

EDUCATION

Education plays a pivotal role in the creation of skills and human capital, which certainly leads to higher economic growth. The development of human capital is critical for improving productivity through technological innovation that in turn leads to sustained high inclusive economic growth while also helping combat multiple economic challenges. Education promotes a productive and informed workforce and creates opportunities for the socially and economically deprived sections of society.

Pakistan is ranked 152 out of 189 countries in the United Nations Development Programme's (UNDP) Human Development Index (HDI) ranking, according to the Human Development Report, 2019. Unfortunately, Pakistan has not exhibited improvement in key educational indicators, such as literacy rate, gross enrolment ratio, and expenditure on education, as compared to regional countries (Table 10.1). Pakistan's literacy rate 57 percent lags well behind its neighboring countries¹. The primary school dropout rate is 22.7 percent (3rd highest in the region after Bangladesh and Nepal), which is alarming given it is at the stage of formative learning.

Table: 10.1 Education Indicators

Country	Literacy rate adult %age 15 years and older (2008-18)	Youth %age 15-24 years old		Population with some secondary education %ages 25 years & older (2010-18)	Gross enrolment Ratio (GER) 2013-18				Primary School Dropout rate (2007-2017)	Government Expenditure on education (% of GDP) (2013-2018)	Human Development Index (HDI) Rank
		Female (2008-18)	Male (2008-18)		Pre-Primary	Primary	Secondary	Tertiary			
	SDG 4.6				SDG 4.2	SDG 4.1		SDG 4.3			
Iran	85.5	97.9	98.3	69.8	52	108	89	69	4.0	3.8	65
Sri Lanka	91.9	99.1	98.5	82.8	101	102	98	19	1.6	2.8	71
Maldives	98.6	99.4	99.1	47.1	91	102	n/a	14	6.7	4.3	104
India	69.3	81.8	90.0	51.6	14	115	75	28	12.3	3.8	129
Bhutan	57.0	84.5	90.4	12.0	25	93	86	11	11.3	7.1	134
Bangladesh	72.9	94.5	91.5	46.7	40	111	67	18	33.8	1.5	135
Nepal	59.6	80.2	89.9	35.9	86	134	71	12	26.5	5.1	147
Pakistan	57.0	65.5	79.8	37.2	80	96	45	10	22.7	2.8	152
Afghanistan	31.7	32.1	61.9	26.1	n/a	104	55	10	n/a	3.9	170

Source: Human Development Report, 2019 (The latest available report)

¹ Human Development Report, 2019.

The Government Agenda

The government has initiated various efforts to improve access to and quality of education through policy interventions and expenditure allocations. In this regard, the National Education Policy Framework has been formulated to combat the multiple challenges faced by the education sector with the following priority areas:

- **Priority 1: Decrease Out of School Children (OOSC) and Increase School Completion:** To address OOSC, the government proposed key actions related to i) school infrastructure, ii) finance which comprised removing financial barriers through cash transfers, improving the existing provision of stipends to girls and improving coordination with the finance departments to ensure efficient and timely transfer and utilization of education budget, iii) improving teacher and student knowledge, iv) providing free online education and v) improving access to education in remote areas.
- **Priority 2: Achieve Uniformity in Education Standards:** To ensure uniform education, the government aims to introduce a uniform education system for all that could ensure equality in quality across the three systems of schooling in Pakistan, i.e., public, private and madrassa². This could be achieved through a selection of a common curriculum framework, streamlining national teaching and learning standards, ensuring a multi-lingual policy, strengthening regulatory bodies to ensure coordination across the different school systems, raising awareness about the quality of government school education through campaigns, reforms and strengthening community action through the dissemination of educational information.
- **Priority 3: Improve the Quality of Education:** To improve the quality of education, the government focuses on improving teacher management while ensuring the continuous professional development of teachers for the purpose of multi-grade teaching, implementing a meritocracy in the teacher's placement process, ensuring implementation of early childhood education, ensuring the availability of teaching and learning resources and their utilization in schools and increasing access to information about nutrition and stunting for mothers and students.
- **Priority 4: Enhance Access to and Relevance of Skills Training:** To enhance access to skill training, the government promoted public-private partnerships with industry, including setting up industry-led skills councils, increasing the number of skilled workers in priority areas, strengthening and improving quality and the institutional framework and introducing a national skills information system to ensure better student placement and planning.

Box-I: TeleSchool

Ministry of Federal Education & Professional Training has launched the country's first educational television channel, "**TeleSchool**," with the collaboration of Pakistan Television (PTV) and Allama Iqbal Open University (AIU) and with additional input from several non-governmental organizations (NGOs). The channel, launched with the slogan 'education at home', is mitigating the academic losses faced by the students amid Corona virus (COVID-19) outbreak and the subsequent closure of educational institutions due to country-wide lockdown.

² There are four types of schools in Pakistan: public schools, private schools with the medium of instruction in Urdu or English, religious schools and non-formal education.

The channel also helps the government to reach remote areas that didn't have access to education facilities and infrastructure before. This initiative will also promote education for the OOSC as well as adult literacy. The TV channel is being aired (through a beam provided by PTV) across the country for online education from grades 1-12.

Description of Educational Institutions and Enrolment Data³

i) Pre-Primary Education

Pre-Primary education is the basic component of Early Childhood Education (ECE). Prep classes are for children between 3 to 5 years of age. An increase of 9.9 percent in Pre-Primary enrolment (12.6 million) in 2017-18 over 2016-17 (11.4 million) has been observed, and it is further estimated to increase by 7.1 percent to 13.5 million in 2018-19. (Table 10.2)

ii) Primary Education (Classes I-V)

Nationally, in 2017-18 there were a total of 172.5 thousand functional primary schools with 522.4 thousand corresponding teachers. An increase of 5.7 percent in primary enrolment is witnessed as the total enrolled students increased to 22.9 million in 2017-18 against 21.7 million in 2016-17. However, it is further projected to increase by 4.4 percent to 23.9 million in 2018-19.

iii) Middle Education (Classes VI-VIII)

There were a total of 46.7 thousand middle institutes, with 448.1 thousand employed teachers in the whole country during 2017-18. An increase of 5.2 percent in middle enrolment is observed as the total enrolled students increased to 7.4 million in 2017-18 against 7.0 million in 2016-17, and it is projected to increase by 3.8 percent, i.e., from 7.4 million to 7.6 million in 2018-19.

iv) Secondary/High School Education (Classes IX-X)

