuing education in Tajikistan makes it difficult to formulate clear and relevant policies for the future. As Tajikistan modernizes its educational system and aligns itself to the international agendas toward lifelong learning, it will be essential for the Government to implement processes for collecting data about education and learning for adults and their further employment, beyond the scope of the basic and higher education system.

Issues related to access and absenteeism

According to UNESCO Institute for Statistics, in 2017 there were 11,435 students in Tajikistan out of school of which 8,176 girls and 3,259 boys.

While disaggregating enrolments in the educational system by each level and type, it is important to remember that the students enrolled in early childhood education are the same students who will eventually go on to complete primary and secondary education, pursue TVET or higher education, and hopefully pursue learning opportunities throughout their lives. Therefore, it is essential not to overlook the transitions of students between educational institutions to get a more complete sense of a student's educational trajectory.

4.3 out of 10 adolescents miss classes. The main cause of absenteeism is illness followed by household work. (See figure below)

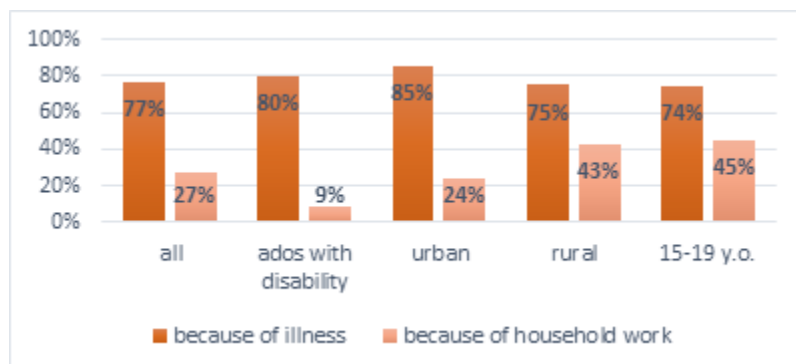
Table 15: % of adolescents missing classes at school ¹⁷

Disaggregated by:

	All	age		gender		residence		Health opportunities				
		10-14 years	15-19 years	boys	girls	urban	rural	with disability	without disability			
Do not miss	57%	57%	54%	52%	59%	55%	55%	42%	56%			
Miss 1-2 times a month	38%	38%	39%	41%	35%	38%	39%	36%	39%			
Miss 1-2 times a week	3%	3%	3%	3%	3%	4%	3%	12%	3%			
Miss 3-4 times a week	1%	1%	1%	1%	1%	1%	1%	8%	1%			
Other		1%		1%	1%	2%	1%	2%	1%	3%	1%	
Could not respond		0,2%		0,2%		0,3%	0,2%	0,3%	0,1%	0,3%	0,0%	0,2%

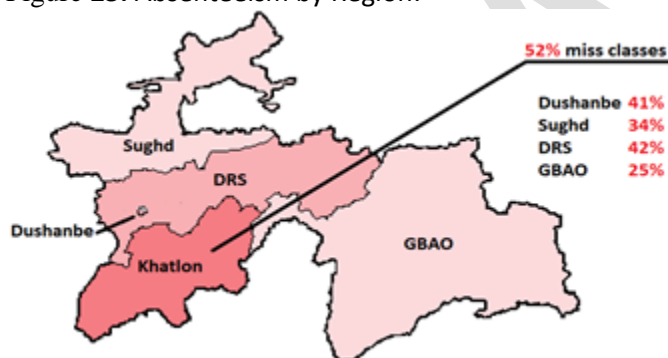
¹⁷ Tajikistan Sector Review, 2017 update.

Figure 22: Percentage of main causes of absenteeism ¹⁸



The absenteeism rate among adolescents across regions ranges from 25% in GBAO to 52% in Khatlon. 34% of adolescents in Sughd region missed classes in the past six months, while their peers in DRS and Dushanbe did so at 42% and 41% respectively. (TSR, 2017)

Figure 23: Absenteeism by Region:¹⁹



The phenomenon of migrant parents is considered another issue that reflects the influences of poverty on enrollment. Labor migration is common in Tajikistan. Parents migrate to work, usually to Russia (Jones, Black, & Skeldon, 2007). Data from the Migration Service of the Tajik Ministry of Internal Affairs indicate that, in 2008, 852,100 people (approximately 12% of the population of Tajikistan) were registered as migrants in the Russian Federation. This finding implies that approximately one family in four has a migrant worker. Data from the National Bank of Tajikistan show that the remittances of migrants amounted to about US\$2.67 billion or 49% of the gross domestic product in the same year (ETF, 2011). In some cases, migrant parents induce positive effects on the education of their children because their remittance allows their children to continue and finish their studies. Nevertheless, in other cases, children with migrant parents must endure the heavy burden of undertaking household chores and work in the fields.

¹⁸ IBID

¹⁹ Tajikistan Sector Review, 2017 update.

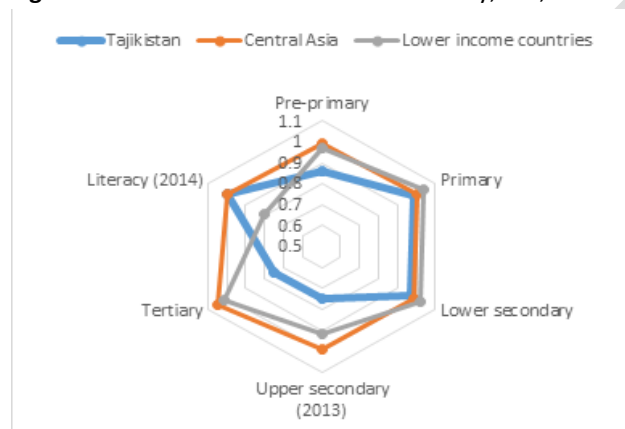
Gender

Gender parity index for gross enrollment rates is below 1 at all levels of general secondary education in Tajikistan. For primary and lower secondary (grades 1-9, boys' and girls' enrollment is close to parity, but the disparity is much wider at the upper secondary level (grade 10-11), despite the improvement seen from 2010/11 (0.718) to 2017/18 (0.85).

Relatively low GPI in pre-primary education is also a concern. However, improvements have been achieved with regards to ensuring more equitable access to pre-school education for boys and girls.

The Gender Parity Index (GPI) peaked in 2014 by reaching 0.839 and then dropping slightly to 0.819 in the 2016-17 academic year as shown in the figure below.

Figure 24. Gross enrolment rate and literacy, GPI, 2017



Source: UIS Data Center

Evidence proves that gender differences exist at the educational level, and the challenges in education faced by girls are closely related to socio-cultural constraints. Statistics indicates that gender bias is in favor of boys, and this inclination begins at the earliest stages of education. MICS (2005) data show that 27.1% of boys and 23.6% of girls in grade 1 attend pre-primary school in the previous academic year. The MOES also reports that the total number of six-year-old children who attended preschool education is 11619, of which 56% are boys and 44% are girls. UIS also estimates that the enrollment rate varies in terms of gender among pre-primary-aged children. In particular, 9% of the enrolled children are males and 7% are females.

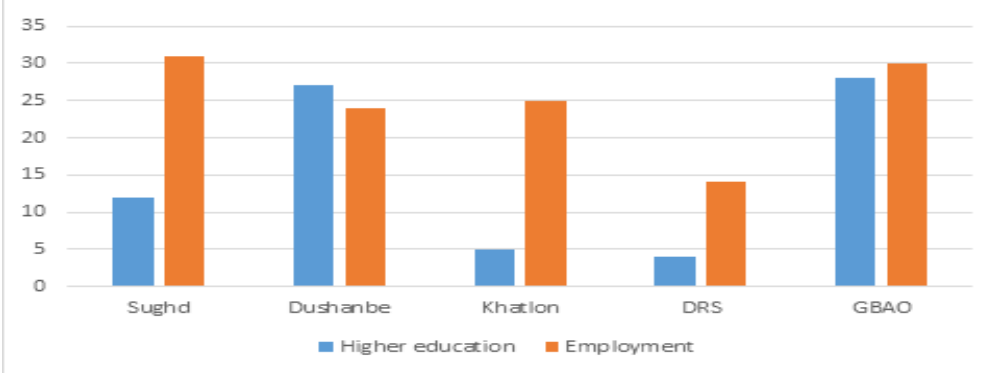
Following the regional differences observed in the previous section, educational opportunities for women are not equitably distributed across Tajikistan. According to the 2017 Demographic and Health Survey, there is a substantial regional gap in women's access to higher learning. Women in GBAO and Dushanbe have the highest percentages of women who have attended higher education, while in the DRS and Khatlon regions, higher education attendance rates among women are as low as 4%. However, education

levels and employment levels are not necessarily correlated; women in Sughd and Khatlon regions had higher employment rates despite having such low higher education attendance rates. While the higher education attendance rate in Sughd was only 12 %, for example, women’s employment rate was 31 %, the highest in the region. Khatlon, with a strikingly low higher education attendance rate at 5 %, had 25 % employment rate for women. These patterns may indicate both perceived and substantive gaps in the relevance of education for employment. It is also worth a closer look at the types of jobs held by women with various education levels in Tajikistan, which may reveal stark differences in salary and working conditions.

While Tajikistan recognizes the value of gender equality and through its Law on State Guarantees of Equal Rights and Opportunities for Men and Women, the national framework lacks clear implementation processes. Other laws aim at protecting women’s rights and security, such as those combating human trafficking, preventing domestic violence, and raising the legal age of marriage to 18 years. A national gender policy was passed in 2010, the National Strategy for Enhancing the Role of Women in the Republic of Tajikistan, which lists concrete actions to improve women’s participation in education, the labor market, entrepreneurship, and in politics. However, lacking the identification of responsible agencies, timeframes with milestones, funding sources, and monitoring plans, there is no clear path forward toward making these ideas tangible (ADB, 2016).

Furthermore, the completion rates of both primary and lower secondary school are high with full gender parity at the primary level and somewhat lower female completion rates at the secondary level (95 vs. 100 % for girls and boys, according to the WDI database). Upon completion of basic education (9th grade), outcomes are less favorable. However four in five students continue their education (in 2015), almost one in three drop out before completion—though school retention rates appear to be improving in recent years. Yet even without legislation, there are more students in the 20-24-year-old age group demonstrating the increased interest in professional education among the youth. Tertiary education has seen a steady increase over the past decade with a significant but narrowing gender gap in favor of males (World Bank, 2018).

Figure 25. Higher education enrolment rates vs. employment rates (in %) by region, 2017²⁰.



²⁰ Source: Data from the Tajikistan Agency on Statistics and ICF. 2018. *Tajikistan Demographic and Health Survey 2017*. Dushanbe, Republic of Tajikistan, and Rockville, Maryland, USA: Statistical Agency under the President of the Republic of Tajikistan (SA), Ministry of Health and Social Protection of Population of the Republic of Tajikistan (MOHSP), and ICF

Qudussov (2017) points out that there is a sectoral segregation by gender in the labor market in Tajikistan. In the high-paid sectors of the economy, the share of women is very small: in the financial sector, the share of women is 29.9%, in the electric power industry - 15.9%, in the mining industry - 12.5%, in transport and communications - 23.8%. Only in two sectors the share of employed women exceeds men: in health care and education; in health care, the share of women is 64.8%, in education - 53.6%. Agriculture, education and health that are the most underpaid economic sectors.

Women are disadvantaged in terms of employment, with only 27% of women employed compared to 63% of men in 2013. Women are employed mostly in the public sector, but almost a quarter of women are also involved in unpaid work in family business, compared to 13% of men (World Bank, 2017b). Women also earn much less than men.

