## Education Sector Analysis

## Afghanistan <br> Volume I

Pouras Consult Aps.
June 2016
Contents
Contents ..... 2
List of Figures .....  4
List of Tables ..... 5
ESA EXECUTIVE SUMMARY ..... 9
Introduction ..... 16
ABBREVIATIONS ..... 17
CHAPTER 1 CONTEXT OF THE DEVELOPMENT OF THE EDUCATION SECTOR ..... 20
SECTION 1: THE SOCIAL, HUMANITARIAN AND DEMOGRAPHIC CONTEXTS ..... 20
1.1. Population ..... 20
1.2 Basic Social Indicators ..... 21
1.3 Impact of HIV/AIDS and Malaria on Education ..... 30
1.4 The Composite Social Context Index ..... 32
1.5 Linguistic and Religious Context ..... 33
1.6 Humanitarian context ..... 34
SECTION 2: THE MACROECONOMIC AND PUBLIC FINANCE CONTEXTS ..... 38
Conclusions Chapter 1 ..... 50
CHAPTER 2 ENROLMENT, INTERNAL EFFICIENCY AND OUT-OF-SCHOOL CHILDREN ..... 53
SECTION 1: THE EVOLUTION OF ENROLMENT AND EDUCATION SYSTEM ENROLMENT CAPACITY ..... 53
2.1.1 The Evolution of Enrolment. ..... 53
2.1.2 Evolution of Enrolment Capacity: Gross Enrolment Rate Computation. ..... 54
SECTION 2: SCHOOL COVERAGE: SCHOOLING PROFILES, SCHOOL LIFE EXPECTANCY ..... 56
2.2.1 Schooling Profiles and Retention ..... 56
2.2.2 School Life Expectancy (SLE) ..... 58
2.2.3 Education Pyramids ..... 59
SECTION 3: THE SUPPLY AND DEMAND ISSUES ON ACCESS AND RETENTION ..... 60
2.3.1 Access-Related Supply and Demand ..... 60
2. 3.2 Retention-Related Supply and Demand ..... 66
Dropouts ..... 69
2. 3.3. Systemic bottlenecks: Quantifying the supply and demand issues related to transition to post secondary education ..... 69
SECTION 4: INTERNAL EFFICIENCY ..... 71
2.4.1 Repetition ..... 71
2.4.2 Internal Efficiency Coefficient ..... 73
SECTION 5: OUT-OF-SCHOOL CHILDREN ..... 73
2.5.1 Estimation of the Share and Number of Out-of-School ..... 73
2.5.2 Who are the Out-of-School Children? ..... 74
Conclusions and Recommendations ..... 77
CHAPTER 3 COST AND FINANCING ..... 79
Introduction ..... 79
SECTION 1: PUBLIC EDUCATION EXPENDITURE ..... 79
1.1 Government Spending ..... 79
1.2 Evolution of Public Expenditure by Type of Spending ..... 82
1.3 The Distribution of Spending Across Sub-Sectors ..... 83
1.4 Detailed Analysis of Public Recurrent Expenditure for the Most Recent Year ..... 85
1.5 External Funding ..... 86
1.6 MOE and MOHE Development Budgets (1394-1395 (2015-2016)) and Development Partner Future Projections ..... 89
SECTION 2: PUBLIC EDUCATION RECURRENT UNIT COSTS ..... 95
2.1 Macro Estimation of Public Recurrent Expenditure per Pupil. ..... 95
2.2 Breakdown of Public Recurrent Unit Costs ..... 97
2.3 Analysis of the Status and Remuneration of Teachers ..... 100
SECTION 3: HOUSEHOLD CONTRIBUTIONS TO EDUCATION ..... 103
3.1 Private Unit Costs by Education Level ..... 103
3.2 Education Cost-Sharing between the Government and Families ..... 104
3.3 Breakdown of Average Private Unit Costs by Spending Item and Level ..... 105
SECTION 4: THE COST OF SCHOOL INFRASTRUCTURE ..... 105
SECTION 5: CONCLUSIONS AND RECOMMENDATIONS ..... 108
CHAPTER 4 ..... 110
QUALITY, SYSTEM CAPACITY AND MANAGEMENT ..... 110
Introduction ..... 110
SECTION 1: ASSESSMENT OF STUDENT LEARNING ..... 114
4.1.1 National Examinations and Admissions Tests ..... 115
4.1.2 National Learning Assessments ..... 115
4.1.3 International Standardised Learning Assessments ..... 116
4.1.4 Using Household Surveys and Literacy Levels as a Proxy Measure of Quality ..... 118
SECTION 2: ANALYSIS OF SYSTEM CAPACITY ..... 120
4.2.1 Evaluation of the Conversion of Resources into Results by Schools ..... 121
4.2.2 Analysis of the Factors Associated with Learning Outcomes ..... 121
Early Childhood Education and Learning ..... 121
4.2.3 The Analysis of Factors' Cost-Effectiveness ..... 128
4.2.4 Institutional Analysis. ..... 129
SECTION 3: MANAGEMENT OF TEACHERS ..... 132
4.3.1 Quantitative aspects of the management of teachers ..... 132
4.3.2 Qualitative aspects of the management of teachers ..... 132
SECTION 4: THE MANAGEMENT OF OTHER RESOURCES AND OF TEACHING TIME. ..... 138
4.4.1 Management of resources other than teachers ..... 138
4.4.2 Monitoring Effective Teaching Time ..... 141
CONCLUSIONS AND RECOMMENDATIONS ..... 141
CHAPTER 5 EXTERNAL EFFICIENCY ..... 144
SECTION 1: THE ECONOMIC IMPACT OF EDUCATION ..... 144
5.1.1 Description of the Labour Market ..... 144
5.1.2 Labour Market Structure and Dynamics ..... 146
5.1.3 Employability of Education System Leavers and Graduates ..... 149
SMEs and the Traditional Apprentice System ..... 150
5.1.4 Economic Return of Different Education Levels ..... 156
5.1.5 The Training-Employment Balance (Macro Approach) ..... 161
5.1.6 Anticipation of Future Labour Market Needs ..... 162
SECTION 2: THE SOCIAL IMPACT OF EDUCATION ..... 163
5.2.1. The Choice of Social Development Variables ..... 163
5.2.2 Estimation of the Net Effects of Education ..... 163
5.2.3 Consolidation of the Net Social Effect of Education ..... 169
Conclusions and Recommendations ..... 169
CHAPTER 6 EQUITY ..... 171
SECTION 1: EQUITY IN ENROLMENT AND LEARNING ACHIEVEMENTS ..... 171
6.1.1 The Absolute Gap in Performance between the Two Groups ..... 171
6.1.2 The Parity Index ..... 173
6.1.3 The Parity Line ..... 175
6.1.4 Scatter Charts ..... 176
6.1.5 Maps ..... 176
6.1.6 Social mobility tables ..... 176
6.1.7 Odds ratios ..... 177
SECTION 2: MEASURING EQUITY IN THE DISTRIBUTION OF PUBLIC RESOURCES ..... 179
6. 2.1 The Structural Distribution of Public Education Resources ..... 179
6.2.2 Distributive Equity in Public Education Expenditure: Social Disparities in the Appropriation of Education Resources and Benefit Incidence Analysis ..... 182
Conclusions and Recommendations on Equity. ..... 184
References ..... 186
List of Figures
Figure 1 Population Pyramid ..... 20
Figure 2 Trend of poverty headcount, by residence and region (in percentages) a, b, c ..... 23
Figure 3 Trend of Gini index, by residence and region $a, b$, and $c$ ..... 23
Figure 4 Literacy Rates by Gender and Area of Residence ..... 27
Figure 5 Infant mortality rate (IMR) and Under-five Mortality Rate (U5MR) ..... 29
Figure 6 Percentage of Afghan children under age 5 who are underweight, stunted and wasted 1389/2010 1390/2011 (Source AMICS 29014) ..... 30
Figure 7 Disability Statistics and Definitions ..... 31
Figure 8 Global Peace Index 2015 Afghanistan's ranking in the South Asian context ..... 34
Figure 9: GDP and Public Resources ..... 39
Figure 10 : Revenue and Grants ..... 40
Figure 11: Government Expenditure ..... 41
Figure 12 Student growth 2001-2014 Primary and Secondary Education ..... 53
Figure 13 Gross enrolment by province ..... 54
Figure 14 Evolution in enrolment at various levels 1380/2001-1392/20132 ..... 55
Figure 15 Gross enrolment by grades 1392/2012 ..... 55
Figure 16 Enrolment by grade 1390/2011-1393/2014 ..... 57
Figure 17 Effective Promotion by Grade ..... 57
Figure 18 School-life expectancy for (a) total, (b) urban and (c) rural populations, by sex (in years) ..... 59
Figure 19 Education Pyramid ..... 60
Figure 20: Percentage of Students reaching grades 5 and 6 of Primary Education ..... 66
Figure 21 Enrolment at Public Universities and Higher Education Institutions 1371/1992 - 1392/2013 ..... 70
Figure 22 Growth of Students in Public and Private Universities 2001 to 2014 ..... 71
Figure 23: Percentage of Repeaters 1392/2013 and 1393/2014 ..... 71
Figure 24 Percentage of Repeaters against Number of Schools per 1000 Students ..... 72
Figure 25 Reason for not attending school ..... 76
Figure 26: Total National Education Expenditure ..... 79
Figure 27: MOE Proportion of Expenditure ..... 80
Figure 28: MOHE Proportion of Expenditure ..... 80
Figure 29: MOE Expenditure by Nature ..... 82
Figure 30: MOHE Expenditure by Nature ..... 83
Figure 31: MOE \& MOHE as \% of Total Education Recurrent Expenditure, 1394 (2015) ..... 84
Figure 32: MOE Recurrent Expenditure by Program, 1394 (2015) ..... 84
Figure 33: Distribution of Public Recurrent Education Expenditure (\%) by Function, 1394 (2015) ..... 85
Figure 34: MOE Development Budgets 1394-1395 (2015-2016) by Government and Development Partners (DP) ..... 90
Figure 35: MOE Development Partner Funding - Development Budgets 1394-1395 (2015-2016)91
Figure 36: MOHE Development Budgets 1394-1395 (2015-2016) by Government and Development Partners (DP) ..... 93
Figure 37: MOHE Development Partner Funding - Development Budgets 1394-1395 (2015- 2015) ..... 94
Figure 38: Per Student Unit Costs for General Education, Teacher Training, TVET and Higher Education; 1390 and 1394 (2011 and 2015) ..... 95
Figure 39: Percent of GDP per Capita for General Education, Teacher Training, TVET and Higher Education; 1390 and 1394 (2011 and 2015) ..... 96
Figure 40: Public Recurrent Expenditure Unit Cost per Pupil, 1394 (2015) ..... 97
Figure 41: Employed and Unemployed persons, by sex and by job status (in percentages) ..... 102
Figure 42: Employed and underemployed persons, by highest level of education attained, and by job status (in percentages) ..... 102
Figure 43: Mean and median monthly earnings, by job status, and by sex (in Afs) ..... 103
Figure 44 Quality Model ..... 110
Figure 45 Youth literacy rate, by sex, and by survey year (in percentages) ..... 119
Figure 46 Percent of class 6 students at each age ..... 122
Figure 47 Achievement by age ..... 123
Figure 48: Time spent travelling to school ..... 125
Figure 49 Textbook use and learning outcomes ..... 126
Figure 50 Effect of Parental Education Level on Student Academic Performance ..... 126
Figure 51 Correlation between language spoken at home and student achievement ..... 128
Figure 52 Proportion of qualified female teachers by province ..... 133
Figure 53Proportion of overall teachers recruited by qualification in the year 1393/2014 ..... 135
Figure 54 Teachers recruited by qualifications across selected provinces of interest ..... 135
Figure 55 PRESET and INSET teacher education programmes in Afghanistan ..... 136
Figure 56: Textbook distribution process ..... 139
Figure 57 Student responses to the question My teacher starts lessons on time ..... 141
Figure 58: Labour Force Participation Rate by Sex and Age ..... 146
Figure 59: Percentage of Employed Population of Age 14 and Above by Sex and Sector ..... 147
Figure 60: Self-Reported Unemployment ..... 149
Figure 61: Main Occupation ..... 154
Figure 62: Average Income by Highest Education Achieved ..... 154
Figure 63: Views on Women Working Outside the Home ..... 156
Figure 64: Is it Acceptable for Women to Work in the Following Places? ..... 156
Figure 65: Correlation between education and income ..... 160
Figure 66 Net enrolment in Primary Education ..... 171
Figure 67 Gross enrolment in Primary Education ..... 171
Figure 68 Gross Enrolment Ratio in Provinces ..... 172
Figure 69: Literacy rate, by sex, and by age; Gender equity indicators, by age ..... 173
Figure 70 Gender Parity in provinces ..... 174
Figure 71 Education gender parity Net Adjusted ratio NAR primary and secondary school ..... 174
Figure 72 Parity Index of Effective Promotion Rate Across Grades ..... 175
Figure 73 Male Literacy by province ..... 176
Figure 74 Female Literacy by province ..... 177
Figure 75 Odds Ratio (OR) for female graduation by province ..... 178
Figure 76 Odds Ratio for Female Graduation Against Female/Male Teacher Ratio ..... 178
Figure 772014 provincial average expenditure per pupil ..... 180
Figure 78 Number of Schools per 1000 Students 1392/2014 ..... 181
List of Tables
Table 1 Population 1391/2012 1394/2015 ..... 20
Table 2 Trends of poverty measures, by survey year ..... 22
Table 3 Mean real per capita consumption (at 2011-12 prices), by poverty quintile ..... 24
Table 4 Poverty headcount, poor- and total population shares, by sex and education related characteristics of household head (in percentages) ..... 25
Table 5 Poverty headcount, poor- and total population shares, by labour market characteristics of household head (in percentages) ..... 25
Table 6 Literacy among young women. ..... 27
Table 7 Human Development Index and Afghanistan HDI Rank ..... 32
Table 8 HDI Groups South Asia and Afghanistan ..... 33
Table 9: GDP and GDP per Capita Trends, 1390-1394 (2011-2015) ..... 38
Table 10: The Evolution of Public Resources, 1390-1394 (2011-2015) ..... 40
Table 11: Total Government Revenue, Expenditure and Deficit (\% of GDP), 1390-1394 (2011- 2015) ..... 42
Table 12: MTFF Government and Education Revenue and Expenditure Projections 1395-1399 (2016-2020) ..... 44
Table 13:MOE and MOHE Total and Recurrent Expenditure Projections (MTFF and Options), 1395-1399 (2016-2020) ..... 50
Table 14: School Life Expectancy ..... 58
Table 15 Heat Table: Percentage of Population of each age attending school ..... 59
Table 16 Percentage of children of primary school age attending primary or secondary school (ANAR) ..... 61
Table 17 Secondary Net Attendance ..... 64
Table 18 Children reaching last grade of primary school ..... 66
Table 19 Primary school completion and transition to secondary school ..... 67
Table 20 Education transition indicators, by sex and by residence (in percentages) ..... 69
Table 21 Growth of Public and Private Higher Education Institutions 2001 to 2014 ..... 71
Table 22: Population 7-24 years not attending school, by school age, sex, and by residence, reason for not attending (in percentages) ..... 74
Table 23: Education Expenditure as a Share of Total Government Expenditure, and as percent of GDP in 2013 for Least and Lower Middle Income Countries ..... 81
Table 24: ODA Disbursement as per the Donor Assistance Database, for the period 1391- 1393 (2012-2014) ..... 88
Table 25: MOE Expenditures On and Off-Budget 1391-1393 (2012-2014) ..... 88
Table 26: MOHE Expenditures On and Off-Budget ODA 1391-1393 (2012-2014) ..... 89
Table 27: Per Student Unit Costs for General Education, Teacher Training and Higher Education (1390-1394 (2011-2015)) ..... 96
Table 28: Education Expenditure per Primary, Secondary and Tertiary student in 1392 (2013)in current \$US and as a percent of GDP per Capita for some Least and Lower MiddleIncome Countries100
Table 29: MOE School Operations and Maintenance Costs ..... 108
Table 30: INPUTS (Service Indicators) ..... 111
Table 31: PROCESS Indicators ..... 112
Table 32: OUTPUTS /System Performance indicators ..... 113
Table 33 proficiency level of reading literacy ..... 117
Table 34 PIRLS, ..... 117
Table 35 Adult literacy rate, by residence, and by sex (in percentages); Gender equity indicators, by residence ..... 118
Table 36 Youth literacy rate, by residence, and by sex (in percentages); Gender equity indicators, by residence ..... 119
Table 37: Labour Force Participation and Employment by Residence, Sex and for Kuchis ..... 147
Table 38: TVET Projects and Annual targets 1386/2013-13488/2020 ..... 150
Table 39: Internal Rates of Return to Educational Investment in India ..... 161
Table 40: Labour Market Trends by Type of Employment 2008 and 2012 (NRVA) ..... 162
Table 41Use and sharing of sanitation facilities ..... 164
Table 42 Percentage of Children under Five According to Three Indices of Nutritional Status ..... 165
Table 43: Correlation between women's education level and patterns of marriage and birth ..... 165
Table 44: Correlation Between Age, Education and Marital Status of Women Aged 15-49 ..... 166
Table 45: Poverty headcount, share of poor and total population, by selected household head education (in percentages) ..... 167
Table 46: Effect of Mother's Education on Child's enrolment in ECD Programmes ..... 168
Table 47 Absolute Gap: Cumulative gender disparities in access to general Education grades 1, \&12 and grade 12 graduation rates in year 1393/2014 (2014) ..... 172
Table 48 Provincial per pupil expenditure status 2011-2014 ..... 180
Table 49 Primary school attendance ..... 182
Table 50 Secondary school attendance. ..... 183

ESA Key data 1394/2015

| Text | Actual | \% | \% M/B | \% F/G |
| :---: | :---: | :---: | :---: | :---: |
| Population | 32.03 m |  |  |  |
| School age population | 10.79m | 33.7 |  |  |
| General Education No. of students | 8.4 m |  | $\begin{array}{r} \hline 5,111,440 \\ 61 \% \\ \hline \end{array}$ | $\begin{array}{r} \hline 3,393,093 \\ 39 \% \\ \hline \end{array}$ |
| CBE No. of students | 234,330 | 2.3 | 158,304 | 76,026 |
| NER General Education incl. CBE |  |  | 71 | 50 |
| NER Primary |  |  | 86 | 64 |
| Permanently absent | 1.0 m | 12 |  |  |
| Islamic Education | 305,928 |  |  |  |
| Out of school children | 3.5 m |  |  |  |
| No. of schools | 15,249 |  |  |  |
| TVET No. of students | 75,496 |  | 62,913 | 12,583 |
| Literacy No. of students | 18,610 |  | 9,424 | 9,186 |
| Teacher Education No. of students | 74,731 |  | 30,198 | 44,533 |
| Higher Education No. of students (2013) | 300,000 |  |  |  |
| Private Higher Education No. of students | 130,000 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Reach last grade primary |  | 51 |  |  |
| Reach last grade secondary |  | 18 |  |  |
| Completion rate primary |  | 31 |  |  |
| School life expectancy | 9.6 years |  | 12.4 years urban boy | 4.4 years rural girl |
| Literacy + 15 years |  | 34 | 49 | 19 |
| Literacy youth 15-24 years |  | 52 | 66 | 37 |
|  |  |  |  |  |

Main Sources: MOE EMIS Enrolment by Programme 1394 and CSO ALCS 2015

## ESA EXECUTIVE SUMMARY

An independent Education Sector Analysis (ESA) based on the Global Partnership for Education (GPE) Guidelines was conducted at the end of 2015 and in the first quarter of $2016^{1}$. This is a summary of its main conclusions and key messages.

While significant progress has been made in the education sector in recent years, it is unlikely that Afghanistan will be able to meet the Education for All (EFA) targets by 2020. The priorities are improving quality, internal efficiencies and education outcomes, and improving access and effectively addressing education sector inequities (gender, rural/ urban divide, poor/ non poor). These are huge challenges given the existing system technical capacity constraints, rising student numbers and future budget projections which indicate fiscal resources will be constrained. Unless there is strong political and institutional commitment to reform, and adoption of new policies and innovative approaches for efficient service delivery such outcomes will not be achieved, and education service quality will decline.

## ACCESS

Afghanistan has made steady progress in reconstituting the education sector over the past decade. Since 2001 there has been remarkable growth in enrolment at all levels. In general education it rose from approximately 800,000 students, and very few girls, to 8.7 million in 1394/2015, 39 percent of whom are girls ${ }^{2}$. However, according to Ministry of Education (MOE) about 1 million or 12 percent were "permanently absent". The number of out of school children is estimated to be over 3.5 million. TVET $^{3}$ had 75,496 students, Teacher education 81,9074 and in 2014 Higher Education had about 300,000 students of whom about 130,000 were enrolled in private institutions ${ }^{5}$.

Enrollment by Grade


[^0]Afghanistan has a very young population. 47.5 percent of the population is under 15 years of age and the school age group $7-18$ is estimated at 33.7 percent $^{6}$. This will exacerbate demand for education and jobs in the following years. Poverty is widespread, about 39 percent $^{7}$ of the population are still consuming below the poverty line.

Efficiency: Based on cohort analyses it was found that 59 percent of students, who start in grade one make it to the end of grade six, and only 18 percent make it to the end of grade 12. The primary school completion rate is 31 percent. Girls' completion rate ( 21 percent) is about half of that for boys ( 40 percent) and it is much lower in rural areas. About 5 percent of the total student population drops out of school every year.

There is a steady increase in the number of students reaching the highest grades of secondary education, and there is growing demand for higher education, but only 25 percent of high school graduates managed to pass the Kankor entry test for governmental higher education institutes. Overall, School life Expectancy (SLE) is only 9.6 years.

Overall attendance is low, only 55 percent of children of primary school age (7-12) are attending school $^{8}$, but this figure conceals huge disparities: 78 percent in urban areas, 50 percent in rural areas. Attendance increases with the child's age up to the age of 11 and starts to decrease from age 12, and it shows significant variance between children from poorest households ( 40 percent) and from the wealthiest households ( 79 percent). Secondary school attendance is 32 percent (girls 21 percent, boys 43 percent) and double as low in rural areas. ${ }^{9}$ Reasons for non-attendance in education, according to ALCS 2013-14, are economic, cultural, security, health and distance considerations with economic considerations, mainly opportunity costs, figuring importantly as the main reason for no longer attending school.

Community-based education (CBE) is a promising approach to expanding access to education in remote rural communities beyond the reach of the official MOE system. The provision of education close to children's' homes is critical for improving equitable access, retention and learning achievement for children in remote villages.

Attendance in Early Childhood Development (ECD) is negligible (1 percent) and average Preschool attendance is 13 percent. For children with disabilities and special needs 95 percent do not have access to school.

## Access: Recommended Actions

- Removal of "permanently absent" from enrolment registers would provide a more accurate account of number of students;
- CBE should be integrated in MOE provision of education in remote rural communities;
- Early Childhood Development (ECD) policy should be promoted;
- Focus on special educational needs (SEN) through community campaigns, and better training of teachers. Inclusive education policy should be prioritised.


## QUALITY

[^1]Quality is poor when measured by the proportion of students who are able to perform grade specific tasks expected at their level, who reach the final stage of the school cycle and pass the exams. Class 6 students in Afghanistan were performing at a lower or similar level compared to Class 4 students in neighbouring countries (Islamic Republic of Iran, Azerbaijan and Kazakhstan). There is no central and standardized examination system and, so far, no systematic learning assessment.

Factors affecting quality are poor school facilities; inappropriate curriculum; inadequate teacher qualifications, inadequate and insufficient textbooks and learning materials, inefficient provision and untimely distribution of textbooks and poor school management. In addition, there is strong correlation between students' performance in school, their health and nutritional status and family socio-economic situation.

The literacy rate in Afghanistan is one of the lowest in the world. For adults (population $15+$ ) it is 34 percent (M 62 percent / F 18 percent) ${ }^{10}$. The median value for low-income countries is M 70 and F 57 percent respectively. The youth literacy rate (age 15-24) is 52 percent. Literacy has improved for the younger generations, girls have benefitted the most and the gender gap in youth literacy has never been smaller ${ }^{11}$.

Variables that contribute to learning outcomes are: age, distance to school, teacher qualification and teacher academic support, access to textbooks and teaching and learning materials (TLM), parents' educational background and socio-economic status (SES) and contact hours.

There is a strong correlation between distance to school, enrolment and performance. Beyond two miles enrolment drops to about 30 percent versus 70 percent enrolment within a mile from home ${ }^{12}$. There is severe shortage of qualified teachers: worst in the rural areas, especially amongst female teachers. Attempts to recruit more female teachers have largely failed due to ignorance of MOE teacher policy and incoherent incentives at Provincial Education Department (PED) and District Education Department (DED) level and current rule of not contracting teachers with less than a grade 12 examination.

The majority of schools receive less than 75 percent of the number of textbooks they request for their students and the physical quality of the books is often poor ${ }^{13}$.

The effective teaching time in Afghanistan is severely limited by a large number of holidays. It has been suggested that the number of school days is as little as 180 days, (against neighbouring countries estimated at between $218-228$ ). Hearsay evidence suggests that sometimes $30-40 \%$ of textbook content is not complete at the end of school year because of insufficient teaching hours. Daily contact hours: No available data, but only 5 percent of students in a study indicated that their teachers started lessons on time.

Quality Assurance, Monitoring and Performance Assessment: A major constraint is the lack of consistent and reliable education sector data for MOE and MOHE (Ministry of Higher Education) management, monitoring, performance assessment, impact analysis and cost effectiveness. This is noted in various sections of this ESA Report, as the data shortfalls reduce the ability of the MOE and MOHE to undertake efficient planning, assessment, and prioritization. While noting the Afghan Financial Management Information System (AFMIS) and Educational Management Information System (EMIS) have improved, in key areas there are data gaps and the collection systems are

[^2]lacking independent verification and data tracking. The following needs improvement: (i) the accuracy of the education data in the MOE EMIS, and implementing transparent collection methods, as currently it is based on principal's self-reporting, and as noted the risk of enrolment numbers being inflated as this data is used for resource allocation ${ }^{14}$; (ii) lack of disaggregated data (physical and financial) at all levels of education, and especially by primary and secondary school, teachers and students, and non-salary expenditures; (iii) monitoring systems for key performance indicators; (iv) program and sub-program evaluation, and outcome impact assessment; (v) private household costs of education; (vi) labour market studies and tracer studies; and (vii) development partner (DP) reporting systems of off-budget development funding in the donor assistance database (DAD).

Institutional reform and capacity building: Unclear functional mandates of some sector departments and offices within ministries, has resulted in a lack of coordination and has led to duplication, fragmentation and inefficiencies, and at times excessive dependence on short-term technical assistants (TA). The rapid expansion of services together with fragmented support from DPs has in the past led to an unsustainable provision of technical assistance (TA) through the development budget for key ministry operations. The system has been heavily centralized, with provincial and district education departments and schools having limited input in the planning and control of their budgets.

Corruption: Corruption is a persistent problem. The population perceives corruption as the second major problem facing Afghanistan ${ }^{15}$ and among some staff in MOE there is a view that an unacceptable amount of corruption exists in the form of embezzlement, fraud, and false reporting.

## Quality: Recommended Actions

- A strong policy needs to made on recruiting more female teachers;
- Learning Assessment should be made an integral part of the system;
- Standardised examinations should be developed;
- Early Grade Reading needs more attention
- EMIS should be expanded to capture quality factors;
- Teacher continuous professional development (CPD) and teacher academic supervision should be further developed;
- Number of days in School year should be increased;
- Community Campaigns (ECD, Age, Girls' ed., special education needs (SEN)) should be carried out;
- School Management should receive more attention, e.g. through Shuras;
- M\&E and EMIS should be improved in terms of independent data validation, data disaggregation, identifying key performance indicators, and programme evaluation;
- Decentralisation and Institutional capacity should be strengthened through devolution of responsibilities and the capacity building for results program;
- Corruption should be eliminated through improved teacher recruitment, procurement and construction supervision procedures as well as independent complaints management.


## EQUITY

The proportional access to, and benefits from, educational services by socially distinct groups is highly inequitable in Afghanistan, and public expenditure on education is unevenly distributed among the provinces.

Girls and women are seriously disadvantaged. The gender parity index (GPI) at primary level is 0.74 , at secondary level 0.49 , and there are large Rural/Urban discrepancies. School Life

[^3]Expectancy varies from 12.4 years for urban boys to 4.4 for rural girls. In addition, there is a large gross enrolment gap between provinces, from less than 20 percent in Zabul to 80 percent and above in the best performing provinces. In absolute terms, the gap between male and female literacy rates is fairly stable around 36 percentage points from around age 23 to older ages up.

There is widening disparity between poor/non-poor. 5.1 percent of the poorest women are literate against 50.3 percent of the richest women. Kuchis (a nomadic tribe) are persistently disfavoured. The literacy rate was 7.2 percent (F 1.2 percent) in 2012 against a national average of 31.4 percent ( 53.5 percent urban, 25.0 percent rural).

## Equity: Recommended Actions

- EMIS data should capture and map inequity along the following lines:
- Enrolment/out-of-school-children (OOSC), ii) Rural-Urban, iii) Girls/Boys, Poor/Disadvantaged, iv) By Province and District, and v) Language;
- Planning could be improved by graphic mapping of inequalities (geographical information systems (GIS));
- Equitable distribution of public resources could be facilitated by prioritising gross inequities (e.g. "red zones");
- Research and policy analysis should identify reasons for inequity and explore options for its reconciliation.


## EDUCATION, EMPLOYMENT AND SOCIETAL BENEFITS

In Afghanistan, quantitative data on labour market demand is limited, and in the absence of labour market tracer studies, is reliant on CSO NRVA and ALCS ${ }^{16}$ data, and on the Asia Foundation perception surveys. The studies undertaken, indicate that education improves employment prospects and income level. The WB study (using NRVA 2007/2008 data) found that education attainment is positively correlated with earnings ${ }^{17}$. In terms of the returns to education, the findings ${ }^{18}$ were on average for those finishing primary school 13 to 15 percent higher earnings, completing secondary school increased wages by 40 to 42 percent, and for those graduating university an increased wage of 80 to 84 percent.

From the perspective of the economy, while the available data is limited, the analysis indicates that the economic internal rates of return from the public investment in individuals completing primary, secondary and higher education is positive. While these returns are low, they are indicative of the economic return from investing in education, and improving labour skills and employment prospects. In addition to the economic benefits there are significant social benefits from education (improved health, hygiene and child mortality rates, improved nutrition rates, living conditions, fertility control and civic commitment). These have been identified, though not quantified and will increase the overall economic return to education.

To improve the labour market skills and capacity, the education sector needs to assess and strengthen linkages with industry, employers and $\mathrm{SME}^{19} \mathrm{~s}$, to improve the targeting and competency of skilled graduates to meet market demands. This may require review of approaches and course structures, particularly in the review of TVET to improve effectiveness and performance of both the formal TVET and the traditional systems. Given the government fiscal constraints,

[^4]seeking opportunities for public-private partnerships and sponsorships with industry sectors to develop targeted skill training.

## COSTS AND FINANCING

The education sector is a key government priority, and in 1394 (2015) it accounted for 14.1 percent of total government expenditure (excluding debt service), 15.5 percent of government recurrent expenditure, 10.3 percent of development expenditure and 3.7 percent of GDP.

Increased Demand and Declining Expenditure per Student. Student enrolments have increased in both MOE and MOHE over the period 1390-1394 (2011-2015), with increased demand for education services at all levels. While MOE and MOHE government budgets have increased, expenditure is dominated by recurrent costs, of which salaries are the main component, leaving only limited financial resources for non-salary costs and materials. Teacher numbers have increased though they have not kept pace with student numbers, and pupil teacher ratios (PTRs) have increased. In higher education, part of this increased demand is being met by private sector institutions, which account for 43 percent of students. Major investments required for school infrastructure, and for implementing sustainable operations and maintenance (O\&M) systems exceed future commitments.

The recurrent expenditure per student has declined in real terms and as a percent of gross domestic product (GDP) per capita over 1391-1394 (2011-2015). An increased numbers of students have continued to higher levels of education, the significantly higher recurrent expenditure per student has major financial implications. As move from general education to teacher training, TVET and higher education the level of expenditure multiple is approximately 4,6 , and 9 times respectively when general education recurrent cost per student is used as the base.

Aid Dependency: The education sector is dependent on a high level of development partner official development assistance (ODA), which is used to fund the development budget and part of the operating budget, and off-budget project interventions. The MOE expenditure (1391-1393 (2011-2014)) $)^{20}$ was estimated at $\$$ US2.5 billion with at least 41 percent (\$US1billion) funded by donors. Of the donor aid, only 25 percent of the expenditure was on-budget, with the remaining development expenditure off-budget. MOHE expenditure over the same period was $\$$ US360 million with at least 43 percent (\$US156 million) funded by donors, and of this donor aid only 23 percent was on budget.

The low level of on-budget support indicates that there are potential opportunities to improve aid effectiveness. Given current development budget expenditure rates, to achieve the full impact when moving funds on-budget, will require coordinated improvements in MOE and MOHE absorptive capacity. As currently indicated by development partners, in their future commitments and projections, ODA support will decline in coming years.

Education Medium-Term Fiscal Projections: The government medium term fiscal framework (MTFF) projections for the economy are tight, and for the education sector to 1398 (2019) it is for a relatively unchanged financial allocation. With development partner funding (including off-budget), it is expected that support will be lower than existing levels. With these fiscal constraints, and an expected increase in student numbers ( 3 percent per year), there will be further decreases in expenditure per student and quality declines unless key internal system inefficiencies are tackled. In the ESA options involving efficiency improvement and unit cost reduction are assessed.

Costs and Financing: Recommended Actions. To maintain and improve the quality of MOE and

[^5]MOHE education services, will require an integrated package of policy, planning and operational efficiency measures, that will include:

- Assessment and adoption of policies to improve service delivery efficiency, covering private sector provision of education services including low cost private education, public-private partnerships, outsourcing and contract delivery of services, and means tested cost sharing by service users (for example with student dormitory and accommodation costs);
- Strengthening MOE and MOHE financial and MIS systems, with the capacity to provide accurate disaggregated data, establishment of independent monitoring groups, and outsourcing of key surveys and studies;
- Improving aid effectiveness, with enhanced MOE and MOHE implementation capacity, higher development budget expenditure rates, and an increased allocation of ODA on-budget. Stronger development partner and ministry coordination and monitoring of off-budget support, with improved development partner reporting into the MOF Donor Assistance Database;
- Cost effectiveness reviews and impact assessments undertaken by MOE and MOHE to eradicate poor and non-transparent practices/ systems and weak performance, and improve internal efficiency (staffing, teacher performance, reducing level of absentee teachers, textbooks and materials procurement), prioritization and outcomes;
- Improving procurement and contract management systems, covering school construction, design, tendering and supervision systems to achieve best value; and
- Sustainable O\&M systems institutionalized, with capacity established for cost effective delivery and management.


## Introduction

The Ministry of Education in Afghanistan, MOE is in the process of developing the next National Education Strategic Plan, NESP III 2016-2020. It has joined the Global Partnership for Education (GPE) and will seek a three-year Program Implementation Grant from the GPE. A requirement for such a grant is the development of a comprehensive Education Sector Analysis and a joint appraisal process of the education plan (NESP III) carried out by the local education donor group (LEG).

This Education Sector Analysis focuses on basic education grades 1-9 but seeks to capture the vertical articulation between different levels of education from ECCD and Literacy to TVET and Higher Education (HE).
This is done taking into consideration a supply and demand perspective and a relevance and quality perspective on the provision of education across the whole sector. The ESA is structured in six major chapters on basis of the GPE Guidelines.

The methodology has comprised document review and analysis of datasets from MOE EMIS, CSO, NRVA and AMICS as well as from MOF MTEF. In addition, a limited number of interviews and consultations with MOE key staff, education sector stakeholders and DPs were administered.

A team coordinated by Pouras Consult Aps developed the ESA during August 2015 - January 2016. It comprised Mr. Poul Erik Rasmussen, Education Expert and Lead consultant, Mr. Allan Kelly, Economist, and Mr. Sadish Dhakal, Statistician. The Team would like to thank for valuable contributions from MOE, in particular from DG Planning Mr. Arian, Mr. Atayee, Mr. Sofizada and Mr. Baluch, as well as from EMIS, CSO and donor representatives.

## A NOTE ON DATA AND ASSUMPTIONS

Since there has not been a national census in Afghanistan since 1979, we used a mix of sampled and population level data. We faced some limitations due to the nature of the datasets. For instance, the NRVA dataset (described below) underrepresents the female population ${ }^{21}$. The age groups in the dataset were also clustered around numbers, which end in 5 or $10^{22}$.

EMIS: This dataset was obtained directly from the Ministry of Education website (http://moe.gov.af/en/page/1831/3031) in August 2015. It contains actual data on the entire population of students and schools. Data at the province level for the General Education system was collated for the purpose of this report.

NRVA: The NRVA survey was conducted by the Central Statistics Organization between 20112012. This data was chosen for its representativeness. The CSO used the pre-census household listing from 2003-2005 as the sampling frame. The total sample size was 21,000 households. 35 Strata were constructed- 34 representing the provinces, and 1 representing the Kuchi population. 600 households per strata were chosen. Insecure areas were avoided and replaced by alternates.

Other key CSO data sources were used and included the ALCS 2013/2014 survey (published in 2016), and the earlier NRVA 2007/2008 survey.

[^6]AMICS: The AMICS dataset is collated from the AMICS report published by UNICEF in June 2012. About 13,468 households were sampled throughout Afghanistan for this survey. As with the NRVA data, this data is used in lieu of a national census. Alternates replaced insecure areas.

We have also used AFMIS data, MOF budget and fiscal bulletins data, MOF donor assistance database, IMF and development agency databases and reports. A number of the reports have indicated issues with the reliability of some data sources and the need for improved collection methods. In some instances, due to the absence of detailed data, disaggregated analysis is not feasible, and where this occurs it is noted. One outcome is to illustrate where further studies and detailed assessment work is required.

A major constraint is the lack of consistent and reliable education sector data for MOE and MOHE (Ministry of Higher Education) management, monitoring, performance assessment, impact analysis and cost effectiveness. This is noted in various sections of this ESA Report, as the data shortfalls reduce the ability of the MOE and MOHE to undertake efficient planning, assessment, and prioritization. While noting the AFMIS and EMIS have improved, in key areas there are data gaps and the collection systems are lacking independent verification.

The MOE human resource and financial data does not allow separate assessment of primary and secondary student costs. MOE confirmed the key constraint is that a significant number of the schools are combined primary and lower secondary, or combined with both lower and upper secondary, and that there is teacher overlap across the levels. For this reason, primary and secondary schools are treated as one unit for the purpose of this analysis.