During the academic year 2017-18, a total of 31.4 thousand secondary schools were functional, with 563.3 thousand teachers working in the whole country. At the national level, an increase of 7.8 percent in secondary enrolment is observed as the total enrolled students increased to 3.9 million in 2017-18 against 3.6 million in 2016-17. However, it is estimated to increase by 6.6 percent, i.e., from 3.9 million to 4.1 million during 2018-19.

v) Higher Secondary / Inter Colleges (Classes XI-XII)

At the national level, 5.8 thousand higher secondary schools / inter colleges with 123.2 thousand teachers were functional in 2017-18. The overall enrolment of students in higher secondary education witnessed an increase of 5.8 percent in 2017-18. The enrolment registered during 2017-18 was 1.7 million as compared to 1.6 million in 2016-17. For 2018-19, it is projected to increase to 1.8 million.

vi) Technical & Vocational Education

During 2017-18, 3.7 thousand technical and vocational institutes with 18.2 thousand teachers were functional at the national level. A significant increase of 25.6 percent in enrolment was recorded as the total enrolled increased to 0.43 million in 2017-18 against

³According to Academy of Educational Planning & Management (AEPAM), the estimated data for enrolment, number of institutions and teachers for the year 2019-20 is not available; however the said data will be available in November, 2020 which will be incorporated in the Statistical Supplement of Pakistan Economic Survey, 2019-20. Therefore the latest available data for the year 2017-18 and 2018-19 is considered for analysis.

0.34 million in 2016-17. However, it is estimated to increase by 8.7 percent, i.e., from 0.43 million to 0.47 million during 2018-19.

vii) Degree Colleges (Classes XIII-XIV)

An enrolment of 0.59 million students is expected during 2018-19 in degree colleges against enrolment of 0.60 million in 2017-18. A total of 1,659 degree colleges with 41,233 teachers were functional during 2017-18. The slight decline in enrollment might be due to preference of students to the professional and vocational courses.

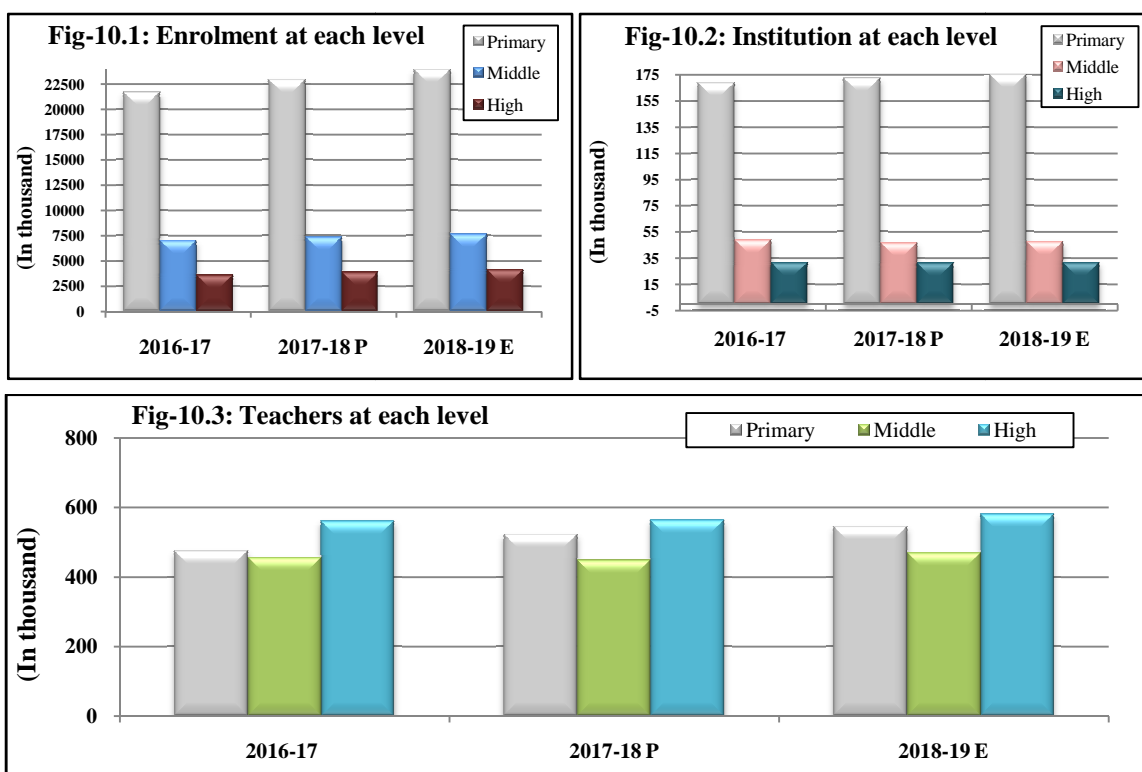
viii) Universities

There were 211 universities with 51.5 thousand teachers in both public and private sectors functional during 2018-19, according to the data received from the Higher Education Commission (HEC). The overall enrolment of students in higher education institutions (universities) increased to 1.86 million in 2018-19 from 1.58 million in 2017-18.

Overall Assessment

The overall education situation based on the key indicators, such as enrolments, number of institutes, and teachers, have shown a slight improvement. The total number of enrolments during 2017-18 was recorded at 51.0 million as compared to 47.6 million during the same period last year, which shows an increase of 7.1 percent. It is estimated to increase to 53.6 million during 2018-19. The number of institutes stood at 262.0 thousand during 2017-18 as compared to 260.1 thousand during last year. However, the number of institutes is estimated to increase to 266.3 thousand in 2018-19.

The number of teachers during 2017-18 was recorded at 1.77 million as compared to 1.73 million during the last year showing an improvement of 2.7 percent. The number of teachers is estimated to increase to 1.83 million during 2018-19.