Children with disabilities

The rights to education for children with disabilities are recognized in various legal, policy and institutional frameworks in Tajikistan including the National Strategy for Education Development 2020. The National Development Strategy of the Republic of Tajikistan until 2030 states that limited social inclusion of children with disabilities is among the key causes of social inequity in Tajikistan and emphasizes the importance of creating a more inclusive education system. Article 22 of the Law on Education states that children with physical and mental disabilities can study in mainstream schools subject to the agreement of their parents and that special institutions of compulsory education, boarding schools and special classes should be opened for those “children with physical and mental disabilities who cannot study in mainstream schools”. With these efforts, in recent years, there has been steady increase in number of children with disabilities attending the mainstream schools with an average 6% annual increase between 2013 and 2017. However, comparing the data from EMIS and school registries, it is evident that not all children with disabilities were reported by EMIS: according to EMIS only 447 pupils with disabilities were registered as enrolled in the target schools in 2016/17, compared to 974 in the school registries. The school administration believe that this is in part because only children whose disabilities are documented are registered in EMIS.

Sub-component 2.3 of the fourth Global Partnership for Education (GPE-4) focuses on inclusive education. The GPE-4 Fund Grant builds on achievements under the previous grants, and supports certain initiatives in new areas, such as early childhood education and inclusive education, complementing work initiated with other development partners including UNICEF, AKF, USAID and OSI.

However, these children continue to face significant challenges. According to the KAPB Study carried out by UNICEF in 2016, societal stigmatization and the negative perceptions of disability have added to the obstacles faced by children with disabilities in accessing education. The discriminatory attitude to children with disabilities prevails, e.g. doctors and teachers implying that children with disabilities should be placed in specialized institutions as they can provide specialized care and education, which cannot be provided

by parents and regular schools. In addition, the gender inequality in accessing education remains an issue of concern. At the same time, the progress is being seen. An assessment carried out in 69 schools by UNICEF in 2017 showed that the majority of the students with disabilities have positive attitude to education. Their classmates also showed willingness to support their peers with disabilities. 90 % of teachers claimed that every child with disability has the right to mainstream schools and only 13 % asserted that children with disabilities should study in special schools. In 2018-2019 7,278 CwD, in which, 2879 were girls who received education in specials classes (EMIS 2019. P.225)

There is a lack of accurate data for CwD, however, available data indicates that most children are receiving primary education, and that those who remain out of school at the primary level are among the most marginalized populations. Data from Tajikistan's Joint Sector Review (JSR) 2017, shows that 3,104 students with disabilities, were enrolled in higher educational institutions in Tajikistan.

Data from Tajikistan's Joint Sector Review (JSR) 2017, indicates that adolescents with and without disability miss classes 1-2 times a month at a similar rate – 36% of those with disability and 39% of those without disability, the former group misses classes 1-4 times a week 5 times more often than the latter group. Yet, only 7% of adolescents with disability named disability as the reason for missing classes, whereas 80% named illness. There are also differences in adolescents missing classes because of household work.

24% of urban adolescents missed classes to do household work, while 43% of their peers living in rural areas missed classes for this reason. This rate is even higher among senior age group of 15-19 years old – 45% of adolescents named household work as the reason to miss classes.

Cost and financing

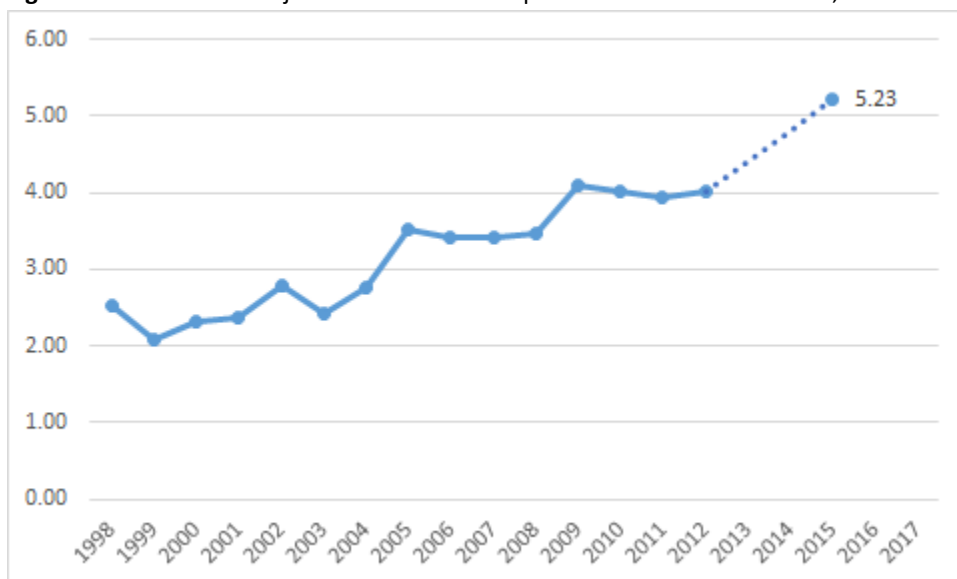
Budgetary allocations towards education

In Tajikistan, the state budget system consists of two main components, namely the republican budget, which is channeled through the central government, and the local budgets, which are channeled through the various sub-national government units.

In 2017, the government of Tajikistan made a financial pledge, as a partner country of the Global Partnership for Education (GPE) to increase public expenditures on education from TJS 3,013 million in 2017 to TJS 3,893 million in 2020 so as to maintain the share of public education expenditures at 17% of aggregate public expenditure.

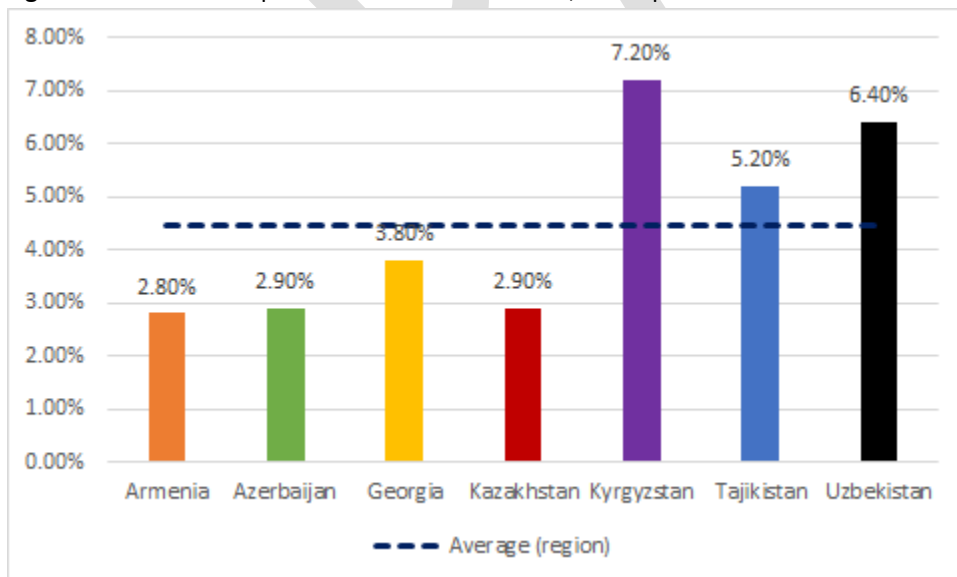
The size of total education expenditure in Tajikistan has steadily increased since 1999, with 2015 UIS data (latest available) registering Tajikistan's education expenditures as a percentage of total GDP at 5.23%. The evolution of the size of education expenditures in Tajikistan is illustrated in Figure 23 below.

Figure 26. Evolution of Tajikistan’s education expenditures as % of total GDP, 1998-2016²¹



This is well above the average education expenditure in low-income countries (3.767% of total GDP) and the average education expenditure of post-Soviet states in the Central Asia and southern Caucasus region (4.46% of total GDP). Comparative data on education expenditure in the said post-Soviet states is presented in Figure 24 below.

Figure 27. Education expenditures as % of total GDP, select post-Soviet states²²



²¹ Source: UNESCO Institute for Statistics. Latest data: 2015; no data reported for years 2013 and 2014.

²² Source: UNESCO Institute for Statistics. Tajikistan, 2015 data; Armenia, Azerbaijan, 2016 data; Georgia, Kazakhstan, Kyrgyzstan, Uzbekistan, 2017 data.

However, despite the fact that Tajikistan allocates a comparatively large share of its GDP towards education, much of this allocation is channeled towards inputs that do not directly contribute to improving educational quality (except in general secondary education, where a huge majority of the funding is spent towards the salaries of education staff; Mirzoev, 2017).

Expenditures by expense type

Capital expenditures are primarily funded through the republican budget (World Bank, 2013) and represent 10% of total capital expenditures within the state budget (Mirzoev, 2017). With regards to the total education budget, capital expenditures accounted for 9% of total spending in 2017 - all of which were used towards new constructions. This follows a marked decrease in capital expenditures since 2010, during which capital expenditures represented 21% of total education spending. Lack of schools' own resources and chronically limited fiscal space affected the subsidy-dependent sub-national governments and led to the reduction in capital expenditures (Khomidova & Mirzoev, 2018).

In contrast, labor costs have significantly increased since 2010: Labor compensation incurs the largest cost within the education budget in 2017, accounting for 60% of total education expenditure, as compared to 2010, during which it represented only 46% of the total education budget. However, despite a marked increase in the wage bill, wages are not sufficiently high, with respect to Tajikistan's per capita GDP: In 2017, the average wage bill in the public education sector is equal to \$104.3 - only 12.7% of per capita GDP (Mirzoev, 2017). Moreover, Mirzoev (2017) reports that average remuneration in the education sector is 22% lower than the average remuneration across the entire public sector.

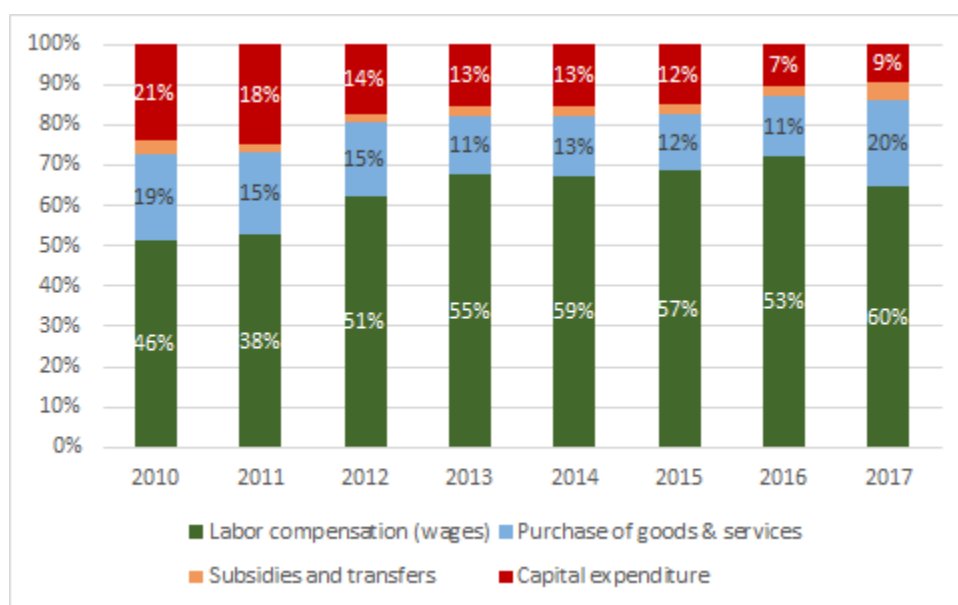
Table 11 below details education expenditures by expense category from 2010 to 2017 while Figure 25 illustrates the way expenditure distribution by expense category has evolved from 2010 to 2017.

Table 16. Education expenditures by expense category (in millions of current US\$), 2010-2017.