## ABBREVIATIONS

| AFMIS | Afghanistan Financial Management Information System <br> Afs |
| :--- | :--- |
| Afghanistan currency: the Afghani which is divided into 100 Puls |  |
| AKF | Aga Khan Foundation |
| AMICS | Afghanistan Multiple Indicator Cluster Survey |
| ANER | Adjusted Net Enrolment Rate |
| ANDS | Afghan National Development Strategy ("PRSP") |
| AREU | Afghanistan Research and Evaluation Unit |
| ARTF | Afghanistan Reconstruction Trust Fund |
| BEPA | Basic Education Programme (GIZ, Germany) |
| BESST | Building Education Support System for Teachers |
| CB | Capacity Building |
| CBE | Community Based Education |
| CBS | Community Based School |
| CD | Capacity Development |
| CEDAW | Convention on Elimination of All Forms of Discrimination Against |
|  | Women |
| CPD | Continued Professional Development |
| CSO | Civil Society Organisation |
| CSO | Central Statistics Organization |
| DAD | Donor Assistance Database |
| Dar-ul-Ulums | Grade 13-14 of Islamic Education |
| DED | District Education Directorates |
| DM Literacy | Deputy Ministry for Literacy |
| DM TVET | Deputy Ministry for Technical and Vocational Education and Training |
| DP | Development Partners |


| ECD | Early Child Development |
| :---: | :---: |
| ECCE | Early Childhood Care and Development |
| EDB | Education Development Board |
| EDI | Education Development Index |
| EFA | Education for All |
| EJSR | Education Joint Sector Review |
| ELA | Enhancement of Literacy in Afghanistan |
| EMIS | Education Management and Information System |
| EQUIP | Education Quality Improvement Programme |
| ETR | Effective Transition Rate |
| FTI | Fast Track Initiative |
| GDP | Gross Domestic Product |
| GE | General Education |
| GER | Gross Enrolment Ratio |
| GMU | Grants Management Unit |
| GoA | Government of Afghanistan |
| GPE | Global Partnership In Education |
| ICT | Information and Communication Technology |
| IGoA | Islamic Government of Afghanistan |
| IIEP | International Institute for Educational Planning, Paris |
| IRoA | Islamic Republic of Afghanistan |
| HDI | Human Development Index |
| HDR | Human Development Report (UNDP) |
| HRDB | Human Resource Development Board |
| ICT | Information and Communication Technology |
| IMF | International Monetary Fund |
| ISAF | International Security Assistance Force |
| INSET | In-service Teacher Training |
| IT | Information Technology |
| LCEP | Learning for Community Empowerment Program |
| LEAP | Literacy Enhancement for Afghan Police |
| Madrasha | Islamic school for children |
| M\&E | Monitoring and Evaluation |
| MAIL | Ministry of Agriculture Irrigation and Livestock |
| MDG | Millennium Development Goal |
| MoE | Ministry of Education |
| MoF | Ministry of Finance |
| MoHE | Ministry of Higher Education |
| Mol | Ministry of Interior |
| MOPH | Ministry of Public Health |
| MPI | Multiple Poverty Index |
| MRRD | Ministry of Rural Rehabilitation and Development |
| MTFF | Medium-term Fiscal Framework |
| NAPWA | National Action Plan for Women of Afghanistan |
| NDP | National Development Program |
| NER | Net Enrolment Rate |
| NESP | National Education Strategic Plan |
| NESP II | National Education Strategic Plan II (1389-1393/2014) |
| NESP III WG | National Education Strategic Plan III (1395-1400/2016-2021) Working Group |
| NFEMIS | Non Formal Education Management Information System |
| NGO | Non Government Organisation |


| NPP | National Priority Programme |
| :--- | :--- |
| NRVA | National Risk and Vulnerability Assessment |
| O\&M | Operations and Maintenance |
| ODA | Official Development Assistance |
| OECD | Organisation for Economic Cooperation and Development |
| PACE-A | Partnership Advancing Community-based Education, Afghanistan |
| PC | Provincial Council |
| PED | Provincial Education Department |
| PRT | Provincial Reconstruction Team |
| PCR | Pupil Class Ratio |
| PTR | Pupil Teacher Ratio |
| PRESET | Pre-service Teacher Training |
| TSR | Teacher Student Ratio |
| REU | Research and Evaluation Unit |
| SBS | Sector Budget Support |
| SCA | Swedish Committee to Afghanistan |
| Shura | Traditional Afghan committee Structure, used for school councils (SMC) |
| SMC | School Management Committee, sometimes also named school Shuras |
| SWAp | Sector Wide Approach |
| SY | Solar Year |
| TA | Technical Assistance |
| Tashkil | Civil Service staff establishment |
| TB | Textbook |
| TLM | Teaching and Learning Materials |
| TTC | Teacher Training Centre |
| TVET | Technical \& Vocational Education and Training |
| UNAMA | United Nations Assistance Mission to Afghanistan |
| UNDAF | United Nations' Development Assistance Framework |
| UNDP | United Nations Development Programme |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNICEF | United Nation's Children Fund |
| UNSCR | United Nations Security Council Resolution |
| WB | World Bank |

# CHAPTER 1 CONTEXT OF THE DEVELOPMENT OF THE EDUCATION SECTOR 

## SECTION 1: THE SOCIAL, HUMANITARIAN AND DEMOGRAPHIC CONTEXTS

The Evolution of the Total Population and the School-Aged Population

### 1.1. Population

No population census has been conducted since1979 in Afghanistan due to more than three decades of war and conflict. All population data available, therefore, are different projections based on the 1979 data sets.

According to The Central Statistics Organization (CSO) ${ }^{23}$ the total population of the country in 1394 (2015/16) is estimated to be about 28.6 million persons. ( 14.7 million men and 13.9 million women) and the settled population (excluding nomads) is estimated at 27.1 million persons. ( 13.2 million ( $49 \%$ ) female and 13.9 million ( $51 \%$ male). 20.4 million persons ( $75.3 \%$ ) live in rural areas and 6.7 million ( $24.7 \%$ ) in urban areas. The nomadic population, according to the national multi-sector survey, which was conducted in 2004, was 1.46 million persons and the current CSO estimation of the nomadic population is 1.5 million persons.

For an accurate estimate of Afghanistan's total population, we looked at various sources. UN data from 2012 estimates the population to be 29.825 million and the population growth rate to be $2.4 \%$ per year. At this rate, the population in 2014 becomes 31.27 million and in 2015 becomes 32.024 million. Similarly, The World Bank estimates the 2014 population to be 31.28 million. Using UN's estimated population growth rate of $2.4 \%$ per year, the population in 2015 according to the World Bank becomes 32.03 million. However, the CSO estimates the population to be 28.6 million in 2015/2016. MOE uses the UN's estimates for planning purposes ${ }^{24}$ and we have chosen to do the same as they are considered more accurate. In the calculations below, we assume the following population for the given years:

Table 1 Population 1391/2012 1394/2015

| Year | Population (millions) |
| :--- | :--- |
| 2012 | 29.83 |
| 2013 | 30.55 |
| 2014 | 31.28 |
| 2015 | 32.03 |

The population of Afghanistan is overwhelmingly rural: the 19.4 million rural residents represent $71.8 \%$ of the total population. Only 22.7 \% ( 6.1 million) live in urban areas, whereas 5.4 \% ( 1.5 million) of the population is classified as Kuchi. The CSO population projection rates imply that since the NRVA 2007-08, the total population has increased with 2.0 million people, of which 1.2 million in urban areas and 828 thousand in rural areas. Due to the assumed counterbalancing effect of natural growth and settlement of the Kuchi, the size of the nomadic population remains stable at 1.5 million people, which implies a steady decrease in terms of its share in the overall population (down from 5.8 in 2007-08 ${ }^{25}$ ).

Figure 1 Population Pyramid ${ }^{26}$

[^7]Percentage of Population by Age-Group


The figure above shows the distribution of population by various age groups based on AMICS survey data. ${ }^{27}$ A projection based on 2012 data from UN Department of Economic and Social Affairs, Population Division (found here: http://populationpyramid.net/afghanistan/2015/) as well as the NRVA report make estimates which are within $0.5 \%$ of our estimates for each age-group above. ${ }^{28}$ We calculated the Gross Enrolment Ratio (GER) for grades 1-12 for the year 2012 using EMIS data on actual enrolment, and AMICS data to estimate the number of children of schoolgoing age ${ }^{29}$.

### 1.2 Basic Social Indicators ${ }^{30}$

## Poverty - percentage below poverty line

Poverty is widespread in Afghanistan ${ }^{31}$. With about $36 \%$ of the population still consuming below the poverty line, it has not changed over the last five years. Poverty remains higher in rural areas and amongst the Kuchi population. Poverty has also remained unchanged within most regions, and significant changes in poverty are observed in only two regions: in the North-East, where poverty headcount increased from 36.4 to $50.9 \%$, and in the North where it declined from 39.4 to 31.7. The average per capita consumption has increased. However, one of the explanations for the seeming stagnation of poverty over time is the widening inequality; consumption in richer parts of the population is growing faster. The top consumption quintile has experienced annual growth rates more than three times higher than the bottom one over the four years in between the latest two NRVA survey rounds. At the same time, inequality measured by the Gini index has increased from 29.7 to 31.6. As the labour endowment is one of the most critical assets for households,

[^8]poverty is strongly correlated with household size and demographic composition, being the highest in households with higher dependency ratios. Similarly, education and employment status of the household head are matched with wide differences in poverty vulnerability. In particular, the analysis reveals that about $70 \%$ of the poor population belongs to households headed by illiterate or uneducated individuals. Moreover, household head's underemployment, casual labour and employment in the farm or construction sectors are strongly correlated with higher poverty incidence.

There are three major poverty indexes that are calculated on the basis of poverty lines. The first is the headcount index, which represents the percentage of the population whose monthly per capita consumption expenditure are below the poverty line. This index is the most commonly used for poverty measurement mainly because of its simplicity and ease of interpretation. However, the major limitation of the headcount index is its insensitiveness to the "degree" of poverty, i.e. its inability to provide information as to whether the poor consume just or far below the poverty line. In fact, two populations with the same poverty headcount index might have totally different living standards in that in one, the poor are concentrated just below the poverty line, while in the other they have consumption levels well below the line. The second index used for poverty measurement is the poverty gap. This index represents the average distance between the consumption levels of the poor and the poverty line, thus capturing whether the poor have consumption just or far below the poverty line. The squared poverty gap, the third poverty measure, is similar in construction to the poverty gap but it differs in that it applies an increasing weight to greater distances below the poverty line, thus capturing the "severity" of poverty. The table below reports the evolution of poverty over time. It clearly indicates that poverty has not changed over time, irrespective of the poverty indicator used. In order to further confirm the lack of poverty changes over time, the table also reports the $95 \%$ confidence interval for each poverty estimate. At the national level and for each of the three poverty indicators, none of the differences over time is statistically significant at a $5-\%$ level.

Table 2 Trends of poverty measures, by survey year

| Poverty indicators | Survey year |  | 95\% Confidence Interval |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2007-08 | 2011-12 | 2007-08 | 2011-12 |
| Poverty headcount | 36.3 | 36.5 | [34.96, 37.62] | [34.84, 38.14] |
| Poverty Gap | 7.9 | 8.6 | [7.49, 8.31] | [8.11, 9.10] |
| Squared Poverty Gap | 2.6 | 3.0 | [2.39, 2.75] | [2.75, 3.19] |

2 Provinces of Helmand and Khost were excluded from the original sample in both survey years.
Source: NRVA 2013
The poorest segment of the population has not benefited from the general improvement in economic conditions. In particular, limited human capital endowments (literacy, education attainment) in poorer households might have prevented them from reaping the opportunities of better employment opportunities in the non-farm and (high-skill) service sector, resulting in stagnating poverty rates and widening inequality. As poverty is concentrated amongst households engaged in the agriculture, the sector's low productivity and the extreme volatility of agriculture production remain one of the biggest challenges to poverty reduction in Afghanistan.

There is wide variation in poverty in Afghanistan with large differences in poverty incidence by residence and by region. The variation in poverty between the rural, Kuchi and urban populations is significant and of great importance, and gender inequality is one of the highest in the world.

The 37.7 \% incidence of poverty in rural areas is 9 percentage points higher than the urban one of 28.9 \%. The nomadic Kuchi population is the most vulnerable to absolute poverty, with poverty rates of 53.8 \%. Afghanistan has the lowest level of inequality in South Asia as measured by the Gini coefficient.

Figure 2 Trend of poverty headcount, by residence and region (in percentages) a, b, c

${ }^{a}$ Central Kabul, Kapisa, Parwan, Wardak, Logar, Panjsher, South Ghazni, Paktika, Paktya, Khost, East Nangarhar, Kunarha, Laghman, Nooristan, Northeast: Badakhshan, Takhar, Beghlan, Kunduz; North: Samangan, Baikh, Jawzjan, Ser-e-Pul, Faryab; West: Badghis, Herat, Farah; Southwest Nimroz, Helmand, Kandahar, Zabul, Urozgan, West-central: Ghor, Bamyan, Daykundi.
${ }^{5}$ Poverty estimates for South Region exclude Khost province in both survey years; poverty estimates for Southwest Region excludes Helmand province in both survey years
${ }^{6}$ Red bars indicale that the difference over time is statistically significant at a 5 percent level
One of the explanations for the lack of poverty reduction over time in spite of an increase in average consumption is increasing consumption inequality. This is seen clearly from the following table indicating that while mean consumption increased $3.2 \%$ annually for the richest quintile, the corresponding growth rate in mean consumption for the poorest one was only $0.9 \%$. As the same time, the consumption share of the poorest $40 \%$ of the population decreased from 22 to $21 \%$ to the benefit of top quintile's consumption share.

This can be seen in the figure depicting the five-year trend in the Gini index ${ }^{32}$ showing that recent economic growth has widened consumption inequality in Afghanistan. The Gini Index increased nationally from 29.7 to 31.6 , and inequality significantly widened in the rural and Kuchi subsamples. At the regional level, inequality increased in the North, North-East, South and West Central regions, while decreased in the South-West.

Figure 3 Trend of Gini index, by residence and region $a, b$, and $c$

[^9]
"Central: Kabul, Kapisa, Parwan, Wardak, Logar, Panjsher; South; Ghazni, Paktika, Paktya, Khost; East: Nangarhar, Kunarha, Laghman, Nocristan; Northesst Badakhshan, Takhar, Baghlan, Kunduz; North: Samangan, Balkh, Jawzjan, Sar-e-Pul, Faryab; West: Badghis, Herat, Farah; Southwest: Ninroz, Helmand, Kandahar, Zabul, Urozgan; West-central: Ghor, Bamyan, Daykundi.
"Poverty estimates for South Region exclude Khost province in both survey years; poverty estimates for Southwest Region excludes Helmand province in both survey years.
${ }^{2}$ Red bars indicate that the difference over time is statistically significant at a 5 percent level.

Table 3 Mean real per capita consumption (at 2011-12 prices), by poverty quintile

| Quintile | Survey year |  | Annual <br> growth (\%) |
| :--- | ---: | ---: | ---: |
|  | $2007-08$ |  | $2011-12$ |

- The 2007-08 consumption has been inflated to 2011-12 prices using the
infation implicit in poverty lines by region-strata.
Despite these inequalities, the share of the poorest Afghan quintile in national consumption: meets the MDG Indicator1.3: of 8.5 \%

Household demographic and socio-economic characteristics are important correlates of poverty. In particular, this section presents results as to how poverty correlates with household size or dependency ratio at the household level as well as the education and employment characteristics of the household head. While causality cannot be established, these results are important for guiding future analysis of poverty determinants.
The youngest segments of the population are over-represented amongst the poor. Children below 15 represent a larger share of the poor then of the total population - a result in line with the finding

[^10]that larger households and with relatively more dependents are more likely to be vulnerable to the risk of poverty. As labour endowment is often the only form of capital available to relatively poorer households, a higher child dependency ratio at the household level is normally associated with higher poverty rates.

Household head characteristics: Low level of education of the head of household is one of the strongest determinants of poverty. As shown in the following table on household characteristics, the head's literacy status and education level are strongly correlated with the risk of poverty. Poverty rates for individuals living in households with an illiterate head are 14 percentage points higher than those of individuals living in households with a literate head (41.6 and 27.6 \% respectively). Similar results emerge when looking at the head's education attainment: poverty rates are the highest for individuals living in households with an uneducated head (42.1 \%). Interestingly and possibly correlated with the low level of education at the aggregate level in the economy, even partial schooling at the primary level is enough to substantially reduce poverty rates. 6 Taking the poor population as a whole, more than $70 \%$ of poor individuals come from households whose heads have no education or are illiterate.

Table 4 Poverty headcount, poor- and total population shares, by sex and education related characteristics of household head (in percentages)

| Household head characteristics | Poverty <br> headcount | Share of poor <br> population | Share of total <br> population |
| :--- | ---: | ---: | ---: |
| Male | 36.4 | 99.3 | 99.6 |
| Female | 54.7 | 0.7 | 0.5 |
| Literate | 27.6 | 27.7 | 36.6 |
| Iliterate | 41.6 | 72.3 | 63.5 |
| No education | 42.1 | 73.0 | 63.0 |
| Incomplete primary school (less than grade 5) | 31.9 | 4.0 | 4.6 |
| Completed primary school (grade 5 or higher) | 30.9 | 9.0 | 10.6 |
| Completed lower secondary school | 25.9 | 3.5 | 4.9 |
| Completed upper secondary school | 22.9 | 6.1 | 9.8 |
| Completed teacher college or technical college | 27.1 | 1.5 | 2.0 |
| Completed university or post-graduate | 14.7 | 0.9 | 2.3 |
| Attended or completed Islamic school | 25.9 | 1.6 | 2.3 |

Labour market characteristics of the household head are another important correlate of poverty. Poverty headcount is the highest amongst individuals in households whose head is underemployed. The highest incidence of poverty associated with underemployment - as opposed to unemployment - is in line with previous findings from NRVA 2007-08 (Islamic Republic of Afghanistan, Ministry of Economy, and the World Bank 2010) showing that individuals in poorer households cannot "afford" being unemployed and are more likely to be engaged in some form of income generating activity, irrespective of its quality, to simply make ends meet.

Table 5 Poverty headcount, poor- and total population shares, by labour market characteristics of household head (in percentages)

[^11]| Household head characteristics | Poverty <br> headcount | Share of poor <br> population | Share of total <br> population |
| :--- | ---: | ---: | ---: |
| Employed | 35.0 | 66.6 | 69.6 |
| Underemployed | 41.6 | 17.3 | 15.2 |
| Unemployed | 39.4 | 5.0 | 4.6 |
| Inactive | 38.2 | 11.2 | 10.7 |
| Day labourer | 52.1 | 30.4 | 21.1 |
| Salaried worker, private sector | 31.4 | 6.7 | 7.6 |
| Salaried worker, public sector | 29.8 | 9.9 | 12.0 |
| Self-employed | 32.8 | 47.9 | 52.8 |
| Employer | 18.2 | 0.6 | 1.1 |
| Unpaid family worker | 30.8 | 4.6 | 5.4 |
| Agriculture | 38.7 | 32.3 | 30.1 |
| Livestock | 44.0 | 8.1 | 6.7 |
| Manufacturing/processing | 31.9 | 2.6 | 2.9 |
| Construction | 42.8 | 12.1 | 10.2 |
| Wholesale and retail trade | 27.0 | 9.9 | 13.2 |
| Transportation and communication | 23.9 | 5.4 | 8.2 |
| Health | 20.1 | 0.6 | 1.1 |
| Education | 32.4 | 3.4 | 3.8 |
| Other government services | 27.4 | 5.8 | 7.6 |
| UN/NGOs | 15.6 | 0.7 | 1.6 |
| Other services | 47.3 | 19.1 | 14.6 |

35

Looking at categories of employment, daily labour is confirmed to be associated with higher poverty rates. The poverty headcount for individuals in households with a day labourer head are more than 20 percentage points more likely to be poor than those in households with a salaried head in either public or private sector jobs. Among the sector of employment, having the head working in agriculture or in livestock production is strongly correlated with poverty, in line with the relatively higher poverty rates registered in rural areas and especially amongst the Kuchi population. In particular, the emerging poverty profile and the lack of progress in poverty reduction over time could be explained by the significant contraction of agriculture production at the time of NRVA 2011-12 data collection. The construction sector also emerges as particularly vulnerable, possibly reflecting the higher incidence of casual and poor quality types of jobs in this sector.

## Literacy

[^12]Afghanistan has one of the lowest literacy rates ${ }^{36}$ in the world. Age 15 + had a male literacy rate of 62 and a female of 18 against the median value for low income countries of M 70 and F 57 respectively ${ }^{37}$.

While MoE is the primary authority responsible for developing and implementing strategies to achieve the target for the national literacy rate of $60 \%$ ( $50 \%$ female and $70 \%$ male) through the Deputy Ministry of Education for Literacy, the MoE EMIS does not capture literacy rates. Hence, these are based on NRVA data. The following table ${ }^{38}$ gives an overview of the most current statistics, disaggregated by population/location and gender:

Figure 4 Literacy Rates by Gender and Area of Residence

| \% | Urban | Rural | Kuchi (migrant) | National |
| :--- | ---: | ---: | ---: | ---: |
| Gender |  |  |  |  |
| Male | 68.7 | 39.1 | 13.2 | 45.4 |
| Female | 37.9 | 10.4 | 1.2 | 31.4 |
| M+F | 53.5 | 25.0 | 7.2 | 31.4 |

Source: NRVA 2011-12
The level of literacy depends on the population figures used from which to extrapolate survey data. According to the National EFA 2015 Review AMICS provided the lowest figure for the literacy rate at $31.4 \%$ ( $\mathrm{F}-17, \mathrm{M}-45$ ), while the Ministry of Education calculated it as $36 \%$ ( $\mathrm{F}-20, \mathrm{M}-50$ ). However, despite slight variation, the scale of the literacy challenge is evident. While levels of literacy have improved over recent years (NRVA 2008 placed overall literacy at 26\%) there remain at least 11 million Afghans age 15 and above suffering from literacy inequalities. In addition to the severity of the issue, literacy rates are marked by large geographical variation and gender disparities. While urban areas and regions of relative economic security can expect a literacy rate of over $30 \%$, the more remote and insecure areas have levels of literacy closer to 15\%. Equally, stark variations in the gender parity are evident across the country.

## Literacy Among Young Women

Only one in five women in Afghanistan is literate and women's literacy rate in rural areas is three times lower than in urban areas. In the AMICS, since only a women's questionnaire was administered to adults, the results are based only on responses from females aged 15-24. Literacy was assessed based on the ability of women to read a short simple statement, or based on her highest school level attained. In the AMICS, a woman who attended secondary school or higher was counted as literate. A woman who did not attend secondary school or higher was given a sentence to read. She was counted as literate if she could read the entire sentence.

Table 6 Literacy among young women

[^13]| Percentage of women age 15-24 years who are literate, Afghanistan, 2010-2011 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Percentage literate | Percentage not known | Number of women age I5-24 years |
| Region |  |  |  |
| Central | 40.5 | 0.3 | 1,762 |
| Central Highlands | 34.6 | 0.1 | 343 |
| East | 16.4 | 0.1 | 866 |
| North | 24.2 | 0.5 | 1,257 |
| North East | 20.8 | 0.0 | 1,799 |
| South | 2.7 | 0.0 | 1,259 |
| South East | 16.1 | 0.1 | 1,121 |
| West | 21.9 | 0.6 | 1,213 |
| Residence |  |  |  |
| Urban | 51.6 | 0.6 | 1,868 |
| Rural | 15.1 | 0.1 | 7,752 |
| Education |  |  |  |
| None | 1.1 | 0.1 | 6,749 |
| Primary | 28.9 | 1.1 | 1,135 |
| Secondary + | 100.0 | 0.0 | 1,733 |
| Age |  |  |  |
| 15-19 | 27.7 | 0.3 | 5,510 |
| 20-24 | 14.8 | 0.2 | 4,110 |
| Wealth index quintile |  |  |  |
| Poorest | 5.1 | 0.1 | 1,673 |
| Second | 10.6 | 0.1 | 1,797 |
| Middle | 13.0 | 0.0 | 1,875 |
| Fourth | 23.8 | 0.3 | 2,029 |
| Richest | 50.3 | 0.4 | 2,245 |
| Total | 22.2 | 0.2 | 9,620 |
| ${ }^{\text {' MICS indicator 7.1; MDG indicator } 2.3}$ |  |  |  |

The table above shows that less than one in five women in Afghanistan are literate and that the women's literacy rate in rural areas is more than three times lower than in urban areas. Of women who stated that primary school was their highest level of education attained, only $29 \%$ were actually able to read the sentence shown to them. Literacy among women living in the poorest households is 10 times lower than their counterparts in the wealthiest quintile.

[^14]Attendance in pre-school education in an organized learning or child education programme is important for achieving children's school readiness, and later progress in schooling is often associated with cognitive abilities acquired at a young age. .In Afghanistan, less than one in five children attend pre-school. Only $13 \%$ of children who were attending the first grade of primary school in the 2010/2011 school year were attending pre-school the previous school year. The proportion of children in rural areas (11\%) who had attended pre-school the previous year is almost twice as low as children living in urban areas (20\%). Regional differentials are also very significant. First graders in the Central Highlands region are six times less likely ( $5 \%$ ) to attend preschool than their counterparts living in the Eastern region (31\%).
In 2013 more than 88,000 children, $55.2 \%$ of whom in private, were enrolled in pre-primary education programmes ${ }^{40}$. In addition to this, more than one million children attend mosque based pre-school education. According to MOE an ECD/Preschool Policy is under preparation.

## Infant mortality rate (IMR) and Under-five Mortality Rate (U5MR)

The Infant Mortality Rate (IMR) is defined as number of deaths to children under twelve months of age per 1,000 live births. The Under-five Mortality Rate (U5MR) relates to the number of deaths to children under five years of age per 1,000 live births.
The U5MR is estimated at 91 deaths per thousand live births and the IMR at 48 deaths per thousand live births. For both indicators, a considerable gap exists between urban and rural populations. On the other hand, little gender difference is observed, and surprisingly the U5MR for boys is below that of girls. ${ }^{41}$

Figure 5 Infant mortality rate (IMR) and Under-five Mortality Rate (U5MR)


In AMICS the infant mortality rate is indicated as 74 (M/F 78/68). The under-five mortality rate is 102 (M/F106/97). The male infant mortality is higher than the female rate because biologically, male infants are more vulnerable than female infants. Life expectancy at birth $\mathrm{f} / \mathrm{m}: 62.0 / 59.5^{43}$

Afghanistan's Maternal Mortality Ratio (MMR) has significantly decreased. In 2008. It was estimated at 1,600 to 1,900 maternal deaths per 100,000 live births, the second highest in the world, next to Sierra Leone. Due to major health efforts by government and NGOs, women's

[^15]mortality rate at birth has to 327 in $2014^{44}$ Nonetheless, infant mortality remains the highest in the world at 117.23 deaths per $100,000 .{ }^{45}$

## Nutrition

The majority of children in Afghanistan suffer from malnutrition. Most are underweight but more than one in five is overweight. In both cases malnutrition is negatively correlated to the mother's education.
Almost one in three children under age five in Afghanistan are moderately or severely underweight ( $31 \%$ ). More than a half of children ( $55 \%$ ) are moderately or severely stunted or too short for their age, and $18 \%$ are moderately or severely wasted or too thin for their height. Children in the Southern region are more likely to be underweight, stunted and wasted than other children. Those children whose mothers have secondary or higher education are the least likely to be underweight, stunted, and wasted compared to the children of mothers with no education. More boys appear to be underweight, stunted, and wasted than girls.
Obesity on the other hand, is a problem among children in the Northern and South Eastern regions where up to $24 \%$ are overweight ${ }^{46}$. Notably, children living in relatively poor households in rural areas are inclined to be overweight ( $21 \%$ of children in the poorest wealth quintiles, and $17 \%$ in the richest quintiles). The overweight prevalence of obesity is higher among children whose mothers have less education ( $21 \%$ of children whose mothers have no education, and $17 \%$ for mothers with secondary or higher education ${ }^{47}$.
Figure 6 Percentage of Afghan children under age 5 who are underweight, stunted and wasted 1389/2010 1390/2011 (Source AMICS 29014)


The Fertility rate (live births per woman) is 5.0

### 1.3 Impact of HIV/AIDS and Malaria on Education

The prevalence of HIV/AIDS is relatively low in Afghanistan and its impact on education is negligible. It is estimated that between 2,000 to 3,000 people may be living with the deadly virus in Afghanistan48. The Ministry of Health stated that most of the HIV patients were among intravenous drug users and that $70 \%$ of them were men, $25 \%$ women, and the remaining $5 \%$

[^16]children. They belonged to Kabul, Kandahar and Herat, the provinces from where people make the most trips to neighbouring or other foreign countries49.

The impact of malaria on education is not known. About half of the population in Afghanistan, 49 \% is exposed to malaria but the transmission rates are low ( $0-1$ cases per 1000 population). About $27 \%$ are exposed to high transmission (> 1 case per 1000 population), while $24 \%$ are malaria-free (0 cases)50.

In 2008 Afghanistan had the second highest number of malaria cases in the Eastern Mediterranean Region, according to the UN World Health Organization (WHO). The MoPH and WHO estimate that every year up to 1.5 million cases of malaria occur throughout the country, but most go undiagnosed ${ }^{51}$.

## Disability

Disability is defined by social and cultural norms, and what is considered "disability" in a given context is not necessarily the case in another (c.f. WHO definition below). In Afghan culture, disability is perceived differently according to gender differences, traditional or ethnic attitudes and religious motives, and even the person's economic status.

The National Disability Survey in Afghanistan (NDSA) ${ }^{52}$ was the first household survey on disability that attempted to utilize the capabilities approach. The capabilities approach places the definition of disabilities within the wider spectrum of human development. The focus is not anymore on the disabling situation but on the equality in terms of choices offered to an individual. It provides further insight into the issues related to disability since it highlights not what a person actually does (functioning) but the range of possibilities that he/she chooses that specific functioning from - this is the capabilities set [Sen A., 1999].

Figure 7 Disability Statistics and Definitions ${ }^{53}$

[^17]| 2/ Disability Statistics |  |
| :---: | :---: |
| Population of persons with disabilities ${ }^{\text {d }}$ | 800,000 3 , a ${ }^{\text {W }}$ |
| Proportion of persons with disabilities to total population ${ }^{1 / 4}$ | 2.7 per cent ${ }^{\text {3 }}$ [ ${ }^{\text {a }}$ |
| Employment rate of persons with disabilities | 70 per cent of persons with disabilities aged over 15 years are unemployed 3 析 |
| Access to education ${ }^{\text {d }}$ | 73 per cent of persons with disabilities above six years of age do not receive any education 3 , |
| 3 Definitions |  |
| Definition of disability | WHO International Classification of Functions Guidelines"3" <br> "Disability is the outcome of the interaction. between a person with an impairment (which can be acquired or congenital), the environment (for example architectural barriers) and cultural attitudes (prejudice). Disability is a state that may be modified, by reducing impairment, changing attitudes or adapting the environment." $म$ d |

## Disability and Education

According to AAOD: Accessibility Organizations for Afghan Disabled, ninety five percent of children with disabilities in Afghanistan do not attend schools due to inaccessible environment. The literacy rate for adults and children with disabilities is very low because of inadequate attention to and lack of literacy education facilities in the country.
Students with disabilities who graduated from higher education have largely remained jobless and it is very difficult to find jobs due to the lack of support from the local and central government. By law the government of Afghanistan has a 3\% employment quota for disabled Afghans for working in both government and private sectors, but the policy is not implemented yet. ${ }^{54}$
MOE has developed an Inclusive and Child Friendly Education Policy, ${ }^{55}$ which sets out the intentions for the future. In the area of children with disabilities and special needs it is the intention to establish competence and resource centres and support units from national over provincial and district level.

### 1.4 The Composite Social Context Index

The Human Development Index (HDI) is a composite statistic of life expectancy, education, and per capita income indicators, which is used to rank countries into four tiers of human development.

Afghanistan is depicted in the Low human development group. It belongs to the least developed countries and was ranked number 169 on the HDI. Its HDI value in 2013 was 0.468 against the regional South Asian average of 0.588

Table 7 Human Development Index and Afghanistan HDI Rank

[^18]| HEA rank | Unman Deselogeeat hedes THDE |  |  |  |  |  |  |  |  |  | HEIt mank |  | Averape amminl Hol grown |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Whe |  |  |  |  |  |  |  |  |  | Ounge |  | (\%)1 |  |  |
|  | 1 m | 1998 | $0 \times 0$ | $2 \times 6$ |  | 2010 | 200 | 281 | nuz | 2013 | 2012 | 201-312 | 130-1930 | $1900-2000$ | 200-7013 |
| Suw human develcoment | 1235 | 03307 | 0.4040 | 0444 |  | 0.471 | 0.472 | 0486 | 0.490 | Q683 | - | - | DEAS | 1 0.85 | 1.54 |
| South Asia | 0382 | Q438 | 0.491 |  | 0.533 |  | 0.560 | 0.573 | 0.582 | $0.58 \%$ | 0.588 | - | - | 137 | 1.16 |
| Least developed countries | 0319 | 0345 | 0361 | 0.421 |  | 0467 | 0472 | 0400 | (1)64 | (0)67 | - | - | E.79 | 1.26 | 1.70 |
| 168 Alunanistan | 0230 | 0.296 | 0.341 | 0.396 |  | 0,430 | Q4.458 | 0.458 | 0.465 | 0468 | 169 | 1 | 2.56 | 142 | 2.46 |

Source: UNDP Human Development Report 2014

Since 2011 Human Development Reports UNDP has added an inequality-adjusted human development index (IHDI) in its reports. According to the 2010 Report, "the IHDI is the actual level of human development (accounting for inequality)" and the unadjusted calculations for the HDI "can be viewed as an index of potential human development (or the maximum IHDI that could be achieved if there were no inequality)".[

For Afghanistan the IHDI shows a 7-point increase in its overall ranking, despite its low level of inequality as measured by the Gini Index. This is probably a reflection of its relatively equal distribution of high levels poverty across the country. More surprising is its high level of inequality in education, 45.0 \% against the South Asian average of 41.6 and an average of $38.2 \%$ in the Low human development group. A possible explanation could be the very high gender inequality in Afghanistan. In comparison, inequality levels amongst Very high and Medium human development countries are $8.7 \%$ and $17.4 \%$ respectively.

Table 8 HDI Groups South Asia and Afghanistan

|  | $\begin{aligned} & \text { Humai } \\ & \text { Development } \\ & \text { Indix inal\| } \end{aligned}$ | Inequality-majurid HDI 3 HDO |  |  | Coufficient of humen tianuitity <br> Vilaz | Inequality in life axpectancy <br> IW/ | Inturalityadjested life mpoctmery iadex <br> Vala | finguality is sulutatisur ${ }^{*}$ <br> (1) | Inequalitrab, nduction indez <br> Whas | Itengality in intarur $\qquad$ <br> ( F$)$ | Isergailory adyusied inctive inder <br> Vhas | locsum ineprelay |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Vata | Vatas | Deveil Linl\|l | Uithoms trientio Tand |  |  |  |  |  |  |  | Qisutite ratio | Palivie ratio | $\begin{gathered} \text { thiai } \\ \text { coneffient } \end{gathered}$ |
| W0irnok | 2013 | 2018 | 2015 | 2017 | 3 mis | 2013 | Tty | 3 m | 319 | 2013 | 5013 | 2001-281\% | 2003-200 | 2006-2012 |
| Human Development lndex groups |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Yery high human development | D 0 H0 | 0.720 | 12.3 | - | 12.11 | 49 | 11.881 | 8.7 | 0.769 | 22.4 | 0.702 | - | - | - |
| High turnan devefoperent | 0.735 | 0.590 | 39.7 | - | 19.3 | 107 | 0.749 | 17.4 | 0.531 | 29.9 | 0.517 | - | - | - |
| Madium human devalopmant | 0.614 | 0.457 | 25.5 | - | 75.2 | 219 | 0.575 | 35.1 | 0.331 | 18.5 | 0.502 | - | - | - |
| Low human dereloment | 0.983 | 0.332 | 32.6 | - | 32.4 | 350 | 0.394 | 382 | 0.241 | 23.9 | 0387 | - | - | - |
| South Asia | 0.568 | 0.419 | 287 | - | 280 | 24.4 | 0.549 | 41.5. | 0274 | 18.0 | 0.489 | - | - | - |
| 143 Alpharistan | 0.468 | 0.321 | 31.4 | 7 | 30.0 | 343 | 0.414 | 45.0 | 0201 | 108 | 0.397 | 4.0 | 1.0 | 27.8 |

Source UNDP HDR 2014, p. 170

### 1.5 Linguistic and Religious Context

There is a diverse range of ethnic groups within the country ${ }^{56}$. Of the 32 million Afghan residents, 42\% are Pashtun, 27\% Tajik, 9\% Hazara, 9\% Uzbek, 4\% Aimak, 3\% Turkmen, 2\% Baloch and 4\% fall into an unspecified "other" group. The Afghan government recently began issuing ID cards that

[^19]state the ethnicity of each citizen, which should eventually reveal more precise numbers about the many ethnic groups in the country. ${ }^{57}$

Pashto and Dari are the official languages of Afghanistan. Dari (Afghan Persian) is spoken by 50\% of the population and serves as the lingua franca in Kabul, Herat, Mazar-i-Sharif and other cities in northern and north-western Afghanistan, mostly in Tajik and Hazara areas, while Pashto is spoken by $35 \%$, mostly in the South-Eastern Pashtun areas of the country where ethnic Pashtuns are the majority. Turkmen and Uzbek are spoken by $11 \%$ in the northern regions of the country, while $4 \%$ speak 30 other languages including Arabic. Many residents of the country are multilingual ${ }^{58}$.

The Afghan constitution states that Islam is the "religion of the state". Almost the entire Afghan population is Muslim, with less than 1\% being non-Muslim. Both Shia and Sunni Islam are accorded equal recognition, while followers of other religions are free to exercise their faith and perform their religious rites within the limits of the provisions of law. ${ }^{59}$

### 1.6 Humanitarian context

Figure 8 Global Peace Index 2015 Afghanistan's ranking in the South Asian context

## TABLE 8 SOUTH ASIA RANKINGS

| SOUTH ASIA | OVERALL <br> RANK | OVERALL <br> SCORE | CHANGEIN <br> SCORE | REGIONAL <br> RANK |
| :--- | :---: | :---: | :---: | :---: |
| Bhutan | 18 | 1.416 | -0.027 | 1 |
| Nepal | 62 | 1.882 | -0.078 | 2 |
| Bangladesh | 84 | 1.997 | -0.058 | 3 |
| Sri Lanka | 114 | 2.188 | +0.073 | 4 |
| India | 143 | 2.504 | +0.057 | 5 |
| Pakistan | 154 | 3.049 | +0.009 | 6 |
| Afghanistan | 160 | 3.427 | +0.056 | 7 |
| AVERAGE |  | 2.352 |  |  |

## Conflict

Afghanistan ranks 160 out of 162 in the 2015 Global Peace Index. It is only surpassed by Iraq and Syria. Against the backdrop of the withdrawal of most international forces from Afghanistan during recent years, the number of deaths from internal conflict in the country rose last year in tandem with an increase in political terror. Crucially, the uncertainty stemming from the shift in

[^20]responsibility for security from foreign troops to Afghan forces means that the chances of sustained internal conflict remain high.

## Education under attack

Increasing violence, threats and intimidation in 2015 left nearly 230,000 Afghan children without access to education and healthcare, according to the United Nations. ${ }^{60}$

In 2015, UNAMA and UNICEF documented 132 cases in which schools or school personnel were attacked or threatened - an 86 percent increase from 2014, and a 110 percent increase from 2013. This led to the closing or partial closing of more than 369 schools, affecting at least 139,048 students and 600 teachers.
Girls are particularly vulnerable. According to the report, 213 girls' schools were shut down last year, denying nearly 51,000 girls access to education. In addition to closing schools, antigovernment forces created additional barriers to education for women and girls by prohibiting education beyond 4th or 6th grade, and in many cases by completely banning them from going to school.

While the highest number of incidents against schools occurred in Afghanistan's eastern region and tied in part to the rise of ISIS there, almost no area of the country was immune, and growing insecurity is furthering a climate of fear.
"When the Taliban attacked our village and the government's military forces, they warned us to close our schools... Even after the attack, we weren't able to re-open the girls' schools," said Aiwaz Khan, headmaster of a primary school for girls in Afghanistan's north-eastern Baghlan province ${ }^{61}$

## Perception analyses of well-being

According to The Asia Foundation's Survey of the Afghan People 2014 and 2015, Afghanistan's biggest problems at the national level are: Insecurity ( $43 \%$ up from 34\%), corruption ( $24 \%$ down from $28.4 \%$ ), unemployment ( $22 \%$ down from $25.7 \%$ ), the economy ( $13 \%$ up from $10.8 \%$ ), and access to education and illiteracy ( $6 \%$ down from $7.6 \%$ ) are the most frequently cited national problems. While this list of issues has remained fairly constant over the years. Insecurity is cited most often in the West region (42\%) and least often in the North East region (24.5\%).

Fear for safety has been on an overall upward trend since 2006. In 2015 more than two-thirds (67.4\%) of Afghans report that they always, often, or sometimes fear for their personal safety or that of their family., the highest percentage in a decade. This rate is highest in the South West $(84.6 \%)$ and South East ( $81.1 \%$ ) regions, where clashes with AOGs have been most frequent. In the West region, however, the percentage of Afghans reporting fear for their safety has decreased by more than 10 percentage points (to $68.5 \%$ ) since $2014 .{ }^{62}$

The most frequently cited national problem is insecurity (42.7\%), up from $34.1 \%$ in 2014 and at its highest level since 2007. The most frequently cited local level problem is unemployment (31.2\%). However, the percentage of Afghans citing insecurity as a local problem (22.0\%) is at its highest level since the survey began.