Education

Table 10.2: Number of Mainstream Institutions, Enrolment and Teachers By Level (Thousands)

	Years	Pre-Primary	Primary [^]	Middle	High	Higher Sec./ Inter	Degree Colleges	Technical & Vocational Institutes	Universities	Total
Enrolment	2012-13	9284.3	18790.4	6188.0	2898.1	1400.0	641.5	302.2	1594.6	41099.1
	2013-14	9267.7	19441.1	6460.8	3109.0	1233.7	465.4	308.6	1594.6	41880.9
	2014-15	9589.2	19846.8	6582.2	3500.7	1665.5	510.6	319.9	1299.2	43314.1
	2015-16	9791.7	21550.6	6922.3	3652.5	1698.0	518.1	315.2	1355.6	45804.0
	2016-17	11436.6	21686.5	6996.0	3583.1	1594.9	537.4	344.8	1463.3	47642.6
	2017-18*	12574.3	22931.3	7362.1	3861.3	1687.8	604.6	433.2	1575.8	51030.4
	2018-19**	13465.4	23942.0	7641.5	4117.9	1757.2	597.6	470.8	1862.8 [@]	53564.5
Institutions	2012-13	-	159.7	42.1	29.9	5.0	1.5	3.3	0.147	241.6
	2013-14	-	157.9	42.9	30.6	5.2	1.1	3.3	0.161	241.2
	2014-15	-	165.9	44.8	31.3	5.4	1.4	3.6	0.163	252.6
	2015-16	-	164.6	45.7	31.7	5.5	1.4	3.7	0.163	252.8
	2016-17	-	168.9	49.1	31.6	5.1	1.4	3.8	0.185	260.1
	2017-18*	-	172.5	46.7	31.4	5.8	1.7	3.7	0.186	262.0
	2018-19**	-	175.3	47.7	31.7	5.9	1.7	3.8	0.211 [@]	266.3
Teachers	2012-13	-	428.8	362.6	489.6	132.0	48.8	16.1	77.6	1555.5
	2013-14	-	420.1	364.8	500.5	124.3	26.0	16.4	77.6	1529.7
	2014-15	-	430.9	380.8	514.2	118.1	36.6	19.4	88.3	1588.3
	2015-16	-	444.6	394.2	529.5	123.1	37.1	18.2	83.4	1630.1
	2016-17	-	475.2	455.4	560.6	120.3	37.9	18.2	58.7	1726.3
	2017-18*	-	522.4	448.1	563.3	123.2	41.2	18.2	56.9	1773.3
	2018-19**	-	545.2	469.2	580.3	121.5	40.0	18.7	51.5 [@]	1828.8

*: Provisional, **: Estimated, ^: Including Pre-Primary, Mosque Schools, BECS and NCHD, @: Provisional Figures provided by HEC.

Source: Ministry of Federal Education & Professional Training, AEPAM, Islamabad

Literacy

According to the Pakistan Social and Living Standards Measurement (PSLM) Survey 2018-19, the literacy rate of the population (10 years and above) is 60 percent as compared to 58 percent in 2015-16. The literacy rate is higher in urban areas (74 percent) than in rural areas (51 percent). Province wise analysis suggests that Punjab has the highest literacy rate, with 64 percent followed by Sindh and Khyber Pakhtunkhwa (Excluding Merged Areas) with 57 percent, Khyber Pakhtunkhwa (Including Merged Areas) with 55 percent and Balochistan with 40 percent (Table 10.3).

Table 10.3: Literacy Rate (10 Years and Above)-Pakistan and Provinces (percent)

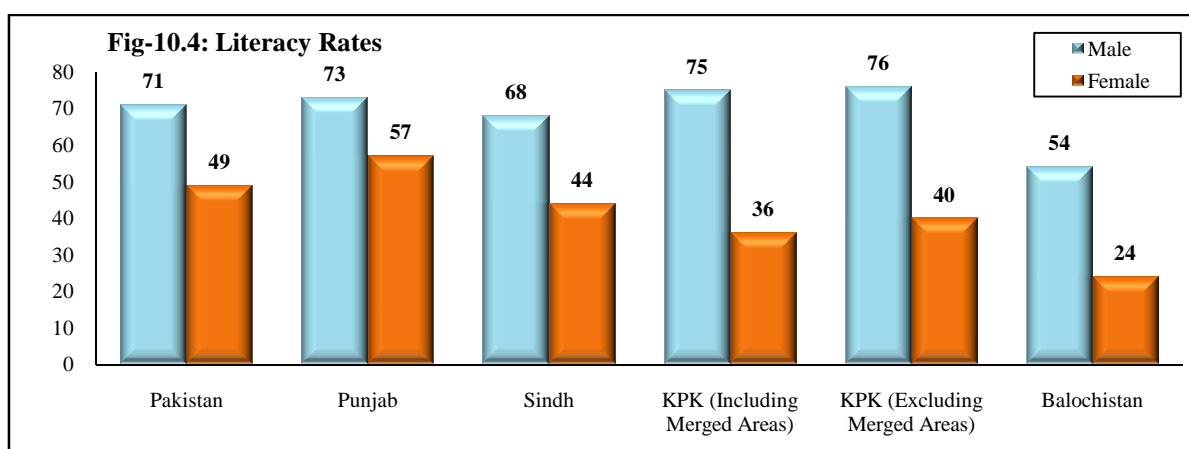
Province/Area	2015-16			2018-19		
	Male	Female	Total	Male	Female	Total
Pakistan	70	48	58	71	49	60
Rural	63	36	49	65	38	51
Urban	81	68	74	80	67	74
Punjab	72	54	62	73	57	64
Rural	66	44	55	67	47	57
Urban	82	73	77	82	73	77
Sindh	67	44	55	68	44	57
Rural	51	19	36	55	21	39
Urban	80	65	73	79	64	72
Khyber Pakhtunkhwa (Including Merged Areas)	-	-	-	75	36	55
Rural	-	-	-	74	33	52
Urban	-	-	-	82	51	66
Khyber Pakhtunkhwa (Excluding Merged Areas)	72	36	53	76	40	57
Rural	70	33	50	81	54	67

Table 10.3: Literacy Rate (10 Years and Above)-Pakistan and Provinces (percent)

Province/Area	2015-16			2018-19		
	Male	Female	Total	Male	Female	Total
Urban	77	52	64	74	37	55
Balochistan	56	24	41	54	24	40
Rural	48	15	33	48	17	34
Urban	76	44	61	70	41	56

Source: Pakistan Social and Living Standards Measurement (PSLM) Survey, 2018-19, Pakistan Bureau of Statistics.

Note: Area of erstwhile FATA is now part of Khyber Pakhtunkhwa and covered the first time. Therefore values of Khyber Pakhtunkhwa are given both with and without merged areas. However, the exact comparison of Khyber Pakhtunkhwa with the previous year is only possible by comparing Khyber Pakhtunkhwa, excluding merged areas.