	2010	2011	2012	2013	2014	2015	2016	2017
EDUCATION BUDGET (WITH PIP AND GRANTS)	226.1	313	325.5	443.2	477	412.2	394.8	418.9
of which: labor compensation (wages)	104.3	119.9	165.2	243.3	281.5	234.6	207.6	250.1
of which: purchase of goods & services	43.2	46.4	48.1	50.9	62.8	48.9	42.6	82.3
of which: subsidies and transfers	7.3	4.8	6.2	8.7	10	8.3	7.5	17.6
of which: capital expenditure	48.5	56.4	45.4	55.8	64.3	50.8	29.6	36.7

<i>(of which: new construction)</i>	37	45.3	35.9	35.9	54.4	40.6	29.6	36.7
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Figure 28. Distribution of expenditures by expense category (in %), 2010-2017



Expenditures by education sub-sector

State preschools are financed completely by sub-national government budgets while vocational institutions (i.e., primary vocational education and training and universities) are almost entirely financed by the republican budget (World Bank, 2013). Like preschool, general secondary education (i.e., including primary education) is also primarily financed by local government budgets: In the academic year 2016-2017, only 6.4% of general secondary education expenditures was shouldered by the republican budget (Khomidova & Mirzoev, 2018). On the other hand, expenditures related to secondary vocational education and training facilities are jointly funded by local and republican budgets (World Bank, 2013).

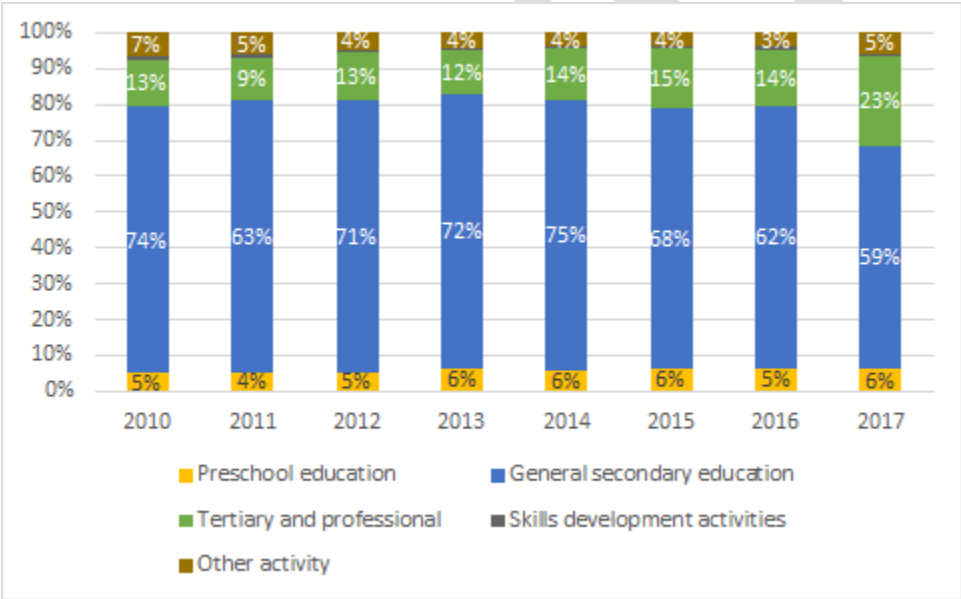
General secondary education receives the largest share of the budget; in 2017, this sub-sector received 59% of the total education budget. Table 12 details education expenditures per sub-sector from 2010 to 2017 while Figure 26 illustrates how budgetary allocations per sub-sector have evolved from 2010 to 2017.

Table 17. Education expenditures by sub-sector (in millions of current US\$), 2010-2017

	2010	2011	2012	2013	2014	2015	2016	2017
EDUCATION BUDGET (WITH PIP AND GRANTS)	226.1	313	325.5	443.2	477	412.2	394.8	418.9

of which: pre-school education	11.2	12.8	15.9	27	27.4	23.6	21.1	23.6
of which: general secondary education	168.1	196.3	231.2	318.7	356.9	280.1	244.2	245.8
of which: tertiary and professional	29.8	29.7	41.4	51.5	66.1	63.7	53.9	97.4
<i>(of which: higher professional)</i>	22.5	21.3	31.7	38.7	50.8	44.5	37.3	74
<i>(of which: primary professional)</i>	3.4	3.9	4.2	5.7	6.9	5.8	5.1	7
of which: skills development activities	1.6	2.2	2.5	2.9	2.8	2.2	2	3.8
of which: other activity	15.3	15.8	14.1	17.1	18.7	15.1	13.4	22.4

Figure 29. Distribution of expenditures by education sub-sector (in %), 2010-2017



However, even if the other education sub-sectors receive dramatically lower budgetary allocations, their corresponding student unit costs are much higher than those for general secondary education (World Bank, 2013). This is indicative of inefficient spending. For instance, the World Bank (2013) found that while enrolment in preschool is much lower than general secondary education, provision of preschool services still incurred disproportionately large costs. Similarly, the per-student cost of primary and secondary vocational education and training is also twice that of general secondary education (World Bank, 2013). The high student unit costs of higher education is also unjustified, given that universities in Tajikistan do

not engage much in research and development, which tend to incur a large fraction of the costs in higher education institutions in general (World Bank, 2013). However, some efforts have been made in this regard.

In accordance with Article 41 (Law on State Finance, 2011), sectoral budget priorities and strategic sectoral plans are taken into account for the formulation of both central government and local budget drafts, as well as minimum requirements to meet the standards of social budget guarantees on newly launched and already implemented initiatives. Local government authorities, based on the methodological instructions issued by the Ministry of Finance and relevant line ministries and departments, formulate local budgets that are based on legal requirements. In recent years, using top down and bottom up approaches sector specific instructions are also developed and adopted by the Ministry of Finance.

An example of such innovations to improve the quality of the financial relations is the introduction nationwide in 2010 of per capita financing (PCF) in the education sector. Since 2011, the development and then the introduction of a targeted social assistance program for low-income groups has started, which currently covers 40 out of 65 districts of the country. In 2015, the phased introduction of per capita planning for primary health-care facilities assistance was initiated. All the above have contributed to enhanced quality of service delivery at the local level.

The full rollout of PCF in the general secondary education sub-sector in 2010 helped make spending more efficient, equitable, and accountable. In the PCF system, the school budget is calculated as a function of recurrent expenditures and more context-specific factors such as available local budget and projected enrolment rates (Khomidova & Mirzoev, 2018).²³ This system has resulted in better-rationalized budgets that are proportional to school needs and available financial resources at the local level. It has given schools more autonomy and has freed up local government personnel costs, providing some financial allowance for schools to implement activities seeking to improve educational quality (World Bank, 2013).

Key fiscal reforms and challenges

The education sector has also benefited from broader reforms in public financial management (PFM), which aimed to improve fiscal transparency, reinforce accounting and reporting practices, and roll out programme-based budgeting in accordance to the NDS 2016-2030. Tajikistan's PFM Reform Strategy 2009-2018 has resulted in the following landmark reforms (Mirzoev, 2016):

²³ The full formula for computing school budgets is as follows (taken verbatim from S. Khomidova and S. Mirzoev; see previous footnote):

$$B = SP \times NP + NS$$

where *B* is the school budget, *SP* is the minimum standard for a pupil depending on the type of school; *NP* is the average annual number of pupils; and *NS* is the minimum standard for school depending on the type of school.

Special coefficients are applied to the formula based on the district to which the school belongs and available school facilities.

- Incorporation of both local and republican budgets in the Treasury Single Account (TSA);
- Rollout of new Financial Management Information System (FMIS) to all budget organizations, including those at district and oblast level;
- Implementation of a unified chart of accounts;
- Adoption of new Treasury Law; and
- Enforcement of public sector accounting standards that are in line with International Public Sector Accounting Standards (IPSAS) for financial reporting.

The adoption of basic PFM systems across the entire government has also made accounting and bookkeeping practices in the education sector more reliable and more accountable (Mirzoev, 2016). According to Mirzoev (2016), compliance with international financial reporting standards, particularly among state educational institutions, facilitates the adoption of best practices in PFM and the conduct of financial audits.

The progress attained through these reforms show in Tajikistan’s improved scores in the World Bank’s Public Expenditure and Financial Accountability (PEFA) assessment, summarized in Table 13 below.

Table 18. Tajikistan’s PEFA scores, 2007 and 2012²⁴

#	Performance Indicator	2007	2012
PI-2	Composition of expenditure outturn compared to original approved budget	C	C+
PI-6	Comprehensiveness of information included in budget documentation	A	A
PI-8	Transparency of inter-governmental fiscal relations	B	B+
PI-10	Public access to key fiscal information	D	C
PI-11	Orderliness and participation in the annual budget process	B	B+
PI-12	Multi-year perspective in fiscal planning, expenditure policy and budgeting	D+	D+
PI-16	Predictability in the availability of funds for commitment of expenditures	D	D+
PI-18	Effectiveness of payroll controls	D+	D+

²⁴ Table directly taken from Mirzoev, S. 2016. *Joint Sector Review Education Sector Synthesis Report*. Dushanbe.

PI-19	Transparency, competition and complaints mechanisms in procurement	C	C+
PI-23	Availability of information on resources received by service delivery units	C	D
PI-24	Quality and timeliness of in-year budget reports	C+	C+
PI-25	Quality and timeliness of annual financial statements	D+	C+

In spite of the significant progress made with regards to PFM policies and practices, however, the government can still benefit from further fiscal reforms.

Firstly, the government has yet to establish a timely in-year reporting system on budget execution (Mirzoev, 2016). In addition, the government is still unable to generate reliable macro-fiscal and revenue forecasts; lack of this fundamental PFM function could undermine the impact of other important PFM reforms, such as the implementation of a medium-term expenditure framework (MTEF) and a programme-based budgeting scheme (Mirzoev, 2016). Without these functions, the size of sectoral budgets will become unpredictable and could hence largely fluctuate year on year; this unpredictability would make budget programming very difficult.

Budget execution and budget performance reporting mechanisms will also need to be improved. Currently, budget execution and budget performance reporting occur independently of the MoES; these are exclusively the responsibility of Main Administrators of Budget Allocations (MABAs), the highest-tier spending units within the public sector. MABAs often do not involve the MoES in the budget execution process, often resulting in incongruence between the MoES' strategic plans and how MABAs decide to execute the education budget (Mirzoev, 2016). Mirzoev (2016) also reports that some MABAs tend to exclude the MoES from the budget performance reporting process, which hinders analyses on whether the education budget is being spent efficiently. These mean that the MoES cannot exercise complete financial oversight and control over the education sector budget.

This inability to determine budget efficiency is also related to the fact that, despite the rollout of programme-based budgeting, the government continues to track what it is purchasing rather than what it is achieving (Mirzoev, 2016). In the education sector, Mirzoev (2016) describes how traditional budgeting systems are preferred to performance-based budgeting, resulting in incoherence between educational inputs and educational outcomes.

Fiscal decentralization is another key fiscal challenge in Tajikistan's education sector. While some oblasts are able to raise sufficient funds to finance their educational costs (such as Dushanbe and Soghd), others are heavily dependent on subventions from the republican budget (such as Khatlon, more than 6 districts of Sughd and GBAO; Mirzoev, 2017) This resource disparity, if unaddressed, can lead to disparities in educational access and quality and inefficiency in educational spending (Mirzoev, 2017). For instance, local governments that were dependent on subsidies saw significant reductions in capital expenditure as a result of economic slowdown; this is one symptom of subsidy-dependent oblasts' increased vulnerability to economic shocks (Mirzoev, 2017).

External Funding and Coordination

Tajikistan has a well-established cross-sectoral donor coordination mechanism called the Development Coordination Council (DCC), which aims to ensure that development partners work collectively with and advocate for the government in a harmonized manner. The DCC is composed of different sector working groups, including education, which is co-led by UNICEF and EU.

In addition to DCC, there is a Local Education Group (LEG) that consists of representatives of development partners and government. The LEG is coordinated by UNICEF.

Tajikistan is also a recipient of funds from the GPE. Within the DCC mechanism, the World Bank serves as the supervising entity whilst UNICEF takes responsibility as Coordination Agency for Tajikistan GPE.

Financial gap

Based on the correlation analysis of education expenditures and other factors (e.g., state revenue, population etc), Mirzoev (2018) estimates that the wage bill is expected to grow by 2.2 % annually during 2018-2020. The core budget (i.e. recurrent and capital expenditure) expanded by 7.8 % in 2018, 8.9 % in 2019, and will reach 23.3 % in 2020. Overall, education sector spend is expected to increase by TJS 1.3 billion between 2017 and 2020. The funding gap for the MTEAP 2018-2020 is estimated to be at USD 506 million over the planning period, majority of which in general secondary education.