When asked what are the biggest problems facing women, Afghans identify education and illiteracy (20.4\%) and unemployment/lack of job opportunities (11.3\%) as the two main problems facing women. However, the frequency with which they have been cited has declined since 2014,

[^21]while the percentage of Afghans who cite a lack of women's rights has increased from $6.2 \%$ in 2014 to $8.7 \%$ in 2015. In general, men and women point to the same challenges facing Afghan women, with the exception of the issue of domestic violence, which is more often mentioned by women (13.0\%) than by men ( $8.1 \%$ ).

In $2015,36.7 \%$ of respondents nationwide say their country is moving in the right direction, down from $54.7 \%$ in 2014 . This represents the lowest level of optimism recorded over the past 10 years, following last year's record high during the presidential runoff election. Overall optimism has decreased across all regions, and is lowest in the Central/Kabul (27.8\%) and North West (30.5\%) regions. This year, Afghans in Helmand province (62.1\%) are the most optimistic about the overall direction of the country, and residents of Kabul province (22.5\%) are the least optimistic.

When asked why the country might be moving in the right direction, Afghans point to the following reasons for optimism: reconstruction (31.8\%), followed by good security (28.5\%). The percentage of respondents citing good government (10.5\%) has increased four percentage points since 2014. Good security is most likely to be cited as a reason by Afghans in the Central/Hazarajat (39.9\%), South West (33.7\%), and East (29.9\%) regions, while other regions are more likely to cite reconstruction as their top reason for optimism.
Among the $57.5 \%$ of Afghans who say their country is moving in the wrong direction, the most frequently cited reason is insecurity (44.6\%, up six percentage points from 2014), followed by unemployment (25.4\%), corruption in general (13.0\%), a bad economy (12.4\%), and bad government (11.4\%). The percentage citing bad government increased from $4.9 \%$ in 2014 , while the percentage citing administrative corruption decreased from $9.6 \%$ in 2014 to $4.6 \%$ in 2015.

## Birth Registration

The International Convention on the Rights of the Child (CRC) states that every child has the right to a name and a nationality, and the right to protection from being deprived of his or her identity. Birth registration is a fundamental means of securing these rights for children. The AMICS indicator related to birth registration is the percentage of children under five years of age whose birth is registered.

The births of only 37\% of children under five years of age in Afghanistan have been registered. There are no significant variations in birth registration between boys (38\%) and girls (37\%), however there are significant variances observed by the age of the child, the mother's education level, residence, region and household socio-economic status. Children aged four years (35\%) have the lowest rate of registered births, while children aged one year have the highest registration rate.

Educated mothers are more likely to register the births of their children. About $67 \%$ of children whose mother has secondary education or higher had their children's births registered, almost double that of mothers with no education, wherein only $36 \%$ of births were registered. Children living in rural areas (33\%) are about two times less likely to have their births registered than their counterparts in urban areas (60\%). Children in the South East region (19\%) are more than three times less likely to have their births registered than children in the Central region (60\%). There are also regional disparities in the percentage of mothers/caretakers who know how to register a birth. For instance, $12 \%$ of mothers/caretakers in the East region know how to register a birth, while it is less than $1 \%$ in the South region. For mothers/caretakers with no education, $5 \%$ know how to register a birth, compared to $12 \%$ of mothers with secondary education or higher. Children living in the poorest households (31\%) are significantly less likely to have their births registered than their counterparts living in the wealthiest households (58\%). ${ }^{63}$

[^22]
## Child Labour

Article 32 of the CRC states that "States Parties recognize the right of the child to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development." Further, the MDGs call for the protection of children against exploitation.

In the AMICS questionnaire, a number of questions addressed the issue of children 5-14 years of age involved in labour activities. The term "child labour" is often defined as work that deprives children of their childhood, their potential and their dignity, and that is harmful to children's physical and mental development. It refers to work that is mentally, physically, socially or morally dangerous and harmful to children; and interferes with their schooling by depriving them of the opportunity to attend school; obliging them to leave school prematurely; or requiring them to attempt to combine school attendance with excessively long and heavy work.
In Afghanistan, 27\% of children aged 5-11 years were involved in child labour activities, while the figure is $22 \%$ for children aged 12-14 years. The prevalence of total child labour (aged 5-14 years) is $25 \%$. There is a variance of total child labour between girls ( $23 \%$ ) and boys ( $28 \%$ ). Major variances are observed across residence, the mother's education level, household socio-economic status, and region. Almost twice as many children in rural areas (28\%) are involved in child labour than their counterparts in urban areas (15\%). Children living in the Central Highlands region (33\%) are more involved in child labour than their counterparts living in the Western region (13\%).
Children whose mothers have no education (26\%) are twice as likely to be involved in child labour than children whose mothers have attained secondary education or higher (13\%). Children living in the poorest households (30\%) are twice as likely to be involved in child labour than children living in the wealthiest households (15\%).

Child labour and school attendance
Of the $42 \%$ of children aged 5-14 attending school, more than half of them (51\%) are also involved in child labour activities. Of the $25 \%$ of children involved in child labour, less than one third of them are also attending school ( $31 \%$ ). Of children involved in child labour who are attending school, there are significant differentials by gender, residence, region, mother's education level and household socio-economic status. There are 16 percentage points difference between schoolattending girls involved in child labour (42\%) and for school-attending boys (58\%) involved in child labour. Children living in rural areas are significantly less likely to be in school if they are participating in labour activities (49\%) than children living in urban areas who participate in labour activities ( $69 \%$ ). The rate of children involved in child labour who are attending school is almost three and a half times higher for children in the Central Highlands region (75\%) than for children in the Southern region ( $22 \%$ ). Children involved in child labour whose mothers have no education (49\%) are less likely to attend school compared with their counterparts whose mothers have attained secondary education or higher ( $88 \%$ ). Children involved in child labour who live in the poorest households ( $38 \%$ ) are less likely to attend school compared with children living in the wealthiest households ${ }^{64}$. For a discussion of the opportunity costs of child labour, see chapter 3.

[^23]
## SECTION 2: THE MACROECONOMIC AND PUBLIC FINANCE CONTEXTS

### 2.1 GDP and GDP per Capita

Afghanistan had a decade of high growth rates from 1382 (2003). The economy is now in transition and economic growth rates have declined in Afghanistan since 1392 (2013). The slowdown became more marked in 1393 (2014) and it continued in 1394 (2015). The growth rates were adversely affected by the impact from the long political transfer process during 1393 (2014), the transition with international forces, ongoing security issues, and lower business confidence and investment. This has resulted in lower economic growth in 2014 and 2015, of 2.1 and 2.6 percent respectively ${ }^{65}$. These growth rates are lower than those over the previous decade, and lower than originally forecast.

Afghanistan's high growth rates were funded by very high levels of development partner support, almost all of which has been grant aid, and by the large international military presence with associated investment and service contracts. As a result, the services (communications and transport, government public sector services (education and health)) have been key elements in this growth, and with industry, construction investment has been a major activity supporting growth. In the future mining has the potential to be a key growth source. Private investment, while small in its contribution, has declined since 1391 (2012). Private consumption has increased, and supported growth in aggregate demand, though with the uncertainty and slowdown in the service sector and job losses connected with the departure of the military, this growth is slowing. The economy continues to be agriculturally based, with wheat, horticulture and livestock being the dominant commodities. The agricultural sector accounted for approximately 25 percent of GDP in 1393 (2014). It provides livelihoods for the majority of the rural population. In terms of GDP shares in 1393 (2014), transport and communication accounted for 28 percent, construction (13 percent), manufacturing ( 10 percent), trade ( 8 percent), public administration ( 13 percent) and other 5 percent. In 1393 (2014), the growth came from slight expansion in industries from a construction increase ( 2.4 percent), and in services ( 2.2 percent). There was a slight slowdown in manufacturing ( 2.5 percent) ${ }^{66}$.

Not included in the GDP is the illegal opium production. Production area has continued to expand, and while the price has declined, it is estimated that in 1393 (2014) the farm-gate value of production was approximately $\$$ US850 million. In terms of the contribution to the GDP, the estimate in $1393 / 1394(2013 / 2014)^{67}$ was 80 billion Afs (US $\$ 1.4$ billion).

As outlined in Table 9 for the period 1390-1394 (2011-2015), the GDP in both nominal and real terms has increased, with GDP per capita (Afs current prices) rising from 28,965 Afs to 37,492 Afs in 1393 (2014) and it has remained close to that level in 1394 (2015). In constant prices, it increased from 13,270 Afs in 1390 (2011) to 15,577 in 1394 (2015). In current \$US, the GDP per capita increased from \$US601 to \$US654 in1393 (2014), and declined to \$US614 in 1395 (2015).

Table 9: GDP and GDP per Capita Trends, 1390-1394 (2011-2015)

| Billions Afs | 1390 | 1391 | 1392 | 1393 | 1394 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| GDP in Current Prices | 2011 | 2012 | 2013 | 2014 | 2015 |

[^24]| -billions Afs | 862 | 1034 | 1117 | 1193 | 1219 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| -billions \$US | 17.89 | 20.3 | 20.17 | 20.82 | 19.98 |
| GDP Deflator (Base Year 2002 - reference 100) | 216.4 | 234.7 | 244.0 | 241.3 | 240.4 |
| GDP in Constant Prices (2002) | 386 | 440 | 458 | 494 | 507.2 |
| Real GDP Growth | 6.5 | 14.0 | 3.9 | 2.1 | 2.6 |
| Population (millions) | 29.76 | 30.42 | 31.11 | 31.82 | 32.56 |
| GDP per Capita ('000s Afs) |  |  |  |  |  |
| In Current Prices | 28965.1 | 33990.8 | 35904.9 | 37492.1 | 37438.6 |
| In Constant Prices (2002) | 12983.9 | 14474.0 | 14712.3 | 15537.4 | 15577.4 |
| GDP per Capita (\$US) |  |  |  |  |  |
| In Current Prices | 601.1 | 667.3 | 648.3 | 654.3 | 613.7 |

Source: Afghanistan Government CSO, MoF and IMF, GDP Deflator IMF to 1392, MOF for 1393-1394

GDP growth is projected to rise over the period 2016 to 2020 from 3 to 6 percent, and in the longterm to average 4.5 percent $^{68}$. The growth is expected to come from agriculture, and from a recovery in confidence, increased mining and energy sector activity, and from the gains achieved under the National Unity Government's reform agenda. Delays with the planned major mining projects, in terms of implementation and the effects from low commodity prices will lead to slippage in investment and income streams to 1397 (2018). The economic growth will be dependent on domestic and regional security conditions not deteriorating, a recovery in economic confidence, and effective implementation of the Government's reform policies. The international development partners have committed to continuing to support Afghanistan through the transition period. This support is based on the government delivering on its commitments under the Self-Reliance through Mutual Accountability Framework.

Figure 9: GDP and Public Resources

—GDP
-Public Resources

- External Resources
-Domestic Revenue


### 2.2 Public Resources

Public resources are the total pool of funds available to government from domestic revenue generation and external resources funded on-budget by the international development partners. Public resources rose over the period 1390 to 13934 (2011-2015) from 197.9 billion Afs to 290.1 billion Afs (remaining within a range of 23 to 25 percent of GDP). Approximately 80 percent of the increase was funded from external resources, as domestic revenues, rose slightly from 99 billion

[^25]Afs in 1390 to 120.8 billion Afs in 1394 (2015). The contribution of external resources to public resources rose from 50 to 64 percent in 1393 (2014), was 58 percent in 1394 (2015). Refer to Figure 9 and Table 10.

Domestic revenues, as a share of GDP, declined over the period 1390 to 1394 (2011 to 2015), from 11.5 to 9.9 percent, with 1393 (2014) the worst year at 8.4 percent of GDP. The key factors that led to this decline were lower compliance and enforcement, slowing economic activity and lower import growth reflecting the political/ security uncertainties. Revenues were lower across all revenue categories, covering tax revenues, non-tax revenues and customs duties. Budget revenue projections were not meet in 1393 (2014) and additional donor support was required.

In 1394 (2015) the government was successful in turning around revenue collections, with an increase on the previous year, of over 20 percent. This was achieved from increased tax collections from existing sources, the initial revenue flows from new taxes and from increased level of taxes and levies (ie. business receipts tax (BRT) doubled, and fuel/ gas levies increased). Political support and MOF institutional commitment was critical in achieving this target. While the planned 2015 VAT to replace BRT was postponed, these new measures are expected to increase revenue by approximately 1 percent of GDP in the medium-term. ${ }^{69}$

External resources, as a share of GDP, has ranged from $11.4 \%$ to 17.6 percent, and was 13.9 percent in 1394 (2015). Refer Figure 10 and Table 10 While domestic revenue has increased, it has not reduced the country's heavy reliance on external support. Current forecasts are that domestic revenues will cover operating expenditure after 2035.

Figure 10 : Revenue and Grants


Table 10: The Evolution of Public Resources, 1390-1394 (2011-2015)

|  | 1390 | 1391 | 1392 | 1393 | 1394 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Billions Afs | 2011 | 2012 | 2013 | 2014 |  |
| Public Resources | 197.96 | 183.4 | 306.01 | 280.51 | 290.05 |
| Share of GDP (\%) | $23.0 \%$ | $17.7 \%$ | $27.4 \%$ | $23.5 \%$ | $23.8 \%$ |
| In Constant 2002 Prices | 91.48 | 78.13 | 125.41 | 116.24 | 120.68 |
| Domestic Revenues | 99.34 | 81.5 | 109.72 | 100.26 | 120.75 |
| Share of GDP (\%) | $11.5 \%$ | $7.9 \%$ | $9.8 \%$ | $8.4 \%$ | $9.9 \%$ |

[^26]| In Constant 2002 Prices | 45.91 | 34.74 | 44.97 | 41.55 | 50.24 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Per Capita (Constant 2002 Prices) | 3338.0 | 2680.1 | 3526.8 | 3150.8 | 3708.5 |
| As \% of total public resources | $50.2 \%$ | $44.5 \%$ | $35.9 \%$ | $35.7 \%$ | $41.6 \%$ |
| External Resources | 98.62 | 101.83 | 196.29 | 180.25 | 169.3 |
| Share of GDP (\%) | $11.4 \%$ | $9.8 \%$ | $17.6 \%$ | $15.1 \%$ | $13.9 \%$ |
| In Constant 2002 Prices | 45.57 | 43.39 | 80.45 | 74.69 | 70.44 |
| Per Capita (Constant 2002 Prices) | 3313.8 | 3347.5 | 6309.5 | 5664.7 | 5199.6 |
| As \% of total public resources | $49.8 \%$ | $55.5 \%$ | $64.1 \%$ | $64.3 \%$ | $58.4 \%$ |

Source: MOF Budget MTFF and Fiscal Bulletins, Afghanistan Government Central Statistics Office, IMF

External Resources and Official Development Assistance. Afghanistan is one of the most highly aid dependent economies. The OECD lists Afghanistan as the top official development assistance (ODA) recipient 1390-1392 (2011-2013) with an average of $\$$ US6.3 billion of civilian official development assistance (ODA) per year ${ }^{70}$. In addition, it receives financial support for military and security sectors, which in total exceeds the ODA level of support. A detailed analysis on ODA and external resources, particularly in relation to the education sector, is provided in Chapter 3 Section 1.5.

### 2.3 Public Expenditure

Government budget expenditures (operating and development expenditures) in total, as a percent of GDP, have remained relatively consistent in recent years in the low 20 percent. In 1394 (2015) it was 23.8 percent of GDP. Refer Figure 11 and Table 11 for details ${ }^{711}$. The change in financial years in 1391 (2012) from a March 22-March 21 year to a December 22-December 21 ( 9 months in that year), is the reason the resources and percentage comparisons (percent of GDP) with the other years are lower. An IMF recalculation ${ }^{72}$ of 1391 (2012) from data on a solar year basis, results in some reallocation from 1393 (2013) indicates that in both these years the public resources would have remained in the low/ mid $20 \%$, with grants around $15 \%$ and resources $10 \%$ of GDP.

Operating expenditure in 1394 (2015) accounted for 19.4 percent of GDP, and development expenditure 6.9 percent of GDP. Government operating expenditure has increased (as a percent of GDP) has increased from 17.2 percent in 1390 (2011) to 19.4 percent in 1394 (2015). This increase in expenditure, is due to increased security costs, rising civil service costs from an expansion in the number of civil servants, especially in education and health, and associated pension costs, and operations and maintenance costs on public infrastructure. Over the period, a further factor has been the transfer of off-budget operating costs to on-budget operating costs.

Figure 11: Government Expenditure

[^27]

In 1394 (2015) while domestic revenues increased over 20 percent, there was only a slight increase in expenditures over the previous year. The government continued with practices adopted in 1393 (2014) involving tight control of discretionary development expenditures and non-salary costs. In 1393 (2014) the government had to fund the deficit by drawing down cash reserves, accruing arrears, and receiving some specific donor assistance.
Table 11: Total Government Revenue, Expenditure and Deficit (\% of GDP), 1390-1394 (2011-2015)
The education sector in 1394 (2015) accounted for 14.1 percent of total government expenditure (excluding debt service), 15.5 percent of government recurrent expenditure, 10.3 percent of development expenditure and 3.7 percent of GDP. Government public spending in the sector is analysed in Chapter 3.

The donor grant allocation approved in the national budget, and which is used for operating and development budget purposes, is generally higher than the actual grant expenditure in that year as a significant amount of the donor development budget is unspent and is carried over to the following year. For example, while the total grants to support the national budget in 1394 (2015) were estimated at Afs 302.75 billion (\$US5.3 billion), which accounted for approximately $71 \%$ of the national budget, the actual grant expenditure for the year was Afs 169.3 billion.

| Percent of GDP (\%) | $\mathbf{1 3 9 0}$ | $\mathbf{1 3 9 1}$ | $\mathbf{1 3 9 2}$ | $\mathbf{1 3 9 3}$ | $\mathbf{1 3 9 4}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ |
| Revenue and Grants (public resources) | $\mathbf{2 3 . 0 \%}$ | $\mathbf{1 7 . 7 \%}$ | $\mathbf{2 7 . 4 \%}$ | $\mathbf{2 3 . 5 \%}$ | $\mathbf{2 3 . 8 \%}$ |
| -Domestic Revenue | $11.5 \%$ | $7.9 \%$ | $9.8 \%$ | $8.4 \%$ | $9.9 \%$ |
| -Grants | $11.4 \%$ | $9.8 \%$ | $17.6 \%$ | $15.1 \%$ | $13.9 \%$ |
| Government Expenditure and Net Lending | $23.1 \%$ | $\mathbf{1 8 . 3 \%}$ | $\mathbf{2 4 . 9 \%}$ | $\mathbf{2 6 . 3 \%}$ | $\mathbf{2 6 . 2 \%}$ |
| Recurrent Expenditure | $\mathbf{1 7 . 2 \%}$ | $\mathbf{1 3 . 1 \%}$ | $\mathbf{1 7 . 7 \%}$ | $\mathbf{1 9 . 1 \%}$ | $\mathbf{1 9 . 4 \%}$ |
| Development Expenditure | $\mathbf{5 . 9 \%}$ | $\mathbf{5 . 2 \%}$ | $\mathbf{7 . 2 \%}$ | $\mathbf{7 . 2 \%}$ | $\mathbf{6 . 9 \%}$ |
| -External | $5.9 \%$ | $5.2 \%$ | $7.2 \%$ | $7.2 \%$ | $6.9 \%$ |
| Net Lending | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ | $0.0 \%$ |
| Deficit Including grants | $-0.2 \%$ | $-0.6 \%$ | $2.5 \%$ | $-2.8 \%$ | $-2.4 \%$ |
| Deficit Excluding grants | $-5.7 \%$ | $-5.2 \%$ | $-7.9 \%$ | $-10.7 \%$ | $-9.5 \%$ |

Source: MOF Budget MTFF and Fiscal Bulletins, Afghanistan Government Central Statistics Office, IMF
The approved 1394 (2015) budget had total grants Afs 161.78 billion (from Combined Security Transition Command - Afghanistan (CSTC-A), ARTF, LOTFA and some other donors), which was
to be used to finance government operating expenditures ${ }^{73}$. The total to fund the development budget was approximately Afs 140.97 billion, and this included new resources in 1394 and carryover of unspent budget from 1393, covering discretionary and non-discretionary grants. The majority of the development budget funding in 1394 was non discretionary (Afs 120.53 billion), with discretionary grants of Afs 16.79 billion, and loan funding of Afs 3.66 billion. This contraction in the funds available in discretionary grants has limited the government's ability to fund priority interventions.

### 2.4 Education Development Indices

A range of education development indices have been applied in Afghanistan. The human development index (HDI) is used as a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. In 1394 (2014) Afghanistan on the HDI was ranked 171 out of 188 countries. The multi-dimensional poverty index (MPI) is another measure that includes health, education and standard of housing. It is based on micro-data at the household level, and the MPI of 0.353 in Afghanistan in 2010/2011 is based on household survey data ${ }^{74}$.

While these indices are important they do not provide a composite index of the comparative international perspective of a country's global level of economic development, which integrates the main macro-economic indicators (GDP per capita, domestic resources as percent of GDP) with external development aid for education, and share of pupils enrolled in private institutions. While such indices have been prepared for sub-Saharan Africa, they have not been prepared for south Asian countries or Afghanistan. The same applies to the composite global context index that has been developed with the World Bank for sub-Saharan Africa to summarize socio-demographic and economic contexts as they apply to the education sector.

In Afghanistan an appropriate education development index (EDI) needs to be identified, that would provide a comprehensive and composite index of performance. Such an index could be used to assist in decision-making and resource allocation. Initially the index could be developed for primary education, and then expanded. An example of the type of EDI, that can be developed, is the Bangladesh EDI ${ }^{75}$, which involves an input index (involving access, infrastructure and quality indices), equity index and outcome index (involving indicators related to outcome, GER, pass rate, attendance rates, drop out and repetition rates). For the index to have validity, it would require access to reliable data sources, which in some of the areas is currently not available.

### 2.5 Future Prospects

The Government medium term fiscal framework (MTFF) provides the Government's projection on future revenue and expenditure ${ }^{76}$. It is based key assumptions on revenue and expenditures, and includes the security expenditure projection which is estimated will rise to 17 percent of GDP in 1399 (2020), before declining as a percent of GDP in the longer term.

The future projections are based on economic growth, reform progress, security improvement, and ongoing development partner grant support. Key risks are an increase in insecurity that would

[^28]constrain economic reform measures and revenue collections, and delays in the mining revenue, and a decline in development partner funding. As noted by the IMF and MOF should grants decline there is would be a need to rapidly increase domestic revenue collections, and to a limited extent this shortfall could be financed by external loans.

While revenue is forecast to increase, expenditure is also expected to rise, meaning that the government total budget deficit (excluding grants) and resulting financing requirement will remain large. The IMF estimate that it will remain above 12 percent of GDP.. This gap is to be financed by development partner grants or concessional loans. This is also of concern, and a risk, as while development partner commitments are in place to 1396 (2017), after that date there is a decline in commitments. New commitments will be needed if grants are going to be at the level required to maintain current government service delivery. In terms of fiscal sustainability, which is defined as domestic revenue covering operating expenditure, this is now forecast as being reached after 1414 (2035).

The MTFF forward projections on education sector expenditure indicate a relatively unchanged total allocation for the forecast period to 1398, ranging between 57.1 to 59.5 billion AFs over the period 1395 to 1399 (2016 to 2020) ${ }^{77}$. These projections are outlined in Table 12.

Based on existing education sector expenditures, and operating within the current system with no efficiency and quality improvements, the forecast increase in student numbers in primary, secondary, TVET and tertiary education, will require an increased education sector financing for services to be maintained at existing levels.

Table 12: MTFF Government and Education Revenue and Expenditure Projections 1395-1399 (2016-2020)

|  | 1395 | 1396 | 1397 | 1398 | 1399 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Billions Afs | 2016 | 2017 | 2018 | 2019 | 2020 |
| Revenue and Grants (public resources) | 418.70 | 441.90 | 396.10 | 398.90 | 398.00 |
| -Domestic Revenue | 117.10 | 127.60 | 136.10 | 147.30 | 159.00 |
| -Grants | 301.60 | 314.30 | 260.00 | 251.60 | 239.00 |
| Government Expenditure | 461.80 | 429.40 | 444.10 | 458.75 | 475.00 |
| Recurrent Expenditure | 283.30 | 302.90 | 318.60 | 339.45 | 360.00 |
| Development Expenditure | 178.50 | 126.50 | 125.50 | 119.30 | 115.00 |
| -External | 178.50 | 126.50 | 125.50 | 119.30 | 0.00 |
| Net Lending | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Deficit Including grants | -43.10 | 12.50 | -48.00 | -59.85 | -77.00 |
| Deficit Excluding grants | -166.20 | -175.30 | -182.50 | -192.15 | -201.00 |
| Education Sector Expenditure (MTFF) | 59.60 | 54.70 | 56.00 | 57.20 | 59.60 |
| \% Annual increase | $34.3 \%$ | $-8.2 \%$ | $2.4 \%$ | $2.1 \%$ | $4.2 \%$ |
| \% of total government expenditure | $12.9 \%$ | $12.7 \%$ | $12.6 \%$ | $12.5 \%$ | $12.5 \%$ |
| MOE and MOHE (96\% of expenditure) | 57.22 | 52.51 | 53.76 | 54.91 | 57.22 |
| -MOE (80.6\% of total sector) | 48.04 | 44.09 | 45.14 | 46.10 | 48.04 |
| -MOHE (15.4\% of total sector) | 9.18 | 8.42 | 8.62 | 8.81 | 9.18 |

Source: MOF- MTFF December 2015
${ }^{77}$ MOF MTFF (December 2015)

### 2.5.1 Analysis Methodology

An analysis was undertaken to assess the forward financing requirements for the MOE and MOHE, and the fiscal resources available to meet such demands. The analysis is based on assessing the estimated financing requirements given existing student numbers and expected student population growth at the different levels of education. The scenarios analyzed cover growth in student numbers within the existing system and quality standard, and for efficiency and quality improvements.

The future financing requirements provide estimates of the likely resource demands. These demands are assessed in terms of the future financial resource availability, and what may be feasible, given the medium term fiscal resources and off-budget development partner funding. The MTFF provides the medium term fiscal resource bound that the government considers is currently feasible for the education sector, given the economy wide assumptions. The MTTF education sector fiscal projections, covers all on-budget operating and development budget finance.

Two approaches are used:
(i) MTFF future projections, are analysed, and based on future student numbers, the unit recurrent cost per student for the different programs are estimated, and compared with the existing recurrent cost per student; and
(ii) Future financing projections are estimated based on student demand for education services (at the different levels), using the 1394 (2015) student recurrent unit cost per program. The allocation for the development budget pro-rated. The cost of providing services under the different options is analysed.

### 2.5.2 Analysis Assumptions

MTFF Allocation to MOE and MOHE. In the education sector, as per 1394 (2015) expenditures, $96 \%$ of the funds were expended by MOE and MOHE, on the basis of 80.6 and 15.4 percent of the total expenditure respectively. Refer Table 12. The expenditure on recurrent and development costs in each ministry were, MOE ( 83.4 and 16.6 percent) and MOHE ( 68.1 and 31.9 percent) respectively. Details on these allocations are provided in Chapter 3.

MTFF allocation to MOE and MOHE is based on current expenditure percentages, and with in each ministry, the allocation to recurrent and development expenditure is based on the current 1395 (2016) Budget, that is MOE 63.6 and 36.4 percent, and MOHE 54.3 and 45.7 percent respectively. This means that the recurrent and development expenditures would reflect existing budget resource allocations.

Student Recurrent Costs. The unit recurrent cost per student is used in estimating the funding requirements in the forward demand projections. This is based on the ESA methodology. In MOE there are five programs and in MOHE one program. As detailed in Chapter 3 and the Chapter 3 Annex, the recurrent costs are determined for each of the five programs for 1394 (2015). The recurrent cost per student are able to be estimated for three of the MOE programs (general and Islamic education, teacher training and TVET) that account for $85.5,3.3$ and 4.4 percent respectively of the MOE expenditure, and for MOHE higher education. For the literacy program, the lack of disaggregated financial data meant it was not possible to separate out the cost base per student, for a literacy school student or literacy course participant. For this program and for the MOE overall education management program, the projected expenditure is allocated in the same fixed percentage as per current expenditure pattern (1.9 and 4.9 percent respectively). In-service
training courses for existing teachers is covered under a development project, as is the provision of textbooks.

The unit cost per student in general education and Islamic education covers both primary and secondary students. The students are treated as one group, as it is not possible to separate out the teachers by primary, and secondary (lower and upper) teaching roles, as within these schools there is an absence of data identifying the number of teachers working across the different levels. MOE also confirmed that such data is not available. The extent of schools with mixed levels was identified in the EFA 2015 Review $^{78}$, where it was noted in 2013 that 41 percent of schools are primary, 27 percent are primary and lower secondary and 32 percent are primary, lower and upper secondary. While this approach of a combined primary and secondary unit cost is not ideal, it is the most realistic estimate, until more disaggregated data is available on actual teacher number by level of teaching, and breakdowns of non-salary costs are available on a similar basis.

Expansion in Student Numbers. The student number in $1394(2015)^{79}$ is used as the base year for the forward projections. In general education and Islamic education it is based on the number of students enrolled at school. This number is higher than the actual number of students attending school, as it has been estimated that approximately 15 percent of enrolled general education and Islamic students are permanent absentees ${ }^{80}$. These students remain registered as enrolled, as per MOE regulations. In this analysis, the general education student number has not been adjusted to remove absentees. While such a change would increase unit cost per student, with a reduced number of students it would have no impact on the total estimated cost of the general education program.

In the forward projection, it is assumed community-based education (CBE) students will be transferred under the MOE umbrella in 1396 (2017). The 1394 (2015) CBE students totalled 329,000 and this number are added to the general education students in 1396 (2017). This addition is on the basis, that the students are maintained in their rural locations in schools to be run by MOE, or in schools that are out sourced and contracted by MOE to a third party, or are transferred to existing MOE schools. The same unit cost is used for these students.

In undertaking the demand analysis, MOE estimates are used of a 3 percent annual increase in general education and Islamic student numbers. For teacher training and TVET the increase is 5 percent per year. For public higher education the increase is 5 percent per year.

Efficiency and Quality Improvements. The MOE and MOHE priority is to improve efficiency, quality and outcomes. The ministries with their renewed focus on quality expect to reduce drop-out rates, increase retention and pass rates. The ministries have identified a number of potential opportunities to improve internal efficiency and quality outcomes, through the following:
(i) Improve quality of teachers, curriculum improvements, availability of textbooks/materials to all students, increased hours of instruction, and improving teacher supervision and reducing absentee teacher numbers. In MOE there are a number of ongoing programs covering in-service teacher training, curriculum development that are working on two of the aspects, though assessments on the effectiveness of these programs and their impact on improved student outcomes has not been thoroughly assessed. Textbooks and materials and the lack of availability to all students is an issue to be addressed in schools;
(ii) Operational and institutional systems with a change from being driven from the centre to having greater local participation and management, and improved teacher supervision;

[^29](iii) Systematic strengthening of management and supervision systems to improve performance, with development of provincial and district operational plans. Strengthening the EMIS and MOHE systems to enable improved monitoring and evaluation, that will provide strategic inputs into planning and budget processes;
(iv) Financial management and procurement systems, improved AFMIS data systems to enable effective costing of programs, sub-programs and outcomes, and review of procurement procedures to ensure the systems are best practice, providing competitive outcomes. O\&M practices;
(v) Rigorous quality and cost control of the capital investment program, with increased professional supervision and monitoring of school construction projects undertaken. In addition, independent third party reviews to provide a further support to support the MOE objective of best value; and
(vi) Assessment and adoption of policies to improve service delivery efficiency.

### 2.5.3 Future MOE and MOHE Financing based on MTFF

Using the MOF MTFF resource projection for the education sector 1395-1399 (2016-2020), and the assumptions outlined above on student numbers, and the allocation of funding to MOE and MOHE, and to the recurrent and development expenditure within each ministry, the unit costs per student at school level (that is not including the overall education management cost) for general education, teacher training, TVET and higher education are estimated. The analysis indicates over the period 1395-1399 (2016 to 2020) unit recurrent costs (at school level) for general education, teacher training, TVET and higher education would decrease by 16, 22, 21 and 19 percent respectively. The lower unit costs are for general education (from 2,992 to 2,502 Afs), teacher training (from 12,296 to 9,649 Afs), TVET (from 17,656 to 13,957 Afs) and higher education (from 27,210 to 22,412 Afs).

A reduction in unit cost at this level, of 16 to 22 percent, would impact on service quality, limit funds for material, operations and maintenance non-salary services and result in larger PTRs.

The development expenditure allocation for MOE and MOHE is closely aligned to current development budget allocations. Given that the allocation is for new commitments only, it would not include any carry forward from the previous year. The indicated allocation ( 17.5 and 4.2 billion Afs for MOE and MOHE respectively) would cover existing on-budget commitments and be equivalent to two thirds of the estimated off-budget commitment. On this basis, the MTFF allocation that is proposed is assuming that there is a transfer of donor off-budget to on-budget. Alternatively, depending on resource requirements there could be a reallocation between recurrent and development expenditures.

Overall, while opportunities exist to improve performance and efficiency in both MOE and MOHE, the level of unit cost saving required to operate with the MTFF fiscal boundary would be difficult to achieve. This emphasizes the need for the ministries as part of a prioritization, cost effectiveness and efficiency review to assess alternate delivery modalities that are more cost effective. This may include contract delivery of services, out-sourcing, public-private partnerships, cost sharing of some services and low cost private schooling.

### 2.5.4 Future MOE and MOHE Financing based on Education Demand

In the education demand analysis two options are assessed.

Option 1, the status quo. This is a less preferred option, with no change in the existing system. Population increases are as per the above assumptions. Unit recurrent costs are the 1394 (2015) estimates. The development budget is increased 5 per cent per year.

Option 2, efficiency and quality improvement. This is a preferred option. MOE have indicated that there are cost savings to be made from removing inefficiencies and poor practices, with savings that would support quality improvements. Option 2 is based on the following assumptions:
(i) a 10 percent saving in MOE general education recurrent unit costs (in the analysis implemented in the first year), achieved from salary cost savings, in part from improving teacher performance (removing absentee teachers and improved teacher supervision) and a 10 percent saving in material costs from improved procurement practices.
(ii) For education management a 5 percent increase per year, as there would be enhanced performance management, and monitoring and impact assessment systems established to assess performance, quality and outcomes. A number of the institutional and operational reforms would deliver efficiency gains without financial cost increases.
(iii) For MOHE a 5 percent saving in student recurrent unit costs (in the analysis implemented in the first year) which would be achieved from a 5 percent saving in teacher costs from improved performance and supervision, and in material costs, a 10 percent saving from introduction of an initial scheme for cost sharing with users the dormitory and associated costs (on a means tested basis).
(iv) With the development budget a 5 percent increase per year. While the improved procurement, contracting and supervision would be expected to improve contract cost effectiveness, with overall service quality improvement it is expected there would be an increased investment requirement.

The recurrent, development and total cost projections for the two options are detailed in Table 13. The MTFF projection is also listed in the table to indicate the anticipated fiscal resources availability. With both Option 1 (equivalent to existing) and Option 2 (initial efficiency and quality improvement) the financial resource requirements exceed the MTFF fiscal allocation. As indicated, for MOE the total expenditure for option 1 and 2 in 2020 is 58.6 and 55 billion Afs respectively, and this exceeds the MTFF of 40 billion Afs by 22 and 15 percent respectively. For MOHE the total expenditure for option 1 and 2 in 2020 is 11.2 and 10.9 billion Afs respectively, and this exceeds the MTFF of 9.2 billion Afs by 22 and 18 percent respectively.

Option 2 is the preferred option given the efficiency and quality improvements that would be achieved at a lower cost. A financial gap has been identified, between future resource availability and requirements (option 2), and a range of strategies should be pursued to address this shortfall:
(i) Undertake further quality, efficiency and cost effectiveness improvement to reduce financial costs. Both MOE and MOHE are finalizing their new strategic plans with a focus on performance and quality improvement. The MOE NESP III 1395-1400 (2016-2021) draft is prioritizing key performance improvements across all programs. As general education dominates the MOE expenditure any measures that improve the efficiency of this program will generate significant savings. Implementation of these measures will achieve the efficiency improvements as per the option 2 assumptions, and are likely to result in additional cost efficiencies. A number of the measures to be implemented are outlined in Section 2.5.2
(ii) Review and adoption of policies to improve service delivery efficiency. This to include private sector provision of education services including low cost private education, public-private partnerships, outsourcing and contract delivery of services, and means tested cost sharing by service users.
(iii) Improve aid effectiveness, through strengthened institutional capacity for implementation, management and monitoring of the development budget. Increase the level of development
partner funding on-budget, and with the off-budget development partner funding, improve cost effectiveness through improved coordination, monitoring and partnership with the ministries.
(iv) Seek additional financing, indicatively 7 billion Afs to cover the shortfall. Given the domestic fiscal constraints there would appear to be limited opportunity to increase the government education budget allocation. With development partner resources, as noted their future level of support is forecast to decline, and therefore limited opportunity for an increase. Should the education ministries improve performance and delivery across a range of agreed benchmarks there may be the possibly of having donors agree to hold or reduce the decline in their sector commitment. Performance based funding could be used to leverage such support.

Table 13:MOE and MOHE Total and Recurrent Expenditure Projections (MTFF and Options), 1395-1399 (2016-2020)

| Billion Afs | $\begin{aligned} & 1395 \\ & 2016 \end{aligned}$ | $\begin{aligned} & 1396 \\ & 2017 \end{aligned}$ | $\begin{aligned} & 1397 \\ & 2018 \end{aligned}$ | $\begin{aligned} & 1398 \\ & 2019 \end{aligned}$ | $\begin{aligned} & 1399 \\ & 2020 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| MOE Recurrent Expenditure |  |  |  |  |  |
| MTFF | 30.6 | 28.1 | 28.7 | 29.3 | 30.6 |
| Option 1 | 31.9 | 33.9 | 35.0 | 36.1 | 37.3 |
| Option 2 | 29.2 | 31.1 | 32.1 | 33.1 | 34.2 |
| MOE Development Expenditure |  |  |  |  |  |
| MTFF | 17.5 | 16.0 | 16.4 | 16.8 | 17.5 |
| Option 1 | 17.5 | 18.4 | 19.3 | 20.3 | 21.3 |
| Option 2 | 17.5 | 18.4 | 19.3 | 20.3 | 21.3 |
| MOE Total Expenditure |  |  |  |  |  |
| MTFF | 48.0 | 44.1 | 45.1 | 46.1 | 48.0 |
| Option 1 | 49.4 | 52.3 | 54.3 | 56.4 | 58.6 |
| Option 2 | 46.7 | 49.4 | 51.4 | 53.4 | 55.4 |
| MOHE Recurrent Expenditure |  |  |  |  |  |
| MTFF | 5.0 | 4.6 | 4.7 | 4.8 | 5.0 |
| Option 1 | 5.0 | 5.2 | 5.5 | 5.8 | 6.1 |
| Option 2 | 4.7 | 5.0 | 5.2 | 5.5 | 5.8 |
| MOHE Development Expenditure |  |  |  |  |  |
| MTFF | 4.2 | 3.8 | 3.9 | 4.0 | 4.2 |
| Option 1 | 4.2 | 4.4 | 4.6 | 4.9 | 5.1 |
| Option 2 | 4.2 | 4.4 | 4.6 | 4.9 | 5.1 |
| MOHE Total Expenditure |  |  |  |  |  |
| MTFF | 9.2 | 8.4 | 8.6 | 8.8 | 9.2 |
| Option 1 | 9.2 | 9.6 | 10.1 | 10.6 | 11.2 |
| Option 2 | 8.9 | 9.4 | 9.8 | 10.3 | 10.9 |

Source: MTFF, December 2015

## Conclusions Chapter 1

## Section 1

UN data estimates the population to be 32.024 million in 2015. We have used UN data, which are also used by MOE for planning purposes.
Afghanistan has a very young population. $47,5 \%$ of the population is under 15 years of age and the school age group $7-18$ is estimated at $33,7 \%{ }^{81}$.
Poverty is widespread, about 36 percent of the population are still consuming below the poverty line. There is wide variation in poverty in Afghanistan with large differences in poverty incidence by residence and by region.
Afghanistan has one of the lowest literacy rates in the world. Age $15+$ had a male literacy rate of 62 and a female of 18 against the median value for low income countries of M 70 and $F 57$ respectively.

