

Education

Education plays key and central role in the economic development of a nation by engineering social development, economic prosperity and human resource development. The government assigns a very high priority to developing a high quality, equitable, and widely accessible education system in Pakistan.

Under the 18th Constitutional Amendment Education has been devolved to the provinces which are responsible for the award of education up to intermediate level. The Academy of Educational Planning and Management (AEPAM), after the devolution of the Ministry of Education under 18th Constitutional Amendment, is being administratively controlled by Ministry of Federal Education and Professional Training and performing the functions of collation of education data collected through Provincial/Regional EMISs (Education Management Information System) and maintain linkages with Provincial and District Organization and Educational Institutions.

i) Pre-Primary Education

Pre-primary education is a vital constituent of a child's elementary education. Internationally, it is recommended that every child must be provided with pre-primary education to prepare him for later stages of education. Prep or Katchi class is meant for children between 3 to 4 years of age. In Pakistan there are no separate pre-primary institutions in public sector. At national level, Pre-Primary enrolment witnessed an increase of 2.1 percent as it increased to 9,791,725 in 2015-16 as compared to 9,589,223

in 2014-15. However, it is estimated to increase further by 1.9 percent i.e. from 9,791,725 to 9,976,263 during 2016-17. [Table 10.1].

ii) Primary Education (Classes I-V)

Primary education is the most important and crucial stage for a child's education. At national level, there were 164,630 primary schools with 444,567 teachers in 2015-16 registering a significant increase of 8.6 percent in primary enrolment to 21,550,582 compared to 19,846,824 in 2014-15. It is estimated to increase by 3.6 percent i.e. from 21,550,582 to 22,330,034 during 2016-17. [Table 10.1].

iii) Middle Education (Classes VI-VIII)

Middle schools include grades six through eight. The official age-group is 10-12 year for this level. There were 45,680 middle institutes with 394,231 teachers were functional in 2015-16. A significant increase of 5.2 percent is witnessed in middle classes enrolment as it has increased to 6,922,251 in 2015-16 against 6,582,173 in 2014-15 and is expected to increase further by 2.4 percent i.e. from 6,922,251 to 7,087,061 during 2016-17. [Table 10.1].

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

High/secondary school is where the final stage of schooling up to a specific age, takes place. High schools in Pakistan usually include grades 9 and 10. During 2015-16, at national level there were 31,740 secondary institutions compared to 31,225 institutions over 2014-15

registering an increase of 1.6 percent, whereas the total number of teachers at high school level stood at 529,520 in 2015-16 as compared to 514,158 over 2014-15 an increase of 3.0 percent. Secondary school enrolment experienced increase of 4.3 percent from 3,652,537 in 2015-16 against 3,500,692 in 2014-15. It is estimated to increase by 5.8 percent i.e. from 3,652,537 to 3,865,408 during 2016-17. [Table 10.1].

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

The Higher Secondary Schools/ Inter Colleges in Pakistan include grades 11 and 12. At national level, 5,470 higher secondary schools/ inter colleges with 123,061 teachers were functional in 2015-16 as compared to 5,393 institutions with 118,079 teachers in 2014-15. The overall enrolment of students in higher secondary education witnessed an increase of 2.0 percent in 2015-16 as compared to 2014-15. The enrolment during 2015-16 was 1,698,047 as compared to 1,665,490 during 2014-15. For 2016-17, it is estimated to increase to 1,911,085. Number of institutes is expected to increase to 5,572 in 2016-17 as compared to 5,470 in 2015-16. [Table 10.1].

vi) Technical & Vocational Institutes

Technical and Vocational education is an educational activity that imparts academic and technical knowledge and skills to the individuals. During 2015-16, 3,746 technical and vocational institutes with 18,157 teachers were functional at national level. A decrease of 1.5 percent in enrolment was recorded as it decreased to 315,168 in 2015-16 against 319,937 in 2014-15. However, it is estimated to increase by 0.7 percent i.e. from 315,168 to 317,399 during 2016-17. [Table 10.1].

vii) Degree Colleges (Classes XIII-XIV)

During 2015-16, 1,418 degree colleges have provided their academic services compared to 1,410 over 2014-15 showing an increase 0.7 percent whereas the total teachers at degree college level stood at 37,082 in 2015-16 as compared to 36,587 over 2014-15. A decline of

18.2 percent in enrolment of degree education has been witnessed as it decreased to 937,132 in 2015-16 against 1,144,826 in 2014-15. However, it is estimated to increase by 13.0 percent i.e. from 937,132 to 1,058,795 during 2016-17. [Table 10.1].