Primary Enrolment Rates

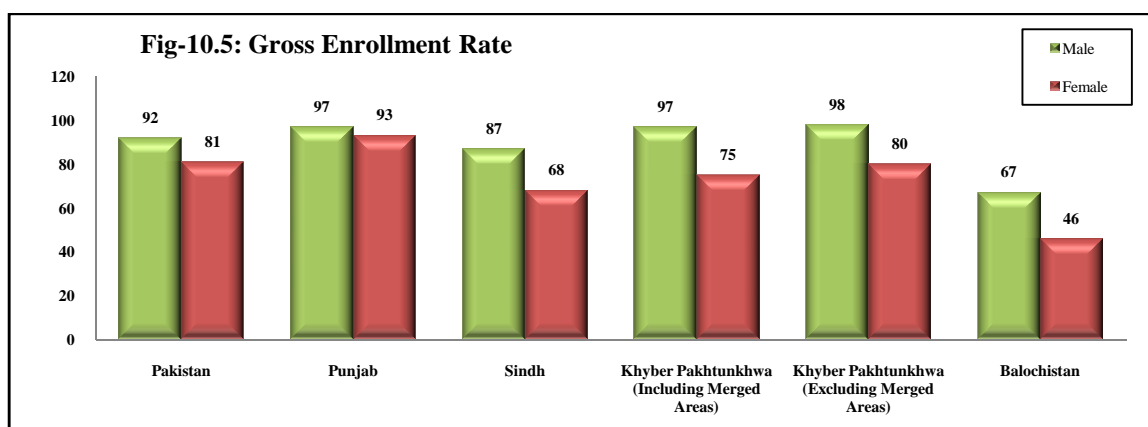
A. Gross Enrolment Rates

Gross Enrolment Rates (GER) at the primary level excluding Katchi (prep) for the age group 6-10 years at the national level during 2018-19 remained at 87 percent as compared to 2015-16. Province wise data suggests that Punjab showed improvement from 93 percent in 2015-16 to 95 percent in 2018-19, Sindh remained stable with Primary level GER at 78 percent, Khyber Pakhtunkhwa (Excluding Merged Areas) improved to 89 percent in 2018-19 against 88 percent in 2015-16, while Balochistan witnessed a decline from 59 percent in 2015-16 to 57 percent in 2018-19. The details are given in Table 10.4.

Table 10.4: National and Provincial GER (Age 6 -10 years) at Primary Level (Classes1-5) (percent)

Province/Area	2015-16			2018-19		
	Male	Female	Total	Male	Female	Total
Pakistan	94	78	87	92	81	87
Punjab	98	88	93	97	93	95
Sindh	88	67	78	87	68	78
Khyber Pakhtunkhwa (Including Merged Areas)	-	-	-	97	75	86
Khyber Pakhtunkhwa (Excluding Merged Areas)	98	77	88	98	80	89
Balochistan	73	41	59	67	46	57

Source: Pakistan Social and Living Standards Measurement (PSLM) Survey, 2018-19, Pakistan Bureau of Statistics.



B. Net Enrolment Rates

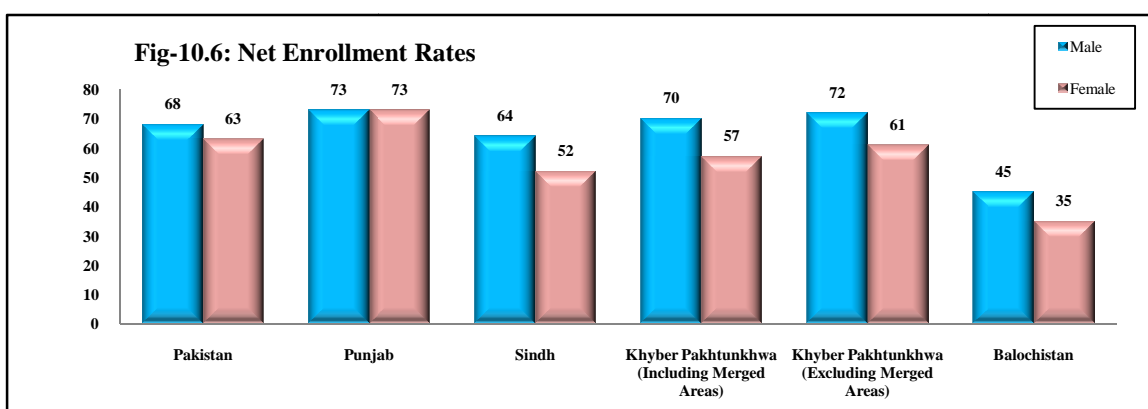
Net Enrolment Rates (NER) at the primary level refers to the number of students enrolled in primary schools of age 6 to 10 years divided by the number of children in the same age group for that level of education.

NER at the national level during 2018-19 slightly improved from 65 percent in 2015-16 to 66 percent in 2018-19. Province wise comparison reveals that Punjab witnessed an improvement of 73 percent in 2018-19 as compared to 71 percent in 2015-16. Sindh showed an improvement of 58 percent in 2018-19 as compared to 56 percent in 2015-16, Khyber Pakhtunkhwa (Excluding Merged Areas) witnessed declined from 67 percent in 2015-16 to 66 percent in 2018-19, while Balochistan remained stable with Primary level NER at 40 percent.

Table 10.5: National and Provincial NER (Age 6 -10 years) at Primary Level (Classes 1-5) (percent)

Province/Area	2015-16			2018-19		
	Male	Female	Total	Male	Female	Total
Pakistan	69	60	65	68	63	66
Punjab	73	68	71	73	73	73
Sindh	62	50	56	64	52	58
Khyber Pakhtunkhwa (Including Merged Areas)	-	-	-	70	57	64
Khyber Pakhtunkhwa (Excluding Merged Areas)	74	59	67	72	61	66
Balochistan	48	32	40	45	35	40

Source: Pakistan Social and Living Standards Measurement (PSLM) Survey, 2018-19, Pakistan Bureau of Statistics.