[^30]The Infant Mortality Rate (IMR) is 48 deaths per thousand live births. The Under-five Mortality Rate (U5MR) is estimated at 91 deaths per thousand live births.
The majority of children in Afghanistan suffer from malnutrition.
The number of people with disabilities is estimated at 800,000 in Afghanistan equivalent to 2.7 \% of the population (source NDSA, 2005) and they estimate that $73 \%$ of children with disabilities above six years do not receive any education. Lately, the disability term is being replaced by children with special educational needs (SEN)
Afghanistan is depicted in the Low human development group in the Human Development Index
(HDI). It belongs to the least developed countries and was ranked number 169 on the HDI. Its HDI
value in 2013 was 0.468 against the regional South Asian average of 0.588
Pashto and Dari are the official languages of Afghanistan. In addition, there are five other official languages.
Afghanistan ranks 160 out of 162 in the 2015 Global Peace Index. The security situation has deteriorated over the last year affecting the routine implementation of government services, and the risk of sustained internal conflict remains high.
In Afghanistan the prevalence of total child labour (aged 5-14 years) is 25\%.

## Section 2

Public resources rose over the period 1390 to 1394 (2011-2015) from 197.9 billion Afs to 290.1 billion Afs (remaining within a range of 23 to 25 percent of GDP). Approximately 80 percent of this increase was funded from external resources. Domestic revenues, as a share of GDP, declined over the period 1390 to 1394 (2011 to 2015), from 11.5 to 9.9 percent of GDP, with the external resources as a share of GDP increasing, accounting for 11.4 percent in 1390 (2011) and 13.9 percent in 1394 (2015) respectively. Given the level of external resource support, Afghanistan remains one of the most highly aid dependent economies.

Afghanistan's GDP growth is projected to rise over the period 2016 to 2020 from 3 to 6 percent, and in the long-term to average 4.5 percent ${ }^{82}$. The economic growth will be dependent on domestic and regional security conditions not deteriorating, a recovery in economic confidence, and effective implementation of the Government's reform policies.

The MTFF forward projections on education sector expenditure indicate a relatively unchanged total allocation for the forecast period to 1399, ranging between 57.1 to 59.5 billion AFs over the period 1395 to $1399\left(2016\right.$ to 2020) ${ }^{83}$. The analysis undertaken based on the existing education sector expenditures, operating within the current system (no efficiency and quality improvements), and the forecast rise in student numbers indicated a higher level of education sector financing would be required for services to be maintained at existing levels.

Both MOE and MOHE are prioritizing efficiency and quality improvements, with cost savings to be achieved from removing inefficiencies and poor practices. Analysis undertaken based on adopting these improvements, indicated that while the future financing gap would be reduced, additional measures should be pursued to meet this shortfall: further quality, efficiency and cost effectiveness improvement to reduce financial costs; review and adoption of policies to improve service delivery efficiency; improve aid effectiveness; and seek additional financing to cover the shortfall.

Given both the domestic fiscal constraints and development partner future forecasts of lower levels of support, there are limited opportunities to increase budget allocations. Should the education ministries improve performance and delivery across a range of agreed benchmarks there may be

[^31]the option to leverage some performance based funding, whereby donors would agree to hold or reduce the decline in their sector commitment.

## CHAPTER 2 ENROLMENT, INTERNAL EFFICIENCY AND OUT-OF-SCHOOL CHILDREN

## SECTION 1: THE EVOLUTION OF ENROLMENT AND EDUCATION SYSTEM ENROLMENT CAPACITY

Figure 12 Student growth 2001-2014 Primary and Secondary Education

2.1.1 The Evolution of Enrolment

Afghanistan has made steady progress in reconstituting the education sector over the past decade:
From approximately 800,000 students, and very few girls, in 2001 to more than 8.5 million students in $1393 / 2014$ (2014) of whom $5,213,426$ are boys and $3,370,280$ or $39 \%$ are girls ${ }^{84}$.
Most students who begin primary school complete primary school. The challenge lies in raising primary attendance rates beyond the rate of $55 \%$, and in ensuring a far greater proportion of primary graduates go on to start and complete a secondary level education. In particular, there is a sharp drop in girls' school attendance after primary school. Afghanistan's achievement of all of the MDGs rests on the human capital that it can bring to bear to reach its development objectives.
Thus improving education indicators, including gender equity in education, in particular must be of paramount priority.

The goal of the Ministry of Education is to increase enrolment in primary education to $110 \%$, in lower secondary to $80 \%$, and in upper secondary to $57 \%$ by 2020. By the same year, the MoE wants to decrease dropout in General Education ${ }^{85}$ to $3 \%$, and repetitions to $10 \%$. GE enrolment is targeted at 14.8 million ( 6.9 million girls and 7.9 million boys). The enrolment target for Technical and Vocational Education and Training is 300,000. MoE plans to increase literacy rate for people

[^32]of age 15 and above to $60 \%$ by the same year. This would be done through literacy courses for 6 million students (at least $60 \%$ of whom would be female) ${ }^{86}$.

We attempt to gauge the progress towards these goals 5 years before the set deadline. We draw from various sources of data to come up with metrics, which will let us get a sense of enrolment, repetition, and dropout as per the guidelines laid down by GPE.
In Afghanistan, age 7 was the primary school entry age until the start of the July 2008 school year, when the school entry age became age 6 for primary school. Age 7 is considered as the primary school entry age in this analysis ${ }^{87}$.

### 2.1.2 Evolution of Enrolment Capacity: Gross Enrolment Rate Computation

Enrolment in GE schools increased to 8.7 million in 2015. Out of these, about 1 million or 12 percent were permanently absent ${ }^{88}$. They were kept enrolled in the school registers for three years to encourage their return. In 2001, approximately 800,000 children were enrolled, few of whom were girls.
In 2013, 8.2 million students ( $39 \%$ girls) including CBE students were enrolled in the GE system, $70 \%$ of whom were in primary school, and the net enrolment rate at primary level was $86 \%$ for boys and $64 \%$ for girls, while the overall net enrolment rate in GE was $71 \%$ for boys and $50 \%$ for girls ${ }^{89}$.. A further 260,000 were enrolled in the Islamic Education system and 61,000 in the TVET system ${ }^{90}$.

Figure 13 Gross enrolment by province


Calculation of the Gross Enrolment Ratio becomes complicated due to lack of school-age population data. The above table shows the GER based on UNDP's estimates of population in

[^33]2011, and actual school enrolment with permanently absent students excluded ${ }^{91}$. Overall GER for all levels is $67 \%$ (boys $80 \%$, girls $53 \%$ ). For primary level, the GER is $79 \%$ overall ( $92 \%$ boys, $66 \%$ girls); the same figure for the secondary level is $36 \%$ only ( $45 \%$ boys, $26 \%$ girls). The variation ranges from $16 \%$ to $97 \%$ across provinces. We can also see that in Nuristan and Nangarhar, GER is above $90 \%$, which suggests that the reliability of the estimate could be questioned.

Figure 14 Evolution in enrolment at various levels 1380/2001-1392/20132


92
The graph above shows enrolment rates at pre-primary, primary, lower secondary, and upper secondary levels between 2001 and $2013^{93}$. The growth in enrolment in primary education accelerated between 2001 and 2005, and then slowed down.

GER is high for males at all grade levels. We can also see that GER increases till the end of primary school, and then suddenly drops. We cannot tell, however, whether the surge in 5 th grade is due to repetition. Furthermore, only a certain portion of the students in each grade will be of the appropriate age group, so GER does not give us a complete picture of enrolment. For instance, according to the EMIS data, there were 1.3 times as many children of age 6 in Grade 1 as there were of age $7^{94}$ (see heat-map based on EMIS data showing age-distribution against the grades below $)^{95}$.

Figure 15 Gross enrolment by grades 1392/2012

[^34]Gross Enrollment Ratio across Grades (2012)


SECTION 2: SCHOOL COVERAGE: SCHOOLING PROFILES, SCHOOL LIFE EXPECTANCY AND EDUCATION PYRAMIDS

## SECTION 2: SCHOOL COVERAGE: SCHOOLING PROFILES, SCHOOL LIFE EXPECTANCY

### 2.2.1 Schooling Profiles and Retention

Repetition is an important indicator of the performance of a schooling system. Though detailed repetition rates at grade level were not available to the ESA Team, we have used the EMIS dataset to estimate the average repetition rate in GE for 2013 and 2014. Repetition data was not available for years before this. We assume that the repetition rate and the new-enrolment rate is the same across grades for the calculations that follow. However, this is not a sound assumption, so the resultant figures should be considered rough estimates.

Figure 16 Enrolment by grade 1390/2011-1393/2014


In the figure above, we plotted the total enrolment (new enrolments as well as repeaters) in each grade level for the years 2001-2014 to get a cross-sectional schooling profile for each of the years. We see a steady drop in enrolment as we move to higher grades. This is true for all years. This is indicative of high drop-out and repetition in the GE schooling system. By assuming a constant new-enrolment rate at each grade, we were also able to get rough estimates for the effective promotion rate of different grades, which is defined as the number of non-repeaters in a grade in a given year divided by the number of non-repeaters in the previous grade in the previous year.

Figure 17 Effective Promotion by Grade


The effective promotion rate for males is in general is over $75 \%$, and that for females is generally over $65 \%$. We should keep in mind that this does not reflect the high repetition rate, as only nonrepeaters are considered in the calculation. The rate declines as we move up the education ladder till the 10th grade, and then increases (more sharply for females than for males).

### 2.2.2 School Life Expectancy (SLE)

Another indicator, which can reveal important features of the education system is the School Life Expectancy (SLE). School life Expectancy is the average number of schooling years the children of a given country may hope to complete (repeated years are not included) given the prevailing conditions offered by an education system ${ }^{96}$. In Afghanistan the average number of student school years increased by almost half a year over three years.

Table 14: School Life Expectancy

| Year | Total Enrolment | Population of school-going <br> age | AER | SLE |
| :--- | :--- | :--- | :--- | :--- |
| 2012 | $7,779,101$ | $10,252,571$ | 0.76 | 9.12 |
| 2013 | $8,203,724$ | $10,500,035$ | 0.78 | 9.36 |
| 2014 | $8,583,706$ | $10,750,936$ | 0.80 | 9.6 |

The table shows that SLE has increased about 6 months between 2011 and 2014, though it still remains low. Overall, there has been a definitive increase in enrolment. Nonetheless, it is also evident that students do not easily graduate into higher grades, especially after primary education.

The figure below shows the school-life expectancy by sex at national level and for urban and rural populations ${ }^{97}$. If current attendance ratios were maintained, a six-year old child could expect to remain in education for 7.7 years, an average that is built up from an expected 4.2 years in primary education, 3.0 years in secondary and 0.6 years in tertiary education. Boys could expect to stay in education for 9.5 years, 1.7 times longer than girls, for whom the school-life expectancy is 5.6 years.
The urban school-life expectancy of 12.4 years for boys is much higher than the rural version (8.5 years). The figure also indicates that the gender disadvantage for girls is larger in rural areas, both in absolute and in relative terms. On average, a rural girl could only expect to be in education for 4.3 years.

[^35]Figure 18 School-life expectancy for (a) total, (b) urban and (c) rural populations, by sex (in years) ${ }^{98}$


Table 15 Heat Table: Percentage of Population of each age attending school
Percentage of the Population of Each Age (5-24) Attending School (1-12 Grade)

| Age | Not Attending | Grade 1 | Grade 2 | Grade 3 | Grade 4 | Grade 5 | Grade 6 | Grade 7 | Grade 8 | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 88.9 | 5 | 4.9 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6 | 68.2 | 11.7 | 14.7 | 4.5 | 0.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7 | 53.4 | 8.7 | 20.4 | 12.6 | 4.2 | 0.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | 47.8 | 3.4 | 16.9 | 17.4 | 10.3 | 3.1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9 | 41.3 | 1.8 | 9 | 17.3 | 15.7 | 9.4 | 4.3 | 1 | 0 | 0 | 0 | 0 | 0 |
| 10 | 41.6 | 0.7 | 4.9 | 12.2 | 15.6 | 14 | 8.4 | 2.6 | 0 | 0 | 0 | 0 | 0 |
| 11 | 37.7 | 0.8 | 2.7 | 6.8 | 12.4 | 15.1 | 14 | 6.9 | 2.5 | 0.9 | 0 | 0 | 0 |
| 12 | 44.6 | 0.3 | 1.3 | 3.6 | 7.5 | 10.4 | 12.3 | 9.5 | 7.5 | 2.4 | 0.6 | 0 | 0 |
| 13 | 49 | 0.1 | 0.6 | 1.5 | 3 | 6.4 | 9.9 | 10.8 | 10.7 | 5 | 2.1 | 0.7 | 0 |
| 14 | 51.4 | 0.1 | 0.1 | 1.1 | 1.7 | 3.7 | 7.6 | 8.1 | 12 | 8.5 | 3.6 | 1.6 | 0.3 |
| 15 | 56.9 | 0 | 0.2 | 0.2 | 0.9 | 1.5 | 3.3 | 6.3 | 9.4 | 9.7 | 6.3 | 3.8 | 1.3 |
| 16 | 61.5 | 0 | 0 | 0.2 | 0.7 | 1 | 1.7 | 2.9 | 6 | 7.2 | 8.6 | 6.6 | 2.8 |
| 17 | 66 | 0 | 0.1 | 0.1 | 0.3 | 0.7 | 0.9 | 2.5 | 3.6 | 6.2 | 7.1 | 6 | 5.1 |
| 18 | 72 | 0.1 | 0.1 | 0.1 | 0.1 | 0.7 | 1 | 0.9 | 2.1 | 3.4 | 5.5 | 4.9 | 6.5 |
| 19 | 82.6 | 0 | 0 | 0.2 | 0 | 0.1 | 0.5 | 0.6 | 1.5 | 2 | 2.3 | 3.8 | 3.9 |
| 20 | 84.9 | 0 | 0 | 0 | 0 | 0.2 | 0.3 | 0.7 | 0.5 | 1.2 | 1.5 | 3 | 3.4 |
| 21 | 84.9 | 0 | 0.1 | 0.1 | 0 | 0.1 | 0.2 | 0.4 | 0.3 | 1 | 1.3 | 3.3 | 4 |
| 22 | 90.9 | 0 | 0 | 0 | 0 | 0.1 | 0.5 | 0.3 | 0.3 | 0.5 | 1 | 0.9 | 2 |
| 23 | 90.7 | 0 | 0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.1 | 0.4 | 0.4 | 0.4 | 1.2 | 1.9 |
| 24 | 99.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 | 0.1 |

Note: Percentages might not add up to 100 due to omission of some categories.
At age $7,20 \%$ of the enrolled population is one grade above the official grade level (1st grade) suitable for their age. By age 11, only $14 \%$ are enrolled one grade above the official grade level5th grade. We can also see that over $80 \%$ of people who are 19 years and above are out of school. Virtually everybody is out of school by the age of 24.

### 2.2.3 Education Pyramids

For each ten students, who start in grade one, less than six make it to the end of grade six and only two make it to the end of grade 12. The education pyramid below shows how the number of students enrolled at each level of education drops as we move from lower to higher grades. The

[^36]numbers are national averages based on actual enrolment figures from EMIS and they do not reflect rural-urban disparities (for this, please refer to chapter 6 on Equity). Only 59\% of the number of students enrolled in first grade is in the schooling system at the end of primary school. This number decreases continuously until twelfth grade, where only $18 \%$ of the number of students in first grade is enrolled ${ }^{99}$.

Figure 19 Education Pyramid

Education Pyramid: Enrollment by Theoretical Age


## SECTION 3: THE SUPPLY AND DEMAND ISSUES ON ACCESS AND RETENTION

### 2.3.1 Access-Related Supply and Demand

In 2012, 618 new schools were built increasing the number of GE schools from 14,071 (in 2011) to 14,693 (in 2012) ${ }^{100}$. In 2015, however, the total number of schools was $15,2499^{101}$ suggesting a much slower pace of construction, less than 200 schools per year. In $201542 \%$ were primary, 26\% lower secondary, and $32 \%$ upper secondary. $34 \%$ were boys' schools, $16 \%$ were girls' schools, and $48 \%$ were mixed schools ${ }^{102}$. There has also been significant recruitment of teachers over the years. Between 2001 and 2013, 187,000 teachers were recruited, $70 \%$ of whom teach at the primary level. ${ }^{103}$

[^37]Table 16 Percentage of children of primary school age attending primary or secondary school (ANAR) ${ }^{104}$

| Percentage of children of primary school age attending primary or secondary school (adjusted net attendance ratio), Afghoniston, $2010 / 11$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male |  | Female |  | Total |  |
|  | Net attendance ratio (adjusted) | Number of children | Net attendance ratio (adjusted) | Number of children | Net attendance ratio (adjusted)' | Number of children |
| Region |  |  |  |  |  |  |
| Central | 87.6 | 1.361 | 67.4 | 1.278 | 77.9 | 2.639 |
| Central Highlands | 83.1 | 302 | 71.8 | 312 | 77.4 | 614 |
| East | 67.2 | 1,221 | 41.8 | 1.040 | 55.5 | 2,261 |
| North | 65.0 | 1.269 | 56.8 | 1,229 | 60.9 | 2,499 |
| North East | 65.5 | 1,380 | 51.0 | 1.328 | 58.4 | 2,708 |
| South | 28.6 | 1.496 | 13.5 | 1,215 | 21.9 | 2,710 |
| South East | 66.1 | 1.138 | 30.4 | 857 | 50.8 | 1.996 |
| West | 60.2 | 1,306 | 50.8 | 1.165 | 55.8 | 2,471 |
| Residence |  |  |  |  |  |  |
| Urban | 82.5 | 1,605 | 72.8 | 1,527 | 77.8 | 3,133 |
| Rural | 58.9 | 7.868 | 40.6 | 6,897 | 50.4 | 14.766 |
| Age at beginning of school year |  |  |  |  |  |  |
| 7 | 50.8 | 1.913 | 41.4 | 1.824 | 46.2 | 3.737 |
| 8 | 55.4 | 1.430 | 48.3 | 1.259 | 52.1 | 2,690 |
| 9 | 67.9 | 1,878 | 47.8 | 1.639 | 58.5 | 3,516 |
| 10 | 66.0 | 1.178 | 48.5 | 924 | 58.3 | 2,102 |
| 11 | 72.8 | 1.707 | 50.3 | 1.480 | 62.3 | 3.187 |
| 12 | 65.7 | 1,367 | 44.3 | 1,298 | 55.3 | 2,665 |
| Mother's education |  |  |  |  |  |  |
| None | 60.8 | 8.807 | 43.2 | 7.766 | 52.6 | 16,572 |
| Primary | 88.8 | 311 | 79.7 | 319 | 84.2 | 630 |
| Secondary + | 93.7 | 349 | 90.6 | 336 | 92.2 | 685 |
| Wealth index <br> quintile |  |  |  |  |  |  |
| Poorest | 48.3 | 2.065 | 30.1 | 1.750 | 40.0 | 3.815 |
| Second | 55.2 | 1.900 | 37.5 | 1.620 | 47.0 | 3.521 |
| Middle | 59.8 | 1.927 | 39.4 | 1.663 | 50.4 | 3.589 |
| Fourth | 69.5 | 1.812 | 52.5 | 1.701 | 61.2 | 3,513 |
| Richest | 84.8 | 1.769 | 72.8 | 1.690 | 79.0 | 3.459 |
| Total | 62.9 | 9.474 | 46.4 | 8,424 | 55.2 | 17.898 |
| ${ }^{1}$ MICS indicator 7.4; MDG indicator 2.1 |  |  |  |  |  |  |

## Primary school attendance

Table 16 shows the percentage of children of primary school age (7-12 years) who are attending primary or secondary school ${ }^{105}$. Only $55 \%$ of children of primary school age (7-12) are attending school. In urban areas, $78 \%$ of children attend school while in rural areas attendance is only $50 \%$. The proportion of children attending primary or secondary school increases with the child's age up to the age of 11. Attendance starts to decrease from age 12. Primary school attendance shows

[^38]significant variance between children living in the poorest households (40\% attendance) and those living in the wealthiest households (79\% attendance).

## Community-Based Education (CBE)

Community-based education (CBE) is an approach to expanding access to education in remote rural communities, which are beyond the reach of the official MOE system. Hallmarks of the CBE approach are schools that are close to children's homes, taught by local teachers who are known by the community, attention to process and maintenance of standards like starting on time etc. Supported by NGOs CBE has offered primary early education grades $1-3$ to about 200.000 children over the last six years. In 1394 the total number of CBE students were 234.330 (158.304 boys, 76.026 girls), while in the previous year the number had dropped to 197.945 equivalent to $2,3 \%$ of the number of General Education students ${ }^{106}$. The proportion of girls in CBE classes has shown a steady decrease from $56 \%$ in 1390 to $48 \%$ in 1394, except in 1393/2014, where the proportion of girls was 64\%.

MOE has developed a CBE policy, which lists the options for "handover" of NGO run CBE classes to the government. It contains three scenarios: 1) A new MOE primary school opens in the village;
2) An outreach class or satellite school linked to an MOE hub school continues in the village, and
3) The CBE class closes down and students are transferred to the nearest hub school for grades 1-3.
Examples of scenarios one and two are extremely rare. In most cases MOE terminated the community-based classes and transferred the students to an existing MOE school. The results have been devastating: virtually all girls and most boys, especially boys younger than grade 5 or 6 drop out when handover involves transfer to an MOE school as little as 3 kilometres away ${ }^{107}$.

The findings suggest that handover dropout is not related to resistance to girls' education per se or to suspicions regarding government provided education. Parents are positive towards girls' education, also at higher grades, and MOE schools are perceived as an avenue towards higher grades and $\mathrm{HE}^{108}$.
Some CBE representatives indicated that MOE seems to regard CBE as a competition to the public schools instead as a response to problems that are common in rural areas.

Research in the CBE approach ${ }^{109}$ suggests that it holds significant potential for addressing key challenges in promoting access, retention and improving learning for children in remote communities. CBE totally eliminates gender disparity in attendance and significantly reduces the gender gap in achievement, while the quality of CBE was found to be similar to government run schools ${ }^{110}$.
In their analysis of community-based schools Byrde et al $2015^{111}$ found that the demand for education was found to be universally high for both boys and girls and most parents want their

[^39]children to continue formal schooling through university or high school. They also found that the demand for schooling was consistently high irrespective of the variation in institutionalization of education following on the introduction of CBE classes.
The findings suggest that sustainability, "institutionalization ", of CBE is almost exclusively related to supply-side factors (teacher recruitment strategies ${ }^{112}$ and capacity and motivation of MOE administrative staff at District and PED level) and that more knowledge is required to determine what strategies might best ensure a sustainable CBE supply at village level.
There is little doubt, however, that the provision of education in close proximity to children's' homes, one of the hallmarks of the CBE approach, is critical for improving equitable access, retention and learning achievement for children in remote villages. So far, no needs identification or systematic school mapping related to CBE has taken place at the macro level. While PEDs are reported to request DEDs to assess the needs for CBE, such assessments are deemed to be inaccurate and impressionistic.

In light of the experience so far and the promising potential of CBE, the current CBE policy should be reviewed in order to facilitate that CBE is better integrated in MOE provision of education in remote rural communities.

## Islamic Education

The total number of students enrolled in Islamic education in 1394/2015 was 312,093 ${ }^{113}$, a $4 \%$ increase from 1393/2014, where it was 299,693. This number constitutes $3.3 \%$ of total enrolment in all MOE programmes. 175,669 students were enrolled at Madrasas, which accounted for 58.6\% enrolment in Islamic education. Darul Hifaz, the mid-level education, accounted for 19.9\% and Darul Uloom, the highest, for $21.5 \%$. Female enrolment in Islamic education on average was 22,0\% with 20,3\% in Madrasas and 25,2\% at Darul Hifaz level.
According to MOE first Five Year Strategic Plan from 1385/2006 improvement and development of Islamic Education is a part of the Islamic Republic of Afghanistan's program for human capital development and it is seen as an effort to build a nation state grounded in modern and tolerant Islamic principles.
The major role of Islamic education in overall education is Mosque-based preschool education, which by far is the largest provider of systemic education at this level. More than 1.1 million children attended Mosque based education in 2013 against an estimated 40,000 in non-Mosque based education. Mosque based education and learning processes, however, are not considered adequate to qualify as ECD according to EFA sources.

## Secondary School Attendance

The secondary school net attendance ratio (NAR) is presented in the table below ${ }^{114}$. About $32 \%$ of secondary school age children are attending school. The secondary school NAR for girls (21\%) is more than two times lower than that of boys (43\%). The secondary NAR of rural secondary school age children is two times lower than their counterparts in urban areas. The attendance of secondary school children living in the poorest households is about four times lower than their counterparts living in the wealthiest households. Regional disparities in secondary NAR are significant. Attendance in the Southern region (12\%) is the lowest among all eight regions and about five times lower than attendance in the Central region (51\%), where it is the highest. About one in ten (9\%) children of secondary school

[^40]Table 17 Secondary Net Attendance

|  | Male |  |  | Female |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Net aitendance rate endensted) | Percent atiending primary school | Number of chlidren | Net attendance rabo (idputed) | Percent attending prinary schooi | Number ar chedren | Net altendance ratio (adposted)' | Percent attending primary school | $\begin{aligned} & \text { Number of } \\ & \text { chilaren } \end{aligned}$ |
| Rogion |  |  |  |  |  |  |  |  |  |
| Central | 458 | 6.6 | 1,272 | 36.0 | 68 | 1.337 | 505 | 6.6 | $2.80 \%$ |
| Centrai Highiends | 54.1 | 16.3 | 232 | 33.8 | 15.2 | 256 | 43.4 | 15.8 | 488 |
| East. | 49.5 | 13.4 | 812 | 130 | 43 | 697 | 320 | 43 | 1,539 |
| North | 429 | 124 | 1,083 | 270 | 6.6 | 1.011 | 352 | 9,6 | 2094 |
| North East | 40.4 | 12.6 | 1,177 | 237 | 6.2 | 1.256 | 31.8 | 3.3 | 2.433 |
| South | 19.0 | 32 | 1.477 | 3.0 | 1.1 | 1.123 | 12.1 | 23 | 2600 |
| Sounh East | 57.4 | 127 | 916 | 153 | 3.6 | 721 | 38.8 | 4.7 | 1,637 |
| West | 297 | 17.1 | 989 | 185 | 13.8 | 94 | 24.2 | 15.5 | 1.972 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urtan | 618 | 8.4 | 1,469 | 40.6 | 58 | 1.407 | 353 | 7.4 | 2876 |
| Qurai | 38.5 | 11.0 | 6589 | 145 | 6.6 | 5.937 | 27.1 | 8.9 | 12.456 |
| Age at beginining of school year |  |  |  |  |  |  |  |  |  |
| 13 | 35.3 | 28.6 | 1,308 | 24.0 | 15.3 | 1,482 | 29.3 | 215 | 2790 |
| 14 | 428 | 17.6 | 1.400 | 225 | 98 | 1.103 | 34.2 | 14.2 | 2.582 |
| 15 | 48.4 | 76 | 1.485 | 240 | 4.6 | 1.397 | 36.9 | 6.2 | 2802 |
| 16 | 47.6 | 4.1 | 979 | 22.1 | 32 | 976 | 34.9 | 3.6 | 1.955 |
| 17 | 440 | 2.4 | 1.799 | 120 | 1.7 | 1590 | 31.8 | 21 | 3.390 |
| 18 | 36.8 | 2.1 | 938 | 16.2 | 2.1 | 875 | 25.9 | 2.1 | 1814 |
| Mother's education |  |  |  |  |  |  |  |  |  |
| Nane | 40.9 | 15.1 | 4.895 | 20.1 | 8.9 | 4.319 | 31.2 | 122 | 9214 |
| Primary | 67.1 | 125 | 168 | 49.6 | 13.1 | 186 | 57.9 | 128 | 353 |
| Secontary * | 335 | 95 | 204 | 79.0 | 5.2 | 192 | 913 | 7.4 | 396 |
| Cambot be determised | 47.1 | 45 | 218 | a. 1 | 1.7 | 350 | 228 | 20 | 575 |
| Wealth index quintile |  |  |  |  |  |  |  |  |  |
| Poorest | 240 | 11.7 | 1.543 | 35 | 5.7 | 1.294 | 15.6 | 9.0 | 2897 |
| Secone | 326 | 10.2 | 1,496 | 10.9 | 56 | 1.350 | 223 | 8.0 | 2.946 |
| Midde | 37.0 | 11.4 | 1.589 | 13.8 | 60 | 1.452 | 26.4 | 80 | 3.041 |
| Fourth | 50.9 | 10.8 | 1.589 | 22.6 | 8.0 | 1.585 | 36.8 | 9.4 | 3.174 |
| Fxchent | 4.9 | 9.2 | 1772 | 463 | 6.4 | 1.663 | 35.9 | 7.9 | 3434 |
| Total | 42.8 | 10.5 | 7.958 | 21.1 | 6.4 | 7,343 | 324 |  | 15.372 |

115

## Private Education

In 1393/2014 the total number of students enrolled in private education programmes were $215,136 .{ }^{116}$ The majority of these, 202,787 were enrolled at General education level constituting $2.4 \%$ of the total GE level enrolment. The proportion of female students was almost $30 \%$.

A Ministry of Justice official gazette from 2007 regulates the establishment and operation of private educational institutions. All schools to be registered must follow the MOE standard curriculum and a district level MOE Officer supervises them on weekly basis. Private schools operate in Dari and Pashto but a few use English as a medium of instruction after grade 6. In major cities public schools often operate in three shifts while private schools operate with one shift from 07 AM - 01 PM. Parents' reasons for sending their children to private schools comprise better quality standards, better quality control and smaller classes.

Most private schools are commercial and collect fees from their students. Private school owners complain that MOE has restricted the yearly number of fees to 9 months, while their expenditure is for the whole year ${ }^{117}$.

[^41]So far, the role of private education in Afghanistan has been limited, and there is little academic research available. One study found that: "classroom facilities, parental involvement, completion of syllabi are better in private schools than public schools. In private schools, additional textbooks on science, computer and English language are taught" ${ }^{118}$. It further stated that "Private schools may be exploiting their teachers for giving them lesser salaries as compared to the teachers of the public schools. Private school teachers are paid less salary than the business value a private school may have; despite the fact that they teach for longer hours during the day."

In Higher Education the role of private universities is rapidly gaining ground. Their number now stands at 92 and they offer approximately $43 \%$ of all HE. While many welcome the advent of additional study opportunities, there are also concerns about quality. In a recent paper on Prospects and Challenges of Private Higher Education in Afghanistan ${ }^{119}$ the author argues that, against the backdrop of soaring demand and the inadequacies of the public sector, introducing private higher education seemed inevitable, and that the higher education sector is gaining strategic importance for the future of Afghanistan. This will have profound implications for the political stability, security and socio-economic development.

The expansion of the higher-education sector, however, has occurred faster than the development of the governance and institutional framework required. This has led to a lack of oversight and mutual 'jealous competition' instead of cooperation between state sector and private sector as well as partly very low teaching standards.

The paper cautions that the weak governance and regulatory environment is also allowing religious and political stakeholders to compete, with their own private institutions, for young Afghans' 'minds' with partly extreme views, influencing the future direction of the country's rapidly expanding intelligentsia. For these institutions, the nature and quality of education are secondary to their political and ideological goals.

## Early Childhood Development (ECD) and Preschool

In Afghanistan, attention to ECD or Early Childhood Care and Education ECCE has, so far, been negligible. Only $1 \%$ of children aged 36-59 months are attending pre-school in Afghanistan. Urbanrural and regional variances are significant. The attendance figure is eight times higher in urban areas as compared to rural areas. Among children aged $36-59$ months, pre-school attendance is more prevalent in the Central region (3\%), and lowest in the South East region (almost 0\%). No gender differential exists, but differentials by socioeconomic status are significant. Almost 4\% of children living in the wealthiest households attend pre-school, while the figure drops to $0.2 \%$ in the poorest households. The most significant background characteristics determining difference in children attending early childhood education is found in the mother's education level. For instance, pre-school attendance is $9 \%$ among the children of mothers with secondary education or higher, compared with less than $1 \%$ for the children of mothers with no education.
Systematic preschool programmes have been shown to improve learning. An evaluation of a preschool program for children from 5-7 years of age ${ }^{120}$ showed significant results in improving school readiness skills of children prior to grade 1 ( 31 percentage points in mean scores of preschool children relative to control group) and in superior learning achievement of first grade

[^42]children in comparison to children who had not attended preschool (16 percentage points higher mean scores).

## 2. 3.2 Retention-Related Supply and Demand

Survival Rate
Ideally, an education system should assure that all students who start primary school graduate at the end of the last grade of primary education. The system's capacity for retention of pupils and overall efficiency is measured by calculating the percentage of pupils starting grade one who reach last grade of primary education. This survival rate to the last grade of primary education is of particular interest for monitoring the target for MDG 2, Achieve universal primary education. For Afghanistan the ANDS indicator is not defined as reaching the last grade of primary education, but grade 5 (Government of Afghanistan 2009).

Figure 20: Percentage of Students reaching grades 5 and 6 of Primary Education

| ANDS indicator 3.b ${ }^{\text {TI }}$ <br> Percentage of pupils starting grade one who reach grade 5 of primary education ${ }^{\text {T }}$ |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| $\rightarrow$ | Both | es | 86.7 T |
|  | Boys | $\rightarrow$ | 87.1 T |
|  | Girls | $\rightarrow$ | 86.0 T |

MDG indicator 2.2 "
Percentage of pupils starting grade one who reach last grade of primary education ${ }^{\text {T/ }}$
$\rightarrow$ Both sexes $\rightarrow 84.2$ T
$\rightarrow$ Boys $\rightarrow 84.4 \pi$
$\rightarrow$ Girls $\rightarrow$ 83.9 ${ }^{\pi}$

Source: ALCS 2015
The percentage of children entering first grade who eventually reach the last grade of primary school (primary survival rate) is presented in the table below. The last grade of primary school in Afghanistan is Grade Six. Of all children starting Grade One, more than four in five (84\%) eventually reach the last grade. Note that this number includes children that repeat grades and that eventually move up to reach the last grade. Compared with primary NAR, it can be concluded that the majority of primary school age children who enrol in primary school are likely to remain in school until the last grade of primary school. There are no dramatic differences in the survival rates among girls and boys, or between rural ( $85 \%$ ) and urban areas ( $83 \%$ ). There is, however, some difference in the survival rate among children whose mothers have no education (85\%) compared to the children of mothers with primary education (90\%) or secondary education (90\%). Some differences among regions are found. The Central Highlands region (78\%) and the Western region $(78 \%)$ have the lowest survival rates while the Eastern region has highest survival rate ( $89 \%$ ).

Table 18 Children reaching last grade of primary school

| Percentage of children entering first grade of primary school who eventually reach the last grade of primary school (Survival rate to last grade of primary school). Afghanistan, 2010-2011 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percent attending grade I last school year who are in grade 2 this school year | Percent attending grade 2 last school year who are attending grade 3 this school year | Percent attending grade 3 last school year who are attending grade 4 this school year | Percent attending grade 4 last school year who are attending grade 5 this school year | Percent attending grade 5 last school year who are attending grade 6 this school year | Percent who reach grade 6 of those who enter grade I' |
| Sex |  |  |  |  |  |  |
| Male | 94.3 | 97.6 | 96.8 | 96.6 | 98.5 | 84.7 |
| Female | 94.4 | 97.6 | 98.1 | 95.9 | 97.2 | 84.2 |
| Region |  |  |  |  |  |  |
| Central | 95.3 | 98.0 | 96.7 | 96.6 | 98.0 | 85.5 |
| Central Highlands | 91.2 | 94.2 | 96.1 | 97.2 | 97.0 | 77.8 |
| East | 95.3 | 99.3 | 98.6 | 97.9 | 97.8 | 89.3 |
| North | 90.2 | 98.9 | 97.1 | 97.7 | 99.2 | 83.9 |
| North East | 95.7 | 98.2 | 97.1 | 98.1 | 96.8 | 86.6 |
| South | 100.0 | 98.3 | 96.2 | 92.7 | 99.2 | 86.9 |
| South East | 94.7 | 98.1 | 98.3 | 96.1 | 98.0 | 86.1 |
| West | 93.1 | 93.7 | 97.6 | 93.1 | 98.5 | 78.1 |
| Residence |  |  |  |  |  |  |
| Urban | 95.1 | 96.1 | 96.0 | 96.4 | 98.1 | 83.0 |
| Rural | 94.1 | 97.9 | 97.7 | 96.3 | 98.1 | 85.0 |
| Mother's education |  |  |  |  |  |  |
| None | 94.1 | 97.6 | 97.3 | 96.6 | 98.7 | 85.2 |
| Primary | 95.2 | 98.8 | 98.7 | 97.5 | 99.4 | 89.9 |
| Secondary + | 97.1 | 97.4 | 97.6 | 99.1 | 98.8 | 90.4 |
| Wealth index quintile |  |  |  |  |  |  |
| Poorest | 92.4 | 97.4 | 96.4 | 97.2 | 98.5 | 83.0 |
| Second | 95.8 | 97.0 | 96.9 | 97.7 | 98.0 | 86.3 |
| Middle | 93.2 | 98.5 | 98.1 | 95.8 | 98.1 | 84.6 |
| Fourth | 95.0 | 98.5 | 98.2 | 94.3 | 97.7 | 84.7 |
| Richest | 95.0 | 96.4 | 96.8 | 96.9 | 98.2 | 84.3 |
| Total | 95.0 | 94.5 | 97.1 | 93.0 | 97.8 | 84.1 |
| ${ }^{1}$ MICS indicator 7.6; MDG indicator 2.2 |  |  |  |  |  |  |

## Completion rate

The primary school completion rate is the ratio of the total number of students, regardless of age, entering the last grade of primary school for the first time, to the number of children of the primary graduation age at the beginning of the current (or most recent) school year. Age 13 is used as the primary school graduation age in Afghanistan in this report.

Table 19 Primary school completion and transition to secondary school ${ }^{121}$

[^43]Primary school completion rates and transition rate to secondary school, Afghanistan, 2010-2011

|  | Primary school completion rate' | Number of children of primary school completion age | Transition rate to secondary school ${ }^{2}$ | Number of children who were in the last grade of primary school the previous year |
| :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |
| Male | 40.0 | 1.367 | 92.6 | 1.011 |
| Female | 20.8 | 1,298 | 93.5 | 516 |
| Region |  |  |  |  |
| Central | 45.7 | 436 | 96.8 | 323 |
| Central Highlands | 43.8 | 81 | 93.8 | 72 |
| East | 40.2 | 264 | 87.5 | 160 |
| North | 40.8 | 386 | 93.9 | 250 |
| North East | 21.0 | 486 | 93.0 | 241 |
| South | 17.0 | 424 | 97.5 | 94 |
| South East | 27.7 | 232 | 93.2 | 196 |
| West | 22.7 | 356 | 86.7 | 190 |
| Residence |  |  |  |  |
| Urban | 42.1 | 513 | 95.3 | 412 |
| Rural | 28.0 | 2,153 | 92.0 | 1.115 |
| Mother's education |  |  |  |  |
| None | 28.9 | 2,446 | 93.2 | 1.179 |
| Primary | 44.1 | 100 | 91.7 | 73 |
| Secondary + | 56.8 | 117 | 98.9 | 98 |
| Wealth index quintile |  |  |  |  |
| Poorest | 21.1 | 526 | 93.2 | 212 |
| Second | 25.9 | 521 | 94.2 | 230 |
| Middle | 26.2 | 527 | 92.6 | 243 |
| Fourth | 37.8 | 498 | 90.4 | 355 |
| Richest | 41.4 | 593 | 94.2 | 487 |
| Total | 30.7 | 2.665 | 92.9 | 1.527 |
| ${ }^{1}$ MICS indicator 7.7; ${ }^{2}$ MICS indicator 7.8 |  |  |  |  |

As shown in the table above, at the time of the survey, the primary school completion rate was $31 \%$. The primary school completion rate for girls ( $21 \%$ ) is almost twice as low as that for boys $(40 \%)$. The table points to a significant difference in the primary school completion rate in rural areas ( $28 \%$ ) compared to urban areas ( $42 \%$ ). Striking disparities are seen in the rates by region. The primary school completion rate in Southern region is the lowest (17\%), while the highest is found in the Central region ( $46 \%$ ). Children living in the poorest households are more than twice as likely to not complete their primary education (21\%) by the appropriate age than their counterparts living in the wealthiest households ( $41 \%$ ). The mother's education level also seems to impact this indicator. Only $29 \%$ of children aged 13 years whose mother has no education had completed primary education, in comparison with $57 \%$ of those children whose mother has secondary education or higher.