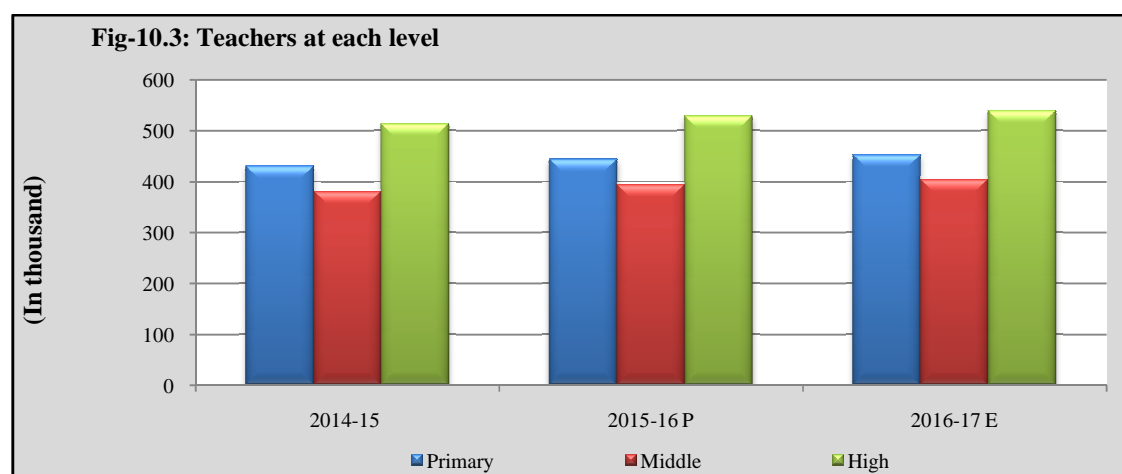
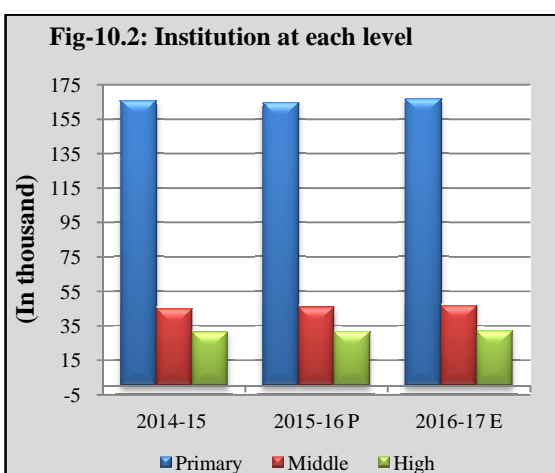
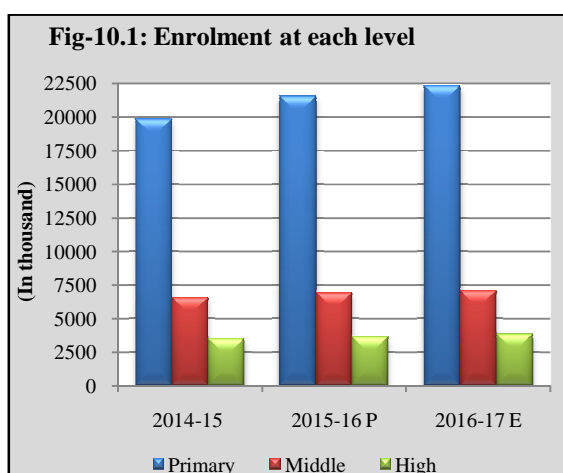
viii) Universities (Classes XV onwards)

A university provides higher education, research and number of disciplines. Now universities are offering grade 13 to 16 classes for completion of four years bachelor's degree programme as well as traditional grades 15 and 16 are offered while grade 17 and 18 classes are also being offered for completion of MS/M.Phil degree. The PhD degrees are also awarded by universities. University provides not only the high-level skills necessary for every labour market but also the essential training for teachers, doctors, nurses, civil servants, engineers, humanists, entrepreneurs, scientists, social scientists, and a myriad of other personnel. During 2015-16, there were 163 universities with 83,375 teachers in both private and public sectors, the overall enrolment of students in higher education (universities) stood at 1,355,694 as compared to 1,299,160 over 2014-15 witnessing an increase of 4.6 percent. During 2016-17, the enrolment is expected to be at 1,287,923. [Table 10.1].

Overall Assessment

The overall education condition is based on key performance indicators such as enrolments, number of institutes and teachers which has witnessed minor improvement. The total number of enrolments at national level during 2015-16 stood at 46.223 million as compared to 43.948 million during 2014-15. This shows an increase of 5.2 percent and it is estimated to increase to 47.834 million during 2016-17. The total number of institutes stood at 252.8 thousands during 2015-16 as compared to 252.6 thousands during last year. However, the number of institutes is estimated to increase to 257.1 thousands during 2016-17. The total number of teachers during 2015-16 were 1.630 million as compared to 1.588 million during last year showing an increase of 2.6 percent. This number of teachers is estimated to increase

further to 1.667 million during the year 2016-17. [Table 10.1].



Year	Enrolment			Institutions			Teachers		
	2014-15	2015-16 (P)	2016-17 (E)	2014-15	2015-16 (P)	2016-17 (E)	2014-15	2015-16 (P)	2016-17 (E)
Pre-Primary	9589.2	9791.7	9976.3	-	-	-	-	-	-
Primary*	19846.8	21550.6	22330.0	165.9	164.6	167.0	430.9	444.6	453.2
Middle	6582.2	6922.3	7087.1	44.8	45.7	46.7	380.8	394.2	404.8
High	3500.7	3652.5	3865.4	31.3	31.7	32.1	514.2	529.5	539.8
Higher Sec./ Inter	1665.5	1698.0	1911.1	5.4	5.5	5.6	118.1	123.1	122.6
Degree Colleges	1144.8	937.1	1058.8	1.4	1.4	1.6	36.6	37.1	42.4
Technical & Vocational Institutes	319.9	315.2	317.4	3.6	3.7	3.9	19.4	18.2	18.8
Universities	1299.2	1355.6	1287.9	0.163	0.163	0.164	88.3	83.4	85.5
Total	43948.3	46223.0	47834.0	252.6	252.8	257.1	1588.3	1630.1	1667.1

Source: Ministry of Professional & Technical Training, AEPAM, Islamabad

E: Estimated, P: Provisional, *: Including Pre-Primary, Mosque Schools, BECS and NCHD