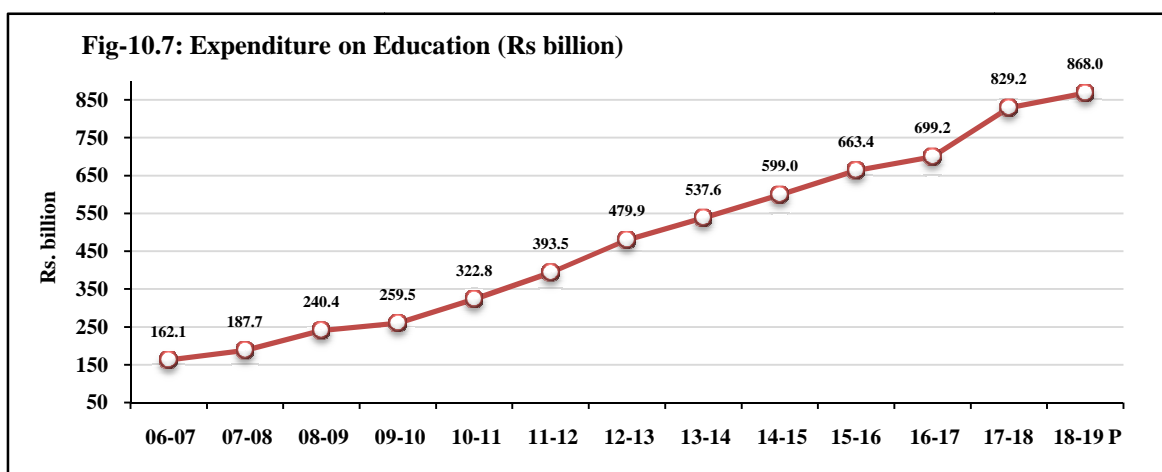
Expenditure on Education

Public expenditure on education was estimated at 2.3 percent of GDP in 2018-19, as compared to 2.4 percent in 2017-18. Expenditure on education has been rising gradually since 2014-15. The education-related expenditure increased by 4.7 percent (to Rs 868.0 billion) in 2018-19 (Table-10.6). The provincial governments are also spending a sizeable amount of their Annual Development Plans (ADPs) on education. Punjab increased its expenditure in 2018-19 to Rs 371.8 billion as compared to Rs 340.8 billion in 2017-18, which shows an increase of 9.1 percent. Expenditure on education in Khyber Pakhtunkhwa has also increased to Rs 152.7 billion, as compared to Rs 142.6 billion last year, which shows an increase of 7.1 percent in 2018-19. Similarly, Balochistan has increased its expenditure from Rs 52.8 billion in 2017-18 to Rs 55.3 billion in 2018-19, which shows a growth of 4.8 percent. A minor decline of 2.1 percent has been observed in Sindh, as expenditure on education stood at Rs 162.6 billion in 2018-19 as compared to Rs 166.0 billion in 2017-18.

Years		Current Expenditure	Development Expenditure	Total Expenditure	As % of GDP
2014-15	Federal	73,729	28,293	102,022	2.2
	Punjab	201,882	25,208	227,090	
	Sindh	109,275	7,847	117,122	
	Khyber Pakhtunkhwa	83,205	28,506	111,711	
	Balochistan	32,299	8,803	41,102	
	Pakistan	500,390	98,657	599,047	
2015-16	Federal	84,496	34,665	119,161	2.3
	Punjab	224,608	26,863	251,471	
	Sindh	123,855	11,153	135,008	
	Khyber Pakhtunkhwa	92,306	19,925	112,231	
	Balochistan	36,121	9,364	45,485	
	Pakistan	561,386	101,970	663,356	
2016-17	Federal	91,139	16,890	108,029	2.2
	Punjab	221,049	39,593	260,642	
	Sindh	134,650	12,082	146,732	
	Khyber Pakhtunkhwa	109,482	26,639	136,121	
	Balochistan	40,571	7,127	47,698	
	Pakistan	596,891	102,331	699,222	
2017-18	Federal	100,428	26,495	126,923	2.4
	Punjab	295,893	44,910	340,803	
	Sindh	152,298	13,705	166,003	
	Khyber Pakhtunkhwa	126,149	16,494	142,643	
	Balochistan	47,107	5,673	52,780	
	Pakistan	721,875	107,277	829,152	
2018-19(P)	Federal	103,787	21,780	125,567	2.3
	Punjab	339,402	32,413	371,815	
	Sindh	153,492	9,110	162,602	
	Khyber Pakhtunkhwa	132,516	20,195	152,711	
	Balochistan	49,298	6,029	55,327	
	Pakistan	778,495	89,527	868,022	

P: Provisional

Source: PRSP Budgetary Expenditures, External Finance & Policy Wing, Finance Division, Islamabad



Development Programmes 2019-20

The Federal Public Sector Development Programme (PSDP) 2019-20 has allocated an amount of Rs 4.8 billion for 11 ongoing and 21 new development projects of the Ministry of Federal Education & Professional Training. An amount of Rs 1.07 billion has also been allocated for 8 ongoing and new education-related projects being handled by Finance, Defence, Interior, and Kashmir Affairs & Gilgit Baltistan Division. The implementation of PSDP funded education projects can have a lasting impact on socio-economic development.

The provincial governments have also prioritized improving key indicators including the provision of missing facilities, upgradation of girls and boys primary schools to the middle, high and secondary levels, construction of new boys and girls schools and colleges, provision of scholarship through endowment funds and scholarship schemes, provision of stipends to female students up to Matriculation, improvement of the physical infrastructure, establishment of IT/Science labs in secondary and higher secondary schools, Early Childhood Education (ECE) at Primary level and strengthening of Provincial Institutes of Teacher Education (PITE). All the provinces have allocated budget for the education foundations, and development budget has allocated for capacity building of teachers to provide quality education and for the establishment of the cadet colleges to meet the prerequisites of education.

Punjab

During 2019-20, Government of Punjab has allocated an amount of Rs 42.9 billion for 206 ongoing and 108 new development projects for education. This includes Rs 32.0 billion for school education, Rs 7.3 billion for higher education, Rs 1.0 billion for special education, and Rs 2.6 billion for literacy and non-formal education. The total allocated amount is 31 percent higher than the last fiscal year⁴.

Sindh

During 2019-20, the Sindh government has allocated Rs 25.7 billion for 287 ongoing and 134 new development projects for education. This includes Rs 17.8 billion for School

⁴ The allocated amount doesn't include TVET sector allocation here.

Education & Literacy, Rs 4.0 billion for college education, Rs 0.15 billion for Special Education, Rs 0.72 billion for Sindh TEVTA and Rs 3.0 billion for Universities & Boards.

Khyber Pakhtunkhwa

The government of Khyber Pakhtunkhwa has allocated Rs 15.5 billion in 2019-20 for 97 ongoing and 26 new development projects. It includes Rs 1.4 billion for primary education, Rs 8.1 billion for secondary education, and Rs 5.8 billion for higher education. The allocated amount for education is 21 percent higher than the last year⁵.