A majority of the children (93\%) who successfully completed the last grade of primary school were attending the first grade of secondary school at the time of the survey. The AMICS found no significant differences in the transition from primary to secondary school between girls (94\%) and boys ( $93 \%$ ), and only minor differences in rural areas (92\%) from urban areas ( $95 \%)^{122}$.

[^44]
## Dropouts

The percentage of school starters who drop out before reaching grade six largely complements the survival rate. Overall, $14 \%$ of children who started primary school dropped out before the final level. There is little difference between urban and rural drop-out rates, but girls seem to drop out somewhat more often than boys ( $14.6 \%$ against $13.6 \%$ ). Grade-by-grade drop-out rates tend to increase by advancement in primary school.

Table 20 Education transition indicators, by sex and by residence (in percentages) ${ }^{123}$

| Sex and residence | Percentage of pupils starting grade 1 who reach |  | Percentage dropped out before reaching grade 6 | Primary completion rate | Transition rate to |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | secondary school |  | tertiary <br> education |
|  | grade 5 | grade 6 |  |  |  |
| Total | 86.7 | 84.2 | 14.0 | 50.2 | 96.5 | 59.8 |
| Boys | 87.1 | 84.4 | 13.6 | 58.1 | 96.7 | 61.2 |
| Girls | 86.0 | 83.9 | 14.6 | 40.3 | 95.9 | 57.4 |
| Urban | 85.7 | 82.3 | 14.3 | 67.6 | 96.4 | 65.6 |
| Rural | 87.2 | 85.2 | 13.8 | 44.8 | 96.5 | 53.2 |

As previously noted, CBE handover dropout is very severe when CBE classes are closed down and students transferred to MOE hub schools. Distance is the main reason. The correlation between distance, enrolment, retention and learning achievement is discussed in chapter 4.

## 2. 3.3. Systemic bottlenecks: Quantifying the supply and demand issues related to transition to post secondary education.

Since 2001, there has not only been an increase in enrolment at the primary and secondary levels, but at the higher-education level as well. The chart below shows the evolution of enrolment at higher education institutions from 1371/1992-1392/2013 with a dramatic increase from the historic low in 1380/2001 under the Taliban regime. ${ }^{124}$

While the primary and secondary levels have received attention, the capacity of higher education has not grown in order to accommodate the students leaving secondary education. There are many systematic hindrances. The MoHE has faced bottlenecks in the flow of funds. Construction of new facilities has not occurred at the necessary pace. Universities are forced to double their shifts, which leads to professors taking more classes, but having less time to advise students. Thus the quality of university education has decreased. This is all in the context of a highereducation system where only $5 \%$ of professors have PhDs; $36 \%$ have master's degrees. ${ }^{125}$ Furthermore, some students who pass the Kankor exam with low scores re-take it in the hopes of getting higher scores, which is required to get admission into engineering and medical schools. This causes undue Strain on the resources required to administer exams. Some students with lowscores might join Teacher Training College (TTC) or TVET programs while they prepare to re-take the exams. In case they get better scores, they might switch to another stream of education, which

[^45]
## is again a waste of TTC and TVET resources. ${ }^{126}$

Figure 21 Enrolment at Public Universities and Higher Education Institutions 1371/1992-1392/2013
Enrollments at Public Universities and Higher Education Institutions: 1992-2013


The available further education opportunities for secondary school leavers are grossly inadequate to the needs. There is a steady increase in the number of students reaching the highest grades of secondary education, and there is growing demand for higher education from young Afghans. In the five years from 1387 (2008) to 1393/2014 (2014) enrolment at grade 12 almost quadrupled from 81,553 students to 299,325 and most of these want to enrol at higher education institutions.

Admission to higher education institutions, however, is severely restricted. In 2015, 219,145 students had participated in Kankor examination. Of these only 54,737 or $25 \%$ of high school graduates managed to pass the entry test for governmental higher education institutes while 36,750 others would be enrolled in semi-higher education governmental institutes. Further, 27,000 high school graduates would be enrolled to private higher education institutes ${ }^{127}$. The total number of graduates in $1393 / 2014$ was 290,450 , which means that a total of 171,963 students, more than half of 1393/2014 school graduates, were forced to look elsewhere for alternative education, training and job opportunities.

## Higher Education

Currently, the number of public and private higher education institutions stands at 126. This is mainly due to a massive growth in the number of private institutions. In response to the rising demand their numbers grew 46 times from 2 in 1385/2006) to 92 in 1393/2014.

[^46]Table 21 Growth of Public and Private Higher Education Institutions 2001 to 2014

| Year | 2001 | 2006 | 2012 | 2014 |
| :--- | :--- | :--- | :--- | :--- |
| Public | 6 | 19 | 31 | 34 |
| Private | 0 | 2 | 66 | 92 |
| Total | 6 | 21 | 97 | 126 |

Source: MoHE data
In 2001, the total percentage of college age students in higher education was less than 1\%, among the lowest in the world. By 2014, the percentage had increased to $9.6 \%$.

The total number of HE students increased from 120.000 to 300.00 in the three years from 1390/2011-1393/2014, more than $150 \%$.

Figure 22 Growth of Students in Public and Private Universities 2001 to 2014


Source MOHE data

## SECTION 4: INTERNAL EFFICIENCY

### 2.4.1 Repetition

We do not have enough data to accurately gauge how well the education system transitions students from one grade to another. We have enrolment data from EMIS available for only 3 years (2012-2014). The data on new enrolment at each grade is only available for 2 of those years (2013 and 2014), that too as an aggregate for grades 1-12. This means we cannot trace the movement of each cohort of students for more than 3 years, and certainly not at a grade level.

Figure 23: Percentage of Repeaters 1392/2013 and 1393/2014

## Percentage of Repeaters




Nevertheless, we were able to use the EMIS data to calculate the percentage of repeaters (difference between total enrolled and number of new students) in each province as shown in the chart above ${ }^{128}$. The average percentage of male repeaters was 87.9 in 2014 and 86.5 in 2013. The average percentage of female repeaters was 86.12 in 2014 and 84.38 in 2013. The proportion of both male and female repeaters increased from 2013 to 2014, but repetition is higher for male. It is possible that people repeat in order to get better marks on the Kankor exam. The teacher training route to go to higher education, rather than the TVET route, is considered more prestigious but is also requires higher Kankor marks. The percentage of female repeaters is particularly lower than percentage of male repeaters in Khost, Paktia, Paktika, and Zabul. This could also be explained by the fact that those females likely to repeat are not enrolled to begin with, as would be reflected by low female attendance.

School density is associated with a lower percentage of repeaters, but the correlation is weak. In figure 24 below we plotted the percentage of repeaters in each province against the number of schools per 1000 students. While there does not seem to be a stark correlation between these two factors, a higher number of schools per 1000 students is generally indicative of a lower percentage of repetition. In fact, about $19 \%(R 2=0.19)$ of the variation in the percentage of repeaters in the provinces is explained by the density of schools alone.
Figure 24 Percentage of Repeaters against Number of Schools per 1000 Students

[^47]

### 2.4.2 Internal Efficiency Coefficient

The coefficient of efficiency is defined as the ideal (optimal) number of pupil-years required (i.e. in the absence of repetition and dropout) to produce a number of graduates from a given schoolcohort for a cycle or level of education expressed as a percentage of the actual number of pupilyears spent to produce the same number of graduates. Input-output ratio, which is the reciprocal of the coefficient of efficiency, is often used as an alternative. N.B. One school year spent in a grade by a pupil is counted as one pupil-year. ${ }^{129}$ However, we were not able to calculate the IEC as the required data were not available.

## SECTION 5: OUT-OF-SCHOOL CHILDREN

### 2.5.1 Estimation of the Share and Number of Out-of-School

The MoE estimates that there are over 3.5 million children out of school. These are children who have never been to school. In addition, 1,080,692 students, $15 \%$ of the total number of students in 2011, were permanently absent according to the MoE. This is the total number of permanently absent students accumulated over the three years leading up to 2011, but who are still registered as enrolled. This allows us to estimate that about $5 \%$ of the total student population drops out of school every year. Afghanistan Swedish Committee estimates the rate to be closer to 7-8\%.

The school attendance information from the ALCS 2013-14 differs from that of $\mathrm{MOE}^{130}$. It indicates that an estimated 2.3 million primary school age children in Afghanistan never attended school. The large majority of these ( $90 \%$ or 2.0 million) are from the rural or Kuchi population. Girls are also overrepresented among the non-attenders, with 1.3 million not in school, compared to 977 thousand boys not attending. The absolute numbers of persons of secondary and tertiary education age who are not participating in education are in the same order of magnitude -2.0 and 2.3 million, respectively, due to the combination of lower attendance ratios at these levels and smaller base populations. Whereas the number of primary school age children who are attending education has remained stable since 2011-12, the number, who are not attending increased with 220 thousand.

[^48]
### 2.5.2 Who are the Out-of-School Children?

Reasons for non-attendance in education are a multi-facetted issue. It involves, among others, economic, cultural, security, health and distance considerations. ALCS 2013-14 collected information about persons in the eligible ages 6 to 24 who ever attended education, but no longer attended at the time of the survey. As can be seen in table 19 below, the reasons why persons dropped out from education vary considerably by age, residence and sex.

Table 22: Population 7-24 years not attending school, by school age, sex, and by residence, reason for not attending (in percentages) ${ }^{\mathbf{1 3 1}}$

| Residence, reason for non-attendance | School-age, sex |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Primary |  |  | Secondary |  |  | Tertiary |  |  |
|  | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female |
| National | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Economic reasons | 15 | 27 | 5 | 26 | 51 | 7 | 30 | 44 | 6 |
| Cultural reasons | 18 | 5 | 29 | 30 | 4 | 50 | 20 | 3 | 48 |
| Problems with school | 14 | 16 | 11 | 12 | 15 | 9 | 5 | 6 | 4 |
| Studied as far as needed | 3 | 3 | 2 | 8 | 9 | 6 | 21 | 23 | 19 |
| Child too young | 17 | 26 | 9 | 1 | 1 | 1 | 1 | 1 | 1 |
| Insecurity | 16 | 8 | 22 | 6 | 2 | 10 | 2 | 1 | 4 |
| Distance / access | 8 | 5 | 10 | 5 | 3 | 6 | 2 | 1 | 3 |
| Other reasons | 10 | 9 | 11 | 12 | 14 | 10 | 18 | 20 | 16 |
| Urban | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Economic reasons | 16 | 28 | 8 | 25 | 54 | 6 | 28 | 47 | 6 |
| Cultural reasons | 20 | 12 | 25 | 31 | 4 | 48 | 22 | 2 | 44 |
| Problems with school | 21 | 27 | 18 | 16 | 17 | 16 | 4 | 5 | 4 |
| Studied as far as needed | 2 | 4 | 0 | 7 | 6 | 8 | 23 | 24 | 21 |
| Child too young | 17 | 17 | 17 | 0 | 1 | 0 | 1 | 1 | 1 |
| Insecurity | 0 | 0 | 0 | 2 | 0 | 3 | 2 | 0 | 3 |
| Distance / access | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 |
| Other reasons | 25 | 12 | 32 | 18 | 17 | 19 | 20 | 20 | 20 |
| Rural | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Economic reasons | 15 | 28 | 5 | 26 | 50 | 7 | 31 | 42 | 6 |
| Cultural reasons | 17 | 3 | 30 | 30 | 4 | 52 | 19 | 4 | 52 |
| Problems with school | 10 | 11 | 9 | 10 | 14 | 6 | 6 | 7 | 4 |
| Studied as far as needed | 3 | 4 | 3 | 8 | 11 | 6 | 20 | 22 | 16 |
| Child too young | 18 | 31 | 7 | 2 | 2 | 2 | 1 | 1 | 1 |
| Insecurity | 21 | 11 | 30 | 9 | 3 | 14 | 3 | 2 | 5 |
| Distance / access | 9 | 5 | 12 | 7 | 4 | 9 | 2 | 1 | 5 |
| Other reasons | 6 | 7 | 4 | 8 | 12 | 5 | 17 | 20 | 11 |

Economic considerations figure importantly as the main reason for no longer attending school. Their prominence increases with the level of education: it was the main reason for $15 \%$ of primary school age children, but twice as high ( $30 \%$ ) for persons with tertiary education age. It is worth noticing that from the mentioned economic reasons, it was not so much direct costs that were mentioned, but foremost the need for the child to work. In economic terms, 'opportunity costs' -

[^49]income foregone if attending school - were more important than direct costs. This importance of opportunity costs was especially observed for males.

Physical access to schools does not figure prominently among reasons mentioned for no longer attending school. Obviously, problems with distance to school are mostly an issue in rural areas. The problem of distance or access is virtually absent in urban areas. Also, security considerations hardly figure in urban areas, but are a major concern for primary school children in rural areas: for more than one in five non-attenders ( $21 \%$ ) and for even $30 \%$ of non-attending primary school girls this was the major reason to drop out from school. The other main difference between urban and rural non-attendance is in the category 'Problems with school' for primary school age children. The difference can be traced back to the finding that children who "do not like school" or "do not learn enough" are mostly found in urban areas.
While security concerns are also obstacles for school attendance, they seem to be concentrated in primary school ages and especially among girls: overall, for $22 \%$ of girls aged 7 to 12 , this was the main reason to drop out from school. The targeted attacks on girls' schools and female pupils that occur across the country may play an important role for the observed gender difference.

In the ALCS 2015 two reasons for non-attendance that are closely related to age are the consideration that children are too young for school and the one that sufficient education has been obtained. The first is almost exclusively mentioned for primary school age children, but it is remarkable that many households consider the age of seven - and sometimes even higher ages too young to attend school. For around one in five persons aged 19 to 24 (21 \%), further schooling is not considered necessary. As can be expected, this figure is lower for children in secondary and primary school ages, 8 and $3 \%$, respectively.

We also used the previous NRVA dataset to explore why people stay out of school. Some of the main reasons are shown in figure 25 above ${ }^{132}$.
We found that about $20 \%$ of the population of age 18 or below who are out of school do not attend because their families do not allow them to.
What is more noteworthy, however, is the fact that the category "no school/school too far" is mentioned by $17 \%$ of respondents and in this data set comes in as the second most important reason.
This draws our attention to the importance of school accessibility, particularly in rural areas. About $80 \%$ of rural households are more than two kilometres away from the closest primary school!

[^50]Figure 25 Reason for not attending school


A GIZ-funded "Dropout Study" ${ }^{133}$ found that more than 500,000 young people between the ages of 15-19 are excluded from participation in TVET lessons. They encompass Illiterate young people and dropouts form the other subgroups. The reasons for non-attendance comprise insufficient educational entry qualifications but there are also private family reasons which hinder them from participating in schooling. The study found that the main reasons for dropping out or staying away from school were: facing family problems (13\%), taking on adult roles in youth (16\%) and insufficient financial means in the family leading to the need to work (71\%). The vicious cycle of illiteracy and poverty is obvious:

- The lower the education level of the father, the lower the family income.
- The lower the family income, the greater the pressure on young people to skip schooling.
- The level of education mainly depends on whether a family can afford to support a child that is not contributing to the family income.


[^51]
## Conclusions and Recommendations

## Conclusions

Afghanistan has made steady progress in reconstituting the education sector over the past decade. In general education enrolment rose from approximately 800,000 students, and very few girls, to 8.6 million in 1394/2015, 39 \% of whom are girls.
However, according to MOE about 1 million or $12 \%$ were "permanently absent".
The number of out of school children is estimated to be over 3.5 million.
Based on cohort analyses it was found that $59 \%$ of students, who start in grade one make it to the end of grade six, and only $18 \%$ make it to the end of grade 12.
The primary school completion rate is $31 \%$. Girls' completion rate ( $21 \%$ ) is about half of that for boys ( $40 \%$ ) and it is much lower in rural areas.
About 5\% of the total student population drops out of school every year.
There is a steady increase in the number of students reaching the highest grades of secondary education.
There is growing demand for higher education, but only $25 \%$ of high school graduates managed to pass the Kankor entry test for governmental higher education institutes.
School life Expectancy (SLE) is 9.6.
Overall attendance is low, only $55 \%$ of children of primary school age (7-12) are attending school, but this figure conceals huge disparities: $78 \%$ in urban areas, $50 \%$ in rural areas.
Attendance increases with the child's age up to the age of 11 and starts to decrease from age 12, and it shows significant variance between children from poorest households (40\%) and from the wealthiest households (79\%).
Secondary school attendance is $32 \%$ (girls $21 \%$, boys $43 \%$ ) and double as low in rural areas. Reasons for non-attendance in education are economic, cultural, security, health and distance considerations with economic considerations, mainly opportunity costs, figuring importantly as the main reason for no longer attending school.
Community-based education (CBE) is a promising approach to expanding access to education in remote rural communities beyond the reach of the official MOE system. The provision of education close to children's' homes is critical for improving equitable access, retention and learning achievement for children in remote villages.
Attendance in Early Childhood Development (ECD) is negligible (1\%) and average Preschool attendance is $13 \%$.
$95 \%$ of children with disabilities and special education needs (SEN) do not have access to school. There is no school or school is too far being mentioned as the second most important reason for non-attendance.
$80 \%$ of rural households are more than two kilometres away from the closest primary school! In TVET the country needs to find smart conceptual and institutional answers to the questions of how to integrate apprentices who have no access to TVET and illiterate young people whose families cannot afford to support children who do not contribute to the family income.
Integrating these marginalised groups means more than simply providing them with qualifications. The Afghan state needs to reach out to them.

## Recommendations

- Removal of "permanently absent" from enrolment registers would provide a more accurate account of number of students.
- The current CBE policy should be reviewed in order to facilitate that CBE is integrated in MOE provision of education in remote rural communities.
- Early Childhood Development (ECD) policy should be promoted.
- Focus on SEN through community campaigns, better training of teachers and inclusive education policy should be prioritised.
- Comprehensive school mapping should identify needs and priorities for rural school construction.
- Apprentices who have no access to TVET and illiterate young people whose families cannot afford to support children who do not contribute to the family income need teaching concepts adapted to their living conditions, and curricula which enables them to understand the society and culture in which they are living and prepare them for their future role as engaged political citizens of Afghanistan. This approach would also contribute to a higher integration level into Afghan society.


## CHAPTER 3 COST AND FINANCING

Introduction

The education sector is a key government priority. The demand for education at primary, secondary, teacher education, TVET and higher education levels has increased over the period 1390 to 1394 (2011-2015), with increases in student number in general education (primary and secondary) of $16 \%$, in teacher college students of $45 \%$, TVET student numbers over 80 percent and in public higher education the student numbers have increased by $125 \%$. While there has been an increase in the teacher numbers and schools, the increase has not kept pace with student expansion and the pupil teacher ratios (PTR) have risen.

The recurrent budgets and expenditure have increased over the period, though except for general education it has not kept pace with the increase in student number. While the decline in unit cost (current Afs per student) for some programs is slight, when the unit cost is presented in terms of percent of GDP per capita, there is a decrease across all programs. In both Ministry of Education (MOE) and Ministry of Higher Education (MOHE), the salary component dominated recurrent expenditure in total and per student, with very limited financial resources remaining for materials, operations and maintenance ( $\mathrm{O} \& \mathrm{M}$ ). The rising PTRs and low expenditure for non-salary costs, including $\mathrm{O} \& \mathrm{M}$, are major risks to both quality and delivery sustainability.

The government is heavily reliant on donor aid to fund the education sector. The donor ODA is used to finance the development budget, part of the operating budget and off-budget project interventions. Of the donor aid in the period 1391-1393 (2012-2014), it is estimated that only 25\% of the aid to MOE was on-budget, and with MOHE only $35 \%$ was on-budget134. This low level of on-budget support indicates that there are opportunities to improve aid effectiveness in the education sector.

The tight medium-term fiscal projections for the economy and education sector, reinforces the priority for both MOE and MOHE to undertake expenditure reviews to improve efficiency and cost effectiveness in service delivery, and as part of this process to assess and adopt viable alternate delivery modalities (contracted services and out-sourcing, means tested cost recovery on some user services, public-private partnerships, and expansion in private sector delivery, including low cost private schools).

## SECTION 1: PUBLIC EDUCATION EXPENDITURE

### 1.1 Government Spending

The education sector is a key government priority, and in 1394 (2015) it accounted for $14.1 \%$ of total government expenditure (excluding debt service), $15.5 \%$ of government recurrent expenditure, $10.3 \%$ of development expenditure and $3.7 \%$ of GDP. While the government has domestic revenue constraints, and is having to fund significantly higher security expenditure, education expenditure over the period 1390 to 1394 (2011-2015) has been at levels ranging from $14.1 \%$ to $15.8 \%$ of total government expenditure, and from $2.7 \%$ to $3.7 \%$ of GDP. Refer Figure 26.

Figure 26: Total National Education Expenditure

[^52]

Source: MOF Fiscal Bulletins and Budget Papers
Expenditure in the education sector has increased from 32.8 billion Afs to 44.4 billion Afs over the period 1390 to 1394 (2011-2015). The government education sector expenditure is predominantly for Ministry of Education (MOE) and Ministry of Higher Education (MOHE), and under this sector budget expenditure heading, funding is also allocated a number of other agencies (Ministry of Information and Culture, National Science Academy, General Directorate of Radio Television Afghanistan, and Olympic Committee). The data, as outlined below in Figures 27 and 28, and provided in detail in Annex Table 3.1B, indicates that MOE and MOHE in total accounted for $96 \%$ of the education sector expenditure in 1394 (2015), and in undertaking the allocation to schools and per pupil, it is only the expenditures from MOE and MOHE that are included in the estimates. The analysis is undertaken for the period 1390 to 1394 (2011 to 2015), with the more detailed analysis undertaken on 1394 (2015) data. The allocation of the education sector expenditure is analyzed across education sub-sectors and in terms of its use for recurrent and development expenditures.

Figure 27: MOE Proportion of Expenditure


Source: MOF Fiscal Bulletins

Figure 28: MOHE Proportion of Expenditure


Source: MOF Fiscal Bulletins
The data presented in this chapter has been sourced from a number of institutions: MOE (Education Management Information System (EMIS), Afghanistan Financial Management Information System (AFMIS)), Central Statistics Office (CSO) (NRVA, ALCS and statistics), Ministry of Finance (MOF) fiscal bulletins, budget papers and MOF donor assistance database, MOE and MOHE published reports, joint sector reviews and draft education strategic plans, IMF, and other development partner education sector documentation. A number of the reports have indicated issues with the reliability of some data sources and the need for improved collection methods. In some instances, due to the absence of detailed data, disaggregated analysis is not feasible, and where this occurs it is noted. One outcome is to illustrate where further studies and detailed assessment work is required. The detailed tables that have been prepared, are included in the Annex to this chapter. The MOE human resource and financial data does not allow separate assessment of primary and secondary student costs. MOE confirmed the key constraint is that a significant number of the schools are combined primary and lower secondary, or combined with both lower and upper secondary, and that there is teacher overlap across the levels. For this reason, primary and secondary schools are treated as one unit for the purpose of this analysis.

Table 23: Education Expenditure as a Share of Total Government Expenditure, and as percent of GDP in 2013 for Least and Lower Middle Income Countries

| Country | Expenditure <br> (\% of total Gov.) | Expenditure <br> (\% of GDP) | GDP per <br> capita <br> (current \$US) |
| :--- | :--- | :--- | :--- |
| Afghanistan | 14.2 | 3.5 | 648 |
| Bangladesh | 13.8 | 2 | 1,033 |
| Burundi | 17.2 | 5.4 | 303 |
| Chad | 12.5 | 2.9 | 1,176 |
| Cote d"lvoire (2014) | 20.7 | 4.7 | 1,403 |
| Guinea | 14.1 | 3.5 | 560 |
| India (2012) | 14.1 | 3.8 | 1,508 |
| Nepal | 21.4 | 4.1 | 692 |
| Pakistan | 11.5 | 2.5 | 1,275 |
| Rwanda | 16.6 | 5.3 | 696 |
| Sri inanka (2012) | 8.8 | 1.7 | 3,239 |
| Tajikistan (2012) | 16.4 | 4 | 1,047 |
| Timor-Leste (2014) | 7.8 | 7 | 4,164 |
| Togo | 17.2 | 4.4 | 638 |

As shown in Table 20 Afghanistan's education expenditure (MOE and MOHE) as a percent of total government expenditure of 14.2 percent ( 3.5 percent of GDP) is similar to that of a number of neighbouring countries, and in the mid-range of least and lower middle income countries ${ }^{135}$.

### 1.2 Evolution of Public Expenditure by Type of Spending

MOE Expenditure. In 1394 (2015) MOE total expenditure accounted for 87.2 percent of the education sector expenditure. Of the MOE's total expenditure it spent 83.4 percent on recurrent expenditure and 16.6 percent on capital/development expenditure. This high level of recurrent expenditure has been consistent over the period 1390 to 1394 (2011-2015), with four years being in the low 80 percent, and in one year (1391 (2012)) rising to 97.8 percent. Refer Annex Table 3.1B. On an annual basis the recurrent budget allocation is almost always fully utilized, while the development budget expenditure rate is consistently significantly lower, of the order of 50 percent. In 1393 (2014) it was 47 percent, while in 1394 (2015) it was lower at 34 percent. The low expenditure rate reflecting optimistic programming, contracting and implementation capacity constraints. The development budget includes a large carry forward of funds unspent that were programmed in the previous year, which is added to the new development funding in the current budget year.

Figure 29: MOE Expenditure by Nature


Source: MOE AFMIS and MOF Fiscal Bulletins
The salary share of the MOE recurrent expenditure has remained high, over 1390 to 1394 (20112015) ranging from 91 to 93 percent, and this has resulted in only a small amount remaining for expenditure on non-salary items, accounting for between 7 to 9 percent of total expenditures. Refer Annex Tables 3.2A and 3.2C. The breakup of these expenditures indicates that goods and services (which includes school teaching materials) has decreased over the period from 7.4 percent in 1390 (2011) to 2.9 percent of recurrent expenditure in 1394 (2015). Similarly, there is a very low allocation to operations and maintenance ( 0.7 percent in 1394 (2015)). Overall the expenditure pattern, indicates the salary component dominates with limited resources available for

[^53]technical materials, and sustainable maintenance of infrastructure. Figure 29 provides the breakup of total expenditure by year.

MOHE Expenditure. In 1394 (2015) MOE total expenditure accounted for 15.4 percent of the education sector expenditure. Of the MOHE's total expenditure it spent 68.1 percent on recurrent expenditure and 31.9 percent on capital/ development expenditure. This level of recurrent expenditure has been consistent, ranging between 66 to 78 percent over the period 1390 to 1394 (2011-2015). The salary share of the MOHE recurrent expenditure has ranged between 53 and 65 percent over the period 1390 to 1394 (2011-2015). Refer Annex Tables 3.2B and 3.2D. While this percentage is significantly lower than for MOE, there is a key difference, as public higher education institutions have to provide dormitories and meals to their students and this is a significant nonsalary expenditure (included under goods and services), which over the period 1390 to 1394 (2011-2015) accounted for 35 to 47 percent of total MOHE recurrent expenditures.

The MOHE National Higher Education Strategic Plan (NHESP) 2015-2020 draft (April 2015), indicated that the dormitory and subsistence expenses account for 20 to 35 percent of the recurrent budget. Only a small amount was detailed as expended on other non-salary items (assets), accounting for between 0.1 to 0.3 percent of total MOHE expenditures in 1392 (2013) and 1393 (2014). Overall the expenditure pattern indicates the salary and the goods and services (dormitories and meals) components dominate, with limited resources available for technical materials, and sustainable maintenance of infrastructure. Figure 30 provides the breakup of total expenditure by year.

Over the period 1390 to1394 (2011-2015), development expenditure accounted for between 22 to 32 percent of total MOHE expenditures. Similar to MOE, on an annual basis the MOHE recurrent budget allocation is almost always fully utilized. The development budget expenditure rate is consistently significantly lower. In 1394 (2015) it was higher than the previous year at 61 percent. The lower expenditure rate reflecting optimistic programming, contracting and implementation capacity constraints. The development budget allocation, as per MOE, has a large carry forward of unspent funds from the previous year that are included in the current year.

Figure 30: MOHE Expenditure by Nature


Source: MOF Fiscal Bulletins, MOF AFMIS, MOHE NHESP (April 2015) draft, MOHE communications
1.3 The Distribution of Spending Across Sub-Sectors

In 1394 (2015), MOE and MOHE accounted for 80.6 percent and 15.4 percent respectively of total education sector recurrent expenditure. Refer Figure 31. Over the period, 1390 to 1394 (20112015) recurrent expenditures have increased, for MOE from 22.9 billion Afs to 30.4 billion Afs, and for MOHE from 2.1 billion Afs to 4.7 billion Afs. During this time the number of students in public general and islamic education (primary and secondary) have increased from 7.5 to 8.7 million, for public TVET from 41,080 to 75,500, and for public higher education, from 77,340 to 174,270136.

Figure 31: MOE \& MOHE as \% of Total Education Recurrent Expenditure, 1394 (2015)

> MOE MOHE Other
$83.1 \% \quad 13.0 \% \quad 3.9 \%$

Source: MOF Fiscal Bulletins and Reports
While primary and secondary education dominates in terms of student numbers and expenditure, there has been a rapid expansion in higher education student numbers since 1390 (2011). In terms of the allocation of recurrent expenditures, over the period 1390 to 1394 (2011-2015) MOE recurrent expenditures declined slightly from 88 to 83.1 percent, while MOHE increased from 8.1 to 13 percent of total education sector recurrent expenditure.

Figure 32: MOE Recurrent Expenditure by Program, 1394 (2015)


```
m
# Curriculum Development and
    Teacher Training
|TVET
| Education Management
## General and Islamic Education
```

Source: MOE AFMIS and MOF Reports
The MOE implements five programs, and in 1394 (2015) each of the programs accounted for the following (as a percentage of MOE recurrent expenditure): general and Islamic education (which covers primary and secondary education) ( 85.5 percent); curriculum development and teacher training ( 3.3 percent); TVET (4.4 percent); literacy ( 1.9 percent) and education management (4.9 percent). MOHE implements one program for the public higher education institutions. Refer to Figure 32 and Annex Tables 3.3A and 3.3B for details.

[^54]
### 1.4 Detailed Analysis of Public Recurrent Expenditure for the Most Recent Year

In 1394 MOE had 258,438 staff137, consisting of 203,578 teaching staff (183,621 civil servants and 19,957 contract staff) and 54,860 non-teaching/ administration staff ( 16,768 civil servants and 38,092 contract staff). In total 78.8 percent of the MOE personnel are teachers and 21.2 percent are non-teaching/ administration staff. Refer Annex Table 3.4 for details.

With the five MOE programs, there is a range in the salary component (as a share of each program's total recurrent expenditure), while for general education and the literacy program approximately 95 and 92 percent respectively of their expenditure is on salary, with the other programs (TVET, curriculum development and teacher training, education management) have salary component ranging from 69 to 79.8 percent. The salary and non-salary components reflect both the program activities undertaken. Figure 33 provides a summary by program. Refer Annex Table 3.3 B for details.

For the curriculum development and teacher training program, this program includes both teacher training colleges and their students, as well as the MOE in-service teacher training courses for existing teachers to improve their skills. The non-salary component is higher as the colleges have to provide students with meals (i.e. food costs 9.9 percent of expenditures). MOE indicated all costs for in-service teacher training are funded under the ARTF donor and WB financed Education Quality Improvement Project (EQUIP), and that all recurrent costs detailed under this program relate to teacher training colleges. After accounting for food expenditures only approximately 10.3 percent remains for all other non-salary costs. In the TVET program the food costs account for 16.6 percent of total program recurrent expenditures, again reflecting student meal costs, and after this is included with salary expenditures it only leaves approximately 10.6 percent for all other nonsalary costs.

Figure 33: Distribution of Public Recurrent Education Expenditure (\%) by Function, 1394 (2015)


Source: MOE AFMIS and MOF Reports
With the literacy program there are two distinct sub-programs, literacy schools and literacy courses. Literacy schools consist of students studying from grade 1-12 in schools similar to general education schools, and in 1394 (2015) student number was 16,166138. The literacy courses are separate, and for a duration of 9 months, and are provided by a number of implementing partners. In the period 1390 to 1393 (2011-2014) over 500,000 students have undertaken these courses per year, MOE for example accounted for 23 percent of the students in

[^55]1390 (2011). Employees from a range of different ministries (mostly interior, defence \& intelligence) also take part in these courses with the respective line ministry covering teacher salary and other costs, and MOE only providing textbooks. For other general literacy learners, all course costs are covered by MoE. In terms of non-salary expenditure only 8.3 percent remains to cover all other costs. The education management program has an important role in overall MOE administration.

### 1.5 External Funding

Afghanistan is currently one of the most highly aid dependent economies. The OECD lists Afghanistan as the top official development assistance (ODA) recipient 1390-1392 (2011-2013) with an average of \$US 6.3 billion per year139. This figure represents civilian aid and excludes the military security support.

It is important to note, given the OECD definition of ODA, that estimates of total aid and international assistance for military expenditures indicate aid shares to Afghanistan, are much higher than the OECD data, as these later estimates include assistance to Afghanistan National Security forces140. World Bank estimated total military and civilian aid in 2010/2011 was \$US15.7 billion, equivalent to the GDP in 2010/2011. Foreign aid disbursements (security related and civilian) were at nearly the same level. The security related expenditure is larger than the civilian expenditure. Civilian aid, which is the ODA focus, is estimated at over \$US6 billion per year. It is important to note that the security related component excluded the large amount spent on international military forces.

With donor aid, the funds are committed either on-budget or off-budget. For the on-budget funds they are used for both operating budget and the development budget, and can be in the form of discretionary or non-discretionary grants. The on-budget donor funds account for a large part of government expenditures. As indicated in the 1395 (2016) national budget the international assistance accounted for 69 percent of total national budget. For donor funding there has been a shift, with more funds provided as non-discretionary grants and less as discretionary grants. This change does constrain the government's ability to fund priority interventions.

In terms of the delivery of this aid, it is provided through: (i) on-budget support to finance the Afghanistan security forces (army and police), the development budget and operating budget; (ii) development partner/ donor projects on the external budget, or off-budget which is outside the government budget; and (iii) donors provide security related aid outside the budget to finance operations and investments of the military, and provincial reconstruction teams.

In 2010/2011 the World Bank estimated the allocation in each of the above categories was \$US1.9 billion, $\$$ US5.2 billion and $\$$ US8.6 billion respectively 141 . With the phased reduction in the international security since 1391 (2012), the security related expenditure has significantly decreased, and as part of the transition process more financial support has been provided to the Afghanistan security forces. These on-budget funds have increased, and the Combined Security Transition Command- Afghanistan (CSTC-A) fund which is operating budget support to the military, accounted for approximately \$US1.7 billion in the 1395 (2016) national budget.

[^56]ODA Funds. In terms of ODA funds, at the Tokyo Conference (2012), an agreement was reached between MOF and the development partners, that a target of $50 \%$ of civilian aid was to be on budget by 1393 (2014). MOF indicated that this target, of 50 percent was achieved.

With the on-budget ODA in the period 1391-1393 (2012-214), 70 percent of funding was into the four pooled funds (Afghanistan Reconstruction Trust Fund (ARTF), Afghanistan Infrastructure Trust Fund (AITF), Law and Order Trust Fund of Afghanistan (LOTFA) and Afghanistan Peace and Reintegration Program (APRP), and 30 percent was from multi and bilateral partners. Of the 54 multi- and bilateral donors supporting Afghanistan, only 9 achieved the 50 percent target in 1393 (2014). Also, while bilateral donors provided $86 \%$ of the ODA in the period 1391-1393 (20122014), they implemented more than 50 percent of ODA directly, and since 1391 (2012) have increased their use of pooled funding for aid delivery. In 1393 (2014), with on-budget ODA 73 percent of disbursement was from the four pooled funds and 27 percent was from multi/ bilateral partners142. Of the 50 percent of the civilian development aid that remains off-budget, at the sector level there is are significant variations in the percent of aid provided off-budget.

While the operating budget expenditure is close to 100 percent, the development budget expenditure is significantly lower. This has occurred historically, as there is large budget carry-over from previous years combined with ambitious budget planning in the current year, and a government line ministry constraint in terms of implementation capacity. There has been some improvement, though for both MOE and MOHE development budget expenditure is variable across years. For example, in 1393 and 1394 for MOE it was 47 percent and 32 percent respectively, and for MOHE 45 percent and 61 percent respectively.

The opportunity exists to improve prioritization and aid effectiveness as more aid is moved on budget. Further to achieve the full impact of this change there will need to be coordinated improvements in the government absorptive capacity. In terms of the recurrent and development ODA on-budget, the budget disbursement rates have improved from 58 to 67 percent over the period 1391-1393 (2012 to 2014), in part influenced by the increased allocation of funds for the operating budget.

Donor Assistance Database. The MOF managed donor assistance database (DAD) is the official source of information about ODA provided in Afghanistan. As noted in the latest report143, MOF implemented new procedures in 1393 (2014), and there has been an improvement in donor reporting. MOF indicate that 97 percent of ODA is now registered on the DAD system. In 1392 (2013) the figure was 58 percent. While DAD disbursements registered by donor totalled \$US12.99 billion over this period ( 97 percent of ODA), when donors allocated this disbursement by sector only \$US11.65 billion was registered ( 82 percent of ODA). Given this gap, with donors only able to allocate 82 percent of the ODA to ministries, the dataset is incomplete. This is important, particularly in relation to off-budget ODA, and the allocation and disbursement at the ministry level. For this reason, when using the DAD ODA disbursement figures for education ministries the figures are likely to be an under estimate, and alternate cross checking is required. The MOF is planning further revisions in Quarter 1, 2016 to improve the process for registering commitment amounts.

In the education sector there has been limited progress in getting the ODA on-budget. For this reason, and given the under reporting particularly of off-budget support to education, the figures presented are likely to be lower than actual, with the number used to indicate the scale and trend.

[^57]The DAD total ODA support to MOE and MOHE is identified as accounting for 9.8 percent of ODA over the period 1391-1393 (2012-2014)144. This is outlined in Table 21, the DAD estimate is that for MOE \$US784.7 million was expended off-budget in the period 1391-1393 (2012-2014), and this accounted for over 75\% of total MOE ODA expenditures. DAD estimates is that on-budget disbursements were $\$$ US223.3 million. These figures need to be carefully reviewed. In this period, MOE on-budget development expenditures totalled \$US280.9 million, and indicatively 90 percent of these on-budget expenditures were funded by ODA. For this reason, a figure of \$US250 million would be a more realistic estimate of donor on-budget development expenditure. The DAD has identified the risk of under reporting of expenditure at the sector level.

The DAD estimate for MOHE is that $\$$ US118.5 million was expended off budget which accounted for over $90 \%$ of total ODA expenditure for this period, and on-budget disbursements were \$US13.2 million. Refer Table 3.2. These figures need to be carefully reviewed, as total development budget expenditures for MOHE in this period totalled $\$$ US73.1 million. It is estimated that donors funded approximately 50 percent of the development expenditures, so under reporting of DAD data has occurred at the sector level. The same could apply to the off-budget donor support.

As per the DAD, key development partners supporting MOE off-budget in 2014 are: Aga Khan Development Network, Australia, Canada, Czech Republic, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Norway, Sweden, Swiss Aid, Turkey, United Nations, and USA. In MOHE, the key development partners providing off-budget support are: France, Germany, Japan, Turkey and USA.