Literacy

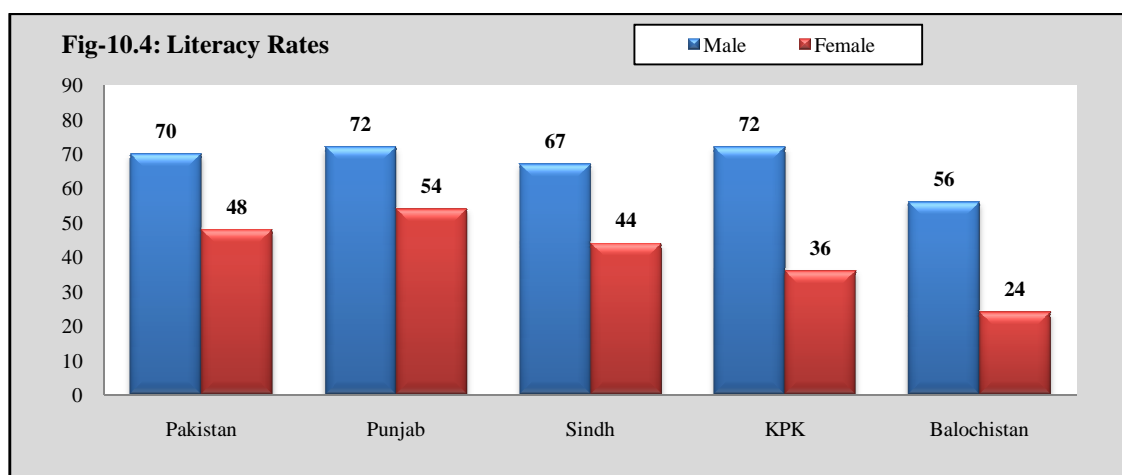
According to the Household Integrated Income and Consumption Survey (HIICS) 2015-16 at National/Provincial levels with urban/rural breakdown, the literacy rate of the population (10 years and above) remained at 58 percent as compared to previous conducted PSLM Survey at National/Provincial level in 2013-14¹.

The data shows that literacy remains much higher in urban areas (74 percent) than in rural areas (49 percent), with male (81 percent) and female (68 percent) in urban areas. Province wise data suggest that Punjab and Sindh leads with 62 percent and 55 percent respectively followed by Khyber Pakhtunkhwa with 53 percent and Balochistan with 41 percent. The details are given in Table 10.2.

Table 10.2: Literacy Rate (10 Years and Above)-Pakistan and Provinces (Percent)

Province/Area	2013-14			2015-16		
	Male	Female	Total	Male	Female	Total
Pakistan	70	47	58	70	48	58
Rural	63	36	49	63	36	49
Urban	81	66	74	81	68	74
Punjab	71	52	61	72	54	62
Rural	65	43	53	66	44	55
Urban	82	71	76	82	73	77
Sindh	67	43	56	67	44	55
Rural	53	21	37	51	19	36
Urban	80	63	72	80	65	73
KPK	72	36	53	72	36	53
Rural	70	32	49	70	33	50
Urban	81	55	68	77	52	64
Balochistan	59	25	43	56	24	41
Rural	54	17	36	48	15	33
Urban	74	45	59	76	44	61

Source: PSLM Section, Pakistan Bureau of Statistics



¹ PSLM Surveys, which were conducted at both District and Provincial level respectively at alternate years. PSLM district level survey collected information (Sample size 80,000) on key Social indicators (for "literacy" captured through one question " Did the person can read or write with understanding in any language") whereas provincial level surveys (Social & HIES) collected information (Sample size 21,000) on social indicators (for "literacy" captured through two separate question "Did person can read with understanding in any language" & "Did the person can write with understanding in any language") as well as on Income and Consumption.

Note: Household Integrated Economic Survey (HIES) which was conducted in 2015-16 under special survey namely Household Integrated Income and Consumption Survey (HIICS) which was especially designed by merging HIES and Family Budget Survey (FBS).The main aim of FBS was to derive weights for rebasing of price statistics, by covering urban and rural areas alongwith income and other social indicators. In future the PSLM/HIES activities likely to be continued as per previous practice.

Primary Enrolment Rates

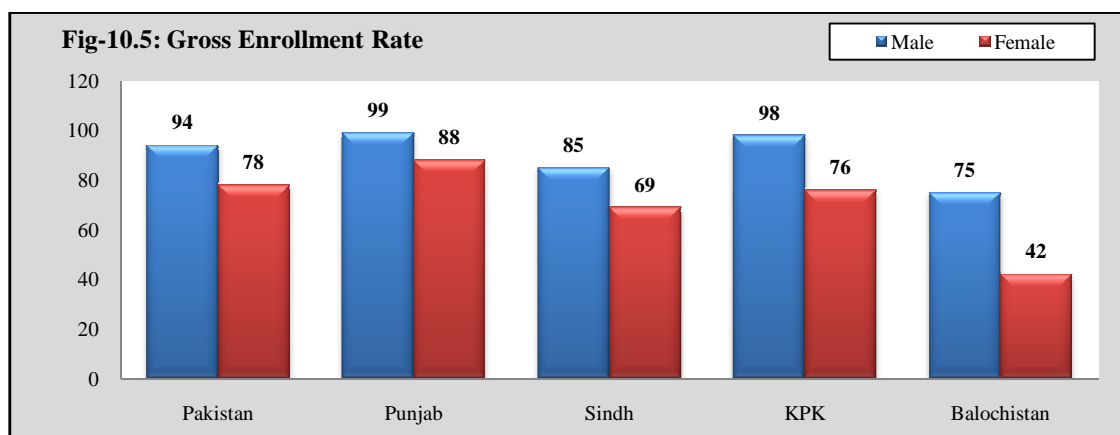
A. Gross Enrolment Rates

Gross Enrolment Rate (GER), is also referred to the participation rate, defined as the number of children attending primary school divided by the number of children with specific age group (5 to 9 years) who ought to be attending school. The overall GER at the Primary level for the age group at National/Provincial level in HIICS 2015-16 recorded at 87 percent as compared to 90 percent in 2013-14 showing a decline of 3 percent. A cursory look at the table, GER indicates that the only Sindh province has

shown some improvement of 2 percent by achieving primary level GER at 78 percent in 2015-16 against 76 percent in 2013-14. The decrease in overall GER in Pakistan is mainly due to decline in Punjab and Balochistan where GER in Punjab declined from 100 percent in 2013-14 to 93 percent in 2015-16 while GER in Balochistan has witnessed a decline of 7 percent from 67 percent in 2013-14 to 60 percent in 2015-16. Khyber Pakhtunkhwa GER also slightly declined as it stood at 88 percent in 2015-16 against 89 percent in 2013-14. The details are given in Table 10.3.