Estimated cost of the Medium-Term Education Action Plan of the National Strategy for Education Development of Education of the Republic of Tajikistan (2018-2020)									
No	Level/Subsector of Education	Funding requirement (in USD)	Inputs from different sources (in USD)			Funding gaps (in USD)	Annual distribution		
			State budget	Other sources	Donors		2018	2019	2020
1	Preschool Education	157,755,771	44,545,566	0	515,500	32,721,359	30,907,076	30,907,076	30,907,076
2	General Secondary Education	459,057,535	59,959,596	1,400,000	10,159,440	599,929,349	129,976,415	129,976,415	129,976,415
3	Primary and Secondary Vocational Education	49,959,769	41,954,649	0	17,146,828	5,813,419	1,205,806	1,205,806	1,205,806
4	Higher Education	59,969,934	41,954,649	0	0	17,995,279	5,995,092	5,995,092	5,995,092
5	Management and Finance	157,620,645	155,755,950	0	0	1,864,695	626,232	626,232	626,232
TOTAL		864,323,445	344,340,309	1,400,000	28,105,768	506,131,659	168,730,623	168,730,623	168,730,623

Cost of transition to a 12-year education system

While Tajikistan had expressed high level of financial commitment to education, its planned reform to introduce a 12-year education system (by adding an additional school year) in 2020 will require substantial resources. Barberton and Makhkamova (2019)²⁴ estimated that between TJS 597 million (approx. USD 60 million) and TJS 1326 million (USD 140 million) will be needed as one-off setup costs while between TJS

321 million (USD 34 million) and TJS 642 million (USD 68 million) will be needed as on-going operational costs (in 2018 constant price). These figures, even with the conservative scenario, seem to exceed the government's funding commitment made with MTEAP 2018-2020.

Quality, system capacity, and management

Student learning outcomes

To date, Tajikistan does not have a systematic method in place to assess learning outcomes at the national level, which makes the measurement of student learning outcomes a difficult task. This task is further complicated by the country's low participation, if at all, in international learning assessments.

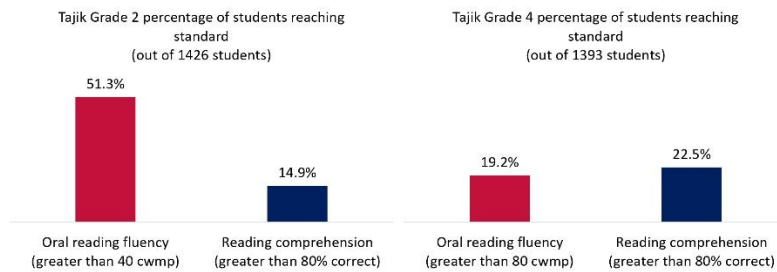
Nonetheless, a 2012 and 2018 Early Grade Reading Assessment (EGRA) led by USAID revealed low reading fluency among students from Grades 2 through 4. The tests were administered in Tajik and Russian, depending on the language of instruction used in the respective sample schools. The data had disaggregation by gender and the five geographic regions, plus Dushanbe.

In 2012, Mean reading fluency scores only barely met the national standard for each grade⁴⁶ and did not meet the international benchmark score used⁴⁷, the Dynamic Indicators of Basic Literacy Skills (DIBELS).⁴⁸ In 2018, the mean score for the oral reading fluency (ORF) subtask for Grade 2 students in Tajik language schools did meet the national standard but not the international. Similarly for Grade 4, the mean score for the ORF in Tajik language schools was 55.9 cwpm lower than the established benchmark of 80 cwpm. 19.2% of Grade 2 students achieved or exceeded the standard as illustrated in the figure below.

Students achieving the comprehension standard in Tajik language schools (four questions correct out of five) were 14.9% and 22.5% for Grade 2 and 4 respectively.

Figure 30. EGRA reading fluency scores

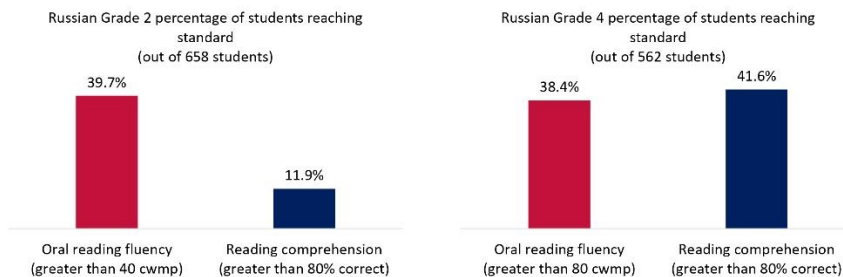
Percentage of Students Reaching Reading Proficiency Standards by Grade in 2018 before RWM Intervention, Tajik



For Russian language, the results were similar for Grade 2 with 32.7% students achieved or exceeded the standard. For Grade 4, the results increased to 70.3% cwpm compared to 55.9 in Tajik language. Students achieving the comprehension standard in Russian language schools (four questions correct out of five) were 11.9% and 41.6% for Grade 2 and 4 respectively.

Figure 31. Percentage of students reaching reading fluency standards (Tajik)²⁵

Percentage of Students Reaching Reading Proficiency Standards by Grade in 2018 before RWM Intervention, Russian



The following can be concluded from these results:

- At grade 2, in both Tajik and Russian language schools, significantly fewer students achieve the comprehension standard compared to the ORF standard
- Comparing the results of Grade 2 and Grade 4 in Tajik language schools the percentage of students achieving the standard for the grade drops significantly.

²⁵ Graph directly taken from Tvaruzkova, M. and Shamatov, D. 2018 *Review of Early Grade Teaching and Skills: The Kyrgyz Republic and Tajikistan: Final Report*, 2018. USAID.

- 25% of grade 4 students in Tajik language schools are reading at or below the ORF standard for grade 2.
- At grade 4 in Russian language schools students achieving the standard for ORF is maintained (compared with grade 2) and students achieving the comprehension standard comprehension scores improve.

Other trends that this data shows:

- Generally, girls outperform boys across both language and grades;
- Generally, urban schools perform better than rural schools, which likely reflects the data on distribution of poverty in this sector review;
- There are regional variations, with Dushanbe and GBAO achieving higher scores and Khatlon achieving lower scores in most cases (DRS for Russian Language).

Figure 32. Tajik Oral Reading Fluency Results by Grade and Region

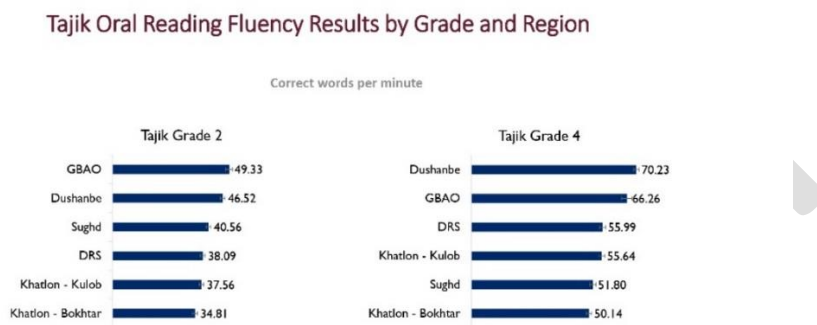
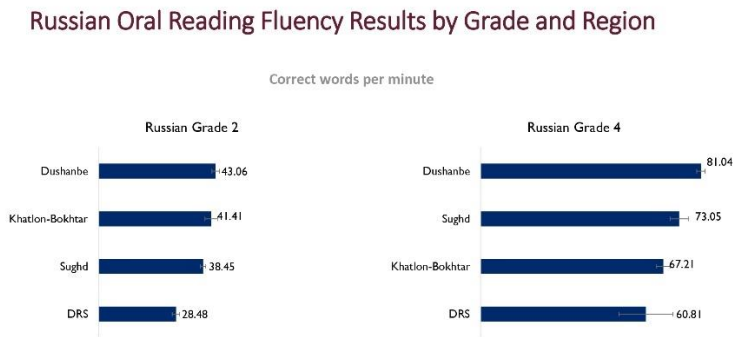


Figure 33. Russian Oral Reading Fluency Results by Grade and Region



Note: The Russian sample did not include schools from GBAO because Russian-language schools were not present in this region at the time of sampling or data collection. Additionally, results from Khatlon-Kulob are not reported due to insufficient sample size.

Secondary analysis of the data, using data from interviews with children and teachers who teach the students who were assessed, indicates some predictors of strong reading as follows:

1. Availability of books for reading at home: For students from Tajik-language schools, having books at home and being able to take books home were predictors of oral reading fluency:

For Grade 2 Tajik:

- On average, children who reported that they had books at home could read 6 more words per minute than children who said that they did not have books at home.
- Children who reported that they had books available at school to take home could read 2 more words per minute than children who did not have books available at school to take home.

For Grade 4 Tajik:

- On average, children who reported that they had books at home could read 12 more words per minute than children who said that they did not have books at home.
- Children who reported that they had books available at school to take home could read 3 more words per minute than children who did not have books available at school to take home.

2. Language at home: another important predictor of student reading performance was parents' ability to read in the language of instruction their child is taught in at school.

For Tajik Grade 2:

- Students who said that their mother can read in Tajik read four more words per minute than students who did not say that their mother can read in Tajik.
- Students who said that their father can read in Tajik read three more words per minute than students who did not say that their father can read in Tajik.

For Tajik Grade 4:

- Students who said that their mother can read in Tajik read seven more words per minute than students who did not say that their mother can read in Tajik.
- Father's ability to read in Tajik was NOT a significant predictor of reading performance for Grade 4 Tajik students.

Further findings linked to language showed that if the class teacher reported that Uzbek was their mother-tongue, yet the language of instruction was Tajik, then this had a negative influence on reading scores. Having a teacher who spoke Uzbek as his or her native language was associated with approximately a seven-word-per-minute decrease in the school-level ORF subtask score for students in both grades 2 and 4.

Comprehension is weak at both grades and across both languages (though in Russian the trend from grade 2 to grade 4 is more positive). This is also demonstrated by the zero-score data. Comprehension skills are a necessary skill that all students need to develop through their schooling and as a core 21st century skill that contributes to the country's development goals and can enable individuals to obtain higher incomes. OECD research²⁶ shows that adults who have poor reading skills earn less in adult life than their peers who had stronger reading skills and this can be predicted by weak reading skills in primary grades²⁷.

Currently there is a lack of supplementary reading books in schools, libraries and in homes in Tajikistan, especially in Tajik Language. Children will not develop a culture of reading if they only encounter textbooks and a range of books (different genres) are needed to develop the range of comprehension skills required by the national competence standards as well levelled and decodable books to support young learners to learn to read.

In Tajikistan a significant number of children are taught in a language that is not their mother tongue. This can lead to slow progress in learning the basic skills of reading in Grades 1 and 2. Russian language classes appear to make progress from this situation, but Tajik language classes would appear to struggle and basic reading skills are still a problem at Grade 4.

Classroom-level assessment practices are also known to be weak, with grading being, for the most part, subjective, and sometimes used merely as an administrative instrument (World Bank, 2009). The World Bank (2009) also notes that classroom assessment results are not required to be used in support of student learning and to be disseminated to stakeholders.

Furthermore, Tajikistan has relatively few hours of instructional time. In Tajikistan, instructional time over nine years of general primary and secondary schooling (5,788 hours) is 24% less than the OECD average (7,656 hours; Agranovich, 2016). The difference is even more noticeable in primary school: Primary school students in Tajikistan receive 548 hours of instructional time per year, compared to an average of 799 hours in OECD countries (Agranovich, 2016).