Table 24: ODA Disbursement as per the Donor Assistance Database, for the period 13911393 (2012-2014)

|  | On-Budget <br> (\$million) | Off-Budget <br> (\$million) | Total <br> Expenditure <br> (\$million) | ODA <br> (\% of total ODA <br> disbursement) |
| :--- | :--- | :--- | :--- | :--- |
| MOE | 223.59 | 784.74 | 1008.33 | 8.7 |
| MOHE | 13.24 | 118.48 | 131.72 | 1.1 |

Source: MOF Development Cooperation Report, 2012-2014 (draft)
ODA Contribution in MOE and MOHE Total Expenditure. MOE expenditure over 1391-1393 (20122014) was $\$$ US1.745 billion (covering recurrent and development expenditure of $\$$ US 1465 million and \$US280 million respectively). With the inclusion of off-budget development expenditure of $\$$ US780 million, the total MOE expenditure was of the order of $\$$ US2.5 billion. This is outlined in Table 22. On the basis of the donor development expenditure, approximately $\$$ US1.03 billion or 41 percent of the expenditure was funded by donors, and of this expenditure only 25 percent was on-budget.

Table 25: MOE Expenditures On and Off-Budget 1391-1393 (2012-2014)

|  | On-Budget <br> (\$million) | Off-Budget <br> (\$million) | Total <br> Expenditure <br> (\$million) |
| :--- | :--- | :--- | :--- |
| Recurrent | 1465 |  | 1465 |
| Development | 280 | 780 | 1060 |

[^58]| Total | 1745 | 780 | 2520 |
| :--- | :--- | :--- | :--- |

Source: MOF Fiscal Bulletins, Budget Papers, MOF Development Cooperation Report 2012-2014 (draft)
MOHE expenditure was \$US241 million over the period 2012-2014 (covering recurrent and development expenditure of $\$$ US168 million and $\$$ US73 million respectively). With the addition of the DAD reported off-budget development expenditure of $\$$ US118.5 million, the total MOE expenditure was of the order of \$US359.5 million, with approximately \$US155 million or 43 percent funded by donors. This is outlined in Table 23. Of the donor expenditure approximately 23 percent was on-budget. The possibility is that donor funding could be higher in both MOE and MOHE, in terms of any non-reported off-budget development support, and the extent of any donor support to the MOE operating budget.

Table 26: MOHE Expenditures On and Off-Budget ODA 1391-1393 (2012-2014)

|  | On-Budget <br> (\$million) | Off-Budget <br> (\$million) | Total <br> Expenditure <br> (\$million) |
| :--- | :--- | :--- | :--- |
| Recurrent | 167.9 |  | 167.9 |
| Development | 73.1 | 118.5 | 191.6 |
| Total | 241 | 118.5 | 359.5 |

Source: MOF Fiscal Bulletins, Budget Papers, MOF Development Cooperation Report 2012-2014 (draft)

### 1.6 MOE and MOHE Development Budgets (1394-1395 (2015-2016)) and Development Partner Future Projections

The current level of government and development partner commitments with on-going projects and future projections is provided. The MOE and MOHE 1394 (2015) and 1395 (2016) approved development budgets are analysed by total budget, that is the carry forward of unspent commitments from the previous year and new funding commitments in the current year, and by development partner funding. To assess development partner current year commitments and projections, the MOE NESP III Working Group have collated a preliminary list of donor commitments and projections (on and off-budget) in March 2016, which is used in assessing MOE future funding trends. It is important when using this data, to note that there is often a difference in which year the commitments are allocated, in terms of the approved project in the budget process or by the development partner. This aspect is covered below.

In the development budget, the total for the current year, includes the carried forward amount plus new commitments for the current year. As per the budget process, the project funds are committed for a particular year, as detailed in the approved project implementation schedule (ie. for contract awards and disbursements) and once committed the funds are allocated to that year. Should there be any delays with implementation and the funds are not utilized in that year, they will be carried forward to the following year. Unless there is a project review and an agreed revision in the implementation schedule, the commitments remain as planned. Once the funds are committed to a particular year, they cannot be committed a second time, and are carried forward. This allocation process, and the large carry forward, in part explains why for both MOE and MOHE development budget expenditures are usually in the range of 40 to 60 percent.

### 1.6.1 MOE Development Budget and Development Partner Commitments

The total development budgets for MOE in 1394 (2015) and 1395 (2016) are summarized in Figure 34 and in Annex Table 3.9. The total budget in 1394 (2015) was \$US289.56 million (carry forward \$US127.6 million and new funding \$US161.96 million). The funding was GOA \$US28.39 million (carry forward \$US27.39 million and new funding \$US1 million) and development partners (carry forward $\$$ US100.21 million and new funding $\$$ US160.96 million). The budget indicates that development partners in 1394 (2015) accounted for approximately 90 percent of that year's development budget, and based on the carry forward to 1395 (2016) over 90 percent of expenditure.

Figure 34: MOE Development Budgets 1394-1395 (2015-2016) by Government and Development Partners (DP)


Source: MOF Budgets 1394 (2015) and 1395 (2016).
The 1395 (2016) budget (approved in January 2016) is for a total of $\$$ US241.5 million, which consists of \$US186.26 million carried forward from previous years (GOA \$US18.33 million and development partners $\$$ US167.93 million) and $\$$ US55.19 million of new 1395 (2016) commitments (GOA $\$ 24.87$ million and development partners $\$$ US30.32 million). The 1395 (2016) budget indicates the variation across years, in both the level of new commitments and the allocation between government and development partners. In part this reflects the level of external and domestic commitments available to projects and the implementation stage of the ongoing projects.

As outlined in Figure 35 the development partner project funding to MOE is dominated by the ARTF donor145 supported Education Quality Improvement Project (EQUIP II). It accounted for approximately 40 percent of expenditure in 1394 (2015) and has a carry forward of \$US106 million. EQUIP II closes in December 2016146 and ARTF donors are planning to support a new MOE EQUIP III.

[^59]Figure 35: MOE Development Partner Funding - Development Budgets 1394-1395 (2015-2016)


Source: MOF Budgets 1394 (2015) and 1395 (2016).
There has been a shift with bilateral development partners from directly funding projects in MOE, to funding through ARTF. Until the end of 1394 (2015) Denmark (DANIDA), was one of the largest bilateral donors, directly supporting MOE through its' education support program to Afghanistan (ESPA). From 1395 (2016) DANIDA support is through ARTF. The other key bilateral is USAID, which directly supports MOE in workforce development, basic education and literacy, and community based education, and it is also a major EQUIP II donor.

The Global Partnership for Education (GPE) project, with UNICEF as the administering agent, is another large MOE project. It had a carry forward into 1395 (2016) of \$US22.6 million and new commitments in that year of \$US7.6 million. This project also closes in 2016. A new GPE is proposed for 1396 (2017). The WB has an ongoing skills development project, as well as the administration of EQUIP II. UNESCO provides ongoing support in literacy and non-formal education. India has ongoing support for infrastructure development.
The GOA commitment is to a large number of small projects, in 1394 (2015) there were approximately 60 projects, with a carry forward of $\$$ US27.39 million and new funding of $\$ 1$ million. In 1394 (2015) approximately \$US10 million was disbursed, and in 1395 (2016) new commitments are $\$$ US24.87 million.

Bilateral donors have increased their use of ARTF, which with WB management, undertakes all required administrative and fiduciary functions during implementation. In terms of fund allocation, the MOE request is for multi-year budget frameworks (3-5 years), with commitments through national budget structures.

A critical issue is MOE implementation capacity, and how these constraints can be addressed and resolved. Development budget expenditure has been relatively constant in recent years, and there are ongoing implementation delays. This is also an issue for development partners, in both on and off-budget projects, in terms of the effectiveness and cost of the capacity support they provide to
support project implementation. In 1395 (2016), two major projects close and there is over \$US100 million to be disbursed.

The MOE and development partners have identified the issues, and they have been outlined in a number of MOE and development partner documents, and include (i) unrealistic project planning, budget allocations and annual commitments; (ii) MOE capacity constraints for procurement and contracting, implementation supervision and monitoring, the allocation of finance and fund movement to local/ provincial levels, and due diligence to address corruption. These capacity constraints can be addressed. The new Capacity Building for Results program should assist in improve MOE implementation performance.

As outlined earlier, and based on MOF DAD and the MOF estimates, over the 1391-1393 (20122014) period the off-budget development partner expenditure for MOE was approximately \$US260 million per year.

Development Partner Commitments and Future Projections. MOE has a programmatic approach in its development strategy and budget. This is being further developed in the new NESP III (20162021). EQUIP II is aligned with this approach and government priorities, with support provided across the sector. The proposed new EQUIP III (indicative \$US200-\$US300 million from ARTF donors) and GPE II (indicative (\$US100 million) will be core projects/ programs to support the new MOE strategy. In addition, there will be the direct on-budget project funding provided by USAID, UNESCO, WB and India, and others in the future.

The NESP III WG has collated an updated list of development partner (on and off budget) commitments and projections. These are summarized in Annex Tables 3.11 and 3.12. This data has been adjusted slightly to separate out some pre-1395 (2016) commitments (which have already been included in the approved budgets) from the new 1395 (2016) commitments. While the development partner commitments and projections may be revised, and some partners who have yet to commit may do so at the Afghanistan Conference in late 1395 (2016), the data does indicate that for the next two years 1395-1396 (2016-2017) that on-budget commitments will average over $\$$ US100 million per year. With the off-budget commitments and projections, while noting that there may be potential for some increase with development partners yet to commit, the NESP III WG collated forward projections for off- budget support are for \$US71 million in 2016 and \$US49 million by 2018. This level of off-budget support is significantly lower than the DAD figures, which indicated an average of $\$$ US260 million expenditure per year over the 2012-2014 period.

These NESP III WG estimates are important for the trend in levels of donor support. They reflect the trend that is forecast at the country level for Afghanistan, of a projected decline (as a percentage of GDP) in foreign aid and development funding, including off-budget funding. The ARTF financing strategy for 1394-1396 (2015-2017)147 of \$US800 million per year, also reflects this reduction in the expected level of development partner financing envelope from the earlier period.

The current commitments, and the forward projections that are being prepared indicate that future development partner support is likely to be at lower levels, especially for the off-budget. Given Government fiscal constraints, and an expanding student number, combined with the MOE renewed priority for quality improvements, using the current cost base there is a large potential funding gap. In this environment, MOE will need to be proactive in improving internal efficiency, and in review of policy options for alternate delivery systems.

[^60]Efficiency improvements can be achieved within the current system. On this basis, MOE in consultation with development partners will need to review all options for internal efficiency improvements (staffing, teacher performance, reducing level of absentee teachers, textbooks and materials, cost effective procurement), prioritization, implement reforms to address capacity constraints in all areas of the development budget and implementation process, establish rigorous independent reporting and monitoring systems, and address due diligence and corruption matters. This consultation and review process should apply to all off-budget projects to ensure efficient resource allocation.

As part of this review process, MOE to assess and review key policies, and options for cost efficient alternate systems of delivering education services (including community based education), and for developing areas where cost recovery would be feasible. These options to include the potential for low cost private schools and how this could be facilitated in urban and rural environments, for public-private partnerships in education services, and out-sourcing the delivery of education services. In terms of households, which education materials or services could be met by household expenditure or with partial cost recovery, and how this could be means tested, or welfare support systems put in place so participation of children from low income households is not adversely affected.

### 1.6.2 MOHE Development Budget and Development Partner Commitments

The total development budgets for MOHE in 1394 (2015) and 1395 (2016) are summarized in Figure 36 and in Annex Table 3.10. The total budget in 1394 (2015) was $\$$ US53.83 million (carry forward $\$$ US45.17 million and new funding $\$$ US8.66 million). The funding was GOA $\$$ US49.55 million (carry forward \$US41.89 million and new funding \$US7.66 million) and development partners (carry forward \$US3.28 million and new funding \$US1 million). The budget indicates that development partners in 1394 (2015) accounted for approximately 8 percent of that year's development budget. The carry forward to 1395 (2016) was increased and reflects a correction with additional allocations from India in 1394 (2015) included.

Figure 36: MOHE Development Budgets 1394-1395 (2015-2016) by Government and Development Partners (DP)


Source: MOF Budgets 1394 (2015) and 1395 (2016).

The 1395 (2016) budget (approved in January 2016) is for a total of \$US60.69 million, which consists of \$US22.76 million carried forward from previous years (GOA \$US15.95 million and development partners \$US6.81 million) and \$US37.93 million of new 1395 (2016) commitments (GOA \$US29.89 million and development partners \$US8.04 million). The 1395 (2016) budget indicates the variation across years, in both the level of new commitments and the allocation between government and development partners.

As outlined in Figure 37 with MOHE, the development budget is dominated by GOA funded projects, with development partner funding to MOHE increasing in 1394 (2015) with the approval of the WB and ARTF donor supported Higher Education Development Project. The commitments for this project coming into the budget in 1395 (2016) and in following years. Currently there is a very small number of other development partners (India and France) supporting MOHE on-budget. The GOA commitment is to a large number of small projects. In 1395 (2016) there were approximately 34 projects, with a total commitment in 1395 (2016) of \$US45.8 million.

Based on MOF DAD and the MOF fiscal reports, over the 1391-1393 (2012-2014) period the offbudget development partner expenditure for MOHE was approximately $\$ \mathrm{US} 40$ million per year.

Development Partner Commitments and Future Projections. MOHE has a programmatic approach in its development strategy and budget, and in the new MOHE HESP (2016-2020) that is being finalized. As noted earlier, the higher education sector and MOHE has expanded rapidly in recent years to cope with the increased demand. The government has been able to respond to this increased demand by expanding public institutions and providing regulatory support for the growth of the private sector provision of higher education, which now accounts for 43 percent of students.

Figure 37: MOHE Development Partner Funding - Development Budgets 1394-1395 (2015-2015)


Source: MOF Budgets 1394 (2015) and 1395 (2016).

With increasing demand for places, government fiscal constraints, and expectations that development partner support in the future (on and off-budget) is unlikely to increase, the pressures on MOHE are similar to those facing MOE. MOHE priorities are improving education quality and outcomes, and increasing internal efficiency, and given the budgetary constraint, seeking opportunities to increase the efficiency of resource allocation, reviewing options for income generation, public- private partnerships and cost recovery in service delivery. This will apply in particular to developing cost recovery and mean testing for provision of full university accommodation and board that is a significant MOHE budget expenditure.

The government ongoing support to provide an efficient regulatory environment for private sector delivery of education services is essential if demand is to be met. For qualified students from low income households to have access to private sector higher education will require review and assessment of policy options, and development of schemes (through government, public-private, and financial sector) for provision of student loans and financing.

## SECTION 2: PUBLIC EDUCATION RECURRENT UNIT COSTS

### 2.1 Macro Estimation of Public Recurrent Expenditure per Pupil

The unit cost per pupil (recurrent expenditure per student) is estimated for the different education levels. Given the data available on each of the programs and the lack of disaggregated financial data by sub-program it is not possible to provide realistic estimates under the literacy program for literacy schools and literacy courses or on the unit costs for in-service teacher courses. The estimates made per program are based on student numbers, in general education148, TVET, teacher training colleges149 and in higher education. MOE disaggregated data is required to enable the detailed analysis of costs and expenditures on the other programs. Textbook costs in MOE have been funded under development partner projects, and these costs are not included under non-salary costs.

The unit costs are provided in Figures 38 and 39, and Table 24 below for general education, teacher training, TVET and higher education, and outline the expenditure levels per student across the different levels of education, the percent of GDP per capita, and provide cost comparisons from 1390 (2011) to 1394 (2015). The scale and trend providing very useful information on cost allocation and expenditure. More detailed versions of the Tables are provided in Annex Tables 3.5, 3.6 and 3.7.

Figure 38: Per Student Unit Costs for General Education, Teacher Training, TVET and Higher Education; 1390 and 1394 (2011 and 2015)

[^61]

Source: MOE AFMIS and EMIS, MOF Fiscal Bulletins and Reports, MOHE NHESP (April 2015) draft and MOHE communications

Figure 39: Percent of GDP per Capita for General Education, Teacher Training, TVET and Higher Education; 1390 and 1394 (2011 and 2015)


Source: MOE AFMIS and EMIS, MOF Fiscal Bulletins and Reports, MOHE NHESP (April 2015) draft and MOHE communications

Table 24 below shows that with general and Islamic education there was a 16 percent increase in student numbers from 1390 to 1394 (2011-2015), and recurrent expenditure per student increased approximately 14 percent from 2,741 to 3,138 Afs, and declined as a percent of GDP per capita from 9.3 to 8.4 percent. For teacher training college students, numbers increased by 45 percent, and recurrent expenditure per student decreased by 22 percent from 16,448 to 12,895 Afs, and declined as a percent of GDP per capita from 55.5 to 34.4 percent. With TVET, student numbers increased over 80 percent, from 41,080 to 75,500 over the period, recurrent expenditure per student declined approximately 2 percent from 18,849 to 18,515 Afs, and declined as a percent of GDP per capita from 63.7 to 49.5 percent. With higher education, student numbers increased by 125 percent from 77,340 to 174,270 over the period, and recurrent expenditure per student was relatively unchanged from 27,395 to 27,211 Afs, and declined as a percent of GDP per capita from 92.5 to 72.7 percent.

Table 27: Per Student Unit Costs for General Education, Teacher Training and Higher Education (1390-1394 (2011-2015))

|  | 1390 | 1394 |
| :--- | :--- | :--- |
| General and Islamic Education Program |  |  |
| Number of Students ('000s) | $7,520.0$ | $8,699.0$ |
| Unit Cost/ student (Afs/student) | $2,575.1$ | $2,992.3$ |
| Unit Cost/ student (including education management | $2,740.9$ | $3,138.0$ |
| cost) | $9.3 \%$ | $8.4 \%$ |


|  |  |  |
| :--- | :--- | :--- |
| Teacher Education |  |  |
| Number of Students ('000s) | 56.49 | 81.91 |
| Unit Cost/student (Afs/student) | $16,254.20$ | $12,296.42$ |
| Unit Cost/ student (including education management | $16,447.87$ | $12,895.24$ |
| cost) | $55.5 \%$ | $34.4 \%$ |
| \% of GDP per Capita |  |  |
|  |  |  |
| TVET Program | 41.08 | 75.50 |
| Number of Students ('000s) | $18,656.28$ | $17,655.63$ |
| Unit Cost/ student (Afs/student) | $18,849.95$ | $18,515.43$ |
| Unit Cost/ student (including education management | $63.7 \%$ | $49.5 \%$ |
| cost) |  |  |
| \% of GDP per Capita |  |  |
|  | 77.34 | 174.27 |
| MOHE | $27,394.62$ | $27,210.81$ |
| Number of Students ('000s) | $92.5 \%$ | $72.7 \%$ |
| Unit Cost/ student (Afs/student) |  |  |
| \% of GDP per Capita |  |  |

Source: MOE AFMIS and EMIS, MOF Fiscal Bulletins and Reports, MOHE NHESP (April 2015) draft and MOHE communications

For the different levels of education, the period (1390 to 1394 (2011-2015)) is characterized by expansion at all levels, though particularly in the TVET and higher education sub-sectors. A comparative cost for the different levels of education is provided, by using the percent of GDP per capita for general and Islamic education as the base, and comparing it with the teacher education, TVET and higher education percent of GDP per capita. The trend (as a multiple of general education percent GDP per capita) indicates that the multiple in 1394 (2015) for teacher training is 4.1, for TVET is 5.9 and higher education is 8.7. A similar trend applied in 1390 but at higher multiples of the general education percent GDP per capita, with teacher education at 6, TVET at 6.9 and higher education at 10.

### 2.2 Breakdown of Public Recurrent Unit Costs

The breakdown of recurrent costs per pupil for general education, teacher education, TVET and higher education in 1394 (2015), is detailed in Figure 40 and Table 25 below (also refer to Annex Table 3.8), reinforce the trends indicated in the earlier sections. For general education, the unit cost per pupil is dominated by teacher and non teacher salary costs (accounting for approximately 95 percent of the total school unit recurrent cost per pupil, leaving only 5 percent for school operational costs (materials, operations and maintenance), This totals 2,992 Afs per student. Adding the pro-rated allocation for the sector wide cost for education management increases costs by another 4.9 percent, resulting in a total recurrent cost per pupil of 3,138 Afs.

Figure 40: Public Recurrent Expenditure Unit Cost per Pupil, 1394 (2015)


Source: MOE AFMIS, EMIS, MOF Fiscal Bulletins, MOHE NHESP (April 2015) draft and MOHE communications

For teacher training the unit cost per pupil, the teacher and non teacher salary costs is approximately 80 percent of the total school unit recurrent cost per pupil, with the operating cost of 20 percent which would have to cover the student costs including accommodation and meals, and operational costs (materials, operations and maintenance). This totals 12,296 Afs per student. Adding the sector wide cost for education management increases costs by another 4.9 percent, resulting in a total recurrent cost per pupil of 12,895 Afs.
For TVET unit cost per pupil, the teacher and non teacher salary costs is approx. 73 percent of the total school unit recurrent cost per pupil, with the operating cost of 27 percent which would have to cover the student costs including meals, and operational costs (materials, operations and maintenance). This totals 17,656 Afs. Adding the sector wide cost for education management increases costs by another $4.9 \%$ to the total cost, resulting in a total recurrent cost per pupil of 18,515 Afs. The TVET the unit teacher salary base is higher than for general education.

For higher education unit cost per pupil, the teacher and non teacher salary costs is approx. 63 percent of the total school unit recurrent cost per pupil, with the operating cost of 37 percent which covers the student costs (dormitories and meals), and operational costs (materials, operations and maintenance) resulting in a total recurrent cost per pupil of 27,211 Afs. With higher education the academic unit salary base is higher than for general education and TVET. Disaggregated data is required on the MOHE teaching and non teaching staffing salaries, and on the goods and services expenditure category.
Overall the public recurrent expenditure per pupil for each of the four sub-sectors in 1394 (2015) indicates the significant cost increase involved per student as move from general education (primary and secondary), to teacher training, TVET and higher education. The unit costs are dominated by salaries (teacher/ non teacher) and living costs provided by teacher education, public TVET and higher education institutions that account for the major expenditure under nonsalary operational costs.

Table 25: Ministries of Education and Higher Education Breakdown of Public Recurrent Expenditure per Pupil, 1394 (2015)

|  | MOE |  | MOHE |  |
| :--- | :--- | :--- | :--- | :--- |
| Afs Millions | General <br> \& Islamic <br> Education | Teacher <br> Education | TVET | Total |


| Expenditure (Afs million) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Teaching Staff | $24,809.2$ | 969.8 | 544.5 | $1,486.6$ |
| Non teaching Staff | $1,220.7$ | 363.2 | 49.2 | $1,486.6$ |
| Total | $26,029.9$ | $1,333.0$ | 593.7 | $2,973.2$ |
| Staff Numbers | $190,781.0$ | $2,586.0$ | $2,567.0$ | $5,486.0$ |
| Teaching Staff | $39,784.0$ | $1,276.0$ | $1,949.0$ | $5,486.0$ |
| Non teaching Staff | $8,699.0$ | 75.5 | 16.2 | 174.3 |
|  |  |  |  |  |
| Number of Students ('000s) | $2,316.2$ | $7,507.3$ | $28,107.6$ | $8,530.5$ |
|  | $105,609.0$ | $220,802.5$ | $126,285.1$ | $270,980.7$ |
| Teaching Staff (Unit Cost per Pupil) | 45.6 | 29.4 | 4.5 | 31.8 |
| Average Salary |  |  |  |  |
| Pupil Teacher Ratio | 535.8 | $5,337.7$ | $5,565.9$ | $8,530.5$ |
| Non-Teaching Staff (Unit Cost per | $117,157.7$ | $206,772.7$ | $136,570.6$ | $270,980.7$ |
| Pupil) | 218.7 | 38.7 | 24.5 | 31.8 |
| Average Salary |  |  |  |  |
| Pupil Teacher Ratio | 140.3 | $4,810.6$ | $3,042.7$ | $10,149.8$ |
|  | $2,992.3$ | $17,655.6$ | $36,716.1$ | $27,210.8$ |
| Operational Costs (Unit Cost per |  |  |  |  |
| Pupil) |  |  |  |  |
| Total School Level (Unit Cost per | 101.2 | 596.9 | $1,241.3$ |  |
| Pupil) | 44.6 | 262.9 | 546.8 |  |
| Sector Wide (Unit Cost) | $3,138.0$ | $18,515.4$ | $38,504.2$ | $27,210.8$ |
| Salary Unit Cost |  |  |  |  |

Source: MOE AFMIS, EMIS, MOF Fiscal Bulletins, MOHE NHESP (April 2015) draft and MOHE communications
Other MOE studies150, including a recent paper by B. Noori (June 2015)151 have demonstrated the significant variation in recurrent expenditure per pupil across the provinces for 1391 to 1393 (2011-2014), reflecting significant disparities in MOE human and financial resource allocation. The recurrent expenditures per pupil ranging in the lowest province from 33 percent below the national average, to 67 percent above in the province with the highest recurrent expenditure per pupil. This variation reflecting the financial effects of having fewer teachers, and less qualified teachers, with classrooms having higher pupil teacher ratios, and fewer resources being allocated for operations and maintenance. The average salary and non-salary recurrent expenditures varying noticeably from rural and less secure provinces to urban and secure provinces. The MOE norm based allocation of operational expenses to the provinces is a complicating factor, constraining both the equitable allocation and use of these limited funds. Alternate methods and provincial output based criteria should be established to improve the equitable allocation of resources.

While teachers' numbers increased over the period 1390-1394 (2011-2015), they did not keep pace with the expansion in student numbers. The pupil teacher ratio (PTR) in general education has risen from the low 40s in 1391 (2011) to 46 in 1394 (2015). The PTR is above the MOE target of 40 , and as noted, there is a wide variation in the ratio across provinces, ranging from low 30s to

[^62]mid 55. The MOHE PTR has also risen as estimated in Table 26 it was 32 in 1394 (2015), and according to MOHE data it has risen from 29 in 1391 (2011)152.

As shown in Table 26 Afghanistan's expenditure per general education student, while not directly compatible with the primary and secondary student expenditures of neighbouring countries and other least and lower-middle income countries, is in the low end of the range for these countries. With tertiary expenditure per student in Afghanistan of \$US446 is also in the lower end of the range for these countries.

Table 28: Education Expenditure per Primary, Secondary and Tertiary student in 1392 (2013) in current \$US and as a percent of GDP per Capita for some Least and Lower Middle Income Countries

| Country | Primary <br> (current \$US) | Secondary <br> (current \$US) | Tertiary <br> (current \$US) |
| :--- | :--- | :--- | :--- |
| Afghanistan-combined figure for both |  | 51.44 | 446 |
| (percent of GDP per capita) | 33.2 | $(8.4)$ | $(72.7)$ |
| Burundi | $(12.4)$ | 80.3 | 793.5 |
| (percent of GDP per capita) | 53.2 | $(30.1)$ | $(297.1)$ |
| Guinea | $(10)$ | 698.3 |  |
| (percent of GDP per capita) | 104.4 | 101.4 | $(131.6)$ |
| Nepal (2014) | $(15.1)$ | $14.6)$ | 1326 |
| (percent of GDP per capita) | 100.9 | 130.4 | 942.6 |
| Pakistan | $(8)$ | $(10.4)$ | $(75.2)$ |
| (percent of GDP per capita) | 45.5 | 260.2 | 660 |
| Rwanda | $(7.2)$ | $(41.3)$ | $(104.7)$ |
| (percent of GDP per capita) |  |  | 200.4 |
| Tajikistan |  | $(19.3)$ |  |
| (percent of GDP per capita) |  |  |  |

Source: World Bank Education Statistics, with data only available for a limited number of the countries listed in Table 3.1. For Afghanistan, MOE 1394(2015), combined primary and secondary school, as data not able to be disaggregated separately, and MOF GDP data,

### 2.3 Analysis of the Status and Remuneration of Teachers

In the current labour market a teaching qualification provides the graduate with better employment prospects and higher employment rates. As an employed teacher they will have a salaried job and are part of the 21 percent of the workforce classified in salaried public and private sector, or as an employer. As indicated in the CSO ALCS (2013/2014) 72 percent of those with a teaching qualification work in the public sector. Teachers are part of the public sector, and the while sector is classified as having high mean and median monthly earnings, teacher monthly mean and median salaries are lower than the overall public sector averages. MOE current teacher salaries were reviewed153, and analysis of the ALCS data indicated teacher college graduates having mean and median monthly salaries of 8564 Afs and 7000 Afs respectively.

Teachers are employed either as a civil servant or on contract. In the MOE the civil servants (those listed as being part of the tashkeel) account for 79 percent, and contract staff the remaining 21

[^63]percent. In terms of average teacher salary there is little difference between civil servants and contract teachers. The number of teachers, their level of qualification, those at each of the different payroll grades in MOE and MOHE is required for a more detailed analysis. In response to increasing student numbers and an expansion in access to education, teacher numbers have risen over the period 1390 to 1394 (2011-2015), though the numbers has have not kept pace with the student number increase, and PTRs have risen.

On teacher qualifications, using MOE criteria only 52 percent of teachers meet minimum education requirements ${ }^{154}$. To address the skill shortfall MOE are undertaking extensive in-service teacher training. In addition, there is a shortage of female teachers, especially in rural areas, that is adversely affecting female student participation rates.

## Employment Opportunities.

In Afghanistan the labour market is challenging. Economic growth has slowed and this has reduced labour demand, in a workforce that has up to 400,000 new entrants (across unskilled to skilled participants) each year.

As outlined in the recent CSO ALCS (2013/2014) Report ${ }^{155}$, of those employed only 21 percent of all employed persons are in salaried public and private employment, or as employers, with the remaining 79 percent of the workforce deemed to be in vulnerable or less secure employment. The employment breakup is provided in Figure 41. With the vulnerable employment 50 percent are labourers or own account workers, while 28 percent are unpaid family workers/ labourers. There are very marked gender differences, with 73 percent of women being unpaid family workers, compared to 17 percent of men.

[^64]Figure 41: Employed and Unemployed persons, by sex and by job status (in percentages)


Source: CSO ALCS (2013/2014)
Prospects of getting salaried employment is heavily influenced by the level of education achieved. The ALCS finding is that education levels above secondary level have a major impact on job prospects as a salaried worker in the public or private sector. As indicated in the Figure 42, for individuals with a teaching qualification, 72 percent have jobs in the public sector. There are very distinct gender differences in job opportunities, with males accounting for two thirds of all jobs in the professional categories, and 88 percent of jobs in other skilled occupations.

Figure 42: Employed and underemployed persons, by highest level of education attained, and by job status (in percentages)


[^65]Salaries. As detailed in Figure 43 and in the previous text, the data indicates that mean and median monthly teacher salaries are lower than the overall equivalent in the public sector.

Figure 43: Mean and median monthly earnings, by job status, and by sex (in Afs)


Source ALCS 2013-2014

## SECTION 3: HOUSEHOLD CONTRIBUTIONS TO EDUCATION

### 3.1 Private Unit Costs by Education Level

There is very little structured quantitative survey assessment and analysis undertaken on household private costs of education, and the impact of these costs on households (by income group), and their children's access to and participation in education. This is a major data/ information gap as it is a key factor which influences education participation rates for both MOE and MOHE, and is required for policy development. Household direct private costs include: education fees, school uniforms, textbooks, pens, notebooks (school supplies), other stationary, transport costs and food related expenses.

Of national surveys undertaken, the CSO National Risk Vulnerability Assessment (NRVA) survey 2011/2012 had a stronger focus on household expenditures than the more recent Afghan Living Condition Survey (ALCS) 2013/2014. The NRVA survey asked five questions on household education expenses. The NRVA Report 2011/2012 did not provide analysis on the household direct education expenses.

The CSO NRVA 2011/2012 datasets were made available as part of this ESA assessment, and used to determine if an estimate of the households (HH) direct expenditure on education, could be presented as per school attending child (mean and median values), and by income group, such as low/ medium/ high-income households. Given the survey questions asked, the data was not collected by the level of education the children in a household were undertaking, and on this basis the estimate would be per child, irrespective of education level. The analysis of this data did not provide any consistent findings, and on this basis it was inconclusive.

While a few published papers have provided some evidence of direct household education costs, the basis and the small sample size mean that the evidence is anecdotal156. Given the absence of any structured database on private household education costs, and its importance in assessing feasibility of policy options, it is a priority that a household survey be undertaken on private

[^66]household education costs. This is particularly important in Afghanistan, given the high poverty rate (39 percent) which impacts on school enrolments, and ongoing government fiscal constraints that will require the MOE and MOHE to evaluate delivery system options and cost recovery mechanisms.

Private Education. While the vast majority of households access the public education system, there is a small but growing private education sector. This covers both private general education (primary and secondary education) with approximately 270,000 students (ie. less than 0.3 percent of total general education students), teachers training colleges and the higher education sector.

Higher Education. With higher education sector, there has been a rapid expansion in the number of private higher education institutions. The number has increased from 2 in Kabul in 2006 to over 90 in 2014, with approximately half operating in provincial cities. Total student numbers were 130,000 in 1393 (2014), which is 43 percent of the total higher education student population. All bar two of the private institutions are for profit. They are self financing, and their income is fee dependent, though in some cases there are other sources of funding. As outlined in the MOHE NHESP 2015-2020 (April 2015) draft, while the average private sector institution charges fees of 5000 Afs per month or 60000 Afs per year, some institutions have fee charges of 290000 Afs per year. Demand is increasing and there is a large pipeline of new applications for further private institutions.

The direct household costs for students attending public higher education institutions/ universities are significantly lower, as the institutions provide students with free tuition, dormitories and food. The dormitories and food, is a major cost to the MOHE budget, as outlined in section 2.2 and Table 25, it accounted for a large part of the operating cost per student in 2015. Given the increase in student numbers, MOHE has budgetary fiscal constraints. As outlined in the NHESP 2015-2020 (April 2015) draft, one of the recommendations is that MOHE consider a new system for dormitory accommodation and food, in which access to the dormitory accommodation would be means tested (based on family income) with graduated fees, and that distance from home be a further selection criterion. Should such a change be implemented, it would enable improved targeting of the limited financial resources available to those in lower income households, and result in an increase in household expenditure for medium and higher income households.

With the higher education sector, an estimate was prepared in 1389 (2010) which indicated that the direct household cost for a student living at home (and not in a university dormitory) was approx. \$US917 per year157. The breakdown of this cost is: transportation \$US208, books \$US60, clothing \$US200, food costs \$US208, and stationary and other \$US200. For a student at a public university, the recent World Bank Higher Education Development Project (July 2015) indicated out of pocket expenses for a student at a public university of \$US 80-100. These estimates again indicate that further work is required to provide a sound quantitative assessment of household private expenditure on education at all levels.

### 3.2 Education Cost-Sharing between the Government and Families

The household direct education expenditures for a student, and the household income are key factors impacting on a child's school attendance. Until a structured survey of household education expenditure is completed, only anecdotal evidence is available for evaluation. Currently it is not possible to provide a quantitative allocation of cost share between government and families. Given the dominant role of public education in general education (at greater than 99 percent), and in public TVET, teacher colleges and higher education institutions (with provision of dormitories and

[^67]meals) for households the key student expenses are clothing, meals, transport, school materials and any informal charges.

Recent survey work has identified the key impact of poverty on school participation rates and nonattendance. That is, the opportunity cost of education to poor household in terms of foregone income, and the associated need for child labour to generate income are critical factors in school non-attendance. The CSO ALCS Report, based on the survey undertaken in 1392-1393 (20132014), collected information on the population (in age range 6 to 24 years) who had attended school, but were no longer in the education system, and on why they had dropped out. While nonattendance in education may reflect a combination of economic, cultural, security, health and distance factors, in the survey it was found that economic considerations were an important factor, particularly for males. It was the main reason for 15 percent of primary school age children (27 percent for males, 5 percent for females). The percentages were very similar for both urban and rural non-attendance. The survey finding indicated that from the mentioned economic reasons, it was the need for the child to work, that is the opportunity cost of the income forgone from school participation, that was more important than the direct costs of education. This applied in particular to the males. With the females, cultural considerations were the dominant reason given for nonparticipation. For secondary level, economic considerations were the reason for 51 percent of male non-attendance and for 7 percent of female, with an overall average of 26 percent.

The ALCS 2013-2014 analysis indicated that approximately 39 percent of the population were living below the national poverty line. The level had risen since the previous 1390-1391 (20112012) survey, due to the impact of the slow down in economic growth on labour market demand.

In terms of child labour, the ALCS survey results indicated that in households where none of the children (age 7-12 years) attended school, that the poverty rate was almost 20 percent higher than households where all children attended school, poverty rates of 53 and 35 percent respectively. While access and availability of schools is a key factor in determining attendance, the survey finding does indicate that children in poor/ low-income households are at a relative disadvantage in terms of attending schools. This finding is re-enforced with the relatively high child labour rates.

The survey findings on child labour, show the dependency of poor households on child labour to generate income. In 1393-1394 (2013-2014), the ALCS survey indicated that 2.7 million children between ages of 5 and 17 years (or 27 percent of the total population) were in child labour. Approximately 46 percent of these children were between 5 and 11 years of age. Males accounted for 65 percent of the child labourers. Poverty rates were found to be higher in households where one child was engaged in child labour, and the rate increased as more children were involved in child labour activities. For poor/ low income households the opportunity cost of attending school, remains a critical factor for non-participation.

### 3.3 Breakdown of Average Private Unit Costs by Spending Item and Level

Currently there is a lack of reliable survey data to provide a breakup of unit costs by spending item and education level. A structured household survey is required across the education sector to provide a sound quantitative base for analysis of private unit costs.

## SECTION 4: THE COST OF SCHOOL INFRASTRUCTURE

In Afghanistan the school population and resulting school infrastructure requirements have increased rapidly since 1381 (2002). While the government, MOE, MOHE and development partners have responded with large investments undertaken in school infrastructure, there are still
major shortfalls in the provision of schools, which have adequate buildings and facilities to provide a sound learning environment.

For example, with MOE the total number of schools has increased from approximately 6,000 in 1381 (2002) to over 15,000. For MOHE the number of public institutions has increased from 6 in 1380 (2001) to 34 in 1394 (2014). In 1392 (2012), of MOE general education schools, only approximately 50 percent were defined as having usable buildings. A significant number of the schools were classified as having less than adequate basic facilities, such as sanitation and water facilities, and were lacking a secure school boundary wall.

Given the expanding population, and the requirement for new schools with supporting facilities, and the need to invest and improve the existing school infrastructure there is a large capital investment required over the medium to long term. The estimates of the investment required158 greatly exceed government and development partner current and planned future investment levels. The identified fiscal constraints emphasize the critical importance of achieving value for money in school construction design, in contract tendering and award, and in contract construction supervision.

For the MOHE, infrastructure investment for improvement and expansion is one of its highest priorities given the increased demands for classrooms, laboratories, libraries, offices, and dormitories that is required with the large increase in student numbers and faculty staff. The NHESP (April 2015) draft indicates that the development budget is less than adequate to meet infrastructure requirements, and the operating budget in insufficient to cover basic materials, equipment, and general operating and maintenance costs.

Studies undertaken examining school construction (MOE, Comparative Review of School Construction \& Educational Infrastructure, 1389 (2010)) demonstrated that there was significant variability in: construction costs across the different implementing partners (MOE, development partners, provincial reconstruction teams, NGOs, community); construction quality and from the use of different contracting partners. In terms of achieving infrastructure quality and value for money, influential factors were community participation that had a significant impact on ownership and cost, planning and design, especially where it included disaster risk reduction, and consistent quality construction supervision (from MOE and the provincial education offices). The review noted the capacity constraints, and coordination issues in MOE infrastructure services that required resolution. Also, the issues related to getting monitoring and cost control systems in place for those school construction activities being undertaken off-budget. The unit construction cost ranges, and those from a later study are outlined in Table 27.

Table 27: MOE Cost of a School Module

| Unit cost of classroom | US\$ |
| :--- | :--- |
| MOE (1394) classroom (all equipment) | 25,000 |
|  |  |
| A.S. Raouf paper "School Facilities in AFG |  |
| current gaps and challenges for the future", 1392 (2013) |  |
| Based on a school module (of 7 classrooms), with costs: | 19,448 |
| -total cost for classroom | 115,763 |
| -total cost for laboratory facilities (secondary school) |  |

[^68]| -total cost for surrounding wall | 61,262 |
| :--- | :--- |
| -total cost for toilet building | 19,448 |
| -total cost of water facilities | 4,865 |
|  |  |
| MOE Comparative Review of School Construction and |  |
| Educational Infrastructure, 1389 (2010) |  |
| Wide cost variations, with range: | above 20,000 |
| -very high | $15,000-20,000$ |
| -high | $10,000-15,000$ |
| -medium | $0-10,000$ |
| -low (some involved community contributions) |  |

Source: MOE and A. Raouf referenced paper.
School construction costs. For costs per classroom, the MOE has an indicative unit cost per fully equipped classroom (with supporting facilities) of \$US25,000 in 1394 (2015), which is used as a basis for the construction program. This cost base needs to be used carefully, given the variability in cost that occurs, with use of materials (local or imported) for small or with larger city schools (using cement and steel), whether the school cost includes the supporting facilities (sanitation and water), the cost of specialized facilities (ie. laboratories) and the use of local (including community) or international contractors.