Table 10.3: National and Provincial GER (Percent)						
Province/Area	2013-14			2015-16		
	Male	Female	Total	Male	Female	Total
Pakistan	98	81	90	94	79	87
Punjab	106	94	100	99	88	93
Sindh	85	67	76	85	69	78
Khyber Pakhtunkhwa	102	76	89	98	76	88
Balochistan	83	49	67	75	42	60

Source: PSLM Section, Pakistan Bureau of Statistics



B. Net Enrolment Rates

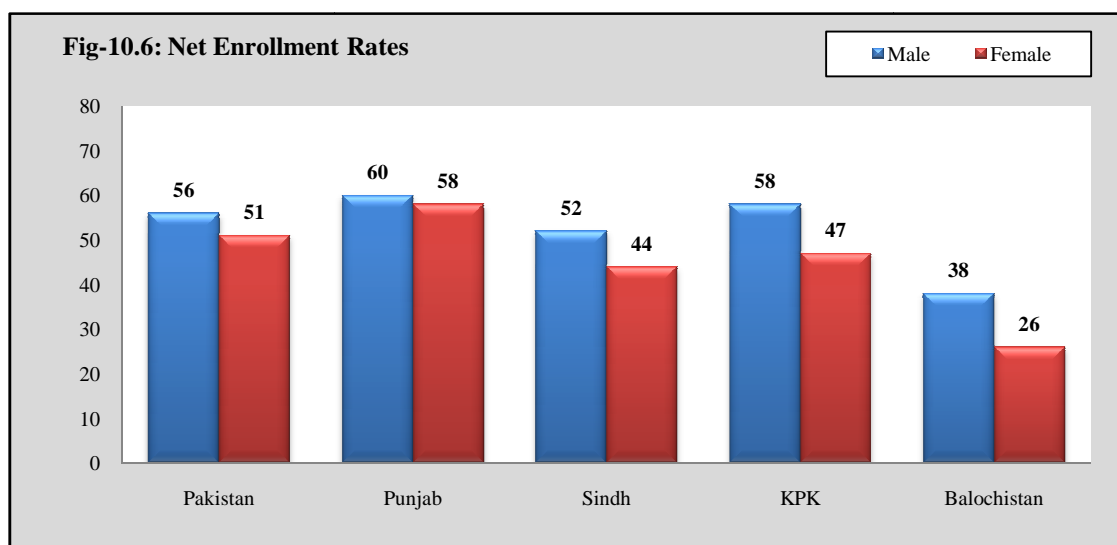
Net Enrolment Rate (NER) at the primary level refers to the number of students enrolled in primary school of required primary school age (5 to 9 years) divided by the number of children in the same age group for that level of education. For Pakistan, the primary NER is the number of children aged 5 to 9 years attending primary level divided by the total number of children aged 5 to 9 years.

The overall NER at the Primary level for the

age group at National/Provincial level in HIICS 2015-16 recorded at 54 percent as compared to 57 percent in 2013-14 showing a decline of 3 percent. NER table indicates that amongst the provinces, only Sindh remained stable with 48 percent while Punjab and Khyber Pakhtunkhwa declined from 64 percent to 59 percent and 54 percent to 53 percent. Balochistan has witnessed a significant decline from 39 percent in 2013-14 to 33 percent in 2015-16. The details are given in Table 10.4.

Table 10.4: National and Provincial NER at Primary Level (Percent)						
Province/Area	2013-14			2015-16		
	Male	Female	Total	Male	Female	Total
Pakistan	60	53	57	56	51	54
Punjab	66	63	64	60	58	59
Sindh	53	43	48	52	44	48
Khyber Pakhtunkhwa	62	46	54	58	47	53
Balochistan	46	30	39	38	26	33

Source: PSLM Section, Pakistan Bureau of Statistics



The reason for the large difference between the GER and the NER is the significant number of over-age children who attend primary school.

Expenditure on Education

Public Expenditure on Education as percentage to GDP is estimated at 2.3 percentage in FY 2016 as compared to 2.2 percentage of GDP in FY2015. The Table-10.5 shows that expenditure on education increasing gradually since FY 2012. The education related expenditure

recorded at Rs. 663.36 billion in FY2016 increased by 10.74 percent to Rs. 599.05 billion in FY 2015. The Government of Pakistan is cognizant to increase the flows of resources to education sector by ensuring proper and timely utilization of funds in order to achieve the target of 4.0 percent of GDP by 2018. The provincial governments are also spending sizeable amount of their Annual Development Plans (ADPs) on education to achieve the target.

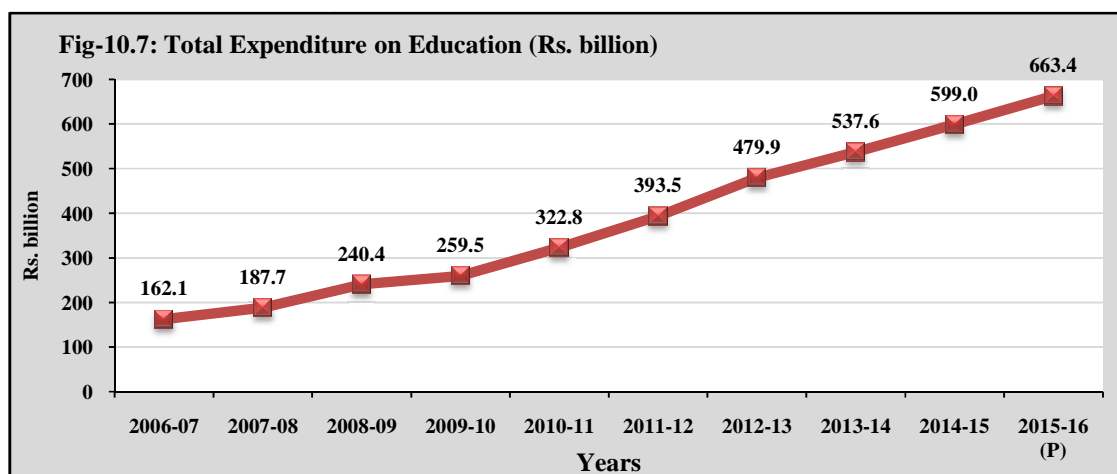
Table 10.5: Expenditure on Education					(Rs. million)
Years		Current Expenditure	Development Expenditure	Total Expenditure	As % of GDP
2012-13	Federal	57,027	14,686	71,713	2.1
	Punjab	186,763	9,323	196,086	
	Sindh	92,697	5,728	98,425	
	Khyber Pakhtunkhwa	65,856	18,602	84,458	
	Balochistan	26,601	2,570	29,171	
	Pakistan	428,944	50,909	479,853	