System capacity

In 2012, the Ministry of Education and Science (MoES) of Tajikistan adopted a National Strategy for Education Development until 2020 (NSED 2012-2020), which aimed to “[create] conditions to ensure functional and effective provision of educational services and access to appropriate quality education for everyone”. To achieve this goal, the Ministry identified three priority axes in its NSED 2012-2020: (1) modernization of the education system; (2) structural changes in the education system; and (3) ensuring accessibility to quality education. Of course, the attainment of these strategic priority areas would only be possible if there is adequate capacity within the education system. This section will therefore examine

²⁶ USA National Adult Literacy Survey (1996).

²⁷ The predictability of adult illiteracy from early reading failure were extrapolated from a well-known study by Connie Juel.

the capacity of Tajikistan's education system by considering its (a) material and technical base, (b) staffing capacity, and (c) education management system.

Material and technical base

In the NSED 2012-2020, the material and technical base refers to the educational infrastructure and pedagogical materials at the disposal of teachers and learners.

Infrastructure

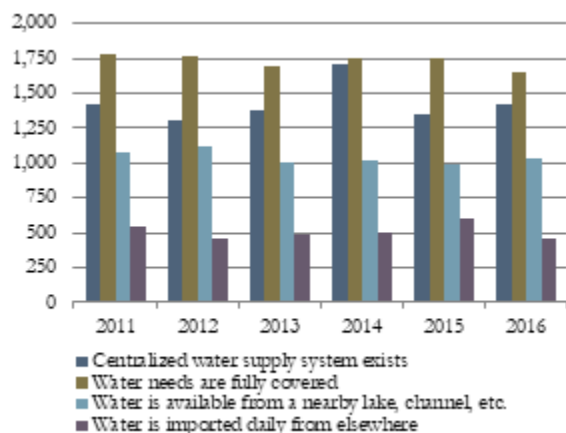
The NSED 2012-2020 recognizes that the inadequacy of educational infrastructure, especially in rural regions of the country, is an important hindrance to instructional effectiveness.

In terms of pre-primary education, for instance, historical evidence demonstrates that a 1% increase in physical infrastructure leads to 4.1% increase in coverage (Mirzoev, 2016). However, the growth of places in preschools does not align with the demand: Between 2012 and 2014, 1,750 new places became available in preschools, yet the number of preschool-age children had already increased by 41.5 thousand in 2013 alone (Agranovich, 2016). The need for pre-primary educational infrastructure is even clearer in rural areas; while 73.6% of the total Tajikistan population is rural, only 33.4% of all public preschools are located in rural areas (Mirzoev, 2016).

Educational infrastructure dedicated to general primary and secondary education matches the total demand; new constructions are able to compensate for the increasing need for new schools and classrooms (Mirzoev, 2016). It must be noted, however, that an overwhelming majority of students attend double-shift schools (88.2%); only 6.6% attend single-shift schools and a remaining 5.3% attend three-shift schools (Mirzoev, 2017). Moreover, many primary and secondary schools lack basic amenities such as lighting, heating, water, and sanitation (Mirzoev, 2016). For instance, according to Mirzoev (2016), less than half of all schools reported having their annual water supply needs fully covered. The status of water supply in primary and secondary schools between 2011 and 2016 is illustrated in Figure 30 below.

Figure 34. Water supply in primary and secondary schools (2011-2016)²⁸

²⁸ Graph directly taken from Mirzoev, S. 2016. *Joint Sector Review Education Sector Synthesis Report*. Dushanbe.



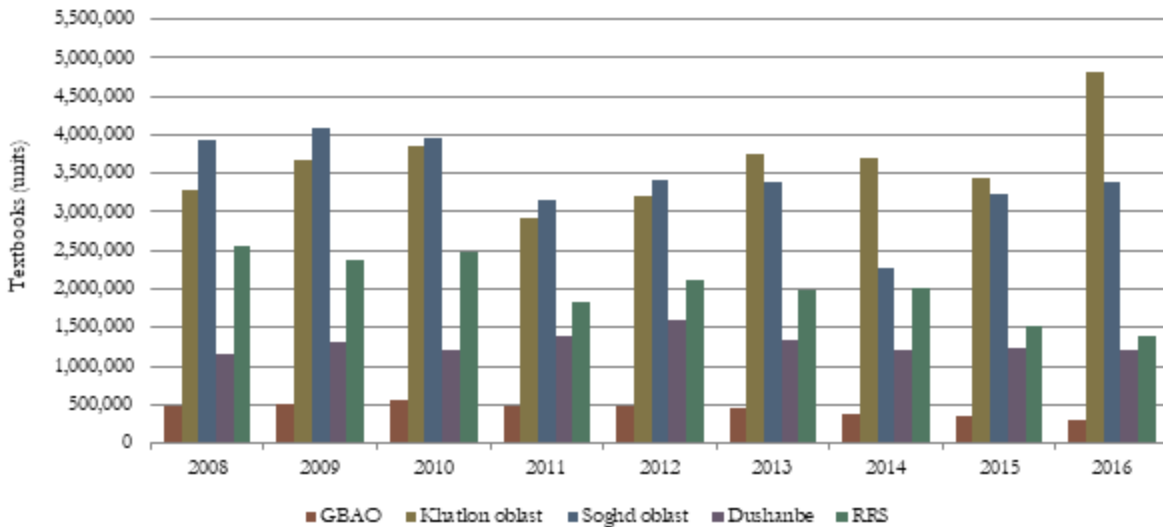
Fortunately, post-secondary educational institutions enjoy better infrastructure, especially higher education institutions. Almost all universities have access to technology-mediated learning media such as computers, tablets, and video-conferencing tools and have in-house technical capacity to maintain and administer such technologies for instructional purposes (Mirzoev, 2016). TVET institutions, however, which tend to be underfunded, do not have access to the same technological resources: Equipment in TVET institutions often do not conform to international standards and thus require significant amounts of investment (Mirzoev, 2016).

Pedagogical materials

Little data is available on pedagogical materials in public pre-schools; EMIS statistics do not cover the availability of learning materials at the pre-primary level. Nonetheless, the MoES has implemented several initiatives aiming to improve the provision of pedagogical materials at the pre-primary level, such as the translation of the ECE curriculum, modules, and teacher guides into Tajik and major ethnic minority languages and the development of 52 types of learning materials (Mirzoev, 2016).

Significant amounts of development partner investment have helped the MoES to develop and procure new pedagogical materials (such as textbooks and teacher guides) for general secondary schools and to train teachers in the use of those materials. For example, the GPE-4 Trust Fund procured 39 types of reading materials and distributed 1,731,600 copies across Tajikistan (Mirzoev, 2016). The MoES, on the other hand, recorded 8,000 copies of training materials pertaining to scientific and methodological courses on compact discs, which were also distributed to schools (Mirzoev, 2016). As of 2016, development partner support helped Tajikistan procure and distribute 160 new types of modules and to distribute: Mirzoev (2016) counted 25,000 modules for scientific and methodological courses and 220,000 copies of reading materials. Figure 31 below illustrates the increase in the number of textbooks for primary and secondary schools across different regions of Tajikistan between 2008 and 2016.

Figure 35. Number of textbooks per region, primary and secondary school (2008-2016)



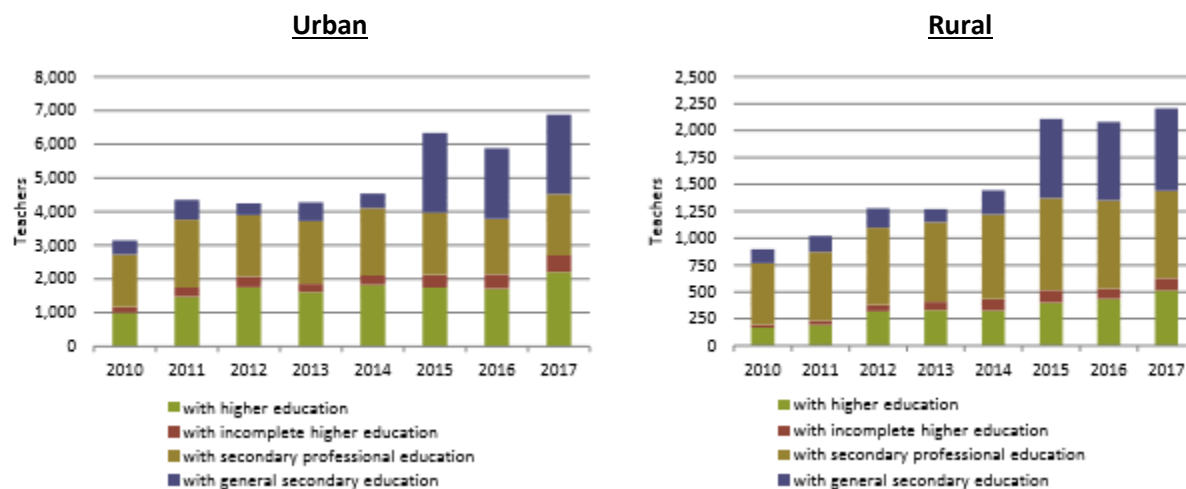
Lack of investment in TVET has led to a decline in the number of libraries and textbooks in TVET institutions; according to 2016 EMIS data, the number of libraries and textbooks respectively decreased by 37.6% and 15.3% between 2014 and 2016. In addition, since Tajikistan does not have a clear qualifications framework, it is difficult to assess the quality and the relevance of these learning materials vis-à-vis best practices in TVET instruction and labour market demands (Mirzoev, 2016).

Teachers

The NSED 2012-2020 acknowledged the persistent shortage of qualified teachers across all levels of education as a key impediment to improving the quality of educational provision in Tajikistan. As such, it focused on developing the competencies and capacities of teachers and education administrators. In addition, it sought to implement initiatives that would make the teaching profession an attractive career option.

Student-teacher ratios at the pre-primary level have remained reasonably sized, with 10.2 children per teacher in 2017 (Mirzoev, 2017). However, regional disparities are still present, prompting the MoES to train more teachers in rural areas; in sum, the number of teachers trained by the MoES in urban areas increased by 16.9%, and by 5.9% in rural areas, between 2016 and 2017 alone (Mirzoev, 2017). It must be noted, however, that a huge majority of pre-primary school teachers in Tajikistan do not have higher education degrees (71.6% in rural areas and 60.9% in urban areas) and thus have not received any formal training in early years pedagogy (Mirzoev, 2017). While the educational attainment of ECE teachers has certainly improved over the past several years, the current state of affairs still leaves much to be desired. The trend in educational attainment of ECE teachers in urban and rural areas between 2010 and 2017 is illustrated in Figure 32 below.

Figure 36. Educational attainment of ECE teachers, urban vs. rural (2010-2017)²⁹



The chronic lack of individuals interested in an early years teaching job is a key reason behind the generally low qualification standard: To cope with demand, the government has set only general secondary education as the minimum requirement to be a preschool teacher, thus expanding the pool of potential teacher-recruits. Teaching in preschool is an unattractive career prospect, given low remuneration; in fact, across all education sub-sectors, teacher salaries at the pre-primary level are among the lowest.

In 2017, more than 80% of primary school teachers in every municipality received formal training in the new competency-based curriculum (Mirzoev, 2017). However, the provided training has not sufficiently addressed the shortage of subject-specific teachers in Tajikistan, affecting teaching load³⁰, particularly in regions with higher student-teacher ratios, such as in Dushanbe (Mirzoev, 2017). Figure 35 below illustrates the evolution of teaching load between 2011 and 2017, while Figure 36 shows the difference in teaching loads across different regions of Tajikistan in 2017.

Figure 37. Evolution of teaching load, primary and secondary school (2011-2017)³¹

²⁹ Graph directly taken from Mirzoev, S. 2017. *Republic of Tajikistan Education Joint Sector Review 2017 Update*. Dushanbe.

³⁰ One full unit of teaching load (*stavka*) corresponds to 21 teaching hours.

³¹ Graph directly taken from Mirzoev, S. 2017. *Republic of Tajikistan Education Joint Sector Review 2017 Update*. Dushanbe.