Balochistan

The Balochistan government has allocated Rs 12.7 billion (11.7 percent of total development budget) for FY2020 for 103 ongoing and 181 new development projects. Out of the total allocation, an amount of Rs 1.4 billion has been allocated for primary education, Rs 3.2 billion for middle education, Rs 3.1 billion for secondary education, Rs 3.4 billion for college education, Rs 0.4 billion for university education, Rs 0.9 billion for general education and 0.2 billion for technical education.

Technical and Vocational Education

NAVTTTC

National Vocational & Technical Training Commission (NAVTTTC) executed nation-wide targeted skill development programme which is focused on preparing skilled human resource for local & international labour market and primarily for national mega projects like China Pakistan Economic Corridor (CPEC) and other energy-related projects. Since CPEC is expected to generate about 2.5 million jobs for skilled youth, NAVTTTC is making allout efforts to produce a competent skilled workforce at par with international standards of the job market in various sectors of the economy, including; Construction, Hospitality Services, and Energy Sectors. More than 200,000 youth have been trained by NAVTTTC under its targeted training programmes during 2015 to 2019.

Box-II: Implementation of Prime Minister's "Skills for All Strategy"– Hunarmand Pakistan Programme under Kamyab Jawan Initiative

After assuming office, the present government constituted a Task Force under the Ministry of Federal Education and Professional Training to devise a comprehensive strategy for skill development in the country. NAVTTTC spearheaded the proceedings of this initiative, and after thorough deliberations, the Task Force identified eight (08) key areas of interventions to uplift Technical and Vocational Education and Training (TVET) sector in Pakistan as below:

- i. Improving governance to remove fragmentation/duplications leading to systemic wastages
- ii. Exploring Multi-source Funding to pursue a broad-based reform agenda
- iii. Capacity Enhancement to create more and more training opportunities
- iv. Quality Assurance to bring the quality of skills at par with national and international requirements
- v. Access and equity for providing equal opportunities to such marginalized segments of the society such as females, orphans, special people, youth from less developed areas, etc.

⁵ It doesn't include TVET sector allocation here.

- vi. Industry Ownership to enhance both relevances of training and youth employability
- vii. Skill Development for International Market for increasing foreign remittances
- viii. TVET Communication Plan to increase the image of the skill sector.

A comprehensive skill development programme is prepared and being implemented by NAVTTC to implement the above recommendations of the Task Force. Fourteen (14) components/areas of interventions covered under this programme include:

- i. Development & Standardization of 200 Technical and Vocational Education and Training (TVET) Qualifications
- ii. International Accreditation of 50 Pakistani TVET Institutes and Initiation of Joint Degree Programmes in TVET
- iii. Extension of NAVTTC's Job Portal into National Employment Exchange (NEX) Portal and refurbishing & connecting all existing job placement facilities across the country to NEX
- iv. Establishing 75 Smart Tech Labs for virtual skill development programmes including distant learning programmes in the TVET sector
- v. Establishing 10 countries of destination-specific facilitation centers in 10 major manpower exporting cities across Pakistan
- vi. Establishing 70 labs/workshop in **madrassa(s)** to introduce skill development and TVET activities across Pakistan
- vii. The skill development programme for 50,000 youth belonging to less developed areas of the country especially Balochistan, GB, AJK and newly merged districts of Khyber Pakhtunkhwa (Ex-FATA), Southern Punjab & Rural Sindh
- viii. Skill development training of 50,000 Youth in High-End technologies in reputed Universities of Pakistan and TVET institutes
- ix. Apprenticeship training of 20,000 youth in the industry under Apprenticeship Act-2018 (formal & informal apprenticeship)
- x. Recognition of Prior Learning (RPL) of 50,000 youth to certify informally acquired skills inside the country and abroad and training of 4,000 Assessors
- xi. Establishing the National Accreditation Council, placed at ICT
- xii. Accreditation of 2,000 TVET Institutes all across the country
- xiii. Transfer of Technology through collaboration with technologically advanced countries for bringing the TVET system in Pakistan at par with international standards and Master Training of 500 TVET Teachers in Technology
- xiv. Establishment of 50 Business Incubation Centers to promote self-employment and entrepreneurship in skilled youth.

The duration of this programme is 20 months (Nov, 2019 to June, 2021). It is also expected that with the initiation of this programme, the long-overdue process of TVET sector reforms and transformation will increasingly attract other stakeholders i.e., the provincial governments, industry, and private sector, to contribute their parts in bringing Pakistani TVET sector at par with international standards. A Total number of 170,000 skilled and certified workforce will readily be available after the successful implementation of this programme.

The NAVTTC has also taken a number of steps to enhance the quality of technical and vocational training in the country. Some of the prominent initiatives taken by NAVTTC are mentioned as under;

- i. National Vocational Qualification Framework (NVQF) has been devised and implemented for the standardization of skill qualifications across the country.
- ii. As a quality assurance mechanism in the TVET sector, NAVTTC has introduced a comprehensive accreditation regime in Pakistan. More than 200 TVET institutes and 1,400 training programmes have already been accredited under the programme .
- iii. In curriculum development and its standardization at the national level, NAVTTC has developed curriculum for more than 100 trades, in accordance with the latest technological requirements of national and international job markets.
- iv. Internationally recognized, Competency-Based Training (CBT) modules have been introduced in the country to replace the traditional model of training. With the introduction of CBT, Pakistan is now able to deliver training in accordance with the internationally demanded and recognized requirements.
- v. Special emphasis has been laid on giving a pivotal role to the industry and private sector in TVET sector development in the country. Four Sector Skill Councils (SSCs) have been established in the Construction, Hospitality, Textile, and Renewable Energy sectors.
- vi. To further strengthen the industry and private sector role in TVET, Apprenticeship Bill, 1962, has been replaced with the Apprenticeship Act, 2018. The new law has a broader scope and is in line with the latest best practices in the field of apprenticeship.
- vii. Pakistan is now a member of the World-Skills which is the collective voice for skills excellence and development in vocational, technological and service-oriented careers around the globe.
- viii. A large number of Pakistani youths acquire training through the informal sector, known as the "Ustad-Shagird" system. In the absence of formal certification for their skills, such youth cannot get employment as skilled workers, in both national and international markets. The system of RPL has been launched as a tool to recognize/certify the skills acquired through informal means to enhance employment prospects for such youth.
- ix. Training and capacity building of TVET trainers and managers has also been given its due importance. Both in-country and foreign training programmes have been arranged for training and capacity building of TVET trainers and managers
- x. For the first time in Pakistan, a National Job Portal has been introduced to link skilled workers with employers. Skill profiles of more than 550,000 youth are available on the National Job Portal. Additionally, NAVTTC has also established Job Placement Centers (JPCs) at Islamabad, Karachi, and Lahore.