Education

Table 10.5: Expenditure on Education					(Rs. million)
Years		Current Expenditure	Development Expenditure	Total Expenditure	As % of GDP
2013-14	Federal	65,497	21,554	87,051	2.1
	Punjab	187,556	30,485	218,038	
	Sindh	99,756	6,157	106,093	
	Khyber Pakhtunkhwa	7,0948	18,756	89,704	
	Balochistan	29,978	6,911	36,889	
	Pakistan	453,735	83,863	537,598	
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	35,523	3,304	38,827	-
	Punjab	116,126	19,634	135,760	
	Sindh	60,109	2,814	62,923	
	Khyber Pakhtunkhwa	49,468	5,064	54,532	
	Balochistan	17,208	905	18,113	
	Pakistan	278,434	31,721	310,155	

*July-December (Provisional)

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



Development Programmes FY 2017

Federal Public Sector Development Programme (PSDP) FY2017

In Federal Public Sector Development Programme FY 2017, an amount of Rs. 2.22 billion has been provided for 12 on-going &

new projects of the Ministry of Federal Education & Professional Training. An amount of Rs.3.06 billion has also been allocated for 13 on-going & new education related projects being handled by Finance and Capital Administration & Development Divisions. The implementation of PSDP funded projects will

have long lasting impact on the inclusive socio-economic development of the country.

Provincial Annual Development Programmes (ADPs) FY2017

The provincial governments have prioritized up gradation of girls primary school to middle/high schools, construction of new boys and girls schools and colleges, up gradation of boys primary school to Middle/high/higher secondary levels along with provision of missing facilities, provision of scholarship through endowment funds and scholarship schemes, provision of stipends to girls students up to Matric level, improvement of physical infrastructure, establishment of IT/ Science labs in secondary and higher secondary level schools and strengthening of Provincial Institutes of Teacher Education (PITE). All the provinces have allocated budget to education foundations. Development budget have been allocated for capacity building of teachers for quality education in public sector schools and establishment of cadet colleges to meet the demand of quality education.

Punjab

During FY2017, Punjab government has allocated Rs. 67.82 billion against last year Rs.55.56 billion, an increase of 22.1 percent for 231 on-going and 475 new development projects for education which includes for school education Rs.47.76 billion, Higher Education Rs.17.22 billion, Special Education Rs.0.96 billion and Literacy Rs.1.88 billion.

Sindh

During FY2017, Sindh government has allocated Rs.20.07 billion compared to Rs.14.82 billion last year showing an increase of 35.4 percent for 172 on-going and 225 new development projects for education which includes Rs.15.14 billion for Education & literacy, Rs. 0.21 billion for Special Education, Rs.1.76 billion for Sindh TEVTA and Rs.2.96 billion for Universities & Boards.

Khyber Pakhtunkhwa

Government of Khyber Pakhtunkhwa has allocated Rs.17.23 billion in FY2017 as

compared to Rs.16.39 billion in FY2016 showing an increase of 5.12 percent for 109 on-going and 23 new development projects for the development of education. It includes Primary Education Rs.2.23 billion, Secondary Education Rs.10.22 billion and Higher Education Rs.4.78 billion.

Balochistan

Balochistan government has allocated Rs. 6.65 billion for FY 2017 against Rs. 10.20 billion last year, showing a decline of 34.8 percent for 201 on-going and 110 new development projects for development of education which includes Rs. 0.542 billion for Primary Education, Rs. 0.232 billion for Middle/Elementary Education, Rs. 0.795 billion for Secondary Education, Rs. 2.274 billion for College Education, Rs. 0.534 billion for University Education, Rs.2.258 billion for General Education and Rs. 0.016 billion for technical education during FY2017.

Technical and Vocational Education

NAVTTTC

National Vocational and Technical Training Commission (NAVTTTC) is an apex body and a national regulatory authority to address the challenges of Technical and Vocational stream in the country. It is involved in policy making, strategy formulation and regulation & revamping of TVET system. The Commission is establishing and promoting linkages among various stakeholders existing nationally and internationally. Since the inception of Commission, high priority has been paid to TVET sector and maximum initiatives have been taken for timely address of issues faced by TVET sector across the country.

Achievements

Prime Minister's Youth Skill Development Programme

Under this programme 73,627 youth both male and female has so far been trained in more than 100 demand-driven trades across Pakistan. Training classes of another 25,000 trainees under Phase III (Batch-II) has been commenced on 02 January, 2017. Minimum 25 percent of

the total training slots are reserved for female trainees. Madaaris students and disabled youth are also covered under this scheme. Furthermore, another 100,000 youth will be trained during 2017-18 & 2018-19 under Phase-IV and the allocation for this phase is Rs. 6,196.50 million

Objectives of Prime Minister's Youth Skill Development Programme

The ultimate objective of PMYSDP is to create competent, motivated, entrepreneurial, adaptable, creative and well trained/skilled workforce for local and international market. Better earning and livelihood will abstain the diversion of mind-set of the young generation towards the negative activities. This will also contribute towards poverty reduction, social and economic developments through facilitating demand driven, high quality technical and vocational training

Characteristics of the PMYSDP

NAVTTTC has ensured transparent mechanism for selection of institutes/industry for execution of its skill development programme across the Country. The selection of executing agencies is undertaken through prescribed procedure assuring the utmost credibility and merit based criteria i.e. Expression of Interest. A meaningful criteria has also been devised for selection of best candidates for PMYSDP. Deserving candidates like women, disable, eunuch and orphans etc are given equal opportunity during the selection process. Accordingly, the target of training of youth has been enhanced from 50,000 to 100,000 annually in the forthcoming phases of PMYSDP.