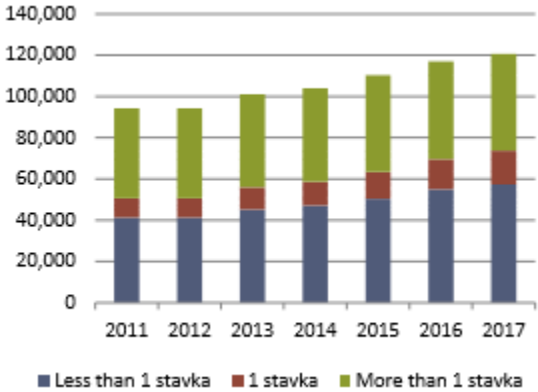
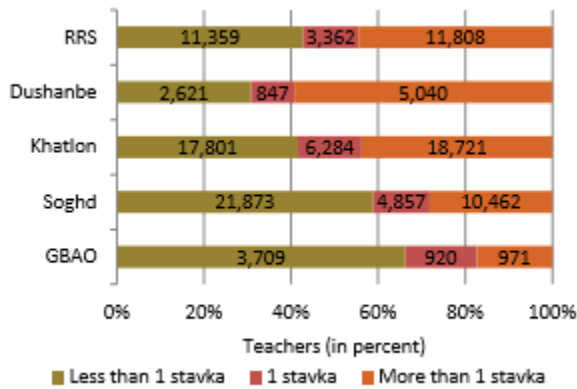


Figure 38. Teaching load by region, primary and secondary school (2017)³²

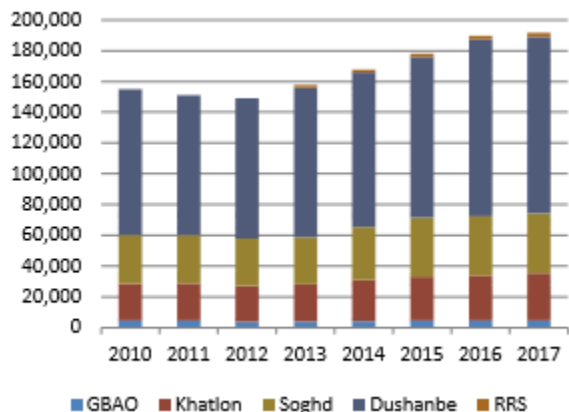


The number of teaching personnel in primary vocational education and training also increased by 11.5% and by 1.9% in secondary vocational education and training, between 2016 and 2017 (Mirzoev, 2017). However, for secondary vocational education and training, EMIS statistics do not provide any information on teachers' qualifications, length of experience, and educational attainment. Teacher remuneration for TVET is generally not market-competitive (Mirzoev, 2016).

At the higher education level, the student-teacher ratio has increased from 16.7 in 2016 to 17.3 in 2017, indicating growth in enrolment in higher education institutions. This steady growth in enrolment in higher education can be seen in Figure 37 below. However, remuneration disproportionately skews in favor of more seasoned faculty members, with younger teachers receiving salaries only close to the stipends received by high-performing university students (Mirzoev, 2017).

Figure 39. Enrolment in higher education per region (2010-2017)

³² Graph directly taken from Mirzoev, S. 2017. *Republic of Tajikistan Education Joint Sector Review 2017 Update*. Dushanbe.



Education management system

The NSED 2012-2020 sought to modernize Tajikistan's education management system by establishing quality assessment frameworks, restructuring the administration of the education system, developing M&E indicators, and installing a functional education management information system.

Strategic planning and policymaking

The implementation of activities and corresponding budget programming in the education sector is anchored on the NSED 2012-2020 and the NDS 2016-2030. The MoES has drafted documents to guide the implementation of these activities, the most critical being the Mid-Term Action Plan (MTAP) 2015-2017. However, while development partners have supported the conduct of several joint sector reviews (JSRs) for Tajikistan, none of these have been able to assess the overall performance of the education system, focusing instead on process indicators (Mirzoev, 2016). According to Mirzoev (2016), these said JSRs were unable to arrive at such an assessment owing to the lack of a results-based planning mechanism and weak monitoring systems. Moreover, the conduct of these JSRs was not linked to the results framework of the NDS 2016-2030 and other pertinent policy documents, further limiting the utility of the said JSRs (Mirzoev, 2016).

Structural issues also hinder the education system of Tajikistan from implementing strategic plans. Budgets can only be executed by Main Administrators of Budget Allocations (MABAs), the highest-tier spending units within the government. As such, regardless of how well strategic plans have been formulated and the extent to which they comply with pre-defined sectoral budget ceilings, their execution would still depend on MABAs (Mirzoev, 2016). Unfortunately, there is often a lack of congruence between strategic plans forwarded by the MoES and the way MABAs execute education budgets (Mirzoev, 2016).

Once budgets have been executed, the MABAs must then to report efficient use of funds to the Ministry of Finance (MOF). However, given the lack of authority and technical knowledge on the education sector, the MOF is not able to process non-financial reports from educational spending units, which prevents a thorough analysis of whether funds allocated to the education sector are being spent efficiently and strategically (Mirzoev, 2016). In addition, Mirzoev (2016) also found that some MABAs do not involve the

MoES in the development of budget performance reports. Furthermore, the lack of a consolidated financial information system for education results in delays in budget programming, preventing the MoES from following the implementation timelines set forth by the NDS 2016-2030 and the NSED 2012-2020 (Mirzoev, 2016).

The structural obstacles mentioned above prevent the MoES from having full financial control and oversight of the education budget. As such, this budget execution mechanism will need to be reformed to truly enable strategic planning and results-based management in the education sector. However, this kind of reform is not within the purview of the MoES; reforming MABAs means reforming the entire public sector's administrative system, since this budget execution system applies to all government agencies.

Monitoring and evaluation

During the development of the Midterm Education Action Plan (MTEAP 2018-2020), the MoES attempted to introduce results-based planning and results-based management. As one of the requisites to doing so, the MoES therefore developed a theory of change and corresponding resource, process, and outcome indicators. This resulted in the creation of the Monitoring and Evaluation Plan for the MTEAP (MEP-MTEAP) 2018-2020. The MEP-MTEAP lays out specific targets and corresponding indicators for every education sub-sector. In addition, it outlines the different activities that will need to be implemented to meet those targets, as well as an implementation timeline and the unit responsible for implementation. However, it is unclear if decentralized educational units will play a role in the M&E process as the MEP-MTEAP only mentions the respective function of central units and development partners.

Education management information system

EMIS was first institutionalized in Tajikistan in 2007, with the goal of providing the MoES with the data required to develop, monitor, and implement policies and decisions related to the administration and operation of the education sector. Since its institutionalization, EMIS-related initiatives are guided by two core policies: the "EMIS RT Conception" and the "Methodology of the Automated Data in Education", which outline the roles and responsibilities of different units in collecting, analyzing, and managing education data (World Bank, 2017c). However, these two policy documents do not lay out the technical specifications, infrastructure, software, and hardware requirements of EMIS (World Bank, 2017c).

Daily operation of EMIS is financed by the government - that is, data collection, report generation, website maintenance, and personnel salaries (World Bank, 2017c). However, the World Bank (2017c) reports that hardware, software, and training of EMIS staff are completely financed by development partners.

Schools are mandated by policy to submit data to the MoES; as such, the school response rate during data collection is 100% (World Bank, 2017c). According to the World Bank (2017c), the full cycle of data collection and analysis takes three months and is often completed in a timely manner. Validation mechanisms also exist at the local and central level to ensure that data is reported accurately (World Bank, 2017c). However, there are no mechanisms that guide the flow of information back to schools. While schools can request for education data from the MoES, this process is very tedious; as such, EMIS use,

especially at the school level, is low (World Bank, 2017c). School principals and teachers can take advantage of using such data; for policy, planning and learning purposes. Education data is also accessible to stakeholders outside the education system, but it is often incomprehensible and not readily usable: Education data is shared to external stakeholders in PDF files, which makes the data difficult to access (World Bank, 2017c). As such, the primary users of EMIS are central government units, such as the MoES and country's statistics agency, and even then, EMIS data is only used to allocate resources and to "police" the education system (World Bank, 2017c).

Khomidova & Mirzoev (2018) points out that EMIS is not utilized by many schools and they rely on their sub-national government counterparts to enter data. The data entry is largely done through a paper-based system and the majority of schools cannot use EMIS and there is no systemic data validation.

The World Bank (2017c) also found that Tajikistan's EMIS contained only administrative data; data on school finance and learning outcomes were not available. That only administrative data is present within EMIS therefore limits its utility to planning, policy formulation, and monitoring and evaluation. Furthermore, EMIS does not integrate with information systems used by other departments within the MoES (e.g., finance, human resources), further limiting its potential to support decision-making (World Bank, 2017c). Financial information is management through a separate financial information management system (SGB.Net) to which every school has a key (i.e., token) to access to enter budgetary information. However, not all school accountants have sufficient capacity to use the system (Khomidova & Mirzoev, 2018).

ICT support capacity in most sub-national governments is not sufficient and supply of electricity and the internet still hinder the use of EMIS at the school level (Khomidova & Kirzoev, 2018).

The challenges mentioned above have prevented the Tajikistan education sector from developing a culture of evidence-based decision-making. Education stakeholders do not completely grasp the value of education data.

External efficiency

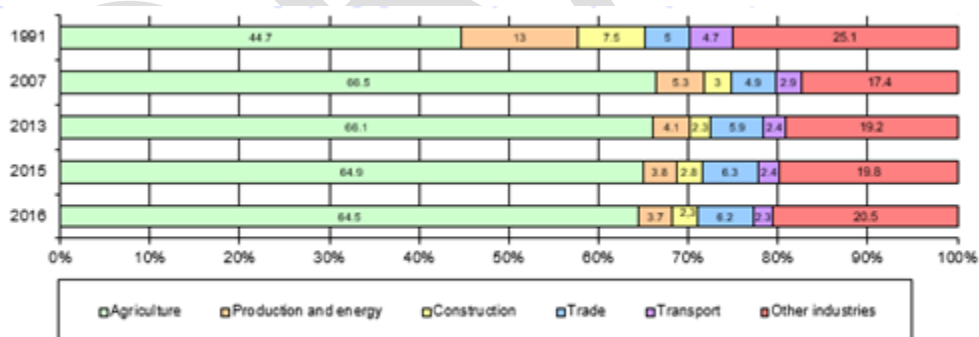
Economic efficiency

The Government of Tajikistan's vision for the country's higher education is to modernize the existing contents towards more professionally-oriented skills to better meet labor market demand as a tool for human capital formation, contributing to economic growth and poverty reduction.

Qudussov (2017) reviewed Tajikistan's labor market from the lifelong learning perspective. The report points out that, while the number of employed has been steadily increasing since 2009, the labor market expansion in Tajikistan has not kept the pace with the increase of the employable population, indicating underutilization of the country's human capital. The excess workforce, mostly men, seek employment opportunities abroad, mainly in the Russian Federation. Women are disadvantaged in terms of employment, with only 27% of women employed compared to 63% of men in 2013. Women are employed mostly in the public sector, but almost a quarter of women are also involved in unpaid work in family business, compared to 13% of men (World Bank, 2017b).

Qudussov (2017) also presents the changing pattern of employment in Tajikistan. As shown in the below figure, the share of "agriculture" is decreasing since 2007 while "trade" and "other services" are increasing. This implies that the more highly educated or skilled labor can be in demand in the labor market.

Figure 40. Distribution of employed population by industry, 1991-2016.