The standardization of school designs and materials, and use of pre-fabricated components would provide a stronger standard cost base. In addition, MOE in designing the schools should include technical features that address disaster risks. In design specifications and defining materials to be used, the estimation of the school infrastructure effective lifespan needs to be undertaken for the different options. The lowest capital cost and possibly the shortest life span, on an annualized basis may result in a higher outlay. Currently, in the absence of school building expected lifespans, it is not possible to determine the annualized cost of a classroom. Further work needs to be undertaken by the Infrastructure Services Department of MOE.

In terms of the school and classroom maintenance, as noted earlier the recurrent budget and expenditure on operations and maintenance is low, and inadequate to maintain the infrastructure. In 1393 (2014) for MOE the expenditure was 597 million Afs or approximately 70 Afs per student. The MOE norms for the operations and maintenance (O\&M) costs in 1394 (2015) are provided in the Table 28 below. It indicates that for a school (with building infrastructure), and a classroom (with 40 students) that the operations and maintenance allocation ( 65 and 60 Afs respectively per student) would be 5,400 Afs per year. That is approx. \$US86 per classroom per year, for a building that is currently estimated to cost $\$$ US25,000 to build. This indicates that the budget allocation and expenditure is totally inadequate to maintain the infrastructure. Using a conservative O\&M of 3 to 5 percent per year, the cost allocation would be $\$$ US750 to $\$ \mathrm{US} 1,250$ respectively per classroom. For schools lacking school building infrastructure, the MOE allocation for O\&M is 75 Afs per student, so for a class of 40 students, a total of 3000 Afs per year (\$US45 per year).

To get an indicative estimate of O\&M costs for the MOE, using a conservative base of $\$ 20$ per student (i.e. class size of 40 , 50 percent in buildings ( 5 percent O\&M per year (i.e. $\$ 30$ per student, and the 50 percent of students not in buildings O\&M of $\$ 10$ per year per student) would indicate a requirement of approximately $\$$ US170 million. This figure is of similar order, to the World Bank estimate for the total education sector in 1390/1391 (2010/2011), which indicated an operations and maintenance funding requirement of approximately \$US170 million, with a forecast given the
infrastructure investment, that this cost was expected to increase to \$US 235 million in 1393 (2014)159.

The government is aware of the large unfunded O\&M cost, and since 1392 (2013) it has implemented reforms in nine ministries, including MOE and MOHE, to improve O\&M. While ODA funds are also supporting O\&M, and an ARTF O\&M facility, the large increase in budget funds is yet to eventuate. Given the large expenditure and budget increase required to implement a sustainable O\&M policy and practice in the education ministries, there will need to be an overall investment in existing government systems, with major institutional capacity enhancement to cost effectively manage $O \& M$ on the required scale.

Table 29: MOE School Operations and Maintenance Costs

| Per Student per Year (Afs) |  |  |  |
| :--- | :--- | :--- | :--- |
|  | Operations | Maintenance | Total O\&M |
| Schools with building infrastructure | 65 | 60 | 125 |
| Schools without building infrastructure | 50 | 25 | 75 |
| Per classroom (with 40 students) |  |  |  |
| Schools with building infrastructure | 2,600 | 2,400 | 5,000 |
| Schools without building infrastructure | 2,000 | 1,000 | 3,000 |

Source: MOE

## SECTION 5: CONCLUSIONS AND RECOMMENDATIONS

Student enrolments have increased in both MOE and MOHE, in response to the increased demand for education services at all levels. While MOE and MOHE government budgets have increased, expenditure is dominated by recurrent costs, of which salaries are the main component, leaving only limited financial resources for non-salary costs and materials. Teacher numbers have increased though they have not kept pace with student numbers, and PTRs have increased. In higher education, part of this increased demand is being met by private sector institutions, which account for 43 percent of students. Major investments required for school infrastructure, and for implementing sustainable O\&M systems exceed future commitments.

The recurrent expenditure per student has declined in real terms and as a percent of GDP per capita over 1391-1394 (2011-2015). As increased numbers of students have continued to higher levels of education, the significantly higher recurrent expenditure per student has major financial implications. As move from general education to teacher training, TVET and higher education the level of expenditure multiple is approximately 4,6 , and 9 times respectively when general education recurrent cost per student is used as the base.

Aid Dependency. The education sector is dependent on a high level of development partner ODA, which is used to fund the development budget and part of the operating budget, and off-budget project interventions. The MOE expenditure (1391-1393 (2011-2014)) 160 was estimated at $\$$ US2.5 billion with at least 41 percent (\$US1billion) funded by donors. Of the donor aid, only 25 percent of the expenditure was on-budget, with the remaining development expenditure off-budget. MOHE expenditure over the same period was $\$$ US360 million with at least 43 percent (\$US156 million) funded by donors, and of this donor aid only 23 percent was on budget 161.

[^69]The low level of on-budget support indicates that there are potential opportunities to improve aid effectiveness. Given current development budget expenditure rates, to achieve the full impact when moving funds on-budget, will require coordinated improvements in MOE absorptive capacity (ie. procurement, implementation, MIS and monitoring systems). As currently indicated by development partners, future commitments and projections anticipate that ODA support will decline in coming years.

To maintain and improve the quality of MOE and MOHE education services, given the fiscal constraints, will require an integrated package of policy, planning and operational efficiency measures, that will include:

- Assessment and adoption of policies to improve service delivery efficiency, covering private sector provision of education services including low cost private education, publicprivate partnerships, outsourcing and contract delivery of services, and means tested cost sharing by service users;
- Strengthening MOE and MOHE financial and MIS systems, with the capacity to provide accurate disaggregated data, establishment of independent monitoring groups, and outsourcing of key surveys and studies;
- Improving aid effectiveness, with enhanced MOE and MOHE implementation capacity, higher development budget expenditure rates, and an increased allocation of ODA onbudget. Stronger development partner and ministry coordination and monitoring of offbudget support, with improved development partner reporting into the MOF DAD;
- Cost effectiveness reviews and impact assessments undertaken by MOE and MOHE to eradicate poor and non-transparent practices/ systems and weak performance, and improve internal efficiency, prioritization and outcomes;
- Improving procurement and contract management systems, covering school construction, design, tendering and supervision systems to achieve best value; and
- Sustainable O\&M systems institutionalized, with capacity established for cost effective delivery and management.


## CHAPTER 4

## QUALITY, SYSTEM CAPACITY AND MANAGEMENT

## Introduction

This chapter is structured in four sections according to the ESA Guidelines: Learning Assessment, System Capacity, Teacher Management and Management of Other Resources. This structure or sequencing of dimensions, however, does not necessarily capture the interrelation of the various factors and dimensions related to educational quality. In order to explain how the different factors interact we have attempted to present the fragmented information in a conceptual model, which seeks to unfold the the various causes and effects.
In addition, in order to provide a clearer picture of the various dimensions of quality, we have summarized the various quality parameters in a table structured by the logic of the model. The table shows service indicators at the input/supply level, process indicators, and performance indicators showing learning outcomes from tests as well as selected quality outcomes related to efficiency and coverage. Finally, in the Conclusions and Recommendations section we have tried to identify and isolate most of those factors that have been associated with the facilitation of learning outcomes.

What is quality? In education, a general notion is that quality is something, which has to do with student learning. From this notion it is often inferred that in order to improve learning, one has to make sure that the required inputs are available to support the learning processes. But, regrettably, this is far from enough. One has to pay attention to the whole process of transforming educational inputs into the desired objectives. Further, it is important that each and every step in the process of the quality cycle gets adequate attention. A simple conceptual model ${ }^{162}$ could look like this:

Figure 44 Quality Model


The concept of quality is relevant for each and every aspect or step in this process. In order to make it operational it has to be translated into standards, which are meant to specify what is an acceptable/desired level of quality for each dimension. Equally important is the identification of who is responsible for the implementation of quality standards. Quality standards have to be 1) defined, 2) applied, and 3) controlled.

The quality of the education system in Afghanistan is poor when measured by the proportion of

[^70]students who are able to perform the grade specific tasks expected at their level, who reach to the final stage of the school cycle and who pass the exams. There is now a growing realization among the new political leadership in Afghanistan that quality of education has not received as much attention as the quantitative dimensions of education.
Among the factors affecting quality are poor school facilities; inappropriate curriculum; inadequate teacher qualifications, inadequate and insufficient textbooks and learning materials, as well as inefficient provision and untimely distribution of textbooks. ${ }^{163}$

In the table below we have tried to summarise the various factors and dimensions of quality of education in Afghanistan.

Quality - A summary of factors and dimensions related to INPUTS (Service Indicators), PROCESS Indicators, OUTPUTS (System Performance indicators), and Factors facilitating learning outcomes
(Sources are indicated in the main text later in the chapter)
Table 30: INPUTS (Service Indicators)

| INPUTS (Service Indicators) |  |  |
| :--- | :--- | :--- |
| Topic | Issue | Situation |
| \% Qualified teachers | Teacher qualification is <br> strongly correlated to student <br> learning | Average 43 \% <br> (48\% according to EJSR <br> 2015) <br> Rural areas disfavoured <br> EMIS does not disaggregate <br> Teacher qualification by sex |
| \% Female teachers | Strong positive correlation <br> between female teachers <br> enrolment and student <br> learning, in particular for girls <br> and early grades | $33 \%$, very few in rural schools <br> Current rules prevent the <br> recruitment of capable and <br> experienced female teachers <br> with less than grade 12 |
| Teacher-Student Ratio: TSR | Very high TSR negatively <br> affects learning, but <br> operational costs are an issue <br> MOE Policy: 40:1 | Average 45:7 <br> Variation 29:1 - 69:1 |
| Curriculum | Learning content and <br> methodology should be <br> appropriate for student <br> development and cognitive <br> level. <br> Early grade learning facilitated <br> by integrated, holistic <br> approaches and few subjects. <br> Increasingly, specialised <br> subjects can be introduced, <br> but fragmentation and <br> information overload is an <br> issue - and so is pressure <br> from partisan interest groups | 8 Subjects in Primary <br> Education Phase One (1-3) |
|  | 11 Subjects in Primary <br> Education Phase Two (4-6) |  |
|  | Education (7-9) |  |
|  | Secondary Education (10-12) <br> Capacity is a problem: Very <br> few curriculum specialists at <br> CDC |  |
| Textbook Pupil Ratio TXPR | Strong correlation between | Most schools receive less |

[^71]|  | access to TB and learning. <br> TXPR is not captured by EMIS | than 75\% of requested TB. <br> Distribution is ineffective. <br> Inferior quality TB. |
| :--- | :--- | :--- |
| School near home/Distance to <br> school | Strong correlation between <br> school distance and <br> enrolment: Dropout increases <br> for each increased 1.6 km <br> (19\% for girls, 13\% for boys at <br> primary level) | $40 \%$ spend more than half an <br> hour to go to school |
| Schools with buildings and <br> facilities | MOE has standards for school <br> infrastructure, which specifies <br> size and design of classrooms <br> as well as facilities like toilet <br> and WASH, libraries, <br> laboratories and boundary <br> walls. <br> Standards are often not <br> adhered to. <br> High demand has led to <br> hastily construction of inferior <br> quality buildings. <br> Corruption is widespread. | $45 \%$ of schools have unusable <br> buildings <br> Many children attend open- air <br> classes. <br> Most schools have no <br> electricity and no central <br> heating or fans to compensate <br> for seasonal cold, heat and <br> wind. <br> In urban centres many <br> schools operate in shifts to <br> cope with demand |
| Number of school days per <br> school year | The number of days in the <br> school year correlates to <br> learning outcomes. <br> It is 218-228 in neighbouring <br> countries | It is only 180 in Afghanistan. <br> This is due to long winter <br> break, examinations and <br> many holidays |

Table 31: PROCESS Indicators

| PROCESS Indicators |  |  |
| :---: | :---: | :---: |
| Topic | Issue | Situation |
| Teaching | The process must be learner centred and directed at the achievement of objectives and student learning outcomes. A caring, non-violent atmosphere is crucial | Increasingly, teachers gain subject mastery and become aware of pedagogy and methodology issues (e.g. BEPA, TCAP/WUSC, SCA etc.). <br> Still, however, focus on discipline and use of corporal punishment |
| Learning | The process should be orchestrated in such a way as to allow for gradual progression from concrete to abstract, from simple to complex, from known to unknown, for experimentation, for questioning, for collaboration and exchange of experience. And it has to take place in a safe and inclusive environment. | Encouraging experience from NGO supported projects (CBE, Beacon, SCA etc.) Often, however, there is focus on rote learning and reproduction of content. Environment is often not conducive to learning, conformist behaviour rewarded and atmosphere sometimes characterised by fear |


| Management | Strong correlation between school and student performance and school management | Many head teachers have been trained in various CPD programmes. <br> Lack of capacity and overly centralised management (DED, PED) hampers the development of school potential |
| :---: | :---: | :---: |
| Participation | Parent and community participation in school management could improve supervision, accountability and mobilisation of resources | Establishment and training of SMCs and shuras have had a positive effect on school performance and school safety in many places |
| Assessment of learning (LA) | LA can provide effective feedback on individual student learning and on system performance. | LA is not yet part of the MOE system, but some pilot projects under EQUIP have been implemented at grade 6 and 3 . There has been some research on LA and small scale NGO projects as well. |
| Examination system | What is tested is what is taught: if teachers and books are focused on producing the right answers to a sample of questions, then the most likely result is going to be rote learning of content with no deeper understanding, let alone ability to apply or synthesise knowledge. | Grades 4-11 examinations are created and marked by classroom teachers, reviewed by the headmaster and principal and consequently reviewed by DED |
|  |  | Grade 12th examinations are sent to PED, and his/her approval is mandatory |
| Kankor - university entrance examinations | Demand for HE is high and many candidates, who fail to access HE try second options through TVET and TE. This is a huge systemic wastage | 219,682 students appeared: $43 \%$ had scores less than $50 \%$; 27\% grade 12 graduates admitted to HE; 11\% Kankor participants directed to TVET and TE |
| Corruption | The population perceives corruption as the second major problem facing Afghanistan | Corruption exists in the form of embezzlement, fraud, and false reporting. <br> No systematic registration of corruption. |

Table 32: OUTPUTS /System Performance indicators

## OUTPUTS /System Performance indicators

MOE has not yet developed an overall Results Framework, which would allow for strategic monitoring of results in key areas and allow for comparisons across time.
No systematic performance evaluation of the previous NESPs 1 and 2 and IP (Interim Plan) have been made, so far ${ }^{164}$.
The indicators below look at quality of learning outcomes measured by various national and international assessments as well as at indicators of efficiency taken from Chapter 2.

[^72]| Learning Assessment | Issue | Proportion of students/population; Prevalence |
| :---: | :---: | :---: |
| MTEG Grade 6 | Cannot read simple words, | 10\% of students |
|  | Cannot name simple shapes in maths | 14\% of students |
|  | Cannot write a simple word | $31 \%$ of students |
| TIMSS | Grade 4 performance in Iran, Azerbaijan and Kazakhstan | Similar to Grade 6 performance in Afghanistan |
| PIRLS | Grade 4 performance in Iran, Azerbaijan | Above or similar to Grade 6 performance in Afghanistan, however majority of students are able to demonstrate fundamental reading skills |
| Beacon EGRA Grade 3 | Read with comprehension | 74\% of students |
| Beacon EGMA Grade 3 | Mastery of essential numeracy skills | 82\% (lowest percentage of questions correct on any single subtest) |
| Efficiency and Coverage |  |  |
| Survival Rate Reach final stage of cycle | Percentage of school starters who reach Grade 6 (Enrolment based) | 84.2\% (Boys 84.4/Girls 83.9) |
| Drop outs | This figure is largely complementary to the survival rate | Overall 14 \% of all starters |
| Completion Rate Age 13 is used as the primary school graduation age in Afghanistan in this report | Ratio of total number of students, regardless of age, entering last grade of primary school for the first time, to the number of children of the primary graduation age at the beginning of the current school year. (Cohort based) | 31\% (B 40\%/G 21\%) |
| School Life Expectancy SLE | Average number of schooling years the children of a given country may hope to complete (repeated years are not included) | Average 9.6; Large variation: 12.4 urban male; 4.3 rural girl |
| Literacy Rate | Adult 15 + | 35\% (49\% male, 15\% female) |
|  | Youth 15-24 | 52 \% (66\% male, 37\%female) |
| Out of school children (OOSC) | Primary level | 2.3 million, $90 \%$ of whom are Kuchis |
| Out of school children (OOSC) | Secondary/tertiary level | 2.0 /and 2.3 million |
| Repeaters | Year 1393/2014 | Male 87.9; Female 86.12 |

## SECTION 1: ASSESSMENT OF STUDENT LEARNING

### 4.1.1 National Examinations and Admissions Tests

Afghanistan does not yet have standardized performance tests or national examinations at primary or secondary school, which makes assessing learning outcomes a challenge.

Afghanistan is in the process of reviewing its examination system, with a Directorate for Standards, Research and Evaluation being established within the Curriculum Development Department (Afghanistan Ministry of Education, 2010). According to Afghanistan's National Education Strategic Plan (1389-1393/2010-2014) (Afghanistan Ministry of Education, 2010), examinations are administered twice annually to Grade 4 students and above.
These examinations are not standardised. Grades 4-11 examination are created and marked by classroom teachers, reviewed by the headmaster and principal and consequently reviewed by DED. However, grade 12th examinations are sent to PED and his/her approval is must. There is no central examinations authority. Currently, the highest level of authority for examinations is the PED.

Examinations typically occur annually and all students within a particular grade participate. They usually assess students' knowledge and skills in relation to different subject areas in the curriculum. All students receive the same test, which is administered under the same test conditions, and, therefore, results are often compared between individual students and across schools.

The main purpose of examinations is to certify and select students, and they have traditionally served gate-keeping functions, for example, determining who are to be promoted or limiting entry to a course or institution, or determining learning paths such as 'academic' or 'vocational'. Therefore, examinations often have high stakes for students as there are consequences for high and low achievement. The percentage scores determine whether or not they can move ahead to the next grade.
With such high stakes, attempts at cheating are common and hearsay evidence suggests occasional leakage of test questionnaires. While much examination corruption may go on unnoticed, its disclosure, in particular concerning the Kankor university entrance exam, attracts widespread public attention and press coverage ${ }^{165}$. We have not been able to find any systematic records of examination related fraud and corruption.

### 4.1.2 National Learning Assessments

Little systematic and comprehensive information on students' learning achievement is available in Afghanistan. Despite data having been collected on school attendance and literacy levels in the population, little was known on the quality of educational outcomes until 2013. Available evidence from various studies, however, indicates generally poor learning outcomes.

A study by Save the Children found that $73 \%$ of children in grade 3 CBE classes could read with comprehension while the same comprehension only applied to $43 \%$ of a sample of grade children in public schools. This low performance in public schools is a concern in itself since reading with comprehension is an important skill that is required for the entire student learning process for all subjects. The study was not nation wide but was conducted in six provinces only. Another study, however, suggests a gradual improvement in learning achievement based on test results from

[^73]2009 and 2011 in Language and Maths at grades 3 and 6166.
Basic Education for Afghanistan Consortium (BEACON) was a project meant to support community based holistic approaches to education in rural areas. The project reached 26647 students in 748 community based education (CBE) classes. It ran from 2012 to 2014. In 2013 a baseline test and in 2014 an end line test using EGRA and EGMA was administered to assess reading and numeracy skills. The results showed that the majority of students had developed the decoding and oral reading fluency skills that are foundational to basic literacy. The results also showed that $74 \%$ of students were reading with comprehension while $5-6 \%$ had not acquired any oral reading fluency or comprehension. The EGMA findings showed that students had mastered the essential numeracy skills but struggled more with quantity discrimination and subtraction. The overall findings suggest that outcomes in initial literacy and numeracy skills can be continually improved through teaching techniques that promote reading and math competencies. Important in this respect is providing teachers with training in multi-level classrooms and supporting the few students who are lagging behind. It will also be important to continue gender-equal instruction in order to facilitate the same learning outcomes for boys and girls ${ }^{167}$.

In 2013, a comprehensive learning assessment study, Monitoring Trends in Educational Growth (MTEG), was conducted by ACER, an Australian consultant for EQUIP, a large ARTF sponsored MOE programme ${ }^{168}$.
The purpose of MTEG was to provide information to education policy makers on the quality of education outcomes in Afghanistan. In addition, MTEG would inform educational practitioners by clearly demonstrating what students at Class 6 can and cannot do in an assessment situation. MTEG is just one component of a learning assessment system ${ }^{169}$, the results of which were available in several reports in 2015.
The 2013 MTEG assessment of Class 6 students in Afghanistan contributed to the discussion on gender disparity by reporting on the proficiency levels of girls and boys in the domains of mathematical, reading and writing literacy. The data provided information on background characteristics that may interact with school attendance and achievement, both of which are important indicators of gender parity. These background characteristics included attitudes to school, perceived support, socio-economic status, and location.
The results of the assessment are reported on 'described proficiency scales'. For each subject, proficiency can be described from early stages of learning to sophisticated skills and understanding. Based on the results of the assessment, the proportion of the Class 6 population performing at each proficiency level is identified. The results showed wide variations in Class 6 students operating at different levels of proficiency in each of the domains of reading, writing and mathematical literacy. While a few performed well, there were substantial proportions of the population who are not able to perform simple reading, writing and mathematical tasks.

### 4.1.3 International Standardised Learning Assessments

International assessments use standardised tests and procedures to measure learning in multiple countries. The largest international assessments include: The Program for International Students Assessment (PISA); the Progress in International Reading Literacy Study (PIRLS) and the Trends in International Mathematics and Science Study (TIMSS).

[^74]The ACER Study tried to compare the performance of Afghan students to their peers in neighbouring countries using International Standardised Learning Assessments.
There is little known about the performance of Class 6 students studying in countries neighbouring Afghanistan. However, there are TIMSS results for grade 4 from the Islamic Republic of Iran, Azerbaijan and Kazakhstan that may be used for comparative purposes. TIMSS is a major international study of mathematics and science for Class 4.
TIMSS reports that $64 \%$ of Class 4 students in Iran, $72 \%$ in Azerbaijan and $88 \%$ in Kazakhstan demonstrate the ability to add three-digit numbers ${ }^{170}$. It would appear that Class 6 students in Afghanistan are performing at a lower level compared to Class 4 students in those countries.

The MTEG ACER study also looked at the proficiency level of reading literacy of class 6 students.
Table 33 proficiency level of reading literacy

| Reading Literacy |  |
| :--- | :--- |
| Competence level | Proportion of students in Class 6 |
| Able to recognise the meaning of single sentences on <br> familiar topics | $90 \%$ |
| Able to identify the main message in short texts on familiar <br> topics | $10 \%$ |
| Explain the behaviour and emotions of characters in a <br> narrative text | Only a "very small percentage" |
| Answer questions that required them to retrieve directly <br> stated information located at the beginning of a text | $55 \%$ |

Source MTEG/ACER ${ }^{171}$
Using PIRLS ${ }^{172}$, some interesting comparisons can be drawn. In PIRLS, the skill of retrieving directly stated information at the beginning of a text was tested.

Table 34 PIRLS,

| Retrieving directly stated information at the <br> beginning of a text |  |
| :--- | :--- |
| The Islamic Republic of Iran | $76 \%$ of Class 4 students |
| Azerbaijan | $82 \%$ of Class 4 students |
| Afghanistan | $55 \%$ of Class 6 students |

It would appear that many Class 4 students in these countries are performing at or above the level of Class 6 students in Afghanistan. Nevertheless, it is promising that a large majority of students are able to demonstrate fundamental reading skills and that a significant, if small, proportion of the population is performing well on relatively difficult reading tasks.

For writing literacy, eight per cent of students are able to produce texts where ideas are elaborated to some extent, and are generally relevant to the task (proficiency level 10 and above in Exhibit 6). Forty-five per cent of Class 6 students are unable to demonstrate writing ability beyond producing a recognisable word to label an everyday object or correctly spelling single words prompted by a

[^75]picture (proficiency levels 6 and below).
There are currently no large-scale international assessments of writing literacy. This means that, at the time of publication, the MTEG Class 6 results for writing cannot be compared with those of other countries.

### 4.1.4 Using Household Surveys and Literacy Levels as a Proxy Measure of Quality

The literacy rate in Afghanistan is one of the lowest in the world. In 2005 it stood at 31\%, 20\% for women, but nine years later it had increased to $52 \%$.
The 2015 ALCS offered a comprehensive account of the literacy situation in Afghanistan ${ }^{173}$. Literacy generally denotes the ability to read and write and to use written words in everyday life. Literacy is one of the intended outcomes of education, as well as a measure of a person's ability to function in society and his or her potential for further intellectual growth and contribution to economic and socio-cultural development of society.
The adult literacy rate - referring to the population aged 15 and over - indicates the accumulated achievement of primary education and literacy programmes in providing basic literacy skills to the population. The table below indicates very low adult literacy rates for Afghanistan, with a $34 \%$ overall literacy rate in the population over 15 years. The complementary illiteracy rate of $66 \%$ implies that there are around 9.7 million illiterate persons aged 15 and older in Afghanistan, 5.9 million women and 3.8 million men, and it indicates the critical need for policies and efforts in organizing adult literacy programmes and quality primary education.

The adult literacy rate presented in the table below also shows pronounced differences by residence: in the urban population the adult literacy rate is almost twice as high as that in the rural population ( 54 against $29 \%$ ), whereas among the Kuchi adult literacy is as low as $8 \%$.

Table 35 Adult literacy rate, by residence, and by sex (in percentages); Gender equity indicators, by residence
Sexand gender

equity indicators $\quad$| Total |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Urban | Rural | Kuchi |  |
|  | 68.2 | 44.4 | 13.4 | 49.1 |
| Female | 39.1 | 12.5 | 1.1 | 19.0 |
| Both sexes | 53.6 | 28.7 | 7.5 | 34.3 |
|  |  |  |  |  |
| b. Gender equity indicators |  |  |  |  |
| Absolute difference | 29.2 | 32.0 | 12.3 | 30.1 |
| Gender parity index | 0.57 | 0.28 | 0.08 | 0.39 |

Source: CSO ALCS 2015

Only $19 \%$ of women 15 years and over are able to read and write, compared to $49 \%$ for men. The corresponding figure for rural women is a low 12 \%. The table above shows how these figures result in poor gender equity indicators, with large absolute differences between male and female literacy and low female-to-male literacy ratios (gender parity indices).
Although the absolute gender differences between urban and rural populations are of similar

[^76]magnitude (close to 30 percentage points), the performance in terms of the ratio indicator is twice as high in urban areas (0.56) as in rural areas (0.28), indicating the disadvantaged position of rural women.

The youth literacy rate - the rate calculated for the sub-population aged $15-24$ - is one of the MDG indicators to measure progress towards achieving universal primary education (MDG goal 2). It reflects the outcomes of primary education over roughly the previous 10 years. As a measure of the effectiveness of the primary education system, it is often seen as a proxy measure of social progress and economic achievement. The table below again indicates large differences in youth literacy rates by residence and sex, and especially the difficulty to service the Kuchi and the female rural population. The overall youth literacy rate of $52 \%$ would imply that Afghanistan is one of the countries with the lowest literacy in the world.

Table 36 Youth literacy rate, by residence, and by sex (in percentages); Gender equity indicators, by residence

| Sex and gender equity indicators | Residence |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Kuchi | Total |
| a. Sex |  |  |  |  |
| Male | 83.4 | 62.3 | 20.6 | 66.3 |
| Female | 65.1 | 26.5 | 2.6 | 36.7 |
| Both sexes | 74.3 | 44.6 | 12.5 | 51.7 |
| b. Gender equity indicators |  |  |  |  |
| Absolute difference | 18.4 | 35.7 | 18.0 | 29.7 |
| Gender parity index | 0.78 | 0.43 | 0.13 | 0.55 |

Source: CSO ALCS 2015
The literacy gender parity index is the ratio of the female literacy rate to the male literacy rate for the age group 15-24. The indicator is applied in Afghanistan as an ANDS indicator to measure progress towards gender equity in education and is also a key indicator of empowerment of women in society. At national level, ALCS 2013-14 found a figure of 0.55 for this indicator (see the table above), indicating that the share of female youth that is able to read and write is just over half that of male youth. The corresponding figures for urban and rural populations were, respectively, 0.78 and 0.43 .

Despite large investments in the education system in the decade before the ALCS 2013-14, their conversion into increased literacy rates is a slow process. The adult literacy rate - referring to the population 15 years of age and older - has increased, from $26 \%$ in NRVA 2007-08 to $31 \%$ in NRVA 2011-12 (data not shown) and is now recorded at $34 \%$ (Table 9.5). The successive surveys observed an increase in the male adult literacy rate from $39 \%$ to 45 and to $49 \%$, respectively, and in the female adult literacy rate from $12 \%$ to 17 and to $19 \%$, respectively. These figures imply that the targets defined in the Education Strategic Plan 2010-2014 of the Ministry of Education for 1393/2014 (2014) (MoE 2010) - 48 \% overall literacy, and 54 and 43 \% for males and females respectively - have not been achieved. Although the male literacy rate came close to the set target, the female rate fell short by more than half.

The youth literacy rates show modest, but constant improvement since the NRVA 2005 (Figure 9.10). This ANDS/MDG indicator showed a $65 \%$ increase in the rate between NRVA 2005 and ALCS 2013-14 for both sexes combined. However, the tempo of the increase is far too low to even come close to the ANDS target of $100 \%$ in 2020.

Figure 45 Youth literacy rate, by sex, and by survey year (in percentages)


Source: CSO ALCS 2015

The figure above presents the change in literacy levels on the basis of age-specific literacy rates. It indicates an improvement in educational performance in the period since 2001. Educational improvement is suggested by the increase of literacy rates in younger age groups at the left of the graph, an effect that is somewhat stronger for women. For all women aged 30 and over the literacy rate is $10 \%$ or below, indicating that during the years in which they were in their school age educational opportunities were very poor. The up-turn that can be observed for women in their late twenties reflects the new opportunities to enter the formal education system after the remove from power of the Taliban regime in 2001. ${ }^{174}$ The increase in literacy continues for each successively younger age up to age 15. At this peak, $48 \%$ of girls is able to read and write and $71 \%$ of boys is able to do so. Children of younger ages show somewhat lower literacy because of the effect of later school starters and using moving averages in the graph.

## SECTION 2: ANALYSIS OF SYSTEM CAPACITY

Capacity is defined as the maximum level of output of goods and/or services that a given system can potentially produce over a set period of time. When analysing capacity of the education system we are interested in its performance in terms of learning achievement and the numbers and proportion of successful graduates completing the full learning cycle, i.e. grade 12.

A proxy indicator for the education system output in Afghanistan is the adult literacy rate, which, as previously mentioned, stands at $34 \% 175$, while according to the National Literacy Strategy, MOE 2013 it stands at $36 \%$ and the youth literacy rate, which stands at 52 , one of the lowest in the world. The proportion of students, who make it to the last 12th grade of schooling, is $18 \%$. The complementary values of these figures are indicative of the system waste: an adult illiteracy rate at $66 \%$, youth illiteracy at $48 \%$ and overall school dropout of $82 \%$.

[^77]
### 4.2.1 Evaluation of the Conversion of Resources into Results by Schools

In order to analyse the correlation between education resources and results we tried to identify available EMIS data on education expenditure (per student or school,) and school performance (e.g. enrolment, learning achievement, pass rate) disaggregated by province or district.

Unfortunately, such data were not available at the time of the sector analysis.

### 4.2.2 Analysis of the Factors Associated with Learning Outcomes

Is it possible to isolate the variables that contribute to learning outcomes and to estimate their relative contribution to learning? To the extent that this would be possible, we would have an instrument, which could help us making choices between alternative inputs in order to optimize benefits, in this case enrolment and learning outcomes. We have identified a number of variables and seek to establish their relative importance by means of various studies that have been undertaken. Factors that have been assessed are: age, distance to school, teacher qualification and teacher academic support, access to textbooks, parents' educational background and socioeconomic status (SES).
Factors that have not been assessed are: the quality of the curriculum, the quality of textbooks, and the number of contact hours, as well as school management. We assume that these factors are critical for learning outcomes and would like to suggest that future research into these areas be made a priority for MOE.

## Early Childhood Education and Learning ${ }^{176}$

Progress in schooling is often associated with cognitive abilities acquired at a young age. Prior participation in early childhood education and learning programmes can play an important role in a child's future education, because they shape the attitudes towards learning and help children to develop basic social skills. Those children who have access to early childhood education and learning programmes are also more likely to go on to have access to primary schooling. However, early childhood education attendance is very low in Afghanistan, with implications for successful transitions to primary school.
Within households, a majority of children have adults engaging in activities with them, and most households have play items in the home, conditions that help stimulate cognitive development and social interactions. However, access to books in the home is extremely low throughout the country. Children's access to books from an early age is a proven means of providing a solid foundation for literacy development and school learning later on.
The importance of parental and adult stimulation of the child for early learning:
It is well recognized that a period of rapid brain development occurs in the first three to four years of life, and the quality of home care is the major determinant of the child's development during this period. In this context, adult activities with children, the presence of books in the home for the child, and the conditions of care are important indicators of the quality of home care. Children should be physically healthy, mentally alert, emotionally secure, socially competent and ready to learn.
Activities that support early learning include the involvement of adults with children in the following activities: reading books or looking at picture books; telling stories; singing songs; taking children outside the home, compound or yard; playing with children; and spending time with children naming, counting, or drawing things.

AMICS ${ }^{177}$ found that for more than two-thirds (73\%) of under-five children, an adult household member engaged in more than four activities that promote learning and school readiness during the three days preceding the survey. The average number of activities that adults engaged in with children was four. Fathers' involvement in one or more activities was $62 \%$.

[^78]Interestingly, children living in households with middle level socio-economic status have the highest rate of support from the father for the child's learning, while children living in households with the wealthiest socio-economic status have the lowest rate of support from the father towards the child's learning. Variances were also found by the father's educational level, in that fathers with secondary education or higher participated in one or more activities with the child more often (73\%) than did fathers with no education (59\%).

The AMICS study also found that fathers were engaged in activities with boys ( $63 \%$ ) only slightly more than with girls (60\%). Higher proportions of adults engaged in learning and school readiness activities with children in urban areas (80\%) than in rural areas (72\%). Strong differentials by region and socioeconomic status are also observed: adult engagement in activities with children was greatest in the Central Highlands region (81\%) and lowest in the South East region (62\%), while the proportion was $80 \%$ for children living in the wealthiest households, as opposed to those living in the poorest households (72\%).

## Exposure to books

Exposure to books during a child's early years not only provides the child with greater understanding of the nature and purpose of print literacy, but may also give the child opportunities to see others reading, such as older siblings doing school work. The presence of books in the household is important for later school performance and literacy development.
In Afghanistan, only $2 \%$ of children aged 0-59 months are living in households where at least three children's books are present (Table 9.3). The proportion of children with 10 or more books declines to almost $0 \%$. While no gender variances are observed, urban children (5\%) appear to have more access to children's books than children living in rural households (2\%).

The presence of children's books is positively correlated with the child's age; in the homes of 3 of children aged 24-59 months, there are three or more children's books, while the figure is only slightly more than $0 \%$ for children aged $0-23$ months. The presence of children's books is positively correlated with the mother's education level: $11 \%$ of children, whose mother has attained secondary education or higher have three or more children's books, while the figure drops to $2 \%$ for children whose mothers have no education. There are notable variances found in the presence of children's books by region and by household social-economic status.

## Age is associated with learning outcomes.

The MTEG/ACER study found a strong correlation between age and learning outcomes. Students in grade 6 who are 15 years and older may be up to 6 months behind those students who start school on time. We have no information as to differentiate whether these children had repeated a grade or entered late. The effects, however, could simply be correlational, for example, children of poor families enter late, and they are also behind in their learning.


- 11 or younger -12 - $13-14$ - 15 or older

Figure 47 Achievement by age


## School Infrastructure

In Afghanistan there are approximately 16000 schools across the country, up from only 3400 in 2001. Despite the influx of Afghan children wanting to attend school, there still remain urgent unmet infrastructure needs that impinge on students' ability to access quality education. Many children attend open-air classes sitting under tents or beneath a simple piece of cloth tied between two trees. Most schools have no electricity, and no central heating or fans, making for difficult learning conditions depending on the season: wind and heat in summer, and cold and snow in winter.
In 2003, approximately $60 \%$ of schools were operating outside and most did not have any water source or adequate toilets ${ }^{178}$. MOE's ISD started its work with a huge challenge and in 2011, according to IIEP, more than 5000 schools have been rehabilitated or constructed since 2003

[^79]Yet, despite the surge in reconstruction of schools, as of 2013, approximately $45 \%$ of schools had unusable buildings despite the Ministry of Education's goal that at least 75\% of general and Islamic classrooms would have usable buildings by the end of 2014.
There is an increasing demand for contractors and construction workers to complete schools at an ever-increasing pace, which has led to shoddy construction and cost inflation by those attempting to extract more money from donors, or facing pressure for a quick turnaround in opening newly built schools. Many buildings in urban areas are hastily built though are used to demonstrate progress to donors in the short-term, with little monitoring thereafter to ensure that the school building is well maintained and has structural integrity. In some cases, newly built schools have quickly become unusable because a foundation was improperly laid, the land is poor quality, walls crumbled or collapsed, materials were inappropriate for the location or climate, or for other reasons. Additionally, widespread corruption severely constrains efforts to address the lack of school infrastructure throughout the country, resulting in poorly or partially built schools ${ }^{179}$. MOE now has developed standards for school construction but there is still a long way to go before all schools have adequate resources within schools such as science labs, school libraries, sports equipment, and school supplies for all students, in addition to appropriate, well-designed and longlasting buildings ${ }^{180}$.

The Learning Assessment Study conducted by ACER found a positive correlation between student performance and the availability of modern facilities at schools: Students who attend schools that have water, electricity or internet perform better. ${ }^{181}$ This correlation, however, is as likely to be a function of schools being located in urban more wealthy settings and with proximity to community facilities, especially shopping centres, factors which are all associated with higher levels of achievement.

## Distance from home to school matters - a lot:

Proximity significantly affects both boys' and girls' enrolment with average enrolment rates declining 16 percentage points for every additional mile $(1.6 \mathrm{~km})$ children had to travel to school ${ }^{182}$. Beyond two miles, enrolment dropped to about $30 \%$ - vs. $70 \%$ enrolment within a mile from home. The effect of proximity was particularly dramatic for girls, whose enrolment dropped a precipitous $19 \%$ with even a one-mile increase in distance between their home and school. Hence, whereas enrolment rates were about equal for boys and girls with access to schools close to home, gender disparities quickly became pronounced with an increase in distance. At 1.5 miles the gender gap was already ap. 10 percentage points. Also, absenteeism increased with distance.

Contrary to widespread beliefs, there is a strong demand for girls' education well beyond the primary level. The study found that it is not resistance to girls' education or to the MOE, which causes high drop out of girls; it is distance from home to school, and there is a strong demand for continued CBE through higher grades, even up to grades 9 or 10. Even in very conservative societies there appears to be strong support for girls' education and, if no other options are available, even in cases where they are taught by locally recruited and trusted male teachers.

On the correlation between distance and learning outcomes the study found that girls' test scores decrease by 0.24 standard deviations per mile, 0.09 standard deviations more than boys'. A similar correlation was found by the MTEG ACER Study (see figure 48).