National Skills Information System (NSIS)

NAVTTTC has established a National Skills Information System to consolidate the demand and supply related information of TVET graduates at local and international level including analysis of labour market for informed decision making. The database will facilitate for future planning, management and delivery of training in TVET sector. It will also develop the linkage between industries and

trained labour force for employability. Vocational guidance and placement services for TVET trainees will also be provided.

Job Placement Center (JPC)

NAVTTTC has established Pakistan's first ever Job Placement Center (JPC) in its Headquarter ,Islamabad, to facilitate and provide carrier counselling to the job seekers. It help jobseekers in finding the jobs of their own choice, while providing a unique platform for employers to advertise different career opportunities available in their organization and received resumes from the potential candidates online as well as offline. The initiative of NAVTTTC will bridge the gap between employers and skilled youth.

Skill Competitions & Job Fairs

NAVTTTC organized the Skill Competition at divisional, provincial and national level for PMYSDP passed out trainees. The employers and representative from industry were also invited to motivate the trainees and ensure the employability of passed outs.

Curricula Development

- Developed National Vocational Qualifications Framework (NVQF)
- Developed 08 Operational Manuals of NVQF
 - i. Developing, Reviewing and Registering NVQF Qualifications
 - ii. Assessment of Competency Based Training (CBT) Qualifications
 - iii. Recognition of Prior Learning (RPL) and Recognition of Current Competencies
 - iv. Curriculum Development of NVQF Qualifications
 - v. Teaching and Learning Material for NVQF Qualification
- Developed 61 competency standards and 61 curricula for various CBT Qualifications
- Developed 61 Assessment Packages for various qualifications
- Developed Teaching and Learning Manuals for 35 qualifications

- Developed booklet for Migrant Workers
- Developed competency standards and curricula for 12 trades for Cooperative Vocational Training (CVT). The duration of these courses is 02 years. In CVT approach trainee spends half of its training period at institute and half in the industry for on job training
 - i. Piloting of CVT has been started in UET Lahore for Energy Efficiency Advisor Trade and Hunar Foundation Karachi for Mechanical Manufacturing with Specialization in CNC
 - ii. Developed 8 Assessment packages for CVT qualifications

CBT Implementation

- Implemented 10 CBT qualifications in 97 Institutes across the country
- Trained 221 Assessors for conducting formative and summative competency based assessment from across the country
- Trained 150 Teachers for conducting CBT
- Trained 175 Principals/Managers

Future Plans

- NAVTTC intends to make socio-economic empowerment of 100,000 individuals through provision of market-able hands-on-skills in PMYSDP (Phases-IV)
- Formal Certification of 50,000 informally skilled individuals under NAVTTC's Recognition of Prior Learning Programme (RPL)
- Skill Development Training of 1100 Temporarily Displaced FATA Youth in best of the best institutes located in ICT, Rawalpindi and Peshawar etc through Pak-Italian Debt Swap Agreement
- Skill Development training of 200 individuals belonging to Oil & Gas producing /experience districts with the collaboration of OGDCL
- NAVTTC is enhancing level of collaboration with Development partners like Germany, Norway & European Union etc.
- Coordination with developing agencies like TIKa, KOIKA, USAID, JAICA, DFID etc

- Collaboration for equivalence of qualifications, NVQF and Accreditation with other countries like USA,UK, Australia, Philippine, Sri Lanka, China & CARs etc

Higher Education Commission

The Higher Education Sector plays a critical role in the production of the human capital, and the generation and transmission of knowledge, critical to achieving a high growth rate and a competitive position in the global knowledge economy. The financial support of the Government of Pakistan towards Higher Education has resulted in a dramatic revival of the sector, led through the activities of the Higher Education Commission (HEC). The policies of the HEC - for improving the higher education system and its contribution to economic prosperity are geared towards facilitating development in key areas relating to faculty development, improving access and increased participation in higher education, promoting excellence in learning and research, and ensuring relevance to the economy through increased stakeholder participation.

A. Planning and Development

The government has initially allocated Rs.21.5 billion under PSDP 2016-17 for 122 (83 ongoing & 39 new) development projects being executed in Public Sector Universities/HEIs and HEC. In addition to this allocation, later on, the government allocated development grant of Rs.5.4 billion for the Prime Minister's laptop scheme and Rs.0.560 billion for the Project titled "**Award of Scholarships to Students from Afghanistan under Prime Minister's Directive**".

During first three quarters i.e. 2016-17 (July-March), the government has released Rs.8.0 billion for the development projects reflected under PSDP 2016-17. Whereas, the releases for 3rd and 4th quarterly instalments are under process. Similarly, Rs.5.4 billion and 0.574 billion have also been disbursed to the Prime Minister's laptop Scheme and Afghan Scholarship schemes.

New Projects Approved during FY 2016-17

During 2016-17 (July-March), 29 out of 39 new un-approved PSDP projects have been approved from the competent forum at a total cost of Rs. 69,488 billion. Details are given below:

21 projects have been approved for universities at a total cost of Rs. 22,272 billion including 03 from Khyber Pakhtunkhwa province, 02 from Sindh, 04 from Punjab and 05 from ICT, 01 from AJ&K and 06 from Balochistan. 08 projects have been approved for HEC at total cost of Rs. 47,215 billion during current PSDP.