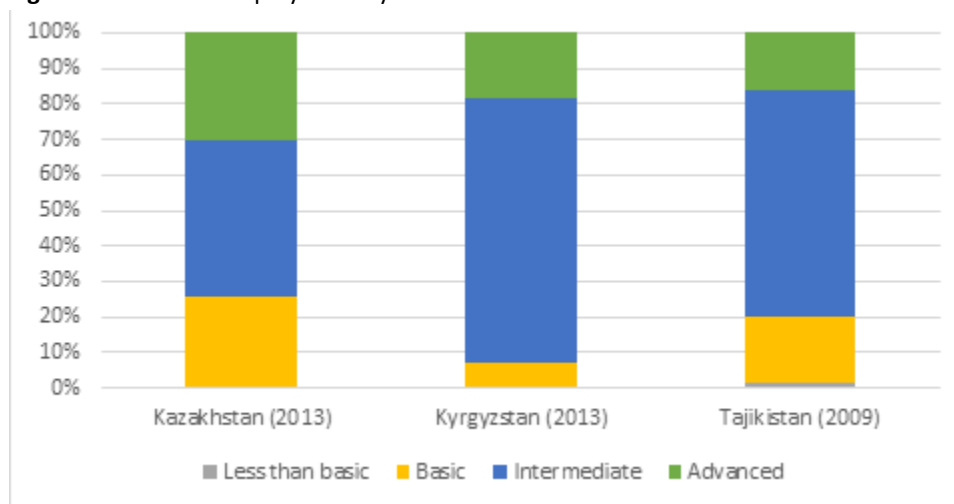


Source: Statistics Agency under the President of RT: <http://www.stat.tj/ru/analytical-tables/real-sector/>

Source: Qudussov (2017), p.18

However, data from household surveys indicate that Tajikistan labor market may not be providing sufficient opportunities for the more educated population. Compared to the neighboring countries with data, the share of those with intermediate and advanced education in the total employment is smaller for Tajikistan.

Figure 41. Share of employment by level of education



Source: ILOSTAT, accessed on 25 April 2019

Moreover, Qudussov (2017) points out that there is no career guidance in the secondary education system. Only under the Agency of Labor and Employment of the Population there is an organization specialized on career guidance – the Center for Vocational Guidance of the Population. Annually, this Center provides career guidance to about 30,000 unemployed people and youth from among schoolchildren while more than 150,000 young people complete the basic school education every year.

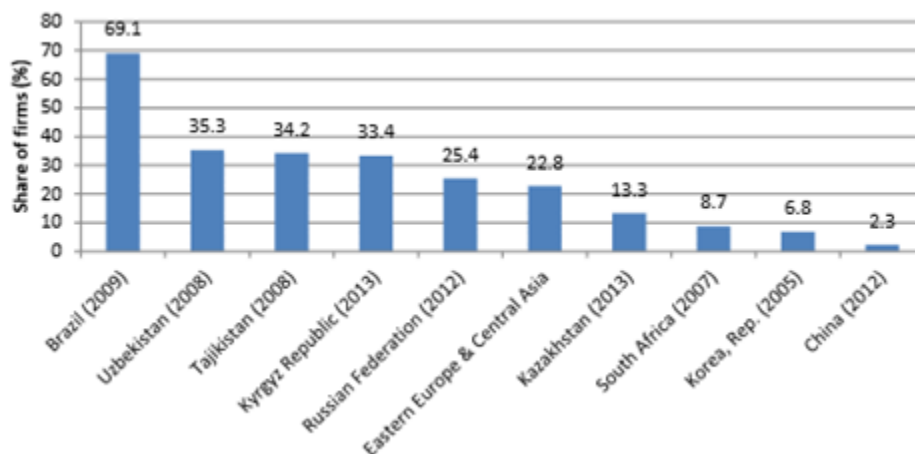
In addition, the report shows that there is a considerable skills and competency gap (Qudussov & Qurbunov, 2015):

“In general, dissatisfaction with the lack of hard skills was expressed by employers in manufacturing and construction industries. Employers in energy, gas and water supply indicated that their staff is lacking the ability to work with specific equipment, cannot use materials and tools, and to apply knowledge. Most employers are unhappy with the lack of basic professional knowledge among their staff. This indicates a rather low quality of professional education.”

It was also found that the employers also noted the lack of cultural competencies (e.g., team-working, ability to take initiatives, etc) as well as basic academic skills (basic calculation, understanding written documents, writing clear sentences etc) among their employees.

The findings from the World Bank’s Enterprise Survey show that substantial share (34.2%) of all firms in Tajikistan answered that an inadequately educated workforce is a major constraint (Ajwad et al., 2014).

Figure 42. % of firms in various countries stating that an inadequately educated workforce is a major constraint.



In 2015, the Government of Tajikistan adopted the Law on Training of Specialists for the Needs of Labor Market to address the issue. However, to date, there is no mechanism for interaction with employers. Moreover, at the legislative level, there is no mechanism for developing curricula and educational standards based on the professional standards presented in the National Qualification Framework (NQF).

According to UNESCO (2017), the Employment Service does not conduct regular assessments of the needs of labor market, does not present any forecasts of labor market development, and does not publish statistical data. There is no any unified informational field reflecting the situation of the labor market. The Employment Service (represented by the Agency of Labor and Employment) has a website containing information about vacancies www.kor.tj, but it is not updated on a regular basis.

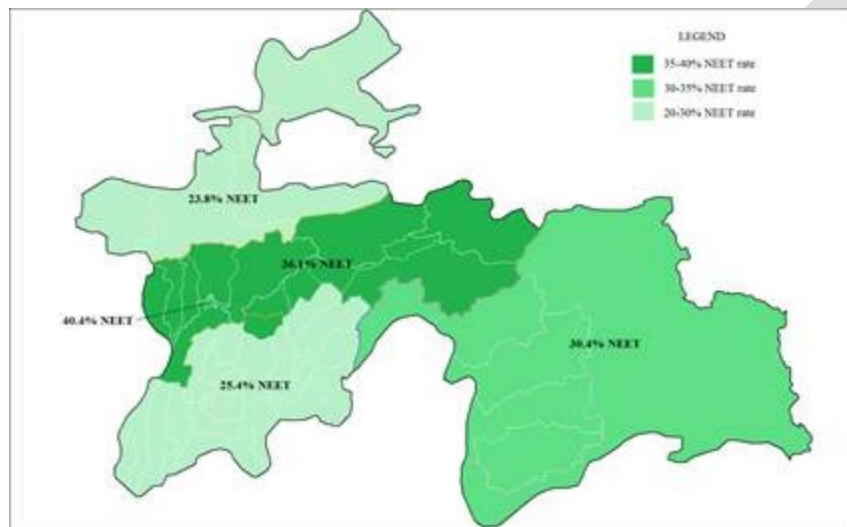
Ajwad and colleagues (2014) recommend the following actions to enable Tajikistan to achieve its national development goals, namely:

- 1) a higher rate of job creation, particularly in the formal private sector;
- 2) better quality of jobs, particularly in the informal sector; and
- 3) better access to jobs, including assistance to job-seekers in the transition from inactivity to employment and in the transition to a better job, by focusing on the vulnerable working population.

Desk reviews and studies (2015 and 2017) on marginalization and the exclusion of adolescents and youth (10-24) in Tajikistan, supported by UNICEF, confirmed that poor education – along with lack of opportunities for meaningful employment in the country - once the young people leave school – drive high rates of mostly outbound migration among the young people (females make up approximately 18% of the migrants). These adolescents and young people are dissatisfied with the economic situation, education quality and lack of opportunities (Saferworld, 2012).

As of 2016, 29.3% of youth aged 15-24 had no job, were not studying towards degree and were not in professional training. Female NEET rate was nine times³³ higher than male rate. Among the five major regions, Dushanbe showed higher NEET rate. The aggregated indicator of under-utilization of labour force among young people shows that one in five young people cannot use her/his labour potential.³⁴

Figure 43: Distribution of NEET by Region.



Young labor migrants were not included in the NEET; instead, they were treated as having employment. The LFS 2016 made it possible for the first time to meaningfully calculate NEET rate in Tajikistan in accordance with ILO recommendations and to study the problems of young people aged 15-29 and 15-24 years with the aim of international comparison with other countries of the world.

Analysis of the LFS 2016 data revealed the following situation of *15-29 years old youth*. Of total number of young people aged 15-29 (2,301,215 people) 707,839 young people were in education in secondary educational institutions (school, gymnasium, lyceum, etc.), in institutions of primary and secondary vocational education (college, lyceum, etc.), as well as in higher educational institutions (institute, university, academy, etc.), including graduate school, residency or graduate military course. 652,013 people were in employment during the time of the survey, of which 6,505 people were employed and in education or vocational training. 250,639 people were in labor migration. The number of young people who were not in employment, in education and did not receive training made 690,724 people, which corresponded roughly to 30% NEET rate of the total number of young people. Notably, gender-wise, males in NEET made only 5.8% of the total male population aged 15-29, whereas females in NEET made 53.1% of the total female population of the mentioned age group. It therefore may be stated that the capacity

³³ This makes 49% of total female population of this age group NEET.

³⁴ Adolescent and youth marginalization in Tajikistan: a snapshot report on the mapping of vulnerable and excluded groups. UNICEF-UNDP commissioned desk-review. 2017. Calculation of NEET group is made based on the findings of LFS the 2016 Labour Force Survey.

of male population in the country is used up to 94%, while the capacity of female population is utilized only to 47%.³⁵

Zooming in on *15-24 years old youth*, the situation looks as follows. Of total number of young people aged 15-24 years (1,487,029 people), 675,291 young people were in education in secondary educational institutions (school, gymnasium, lyceum, etc.), in institutions of primary and secondary vocational education (college, lyceum etc.), as well as in higher educational institutions (institute, university, academy, etc.), including graduate school, residency or military school), and also were in vocational training or internships. 344,855 young people were employed during the time of the survey, and 250,639 people were in labor migration.

The highest school dropout rates in Tajikistan are found among adolescents, while the completion rate of secondary education after compulsory schooling (1-9 grades) is declining. Girls aged 11-17 are approximately twice as likely as boys to be deprived in school attainment, school attendance, and the aggregated education dimension (1.95, 6.76, and 6.43 percentage points of difference respectively). This result may be indicative of girls dropping out of school earlier than boys, after completing the mandatory lower-secondary education level after age 15 (WFP, 2016).

Summary and Recommendations for the National Strategy of Education Development

Summary

Access and transition

As pre-primary education is a priority for the Government of Tajikistan, access has increased over the past several years due to greater publicly-funded options. However, pre-primary education enrolment remains relatively low due to lack of trained personnel, lack of physical space, and high fees that prevent families from sending their children. Enrolments in primary and secondary education is high with generally equitable access between genders, recent MOES statistical data shows that girls are likely to progress to upper secondary education with 89.1% transition rate and 85,5% secondary enrolment rate. However, 78.3 percent of these institutions provide students the full cycle of general secondary education (grades 1-11), while 9.1 % of schools offer education only in primary grades (i.e. grades 1-4). Progress has been made to increase access in primary and basic education. While improvements have been observed, the persistent low coverage of education for children with disabilities indicates that they make up a substantial population of out-of-school children who are at risk of never enrolling in the education system. TVET has made improvements over the years by updating its curriculum and making gains in women

³⁵ Labor Force Survey, 2016

enrolled in TVET programs while the sub-sector may need more absorption capacity to re-train the migrant workers who return to Tajikistan after the economic slowdown in Russia. In higher education, there are increasing enrollments of women but completion rates remain relatively low, hitting girls and women in rural areas the hardest. While overall trends of women's enrollment in educational institutions appear to be improving, there are still practical barriers to their attendance and completion of education, which may be in part explained by perceived irrelevance of education in finding employment. There is a lack of updated data on adult education in Tajikistan.

There is a shortage of textbooks, particularly in ethnic minority languages, and equipment which result in poor education quality that provides little incentive for students to value and attend school as a means to improve prospects for a good future livelihood. Migration patterns have diverse impacts on school-attending populations; for some, remittance payments allow them to continue their education, while other children with migrant parents must endure the heavy burden of undertaking household chores and work in the fields.

Cost and Financing

Tajikistan's state budget system is organized into two components: (1) the republican budget, which is channelled through the central government; and (2) local budgets, which are channelled through sub-national government units. Education occupies a sizeable portion of the state budget, totalling up to around 17% of aggregate public expenditures. In 2017, the country pledged, as a partner country of the Global Partnership of Education (GPE), to maintain this share of public expenditures funnelled towards education. The size of total education expenditure has steadily increased since 1999, registering at 6.3 % of the country's total GDP in 2018 (latest available UIS data). This is well above the average education expenditure of other post-Soviet economies in the Central Asia and southern Caucasus region. However, despite comparatively large allocations towards education, much of these allocations are spent towards inputs that do not directly contribute to improving educational quality.