Higher Education Commission (HEC)

HEC has been set up to facilitate the higher education institutions (HEIs) to serve as an engine of growth for the socio-economic development of Pakistan. HEC has taken numerous measures to address the key areas of higher education like; substantial expansion in

education, human resource development, enhancing the quality of education as well as the research and development practices in the country.

Table: 10.7 Enrollment (Provisional) - Region, Sector, and Gender-wise for the year 2018-19

Province/ Region	Public			Private			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
ICT	382,221	385,466	767,687	22,563	15,505	38,068	404,784	400,971	805,755
Punjab	201,990	205,739	407,729	88,015	55,319	143,334	290,005	261,058	551,063
Sindh	111,843	70,934	182,777	61,400	31,864	93,264	173,243	102,798	276,041
Khyber Pakhtunkhwa	840,84	30,327	114,411	36,331	9,389	45,720	120,415	39,716	160,131
Balochistan	25,358	10,972	36,330	492	164	656	25,850	11,136	36,986
Azad Jammu & Kashmir	11,795	12,643	24,438	974	1,189	2,163	12,769	13,832	26,601
Gilgit Baltistan	3,118	3,069	6,187	-	-	-	3,118	3,069	6,187
Pakistan	820,409	719,150	1,539,559	209,775	113,430	323,205	1,030,184	832,580	1,862,764

Source: Higher Education Commission

There are a total of 211 public (128) and private (83) sector Higher Education Institutes operating in the country having a total enrolment of 1.863 million approximately with 51,494 faculty members (Ph.D. 16,478, Non-Ph.D. 35,016).

Table: 10.8 Faculty (Provisional) - Region, PhD, Non-PhD in HEIs, 2018-19

Province/ Region	PhD Faculty	Non-PhD Faculty	Total
ICT	3,503	6,375	9,878
Punjab	6,397	12,134	18,531
Sindh	2,990	9,821	12,811
Khyber Pakhtunkhwa	2,725	4,210	6,935
Balochistan	422	1,452	1,874
Azad Jammu & Kashmir	362	919	1,281
Gilgit Baltistan	79	105	184
Pakistan	16,478	35,016	51,494

Source: Higher Education Commission

Quality of Higher Education

HEC has established five National Accreditation Councils in the areas of Agriculture, Business, Computing, Teacher and Technology Education for the programmes offered by the universities to standardize the quality of education. HEC has also coordinated and established linkages with nine existing professional councils. HEC aims to enhance quality education through strong coordination and collaboration amongst universities and councils, and the focus is to improve the education system through proper assessment and evaluation processes with the cooperation of concerned councils. At present, 1,800 programmes are accredited by the Accreditation Councils, and 200 more programmes are to be accredited in the next financial year 2020-21.

a. Quality Enhancement Cell:

The HEC ensures that all existing and new universities will have a Quality Enhancement Cell (QEC) to implement the standards being set for curricula, faculty, examination, governance, and digital resources. Currently, there are 196 out of 211 universities that have established QECs.

b. Institutional Performance Evaluation

Quality Assurance Agency (QAA) of HEC has been involved in both internal and external reviews of HEIs, since its establishment. Nevertheless, a major step was undertaken by developing standards for Institutional Performance Evaluation (IPE). Initially, four standards were developed for the evaluation of selected HEIs, which were gradually enhanced up to eleven standards. This quality assurance initiative was introduced by QAA as part of its manifesto to safeguard the public interest by encouraging the introduction and implementation of good practices in public and private HEIs for continuous quality improvement in the higher education sector of Pakistan.

Human Resource Development

HEC is investing a substantial amount to bridge the financing gap of obtaining the highest qualifications through the development and recurring projects/programmes of scholarships.

Overseas Scholarships (OS): A total number of **716** scholars proceeded abroad for their Ph.D. studies during 2019-20, whereas **487** scholars provisionally awarded under OS-Phase-III. In addition, 501 scholars were awarded for six (06) month Ph.D. research fellowship abroad under the International Research Support Initiative Programme (IRSIP) during the said period.

Indigenous Scholarships: A total number of **1,975** indigenous scholarships were awarded for Undergraduate, Postgraduate and Ph.D. studies under various schemes during 2019-20.

Need-Based Scholarships: A total number of **2,853** need-based scholarships were awarded during 2019-20, under different need-based programmes. It includes HEC need-based scholarships, USAID, and OGDCL Need-based scholarship programmes.

Ehsaas Undergraduate Scholarships: This initiative launched by the Prime Minister, is the largest ever needs-based undergraduate scholarship programme in the history of Pakistan. Under this programme, every year, 50,000 students from low-income families will be awarded scholarships for 4 to 5-year undergraduate degree programmes. Over four years, 200,000 undergraduate scholarships will be awarded on need and merit basis; 50 percent of awardees will be girls, while 2 percent of awardees will be disabled. It is a four-year programme that commenced in November 2019 for the academic year 2019-20.

Research & Development

The research activities have enhanced in public sector institutions. Streamlined research, generated by strategic academic processes that build strong societies and economies, has now entered a takeoff phase of commercialization. Business and Technology Incubators have been established in universities across the country to promote university-industry collaboration. Universities have initiated various research projects related to agriculture, business, and industrial needs, which have been shared with the related stakeholders and other sections of the society.

In order to sustain the improving trend and to expand the horizon of research activities in HEIs, HEC focused on those research activities that have a direct impact on community well-being and the economy of the country. These are:

- i) Rapid Research & Innovation Initiative (RRII): In response to the emergency situation

arising globally due to the spread of COVID-19, HEC has made efforts to ensure that the country utilizes the research capacity of its universities to respond to the pandemic timely and effectively. HEC has launched a fast track funding mechanism under RRII to support proposals in applied research, product innovation and commercialization of potential solutions under various priority themes dealing with topics and issues of severe urgency with regard to availability and access to data, facilities or specialized equipment as well as the quick response of research on COVID-19.