B. Human Resource Development

Human Resource Development (HRD) Division is responsible for the provision of scholarships to talented candidates. Programmes initiated are primarily designed to fill the gap of the trained people in various fields relevant to the national priorities. Moreover, it also envisages building an environment of research which is vital for the country's economic and social wellbeing. The creation of an ambience of research in the context of national needs and in line with the global trends is the core vision of HRD Division. The HRD performance and future strategies in brief are as under:

Table-10.6: Detail of Scholarships under HRD Schemes During FY 2016-17		(Nos.)
Scholarship Titled		2016-17
Indigenous (PhD)		269
Foreign (PhD)		270
Prime Minister's Fee Reimbursement Scheme (PMFRS) for less developed areas		17,137
Need Based Graduate/Undergraduate Scholarships		1,471
Grand Total		19,147

Source: Higher Education Commission (HEC)

- Prime Minister's Fee Reimbursement Scheme for less developed areas (selected regions) was successfully executed and is continued during FY 2016-17. The scheme is focused on building capacities and enabling them to compete in the normal course. And in future it would provide manpower for public sector universities. Reimbursement to around 17,137 students of less developed areas is being carried out this year.
- "An Initiative of Aghaz-e-Haqooq-e-Balochistan (Indigenous and Overseas)" is focused towards providing scholarships in MS leading to PhD and PhD studies to less privileged areas of Balochistan, who despite possessing academic merit are unable to overcome the financial difficulties. This project covers tuition, accommodation and living expenses as well. In FY 2016-17, 31 candidates availed the overseas scholarships while 16 candidates availed the indigenous scholarships.
- The project "Provision of Higher Education

Opportunities for Students of Balochistan and FATA Phase II (President's Directives)" is based on the provision of higher education opportunities to students from Balochistan and FATA through enrolling them in an educational institution of other province and supporting them by paying their tuition fee and other living expenses. The quantitative target of the programme is to provide financial support to a total of 3900 students (2500 Undergraduate and 1400 Post-graduate). The scholarship distribution ratio for the students of Balochistan & FATA is 50:50. The test has been conducted for Undergraduate and postgraduate students during FY 2016-17. 188 scholarships were awarded to MS/M.Phil. students while 500 scholarships were awarded to Bachelors students.

C. Academic Division

Academic Division serves the role of a primary coordinating unit for delivery and discourse of academic programmes and academic support operation. The division coordinates the

development and continuous revision of curricula of all subjects offered at different levels of tertiary education covered under National Qualification Framework, and improve the quality of instruction through offering competitive awards i.e. Best University Teacher Award, Civil Awards announced by Cabinet Division, works for uniform implementation of semester system guidelines across all universities and affiliated colleges, offers institutional strengthening grants to universities for upgrading their Laboratories and Libraries; upgrades national journals of Social Sciences, and implements policy on Social Sciences, Arts/Humanities and Management Sciences regarding faculty appointment, evaluation, promotion, and tenure on the basis of research publications, offers thematic research grants for the social

scientists, involved in the capacity building of college Principals/Vice-Principals etc.

D. Learning Innovation

Learning Innovation is the hub for In-Service Continuous Professional Development of HEIs Teaching Faculty and Management. With a two pronged objective it is spearheading initiatives for the In-Service professional quality enhancement of academia and their management. Learning Innovation initiatives for HEIs Academic and Management revolve around two major categories:

1. Professional Training Programmes for HEIs Teachers
2. Professional Training Programmes for HEIs Management

Table-10.7 Province wise Distribution of Faculty and Management Staff Trained								(Nos.)
Programmes	Federal	Punjab	Sindh	KPK	Baloc- histan	AJ&K	Gilgit/ Baltistan	Total
Professional Training Programmes for HEIs Teachers (MT-FPDP)	14	21	22	13	11	6	-	87
Professional Training Programmes for HEIs Management	7	21	14	14	2	3	-	61
Transforming English Language Skills (TELS)	33	196	50	35	29	-	24	343
Continuous Professional Development (CPD)	120	90	240	90	30	-	-	47
Total	174	328	326	161	72	9	24	1,047
Source: Higher Education Commission (HEC)								

Source: Higher Education Commission (HEC)

E. Research and Development

HEC executes programmes and projects which ensure sustainable and progressive research culture.

International Linkages

- Under Pak-US Science and Technology Programme, Phase-VII of the programme was launched in August 2016 under which 220 research projects are in review process and selection will be finalized in 1st week of May 2017
- Under Pak-France PERIDOT Research Programme, 3rd phase was launched wherein 38 new joint research proposals

were received and under review while 2nd installment to 4 ongoing projects have been released

F. National Research Grants

- Under Pakistan Programme for collaborative research, 14 projects were approved for grant of Rs.6.6 million
- Under National Research Programme for Universities (NRPU), 647 national research projects were approved with the maximum duration of three years while funds for 83 projects amounting of Rs. 365 million have been released 2016-17 (July-March)
- Under Travel Grants Programme, 997 fresh

cases have been approved during 2016-17(July-March)

- Under Text book and Monograph program 12 books are expected to be published in FY 2017-18. 13 books are expected to be published in 2018-19 and 14 books are expected to be published in 2019-20

G. Resource Development

- 750 new applications were received while 650 applications are under review process for 6th HEC Outstanding Research Awards
- 04 Offices of Research, Innovation and Commercialization (ORICs) have been established. In total 49 ORICs are working in various universities
- Two new projects were awarded under “University Industry Technology Support Program” during 2016-17(July-April)

The impact factor published articles for the year 2016-17 is 12000. Content subscription is more than 1.5 million that comprised of e-journals about 11,000+ and e-books around 150,000. The numbers of institutes that are taking the facilities of National Digital Library Programme are 544 in 2016-17.