Labour costs comprise the largest share of the education budget, accounting for 60% of the total education budget in 2017. However, the average wage in the education sector remains relatively low, equalling only 12.7% of the country's per capita GDP and 78% of average remuneration in the public sector.

Pre-primary education is entirely financed by local budgets. General secondary education is also primarily financed by local budgets as well, with only 6.4% of general secondary education expenditures paid by the republican budget. Primary vocational institutions and universities are mostly financed by the republican budget while secondary vocational institutions are jointly and interchangeably financed by republican and local budgets.

Per sub-sector expenditures are marked by generally inefficient spending patterns, with preschool, TVET, and higher education incurring disproportionately high student unit costs vis-à-vis their respective

enrolment rates and provided services. Fortunately, spending towards general secondary education is more efficient, benefitting from the full rollout of per capita financing (PCF) in 2010. The PCF system calculates school budgets according to recurrent expenditures and context-specific factors such as enrolment rates and available local budgets, thus ensuring that schools receive allocations that are proportional to their needs and to the locally available financial resources. This decentralized financing mechanism has given schools more autonomy to implement initiatives that respond to their most pressing needs.

Indeed, fiscal decentralization remains a key challenge for Tajikistan's education sector; the heavily centralized current system has led to disparities in educational access and quality, as well as spending inefficiency. For instance, local governments that were dependent on subventions from the central government were more affected by economic slowdown, as evidenced by significant reductions in their capital expenditure. In addition, the dependence of the MoES on Main Administrators of Budget Allocations (MABAs) means that the MoES is not able to exercise full financial control and oversight over the education budget. In some cases, MABAs do not involve the MoES in the budget performance reporting process, thus preventing a thorough analysis of whether the education budget is being spent efficiently.

The government's current inability to generate reliable macro-fiscal and revenue projections also hinders spending efficiency. Without such forecasts, the size of sectoral budgets can become unpredictable and thus potentially fluctuate every year. Lack of these functions makes budget programming very difficult.

Quality, system capacity, and management

Tajikistan currently does not have a systematic method to assess learning outcomes, which makes measuring student achievement a difficult task. Complicating this task further is the country's low participation in international learning assessments such as PISA, PIRLS, and TIMSS. The latest data available on learning outcomes is an Early Grade Reading Assessment (EGRA) led by USAID in 2012, which demonstrated that most students in Tajikistan, both Tajik-speaking and Russian-speaking, were unable to read at their grade level. Classroom-level assessment practices are also known to be weak: Grading is, for the most part, subjective and, in some cases, used only to comply with administrative requirements. Classroom assessments are not used in support of student learning.

Inadequate educational infrastructure is also a key challenge. This is aggravated by geographical disparities: For instance, while 73.6% of Tajikistan's population is rural, only 33.4% of preschools are located in rural areas. Insufficiency of pedagogical materials is also an important challenge, but the MoES has enacted various initiatives to address this, such as the procurement of reading materials for general secondary school through the GPE-4 Trust Fund.

Persistent teacher shortage is another critical issue, which is also marked with geographical disparity. Due to the chronic lack of teachers, the government has been forced to lower teacher qualification standards: For instance, at the pre-primary level, teachers only need to have completed general secondary school. In

primary and secondary school, a significant percentage of teachers have less than three years of pedagogical experience (14.2% and 20.7%, respectively). This lack of teachers can be attributed to the overall unattractiveness of the teaching profession in the country, primarily because of uncompetitive salaries.

The management system of Tajikistan's education sector is also generally weak. For instance, while several joint sector reviews have been conducted in the past, none of them were able to assess the overall performance of the education system, due to the education sector's lack of a results-based planning mechanism and its weak monitoring systems. While there have been efforts to introduce results-based budgeting in the education sector, there is weak capacity among education sector staff to implement such a system. Moreover, while the government has developed a Monitoring and Evaluation Plan for the Mid-Term Action Plan for Education, it does not clearly lay out the role that decentralized educational units will play in monitoring and evaluation. It only mentions the functions of central units and development partners.

The MoES has an education management information system (EMIS) in place, but data use is low, especially at the school level, despite 100% school compliance during the data collection process. This is due to the absence of guiding mechanisms regarding the flow of information back to schools. As such, the process is heavily top-down and use of EMIS data for monitoring and decision-making at the sub-national level is limited. Furthermore, the EMIS contains only administrative data, therefore limiting its use in planning, policymaking, and monitoring and evaluation. In addition, it does not integrate with other information systems used within the MoES (e.g., human resources information system, financial management information system), further limiting utility.

External efficiency

While education tends to be correlated with employment in Tajikistan, there is still a considerable lack of skills, both technical and soft skills, among people. At the same time, youth labor force is under-utilized especially among young girls. The shifting labor market demands, which are moving away from agriculture toward trade and other services, poses a challenge for educational planning. The relevance of education for future employment and life opportunities appears to be decreasing and opportunities for the highly-educated population are sparse, which could lead to out-migration to search for enhanced career opportunities. A lack of available labor market projects makes it difficult to plan for the future.

There is limited information/data on education's impact on social development (e.g., health, fertility, civic and social engagement, well-being). Any additional information could be welcome. Some could be calculated if Census and/or household survey data are provided.

Recommendations

Access and transition

- Expand the provision of pre-school and ECD, especially in rural areas
- Raise awareness of the values and the importance of pre-school education among parents, especially in rural areas
- Reduce financial burdens of pre-school and ECD for the disadvantaged while encouraging private pre-school provision for more affluent populations
- Promote transition beyond Grade 9, especially among girls
- Develop a comprehensive plan to recruit and retain qualified teachers especially in rural areas
- Establish public/private partnerships to support improved recruitment and retention of teachers for technical subjects
- Further increase enrolment of female students in TVET by improving relevance of TVET
- Expand the provision of TVET for youths and adults for continuous learning, especially for the migrant workers returning from abroad
- Provide an inclusive and a barrier-free environment to enable marginalized children, in particular children with disabilities with access to quality education by:
 - Developing capacity of teachers, school principals and staff to address the equity issues at the school level
 - Developing and distributing learning materials relevant to the needs of the students from disadvantaged/marginalized populations
 - Investing in improvement of learning environment for all

Cost and financing

- Increase funding to pre-primary education while expanding private preschools and alternative modalities (e.g., ECD centers)
- Explore possibilities of public-private partnership for TVET and higher education
- Review the financing of 12-year education system to identify the most feasible transition plan

Quality, system capacity and management

Quality

- Enhance the national assessment systems to provide data and information relevant for actions
- Review teachers' status and improve their occupational conditions
- Review of the primary curriculum and textbooks for more balanced curriculum.
- Encourage the culture of reading to develop for the young generation. New reading books for younger ages are needed every year for the first part of the strategy period. These books need to be systematically developed to meet the full range of needs for young readers.

- Consider a strategy to define the approach where children are not learning in their mother tongue. This strategy may need to apply to the language policy as well as addressing teacher language training.
- Ensure the implementation of the competency-based curriculum by equipping the teachers with the knowledge and skills, distributing necessary teaching and learning materials, and reviewing the assessment systems in line with the curriculum
- Consider strategic and systemic use of ICT in delivering and managing education
- Invest in quality enhancement of TVET by updating curriculum, learning materials, and infrastructure and equipment. Train and reward TVET teachers in alignment to the general education teachers.

System capacity and management

- Review the current teacher training systems and introducing teacher professional development
- Review the effectiveness of the existing teacher incentive schemes - e.g., state awards, local education awards, and excellence in education.
- Set clear, achievable, and measurable education goals and targets with clear responsibilities assigned to the appropriate unit(s) for monitoring and reporting
- Enhance the MoES's capacity in sector-wide education policy and planning especially on results-based planning and management
- Improve the education information management system (EMIS) and other data management systems to facilitate evidence-based decision making at all levels
- Expand the information/evidence base on disparities in education (e.g., data disaggregated by SES characteristics)

External efficiency

- Conduct a comprehensive labor market analysis and a tracer study to improve the relevance of TVET and higher education
- Improve entrepreneurship education at TVET
- Consider the development of a human resource development strategy, working closely with the Ministry of Labor, Migration and Employment of the Population
- Conduct an in-depth analysis of education's social impact

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Annexes

Annex 1: Legal and policy frameworks for education

Table 1: List of national legislative documents related to education³⁶

#	Legislation	Adopted	Amended
1.	Law of the Republic of Tajikistan "On Science and Scientific-Technical Policy in the Republic of Tajikistan"	May 21, 1998	2004, 2007, 2008, 2011
2.	Law of the Republic of Tajikistan "On Academy of Sciences of the Republic of Tajikistan"	May 10, 2002	2007, 2010
3.	Law of the Republic of Tajikistan "On Primary Professional Education"	April 22, 2003	2007, 2009, 2012, 2014
4.	Law of the Republic of Tajikistan "On Higher and Postgraduate Professional Education"	December 8, 2003	2009, 2014, 2016
5.	Law of the Republic of Tajikistan "On Education"	May 17, 2004	2005, 2006, 2008, 2009, 2010, 2011, 2013, 2014, 2016
6.	Law of the Republic of Tajikistan "On Environmental Education of Population"	December 29, 2010	--

³⁶ Table taken directly from Mirzoev, S. 2016. *Tajikistan Joint Sector Review Education Sector Synthesis Report*. Dushanbe, Tajikistan.

7.	Law of the Republic of Tajikistan "On Social Protection of Disabled Persons in the Republic of Tajikistan"	December 29, 2010	--
8.	Law of the Republic of Tajikistan "On Parental Responsibilities in Children's Care and Education"	August 2, 2011	March 15, 2016
9.	Law of the Republic of Tajikistan "On Additional Education"	April 16, 2012	--
10.	Law of the Republic of Tajikistan "On Pre-School Education and Care"	December 28, 2013	--
11.	Law of the Republic of Tajikistan "On Secondary Professional Education"	August 8, 2015	May 30, 2017
12.	Law of the Republic of Tajikistan "On Protection of the Rights of the Child"	March 18, 2015	--
13.	Law of the Republic of Tajikistan "On Education of Adults"	February 24, 2017	--

Source: Ministry of Justice of the Republic of Tajikistan.

Table 2. International conventions and covenants ratified by Tajikistan³⁷

Ratification	International Conventions and Protocols
Dec 2, 1949	Convention on Repressing Human Slavery and the Exploitation of Another Person's Prostitution
June 29, 1951	Convention on Equal Remuneration
June 15, 1960	Convention on Discrimination with Respect to Employment and Occupation
Dec 14, 1960	Convention against Discrimination in Education
Dec 21, 1965	Convention on Elimination of All Forms of Racial Discrimination
Dec 16, 1966	International Covenant on Civil and Political Rights

³⁷ Table directly taken from Mirzoev, S. 2016. *Tajikistan Joint Sector Review Education Sector Synthesis Report*. Dushanbe, Tajikistan.

Dec 16, 1966	Optional Protocol to the International Covenant on Civil and Political Rights
Dec 16, 1966	International Covenant on Economic Social and Cultural Rights
June 28, 1966	Convention on the Status of Refugees
June 26, 1973	Convention on the Minimum Age for Admission to Employment
June 23, 1975	Human Resources Development Convention (vocational guidance and training)
Dec 18, 1979	Convention on the Elimination of all Forms of Discrimination against Women
Nov 20, 1989	Convention on the Rights of the Child
Nov 26, 1993	Convention on Vocational Rehabilitation and Employment (Persons with Disability)
Nov 26, 1993	Convention on Forced or Compulsory Labor
Nov 19, 1999	Convention on the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labor
Oct 31, 2003	UN Convention against Corruption
Oct 20, 2005	Convention on the Protection and Promotion of the Diversity of Cultural Expressions