- ii) Under "National Research Programme for Universities"(NRPU), 544 Projects have been awarded in FY2020, and a total of 381 projects have been completed during this period with a total allocation of Rs 1.45 billion.
- iii) Six (06) collaborative research grants jointly submitted by Pakistani and UK faculty will be supported under Innovative & Collaborative Research Grants (ICRG), of up to Rs 50.0 million for each partner by HEC & British Council.
- iv) Twenty-Five (25) Travel Grants to Pakistani and UK researchers to establish linkages and strengthen research partnership have been awarded.
- v) Under Pak-France and Pak-Turk Research Mobility Programme, review of applications is under process and project to be awarded in the current financial year.
- vi) HEC has recently revamped the research grants framework in order to meet projected national requirements as well as to achieve a wider social impact. This has been developed in consultation with the Higher Education Development in Pakistan (HEDP) Project funded by the World Bank. The project aims to strengthen the research capacity and academic excellence of HEIs in Pakistan. HEDP is comprised of a diverse set of research funding opportunities, including Grand Challenge Fund (GCF), Technology Transfer Support Fund (TTSF), and Innovator Seed Fund (ISF). These research portfolios will provide competitive research, innovation, and commercialization grant opportunities.

Planning & Development Division

In FY2020, the government has allocated Rs 29.047 billion to HEC for the implementation of 138 development projects (128 ongoing & 10 new projects) of Public Sector Universities/HEIs.

During July-March, FY2020, an amount of Rs 22.738 billion (around 80% of the total allocation) has been authorized to HEC for meeting expenditure against ongoing projects activities like Construction of New Academic Buildings, Strengthening of ICT Infrastructure, Faculty Development, Procurement of Laboratory Equipment and other approved components. However, the balance amount is to be released in the remaining period of the current financial year.

Education Survey (Annual Status of Education Report, 2019)

Annual Status of Education Report (ASER), 2019, is the largest citizen-led household-based learning survey mostly in all rural and selected urban areas. It is led by the Idara-e-Taleemo-Aagahi (ITA) in collaboration with other stakeholders. The ASER 10,000 trained volunteer/enumerators surveyed 92,008 households in 4,546 villages across 155 rural districts of Pakistan. Detailed information of 255,266 children aged 3-16 has been collected

(56% male and 44% female), and of these, 202,648 children aged 5-16 years were assessed for language and arithmetic competencies.

Box-III: Summary of Key Findings & Comparison between ASER 2019 and 2018.	
Enrollment (National Rural)	
<ul style="list-style-type: none"> ▶ In 2019, 83% of 6-16-year-old children in rural Pakistan were enrolled in schools (17% of children were out-of-school). Amongst the enrolled, 77% of children were in government schools, and 23% were enrolled in non-state institutions (21% private schools, 2% Madrassa). ▶ Pre-school enrollment (3-5 years) in 2019 increased to 39%. 	<ul style="list-style-type: none"> ▶ In 2018, 83% of 6-16-year-old children in rural Pakistan were enrolled in schools (17% of children were out-of-school). Amongst the enrolled, 77% of children were in government schools, and 23% were enrolled in non-state institutions (20% private schools, 3% Madrassa). ▶ Pre-school enrollment (3-5 years) in 2018 was observed at 37%.
Quality of Learning (National Rural)	
<p>In 2019,</p> <ul style="list-style-type: none"> ▶ Percentage of Class 5 students able to read a story in Urdu/Sindhi/Pashto: 59 ▶ Percentage of Class 5 students able to read Class 2 level English sentences: 55 ▶ Percentage of Class 5 students able to do 2-digit division sums: 57 ▶ ASER Rural Survey 2019 highlights, as per past trends that children enrolled in private schools are performing better compared to those studying in government schools. 	<p>In 2018,</p> <ul style="list-style-type: none"> ▶ Percentage of Class 5 students able to read a story in Urdu/Sindhi/Pashto: 56 ▶ Percentage of Class 5 students able to read Class 2 level English sentences: 52 ▶ Percentage of Class 5 students able to do 2-digit division sums: 53
Mothers' Education	
<ul style="list-style-type: none"> ▶ ASER, 2019 reveals that the percentage of mothers having completed primary education has increased to 35%. 	<ul style="list-style-type: none"> ▶ In 2018, 33% of mothers were completed primary education.
School Facilities (National Rural)	
<ul style="list-style-type: none"> ▶ Overall, teacher attendance in government schools increased to 89% in 2019, while attendance in private schools stood at the same (89%). Overall, student attendance in government schools stood at 84% compared to 90% in private schools. ▶ In 2019, 33% of teachers of government schools had a bachelor's degree compared to 40% of teachers of private schools. Whereas, 47% of teachers of government schools have a Master's degree as compared to 35% of teachers of private schools. ▶ In 2019, 59% of the surveyed government primary schools had toilets. Similarly, 89% surveyed private primary schools have toilet facilities. ▶ Government primary schools with drinking water facility: 61% ▶ Private primary schools with drinking water facility: 93% ▶ ASER 2019 also collected information on some important civic, social support and technology indicators such as (Government & Private primary schools) cell phone use (66%), SMS use (59%) and WhatsApp use (90%) to communicate pragmatically, and percentage with alternative energy sources (34% overall). 	<ul style="list-style-type: none"> ▶ Overall, teacher attendance in government schools was 87% compared to 89% in private schools. Overall, student attendance in government schools was 84% compared to 88% in private schools. ▶ In ASER 2018, 36% of teachers of government schools have a bachelor's degree compared to 42% of teachers of private schools. Whereas 42% of teachers of government schools have a Master's degree as compared to 30% of teachers of private schools. ▶ 58% of the surveyed government primary schools have toilets in 2018. Similarly, 87% surveyed private primary schools have toilet facilities. ▶ Government primary schools with drinking water facility: 67% ▶ Private primary schools with drinking water facility: 89%

Conclusion

Education plays a leading role in improving the economic condition of the country and is a vital investment for human and economic development. Quality education with access and equity can produce human capital which is essential for improving productivity, economic growth and establishing knowledge-based society. The present government is making efforts to introduce Single National Curriculum with the aim to eliminate the disparity between curriculums, facilities, medium of instruction, and have a fair and equal opportunity for all children to receive a high-quality education. Phase-I of Single National Curriculum (for class 1-5) has been developed, and its implementation would be completed by March 2021. Similarly, phase-II of Single National Curriculum (for class 6-8) would be ready by March 2021 and implemented by March 2022, while the phase-III curriculum (for class 9-12) would be ready by March 2022 and implemented by March 2023.

Similar to many developing countries, Pakistan has not made adequate progress in improving education outcomes. A literacy rate of only 60 percent (40 percent of its population remains unable to read or write) considerably limits opportunities towards acquiring skills and technical knowledge for higher productivity and better-earning levels. Large investments in education access and quality are required to obtain the objective of educated and skilled human resources, along with comprehensive planning, removal of the gender inequalities, and enforcing more accountability in the sector.