H. Accreditation & Attestation (A&A)

For effective functioning of A&A the work has been divided into three (3) cells:

i) Accreditation Cell dealing with

- Establishment of new universities/institutions both in public and private sectors;
- Franchising of local institutions with foreign universities;
- Correspondence with the private chartered universities

ii) Equivalence Cell dealing with

- Equivalence of degrees/diplomas awarded by local and foreign universities;
- Equivalence of deeni asnad

iii) Attestation Cell

- Attestation of Degrees/Transcripts awarded

by the HEIs of Pakistan

I. Quality Assurance

Following quality parameters have been developed and implemented to fill the gaps in quality provision between National and International Systems of higher learning:

a) Tenure Track System (TTS)

TTS of appointments is introduced in public sector universities which aim at enhancing performance and efficiency of the faculty members by creating a healthy competition among them, allowing freedom of research and teaching, as well as the financial independence to pursue these objectives.

- TTS appointments: Version: 2.0 implemented since 2008
- 3,337 faculty members have been appointed by 58 Public Sector Universities /DAIs till date

a	Professors.....	341
b	Associate Professor	147
c	Assistant Professors.....	2849
	Total	3337

b) Pakistan Qualification Framework (PQF)

PQF provides clearly defined levels of Knowledge, Skills and Competencies to be acquired by each graduate that are easy to comprehend by Students, Employers and Human Resource Development policy makers. It is augmented by a Register that lists all the charter Higher Education degree awarding institutions and details about the programmes offered by them. It defines levels, structure of education system, structure of curriculum, content, learning areas and subjects. It also describes criteria for use of degree titles/nomenclature etc.

c) National Quality Assurance Committee (NQAC)

- HEC contributes as an advisory body for quality provision in higher education sector and review current policies for continuity

and facilitation in response to global advancements and challenges

- NQAC comprises eminent scholars, policy makers and the Vice-Chancellors of major universities to carry out the consultative process vital for effectiveness and ownership of the policy recommendations.

J. Information Technology

HEC has signed a contract with M/s Haier Electrical Appliance Corp. China for the provision of 200,000 laptops during this year, out of which 150,000 laptops are being assembled locally at the Haier Industrial Park, Lahore. The objective is achieved with the support of renowned Original Design Manufacturers (ODMs) along with M/s Haier being the Original Equipment Manufacturers (OEM). In addition, Haier will also take local engineers and scientists onboard for the R&D activities related to the design and performance testing of laptops which are assembled or manufactured locally.

Smart Universities through Smart Campuses

HEC intends to transform HEI's into Smart Universities by augmenting a highly conducive, technologically advanced, and cost effective learning environment at the HEIs. While making conventional university into modern ICT driven and technologically advanced universities, Smart Universities through Smart Campuses will provide Wi-Fi blanket coverage among with EduRoam services to all nomadic users at the universities' premises.

The deployment of ninety universities has been divided into three years with further granular milestones of 7-8 universities per quarter. Currently nine institutes have been provided the blanket WiFi coverage in all the three regions and more than 10,000 students in these institutes have been extended the facilities of different IT services through this project.

K. Strategic Plans for FY 2016-17

a) Call Center Services for HEIs

HEC has planned to establish, "One Stop Call Center Service" which will serve as a focal contact center to provide support for the different government schemes / services

launched for higher education sector through various channels. Call Center will be first point of contact regarding government Higher Education related schemes and projects like Prime Minister Fee Reimbursement scheme, Prime Minister Laptop scheme, Student Scholarships affairs, Universities Admissions etc.

b) Safe Campus for HEIs

HEC intends to launch safe campus project for HEI's (all public universities/ Institutes) to help in improving overall law and order situation and to take important measures for protection of life and property of the people working within the campus. The installation of safe campus will be deployed using the same infrastructure resulting in huge cost saving and quick deployment as per the need. An average cost of Rs.10 million is estimated to transform the campuses of the universities into "Safe Campuses"

c) e-Learning

The concept has been realized on the directives of the Prime Minister of Islamic Republic of Pakistan for the award of laptop computers amongst the talented students. Accordingly, 500,000 laptops have been awarded amongst the students of all public sector universities/ degree awarding institutes.

d) Knowledge Incubation Center (KIC)

HEC intends to develop a KIC with the concept to provide a unified platform to develop synergy amongst the stakeholders relating to IT Solutions and Services. The Center is aimed at accommodating multinational ICT companies Microsoft, Oracle, SAP, Cisco, Huawei, etc. along with their partners or system integrators, who are to work closely and develop synergy with researchers from higher education institutes.

e) Digital Library & Resource Center (DLRC)

HEC believes in the capacity building and human resource development to address the challenges being faced by the country and

to produce skillful resources in order to compete at the international level. HEC has initiated many capacity building programmes which offers high level trainings and international certifications to the technical resources and students of HEIs. This provides an easy platform to get beginner, intermediate and expert level trainings and certifications from ICT industry leaders.

f) IT Academy @ HEIs

HEC has taken another technology initiative and has signed an agreement with Microsoft for setting up and award the status of Microsoft IT Academy to all private and public sector universities and Certipoint Testing Center to all public sector universities across Pakistan and AJ&K. Though the initiative has been taken under the Prime Minister's Laptops Scheme for the beneficiary students, however, the facility, once established at the university, will benefit all students equally.

g) Open Source Research Laboratory (OSRLab)

HEC intends to establish around thirty research laboratories at the technology universities across Pakistan. Under this initiative, universities will be provided with necessary hardware infrastructure with open source platform and tools. In addition,

the technical support from the experts available with Open-Source Forum Pakistan (OSFP) will also be extended to the universities to encourage both faculty and students to take up research projects and product development activities

Conclusion

The government's resolve to create a knowledge society through an ongoing development process and allocating more financial resources for capacity building, research & development, provision of access to low social strata children, decrease disparity, increase quality to strengthen retention and decrease dropout rate at all levels. Reduction of regional and gender disparity in human development is necessary to improve social indicators. The development of plans and strategies are under consideration of the federal and provincial governments to improve access, equity and quality of the basic and college education. For improving access, equity and quality education, investment is being made in the physical infrastructure, assurance of teachers' attendance, up gradation of educational institutions and opening of new educational facilities for boys and girls. Standards for assessment and examination system are being improved to compete the systems of education at regional and international levels.