[^80]Figure 48: Time spent travelling to school ${ }^{183}$


Almost 40 \% of students spend more than half an hour to go to school
Burde and Linden conclude the major findings on the importance of distance as follows: "Virtually all girls and boys, especially boys younger than grade 5 or 6 drop out when handover involves transfer to an MOE school as little as 3 kilometres away."
Girls' handover dropout does not derive from resistance to girls' education per se; on the contrary, parents urge more educational opportunities for their daughters, provided it can be accessed closer to home.
Handover dropout is not related to suspicions regarding government-provided education. Although many see the MOE as less capable of providing support for students and teachers than NGOs, MOE schools - and handover - are viewed as a ticket to higher grades and higher education. Parents and MOE officials alike recommend that CBE classes be continued in the communities through higher grades. Although CBE policy allows handover and continuation as MOE outreach classes, both parties appear to assume that continuation would have to be supported by NGOs ${ }^{184}$.

## Teacher Education

There is little evidence from Afghanistan on the correlation between teacher education and students' learning achievement. There is, however, a large body of international academic literature suggesting a very strong correlation between teacher education and student learning. The weight of substantial evidence indicates that teachers who have had more preparation for teaching are more confident and successful with students than those who have had little or none. Recent evidence also indicates that reforms of teacher education creating more tightly integrated programs with extended clinical preparation interwoven with coursework on learning and teaching produce teachers who are both more effective and more likely to enter and stay in teaching. An important contribution of teacher education is its development of teachers' abilities to examine teaching from the perspective of learners who bring diverse experiences and frames of reference to the classroom ${ }^{185}$. The MTEG/ACER study found that students who attend schools with greater proportion of teachers with university education were more likely to perform better in reading ${ }^{186}$. Currently, a project under TCAP/WUSC is providing project support to MOE TED for the professionalization of teachers.

[^81]
## Teacher support

While student learning achievement is closely associated with teacher qualifications it is also, associated with supporting teachers in the classroom. According to a study by ACER,: "The effect on student learning of university qualified teachers in a school was not as great as the effect of providing direct support to teachers in the school (teacher education visits). This raises a discussion point related to 'Teacher qualifications' AND 'teacher Support"' ${ }^{187}$ Inspector/supervision visits have a small association with writing achievement and none for reading or mathematics. Teacher educator visits, however, have a significant correlation with higher achievement in all three domains. ${ }^{188}$

## Textbooks and learning

There is strong evidence to support the goal of having a full set of textbooks for each student. The correlation between textbook use and learning outcomes shows better score values of 7 in Maths, 9 in Reading and 5 in Writing.

Figure 49 Textbook use and learning outcomes


Students who have to share a textbook may be on average 6 months behind students in reading who have their own textbooks ${ }^{189}$

## Parents' Education Level

The significance of parent's education level on student academic performance is quite high as can be seen from the graph below. Students with no parents are seriously disadvantaged.

Figure 50 Effect of Parental Education Level on Student Academic Performance ${ }^{190}$

[^82]

The performance of students who do not have a mother or father may be up to 6 months behind those students who have parents that completed secondary school

## Language and mother tongue

There are about 30 spoken languages in Afghanistan and two national official languages: Dari and Pashto. Article 32 of the Education Law states, "Language of teaching shall be selected from one of the two state official languages, based on the current language spoken by the majority of the population residing in the area, in accordance with its related rule. In the areas where spoken language of the majority of the people is the third official language in the country (Uzbeki, Turkmen, Pashai, Nooristani, Balochi, Pamiry, and other languages), in addition to teach Pashto and Dari languages, opportunities for teaching of the third language as a teaching subject shall be prepared."
The MOE Inclusive and Child Friendly Education Policy from 2014 has identified children from language minorities as vulnerable to marginalisation and it stipulates that multilingual approaches in education, which are in line with the Constitution, should consider language as an integral part of a student's cultural identity.
The use and promotion of minority languages challenges has undergone several changes during the last 25 years. In the 1980s, under the Nationalities Policy, minority languages and dialects began to flourish with the assistance of Soviet advisers, while the situation under the Taliban period was reported to have reversed completely ${ }^{191}$. Now, with the 2014 inclusive and Child Friendly Education Policy there is a renewed focus on third official languages, but little practical action orientation and specification of desired results.
Current challenges to introducing an effective minority language policy in Afghanistan comprise the language diversity with the official languages operating alongside with a common local language, much of which is only oral. ${ }^{192}$ The Language challenges could be summarized:

- A lack of consensus within the ministry on the importance of mother-tongue education in the case of small ethnic minorities

[^83]- The political fear of weakening national unity by strengthening local languages, especially through possible interference of neighbouring countries
- Negative perceptions of some linguistic minorities towards education in local languages
- Shortage of written literature in local languages and diversity within each language
- A lack of reliable data on the number of school-age children of linguistic minorities
- Shortage of qualified teachers for teaching local languages;
- The possibility of losing future opportunities and further marginalization of ethnic minorities by studying in local languages

Currently, ${ }^{193}$ Textbooks for all grades are developed in both Dari and Pashto languages. Students study either in Dari or Pashto language, depending on the neighbourhood's major language. Second national language is taught in Grade 4 and upward as a subject. The minority languages should be taught in Grades 1-12 as an extra subject to the children of minorities. Textbooks in the minority languages are developed up to Grade 6, so far. Textbooks are printed, but most minority students have not received the textbooks (due to logistical weakness, corruption, lack of enough attention to minority languages). Extra three hours are allocated to teaching the local languages, but in practice, it is often not implemented.

Figure 51 Correlation between language spoken at home and student achievement ${ }^{194}$


The inclusive policy concern that children from minority language groups are vulnerable to marginalisation is confirmed by evidence. Research suggests that students who speak a language other than Dari or Pashtu in the home are on average six months behind their peers in school. ${ }^{195}$

### 4.2.3 The Analysis of Factors' Cost-Effectiveness

The previous section demonstrated the effect of various factors on learning outcomes. In situations of scarcity it would be beneficial to be able to determine the relative significance of the various factors in order to make rational policy choices between alternatives. Such an analysis, however, would require that we were able to isolate and calculate the net effect of specific factors on learning results and that we were able to construct the annualised unit costs of the chosen factors. So far, we have not been able to isolate the unit costs of such factors as e.g. textbooks, qualified teachers, teacher support linked to CPD and others.

[^84]Given the strong evidence of the positive effects on enrolment, retention and learning of CBE schools, one of the most interesting cost-effectiveness analyses we could think of is the costeffectiveness of CBE in remote and sparsely populated areas versus MOE hub schools at a distance higher than 1-2 kilometres from students' homes.

### 4.2.4 Institutional Analysis

## National Education Strategic Plans (NESP)

Since 2006 three National Education Strategic Plans(NESP) have been developed in Afghanistan:

- NESP I, 1385/2006-1389/2010 was developed with substantial technical assistance from IIEP
- NESP II, 1389/2010-1393/2014 was developed primarily by Afghans and with very little TA from outside
- NEIP, the National Education Interim Plan, 1390/2011-1393/2014 was developed in response to specific requirements from the then FTI (now GPE) in order to facilitate a USD 45 million grant for education in Afghanistan.

So far, there has been no systematic evaluation of the previous NESPs, but a Master Thesis from IIEP has thrown some light on the policy formulation processes ${ }^{196}$. A summary of the goals of NESP 1 and 2, and the Interim Plan (NEIP) can be found in the Annex.

## MOE Organizational Structure

MOE has made significant progress since 2007 in building a modern and functional education administration. Still, however, a number of challenges remain in its work on institutional reform. The organizational structure of the Ministry of Education197 now loosely corresponds to its five main programmes identified in the National Education Strategic Plan (NESP). The MoE has six Deputy Ministries: (i) Administration and finance; (ii) Islamic education; (iii) Literacy; (iv)Technical and vocational education and training (TVET); (v) Curriculum development and teacher training; and (vi) Academic ${ }^{198}$.
The Deputy Minister for Administration supervises key administrative directorates and Finance. These include the directorates of procurement, finance and accountability, infrastructure service (ISD), information technology, and the general directorate human resources (HRGD). Furthermore, there are several (general) directorates working directly under the Minister, including the planning general directorate, and the internal audit directorate. At the sub-national level, the MoE's structure is sub-divided into three levels: provincial directorates (PED), district directorates (DED) and schools. There are 35 PEDs (one for each province and an additional one for Kabul city), 424 DEDs, and around 16,500 schools, together employing more than 200,000 civil servant teachers. The organizational Structure of the PEDs is similar to the central MoE. It includes six senior managers, corresponding to the Deputy Ministries. The senior manager for administration and finance supervises most administrative functions. Planning and audit departments are supervised directly by the PED director. The DEDs are headed by a district education director, and have two main departments: one for administration and finance (responsible for processing teacher attendance sheets and salary payments requests), and one department responsible for the monitoring and supervision of schools.

[^85]Each District Education Officer (DEO) submits implementation reports of annual operational plan to their respective Provincial Education Directors (PED) at the end of each quarter and the PEDs submit a consolidated provincial implementation report to the central program departments of MoE. After review of relevant program directors these reports are consolidated into a national report of implementation of the annual operational plan. In meanwhile the program directors and managers analyse implementation challenges identified at each level and provide guidance and instruction to address the issues encountered.
After appointment of the new education minister, the MoE 100-days plan was developed based on the annual operational plan, with a focus on the areas that accelerate reform and improved education service delivery and assist MoE in confronting fundamental issues. This plan is programwise and each department will implement relevant planned activities and provide a progress report. 199

## EMIS

The Education Management Information System (EMIS) was initiated in 1384 (2005). It has its own Directorate and has developed into a comprehensive information service for MOE. It undertakes the Annual School Census (ASC) based on a comprehensive census questionnaire form ${ }^{200}$ and the Directorate is responsible for collecting, storing, processing and disseminating all education statistical data. Moreover, it is responsible for developing information systems and reporting against NESP indicators.
An increasing number of data are placed every year on the MOE's website and with the addition of data sets on expenditure and performance disaggregated by e.g. sex, age, school, district and province it will be possible to extract information for planning and monitoring system performance with statistical rigour but, so far, the use of this data for policy analysis has been limited. In 1390 (2011/2012) an EMIS Statistical Analytical Report was published by MOE Department of Planning and Evaluation but, despite its title, the report was mainly descriptive and no correlation analyses were made.
Monitoring of education performance has significantly improved over the last few years. There are now two dedicated units in MOE, the Monitoring and Reporting unit under the EMIS Directorate and the Research and Evaluation Unit under the Directorate of Strategic and Operational Planning, which are responsible for M\&E but still the logic of the functional division of labour of these units merits further reflection. (See MOE organogram in Annex).

Since 1391 (2012) and in 1392 and 1394 (2015) MOE has conducted an Education Joint Sector Review focused on Planning, Management, EMIS, M\&E, Reporting, Budget and Finance and HRM as well as progress and challenges in the five NESP programmes. The two last EJSRs have been internal without the participation of developing partners (DPs) but with extensive participation from representatives of all MOE administrative levels from HQ to schools. The 1394/2015 EJSR was structured on an analysis of three of the main NESP programmes, Higher Education and crosscutting issues, and it involved visits to a sample of 9 provinces ${ }^{201}$ selected on basis of parameters like security, previous EJSR visits, language, ethnicity, regional diversity and degree of development.

[^86]
## School Management

Community based management of schools is gaining increased prominence. Local school management councils/committees (SMCs) or shuras are increasingly seen as a way of improving local participation in active management of schools and a process of empowering local committee members has been going on for a number of years. Under the World Bank sponsored EQUIP programme school management councils or "shuras" have been established in a large number of schools. With training of shura members and the introduction of school enhancement grants an attempt was made at fostering real decentralised decision-making. While in some cases either PEDs or principals continued a rather autocratic management style, there were other cases, where the establishment of shuras have led to authentic participation. In an evaluation report on Swedish assistance to education in Afghanistan202, many shuras were reported to perform well, and there was much praise of the results that have been achieved: Shuras had improved security, enhanced community ownership and promoted a positive attitude towards increasing access to education for all. Some mentioned that before the shuras were involved, construction was often of poor quality and dangerous.

## Decentralisation, Institutional Reform and Capacity Building

While significant progress in organisational restructuring of MOE has been made during the last decade, the system is still heavily centralised and administrative efficiency is hampered by cumbersome bureaucracy, low capacity and inefficient procedures in e.g. procurement and the hiring of teachers.

Decentralisation, is a high political priority The main thrust of the 1394/2015 EJSR report, expected by February 2016, will be on this. DEDs and schools, for example, do not know about their budgets.

Further institutional reform and capacity building of the MOE is critical for sustained delivery of quality services. The system is heavily centralized and there are still many examples of unclear functional mandates of sector departments and offices, of lack of coordination leading to duplication, fragmentation and inefficiencies and of excessive dependence on short-term technical assistants (TA).
The issue of technical assistance and the need for sustainable staffing and capacity building has been a recurrent issue among the education sector stakeholders. A draft assessment report on TA with a proposal on capacity building reform states: "A major capacity objective will concern staffing and the need to recruit better qualified personnel to achieve the reform objectives. As explained, rapid expansion of services together with fragmented support from DPs has in the past led to an unsustainable provision of technical assistance (TA) through the development budget for key ministry operations. This has been coupled at central and provincial levels with inefficient and capacity-draining "projectisation", duplication of effort and lack of clear agreement on outcomes. A characteristic of this unsustainable situation has been the deployment, alongside tashkeel personnel, of large numbers of donor-funded national TA with the short-term responsibility for carrying out MoE operations."203

## Corruption

Corruption is a persistent problem. The population perceives corruption as the second major problem facing Afghanistan ${ }^{204}$ and there is a widespread view that "an unacceptable amount of

[^87]corruption exists in the form of embezzlement, fraud, and false reporting ${ }^{205 "}$. MOE in its 100 Days Plan has in its program objectives for education administration development identified the elimination of corruption from education offices/institutions at all levels. Action elements include teacher recruitment and complaints management, as well as identification of eligible contractors and suppliers and banning of dubious contractors.

## SECTION 3: MANAGEMENT OF TEACHERS

### 4.3.1 Quantitative aspects of the management of teachers

Budget Constraints Prevent Hiring of Qualified Teachers, and Teacher-Student Ratios continue to be high. Afghanistan is characterized by a severe shortage of teachers evidenced by its high Teacher-Student Ratio ${ }^{206}$ (TSR). In 1393/2014 it was $45: 7$, which is slightly higher than the official policy of TSR of 40:1. It is worth noting that there has been a significant progress in terms of provision of teachers in schools where the number of teachers in general education schools (primary and secondary) has risen from 110,000 in 2007 to 188,000 in 1393/2014. The teacher shortage is worse in the rural areas, especially amongst female teachers. Out of the 188,000 teachers in general education, only 33 per cent are females and only very few of these are in rural schools. On teacher recruitment, availability of adequate finances is a major hurdle; the HR, driven by availability of budget from MOF, substantially reduces requests given by PEDs every year. PEDs, as a result are 'left with no choice' but to recruit teachers on contract to meet the school demands, and supposedly for hiring of contract teachers, which have a separate budget line and work on lower salaries compared with regular teachers.

## Student-teacher ratio by province

The shortage of teachers is combined with an incoherent distribution by province as reflected in provincial disparities in Teacher-Student Ratios (TSR) as shown in the table in the Annex. The average TSR conceals a wide variation between provinces spanning from 92.6 in Daikundi tp 31.8 in Parwan. Other provinces with high TSR are Khost 60.6, Nimroz 44.1, Ghazni 51.7, Nangahar 51.4, and Paktia 51.1 ${ }^{207}$.

### 4.3.2 Qualitative aspects of the management of teachers

## Policy and guidelines

According to the Afghanistan educational system the minimum education standard for teachers is graduation from grade 14. One of the main challenges the Ministry of Education is facing is insufficient number of professional teachers for different cycles of education.

Out of 193,044 teachers at different levels, 82,898 of the current teachers, equivalent to $43 \%$, fulfil the minimum standards of teaching and the remaining $57 \%$ who have not completed the criteria of professional teachers are recruited as contact teachers in remote areas due to the lack of teachers. ${ }^{208}$

In 1390/2011 there were 170, 174 teachers ${ }^{209}$ and in 1391/2012 there were $180,821^{210}$, and in $1393 / 2014$ the number had risen to $188,023^{211}$ corresponding to a $9.49 \%$ increase in the teaching force over three years.

[^88]Current EMIS data on teacher qualifications are not disaggregated by sex. MoE has been making efforts to enhance the capacity of these teachers through short term courses and recruiting them in the In-service Teacher Education programs, so that to improve the quality of teaching and learning.

The following map illustrates the huge regional disparities in teacher qualification.
Figure Percentage of unqualified teachers by province


Urban centres and the Northern regions have a much larger proportion of qualified female teachers than other regions of the country, as can be seen from Figure 52 below on the distribution of qualified teachers

Figure 52 Proportion of qualified female teachers by province

[^89]

Source: EJSR Sub-sector Report on Primary and Secondary Education, MOE 2012
A number of Strategies, including targeted in-service training for CBE women in rural areas, have ben piloted to address this imbalance. So far, however, the results have not been satisfactory. There are several reasons for this: ignorance of MOE teacher policy and incoherent incentives at PED and DED level undermine the efforts. In addition, the criterion of not contracting teachers with less than a grade 12 examinations prevents capable CBE teachers from being absorbed into MOE, despite the fact than many of these may be better teachers than formally qualified TTC graduates.

The PACE-A Handover Report ${ }^{212}$ showed that the handover of CBE schools to MOE might involve MOE taking on the CBE teachers as well, but this rarely happens. Once the MOE takes over responsibility it may exert its right to replace or not hire CBE teachers. This however is problematic from the perspective of the community, where much effort has been invested in training locally recruited CBE teachers. In cases where the CBE teacher is capable and by being locally known and trusted, this has shown to contribute to high enrolment rates among girls.

The report concludes: "A well trained and experienced CBE teacher may well be as competent in a classroom as a $12^{\text {th }}$ grade graduate, or even more, and so replacement should not be based solely on the grade 12 criterion. Current policies and guidelines do in fact provide some flexibility and options for waiving the requirement of a $12^{\text {th }}$ grade education for MOE teachers, including teachers in formal schools, who can be hired on contract rather than on permanent basis. However, many local MOE officials are not aware of this and/or they do not recognize CBE teacher training as sufficient qualifications. ${ }^{213 n}$

[^90]
## PRESET or INSET?

There is an on-going discussion on the advantages of In-service teacher training over Pre-service teacher training, and it has been suggested that pre-service training should be completely replaced by in-service training aimed at upgrading qualifications. A few facts from the ISAPS review of teacher training ${ }^{214}$ are worth mentioning. First, in the selected provinces, the number of in-service students enrolled at the TTCs to upgrade their qualifications is twice that of the pre-service students or fresh graduates (In-service, 7248; Pre-service, 3597). This shows a tendency that the in-service teachers are enrolling and benefitting from the TTC.

Second, based on the payroll data received for the year 1393/2014, the ratio of teachers graduated by the TTC to those employed as regular teachers is $34 \%$ across the country. On the other hand university graduates represent only $12 \%$ of the teaching force. This is so despite the fact that hiring process of teachers does not give any special preference to TTC graduates. The following pie chart illustrates these numbers.

Figure 53Proportion of overall teachers recruited by qualification in the year 1393/2014

## Below 12th ${ }^{-12 t h}$ Grade -14 th Grade - Bachelor \& Above



A study looking at pre- and in-service teacher training programmes found that "When one looks at the recruitment of teachers by qualification in the 7 provinces studied in the review ${ }^{215}$, it is clear that recruitment of TTC graduates substantially surpasses recruitment of university graduates as teachers". Refer to figure 54 below.

Figure 54 Teachers recruited by qualifications across selected provinces of interest

[^91]

## A future Teacher Education System in Afghanistan ${ }^{216}$

We know from research that Teacher education, especially that which focuses on development of the subject knowledge of teachers in tandem with pedagogical skills is shown to increase student achievement. Under ideal conditions, teachers' professional education should form a continuum, with higher secondary education leading into the initial teacher preparation, followed by induction and on the job continuous professional development. ${ }^{217}$


Continuum of Professional Development

In Afghanistan, however, this perspective on continuum is complicated by the challenges unique to its context. For instance, as of 2010, approximately $78 \%$ of all teachers (nearly 13,200 ) did not have the desired qualifications to be teachers and approximately 42,000 teachers had never graduated from secondary school. ${ }^{218}$ Therefore, the country was in need of a system of teacher development that developed a regular supply of qualified teachers while also simultaneously upgrading the qualifications of a large volume of teachers inside the school system. The model below in figure 55 illustrates the qualification structure.

Figure 55 PRESET and INSET teacher education programmes in Afghanistan

[^92]

## Teacher Education imperatives in Afghanistan

The EQUIP Teacher education review ${ }^{219}$ review suggested that the institutional Structures and modalities created over the last decade or so did respond to all of the imperatives mentioned above. In order to restore supply of qualified teachers, number of TTCs was increased from 4 in 2001 to 48 by the time of this review. The development of TDCs (a total of 259) was a response to the need to upgrade the qualifications of in-service teachers and DT3 modality provided a mechanism to reach out to maximum number of teachers with an intense dosage of knowledge and skills needed to improve both subject knowledge and pedagogical skills of the vast number of in-service teachers.
Until 2013, the TTCs had graduated a total of 136,658 ( $42 \%$ females). In 2014, TTCs graduated 30,413 ( $33 \%$ in-service teachers, $53 \%$ females) and enrolled another 37,852 ( $62 \%$ females). The award of GSP to girl students has contributed to a visible increase in the number of female student teachers.
Through the INSET-I, II, and IIIs, TED has been able to reach a total number of 122,675 teachers.

## Teacher monitoring

There are no systematic data on teacher absenteeism. The role of shuras in monitoring this phenomenon, however, appears to hold a significant potential as well functioning shuras tend to increase the accountability of teachers as well as strengthening the demands side of education.

## Academic Supervision

The MoE has increased the number of academic supervisors to 4600 but several challenges, which limits the impact of supervision remain: (1) transportation facilities are not available for district and provincial supervisors, (2) unqualified persons are hired as supervisors, (3) Adequate training and support for supervisors are not available, (4) a functional reporting and follow-up system is not in place, (5) district supervisors' reports need to be approved by district education managers, which often leads to removing negative reports, and (6) supervisors mostly focus on inspection function rather than providing academic, support, (8) the number of female supervisors is very low4, and (8) parallel supervision systems within the General Education Deputy Ministry without defined roles and responsibilities.

## Nepotism:

[^93]A practice of registering the sons and daughters of powerful people as teacher training students without them actually studying and subsequently claiming a TT certificate to be employed as teachers has been widespread over the country. This has led to poor teaching and learning ${ }^{220}$. In order to counter this nepotism, the role of District teacher training colleges will be gradually diminished in favour of a provincial based TTC, which is supposedly less prone to political intervention.

## SECTION 4: THE MANAGEMENT OF OTHER RESOURCES AND OF TEACHING TIME

### 4.4.1 Management of resources other than teachers

## Curriculum

Afghanistan saw its first curriculum after the Taliban regime in 2003 ${ }^{221}$. In 2011 a new Afghanistan Education Curriculum was approved. It concluded the work of a special commission set in 2004 to formulate an education curriculum framework for Afghanistan.
The 2011 curriculum is structured at four levels:

- Primary Education Phase One (1-3): each class 8 Subjects
- Primary Education Phase Two (4-6): each class 11 Subjects
- Intermediate Education (7-9): each class 17 Subjects
- Upper Secondary Education (10-12): each class $16-17$ subjects

The new curriculum, according to the Director of Curriculum Department (CD) was based on consultations in the field with teachers and students. During the process there was also pressure from specific interest groups trying to influence the content of the curriculum. They comprised religious groups, environmental groups, MOWA, the Human Rights commission and others. There was no independent professional board of curriculum specialists, or a political body providing guidance to $C D$, outside of $C D$. Its staff comprised mainly of subject specialists with BA level qualifications, many of which were obtained before $1358 / 1979^{222}$. Currently, there are no academically trained curriculum specialists and there is a serious need of professional capacity building at CD in the fields of psychology, pedagogy and methodology. However, no capacity development of CD tashkeel staff has taken place over the last many years.

After fours years of implementation of the 2011 curriculum, a process of reviewing the textbooks has begun and revision of grade 1-3 TBs has been completed, revision of grades $4-6$ is in process and revision of the higher-level grades under preparation.
This revision, however, does not address the key problems of the curriculum, one of which is that it is overcrowded. There are persistent complaints from teachers and educators that the curriculum is overcrowded. There are simply too many subjects for the students to cope and the fragmented timetable results in poor learning. In addition, there is lack of qualified subject teachers, in particular in Maths and Science.

There is need for professional capacity building in curriculum development at CD and there is need for an independent body to guard the curriculum against pressure from political and religious groups. In one case, for example, religious groups succeeded in MOE withdrawal of a TB on culture ${ }^{223}$.

[^94]
## Textbooks

Figure 56: Textbook distribution process


Figure 56 above explains in detail the MOE process of identifying the needs for and managing the provision of textbooks ${ }^{224}$.

The majority of schools receive less than $75 \%$ of the number of books that they request for their students and the physical quality of the books is often poor. In order to cope with this shortage schools often encourage parents to buy books from the market. Market books are typically inferior quality copies of official MOE books. In other cases, teachers just dictate notes that the students copy.
So far, the number of textbooks and calculation of the Textbook to Pupil Ratio (TXPR) are not reflected in the MOE annual reports and EJSRs.
The EMIS school census form does have a questionnaire pertaining to Existing Study Book Quantity specified by class (1-12) and subjects (31). It was not, however, possible to calculate the average TXPR by selected variables (class, subject, province) due to unavailability of data.

## The Process of Textbook Needs Assessment, Distribution and Use

[^95]The need for textbooks is established by collecting school level data on number of students at each grade and the corresponding subjects and by deducting the number of books in stock. These requests are compiled at district and province level and forwarded to MOE Curriculum Department.

Three main steps can de differentiated in the provision of sufficient number of textbooks to the schools: request, allocation and delivery. Before identifying the bottlenecks that exist at the various stages, it is important to understand the process details in theory

Requesting the textbooks: The number of textbooks that will be requested for the school year are defined in each school. At the end of the year, the school bookkeeper collects the books that are still in working condition from the students, counts them and stores then in the bookstore. Each school fills the F13 request form and sends it to the DED. The DED compiles the requests from all the schools and send them to the PED. The PED in turn, collated the requests from all districts of the province to send a FS9 request form to the central MoE.

Allotment of textbooks: The MoE curriculum department determines the number of books needed for the next year based on data from the EMIS. Each textbook delivered has an estimated life span of three years currently. The quality of the books that have been printed for 1390 are visible better that those of previous years in terms of the quality of paper. The estimated number of books is always incremented by $20 \%-30 \%$ to account for unexpected requirements (additional request, deterioration due to various factors). MoE publications department then considers the requests from the PEDs in order to draw-up the distribution plan.

Distribution of textbooks: The distribution plan details the number of books that will be sent to each province. The MoE delivers the books from the storage to the PED stores. The logistics department of the PED receives, and is expected to count and store the books. The PED then delivers the books to the DED, who in turn is responsible for the final delivery to the schools.

Bottlenecks in Textbook Distribution: The PETS also analysed the request-allocation-delivery process of textbooks. It examined if schools were receiving sufficient amounts of textbooks and identified bottlenecks in the process and opportunities for leakage. About a quarter and a third of schools reported having received over $75 \%$ of the required amount. The majority, however, received much less than this. In some districts, a quarter of schools received less than $25 \%$ of the required books

Reasons for inadequate distribution of books according to principals are: poor distribution, insufficient number of printed books and flawed allocation. When they were asked about the reasons, a majority of interviewees identified mistakes in distribution as the main reason. In one district, a quarter of the interviewees thought that lack of books at the central level explained the lack of books in schools, suggesting that not enough books had been printed. In other districts, however, however, the main reasons identified was the lack of books at the provincial or the district level, suggesting that it was an issue related to the allocation process.

Coping mechanisms: In order to compensate for the lack of sufficient textbooks, schools have various mechanisms. Most simply request that students buy the books from the market. Such books, however, are not always in line with the curriculum. When they are, they are poor quality copies of the MoE books. In some districts students used old books from the previous years and curriculums, while others stated that the teachers just dictated notes for the students to take down. In some schools, students shared books. Discussions with some DEDs suggested showed that in certain cases there was exchange of books with other schools or other DEDs when these had a surplus of a given subject or given class TB.

### 4.4.2 Monitoring Effective Teaching Time

The effective teaching time in Afghanistan is severely limited by a large number of holidays, summer (15) and winter (90), examinations (52), and various celebration days. At a meeting with private school principals and owners ${ }^{225}$ it was suggested that the effective annual school year is as little as 180 days, which is in stark contrast to the number of school days in neighbouring countries, which was estimated at between 218-228.

We do not have any data on the number of daily contact hours, but there seems to be potential gains to be made if effective teaching time could be ensured. In the ACER study only 5\% of students indicated that their teachers started lessons on time (DMTEGAfg-C6).

Figure 57 Student responses to the question My teacher starts lessons on time


## CONCLUSIONS AND RECOMMENDATIONS

## Factors facilitating learning outcomes

## Short Distance from Home to School and Proximity to Community Facilities

There is a negative correlation between distance and performance: the longer the distance the poorer the results. Whereas enrolment rates are about equal for boys and girls with access to schools close to home, gender disparities quickly become pronounced with an increase in distance. At 1.5 miles the gender gap is already ap. 10 percentage points.
Also, absenteeism increases with distance.
Schools located in urban settings and proximity to community facilities, especially shopping centres are associated with higher levels of achievement.

## Correct School Age

Children who have access to early childhood education and learning programmes are more

[^96]likely to go on to have access to primary schooling
Students in grade 6 who are 15 years and older may be up to 6 months behind those students who start school on time.
Well Trained Teachers
Students who attend schools with greater proportion of teachers with university education were more likely to perform better in reading.
Teacher education, especially that which focuses on development of the subject knowledge of teachers in tandem with pedagogical skills is shown to increase student achievement. It is suggested, therefore, that the pre-service programs are valuable because the system will always hire new teachers and will do better hiring those, who have professional qualifications from the TTCs.
Students from schools with higher proportion of teachers having done a program of professional development/INSET programmes within the last year were more likely to have greater achievement in writing.
Female teachers are associated with higher enrolment and learning achievement.
Strategies to increase the proportion of female teachers, including targeted in-service training for CBE women in rural areas, have ben piloted but so far the results have not been satisfactory. In consideration of the strategic importance of female teachers, much more efforts should be made to increase their education, recruitment and deployment, in particular in rural areas.
Current recruitment rules should be reviewed.
Engaged Teachers
Teachers in effective schools support academic success by making sure students are engaged in their reading, mathematics, and science lessons
They ensure that students know what they are expected to do; they ensure that students like what they read; and they strive to be easily understood;
They present content in interesting ways; and give students interesting things to do and read. Teacher Support and CPD
Current supervision of teachers mostly focuses on inspection and control rather than providing academic support. Results of academic support and continuous professional development, e.g.
by TTC lecturers, have been very promising.
Sufficient Contact Hours
There is a positive correlation between the time on task (attendance), teacher attendance and student learning.
Students from schools that monitored their attendance performed better in reading.
Students from schools that monitored their teacher's attendance performed better in all three domains: reading, writing and mathematics.
Only $5 \%$ of students, however, indicated that their teacher started lessons on time Infrastructure and School Improvement Plans (SIPs)
Students from schools with greater access to resources related to basic infrastructure and other miscellaneous facilities as well as SIPs were more likely to perform better in in all three domains: reading, writing and mathematics.
Available TBLM
Strong correlation between having one TB for each student and learning outcomes.
Students who have access to their own textbook performed better than students with shared TBs.
In addition, access to libraries, laboratories, sports and recreational facilities are associated with improved student learning

## Good School Management

Effective schools support learning achievement when all parties - principals, teachers, parents and students - are equally invested in achieving this goal.
SMCs or shuras are increasingly seen as a way of improving local participation in active management of schools and a process of empowering local committee members.

Shuras have improved security, enhanced community ownership, improved quality of construction and promoted a positive attitude towards increasing access to education for all. Conducive environment

A safe and orderly environment supports academic success.
It maintains discipline and safety
Is safe and orderly
Reduces the frequency of bullying among students

## Language (Mother Tongue)

Students taught in the same language they mainly speak at home are more likely to perform better in writing, but not in reading or mathematics.
Children from minority language groups are vulnerable to marginalisation.
Students who speak a language other than Dari or Pashtu in the home are on average six months behind their peers in school.
Second national language is taught in Grade 4 and upward as a subject. The minority languages should be taught in Grades 1-12 as an extra subject to the children of minorities

## Recommendations

- A strong policy needs to made on recruiting more female teachers
- Learning Assessment should be made an integral part of the system
- Standardised examinations should be developed
- EMIS should be expanded to capture quality factors
- Teacher CPD and teacher academic supervision should be further developed
- Number of days in School year should be increased
- Community Campaigns (ECD, Age, Girls' ed.) should be carried out
- School Management should receive more attention, e.g. through Shuras
- A comparative analysis of cost-effectiveness of CBE in remote and sparsely populated areas versus MOE hub schools at a distance higher than 1-2 kilometres from students' homes should be carried out.


## CHAPTER 5 EXTERNAL EFFICIENCY

## SECTION 1: THE ECONOMIC IMPACT OF EDUCATION

### 5.1.1 Description of the Labour Market

Afghanistan's labour market suffers from a number of imbalances. On the supply side the labour force could be characterised as poorly educated, largely informal and lacking the requisite skills to develop their career further ${ }^{226}$. Slightly more than two thirds of the labour force of 8.5 million is less than 40 years of age. $40 \%$ remains not gainfully employed (underemployed or unemployed) and $78 \%$ is in vulnerable employment. Meanwhile, a total of 6.8 million Afghans in the working age, mainly women ( 5.3 million), do not participate at all ${ }^{227}$.

On the demand side agriculture accounts for two fifths of all employment, manufacturing for less than a tenth, while the recently more dynamic trade, transport, finance, real estate and insurance sectors account for a little less than a fifth. Agriculture, while the primary driver of economic activity in the districts, has a more limited impact in the urban centres. In a study of four districts only $3.7 \%$ of all surveyed urban-based individuals derive the largest share of household income from agriculture and only $1.5 \%$ of employers and employees were involved in the agriculture sector. Although important for day labourers, agriculture adds value to urban economies directly through trading and transportation and indirectly through income generation for the rural population.

The urban labour markets resemble the economic activities of the provincial capitals. The primary sectors driving the economy and providing employment is the wholesale and retail trade, followed by the manufacturing sector. On the supply side there is a perception of a labour market divided into two categories of workers.

The first category of workers were educated, generally in the urban centres, and due to their literacy were able to access further education opportunities as well employment within the government, NGOs, the UN and the limited number of jobs within the formal private sector.

The second category of workers were generally deemed to be illiterate or with low education standards, often from the rural districts, and reliant on low skill jobs in the bazaars as cart haulers, day labourers for the construction industry or agricultural workers during the harvest or planting season. This second category of workers were reportedly also able to access apprenticeships or on the job training within the family business in fields such as baking, carpentry, construction, masonry, mechanics and metal work.

There are about 300,000-530,000 micro enterprises (about 90\% of all enterprises in the country) in Afghanistan which belong to the informal economy. On average, each company has three employees and two apprentices ${ }^{228}$.

Most SMEs are family-run enterprises. Small businesses overwhelmingly remain family affairs with recruitment and access to credit primarily undertaken through social networks and formal contracts

[^97]with employees being a rarity. Approximately a third of all employees stated that a relative was the owner of the business, which supports the assertion that many of the small manufacturing and trading businesses are family-run, with young males commencing work in their early teens, often forgoing the opportunity of an education. The informal nature of businesses also extends to registration, as approximately $11.2 \%$ of employers have not registered their firm with any official department or agency ${ }^{229}$.

Many youths pursue work opportunities in the day labour market, as opportunities remain limited in the formal labour market. Day labourers, with high levels of illiteracy, comprise perhaps the majority of workers in the construction industry and undertake many manual jobs, including seasonal agricultural work, for an average of between 250 to 350Afs a day for a unskilled worker.

Cross-border labour migration is widespread. In addition to day labouring opportunities, interviews in the three northern provinces suggest that between one in two and one in three households have at least one son working in either Iran and Pakistan. Labour migrants appear to be better educated, and males at least perform much better in the labour market than the general population: a greater proportion of internal male migrants were gainfully employed, found better jobs, and earned more, although male immigrants were less successful in finding gainful employment and had higher rates of unemployment. Labour migration represents an important part of a family's income, particularly in times of economic shocks, such as the current drought across large parts of the north of the country. Perhaps perversely, Afghan youth migrate to Pakistan and Iran to fulfil largely unskilled labour, similar to the day labourers congregating in the main squares of Afghan urban centres, while Pakistani and to a limited degree Iranian labour migrants fulfil some of the more skilled occupations in Afghanistan ${ }^{230}$. Lately, the traditional labour migration destinations - Pakistan and Iran - seem to have lost much of their appeal to migrants while the Gulf states have emerged as important labour migration destinations.

In terms of qualifications, the findings from a study of four districts seem to have a general validity ${ }^{231}$. The labour supply could be characterised as poorly educated, largely informal and lacking the requisite skills to develop their career further. Approximately $45 \%$ of surveyed employers and employees are either illiterate, literate with no schooling or were schooled up to primary school ${ }^{232}$. The latest ALCS found that an overwhelming $61 \%$ of all employed have not been to school and only ten \% have attended school up to primary level. Consequently, nine tenths of the employed workforce is in unskilled occupations ${ }^{233}$.

Formal skills in the labour market are also limited as there are few formal training mechanisms that either employers or employees have previously reported accessing. An average of $61.2 \%$ of employers and $62.1 \%$ of employees had not received any formal training in their current employment, while a further $22.5 \%$ of employers and $34.2 \%$ of employees had received internal training, which is often conducted by a relative considering the familial nature of many businesses ${ }^{234}$.

The GIZ Bazaar Study found that that about 600,000 to 1,060,000 young people in Afghanistan are receiving in-company training as an apprentice. Thus the informal sector is by far the largest training provider in the country and can guarantee at present what the formal TVET system cannot

[^98]- the employability of those young people who successfully complete training as apprentices ${ }^{235}$.

The analysis of the labour market suggests that both demand and supply side measures are necessary to promote the growth of decent employment opportunities in Afghanistan. The demand for labour needs to be increased through the aggressive promotion of entrepreneurship and small businesses catering to export markets as well as to domestic and local markets. The agricultural sector needs to be made more productive by providing better inputs, such as improved seeds and fertilizer; storage facilities; creating functioning local markets; and rebuilding transport and communication networks to access more distant markets. At the same time, workers must also be equipped with demand-driven skills so that they can create productive selfemployment opportunities, or else take up the job opportunities created by a growing business class ${ }^{236}$.

### 5.1.2 Labour Market Structure and Dynamics

In analysing the education sector, we must also consider how education is meeting the demands of the society and the labour market. Since labour-market data over multiple years is not available, it is difficult to deduce trends and future needs. Still, we have used data from the NRVA ${ }^{237}$ to learn about the current state of the labour market.

In order to assess the economic impact of education, we first study the characteristics of the labour market. The NRVA data tells us that $54 \%$ of the Afghan population is of working age ( 14 years or older). Labour force participation is $49.8 \%$, however only $19 \%$ of the female working-age population is active in the labour market while the number is $80 \%$ for males. The graph below shows us labour market participation by age and sex.

Figure 58: Labour Force Participation Rate by Sex and Age


We can see that over $45 \%$ of males and $18 \%$ of females of age 14 participate in the labour force. The participation is consistently higher for males in all age-groups. While participation of males increases considerably between the ages of 20 and 60, the participation of women does not

[^99]fluctuate with age till the age of $60^{238}$.
Table 37: Labour Force Participation and Employment by Residence, Sex and for Kuchis

| Residence, <br> sex | Labour force <br> participation <br> rate | Employment <br> to population <br> ratio | Underemployment <br> rate | Un- <br> employment <br> rate | Not <br> gainfully <br> employed <br> population |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Urban | $\mathbf{4 3 . 1}$ | $\mathbf{3 9 . 2}$ | $\mathbf{8 . 6}$ | $\mathbf{9 . 0}$ | $\mathbf{1 7 . 6}$ |
| Male | 72.0 | 66.5 | 7.7 | 7.7 | 15.4 |
| Female | 12.9 | 10.8 | 14.1 | 16.7 | 30.8 |
| Rural | 51.3 | $\mathbf{4 7 . 1}$ | $\mathbf{1 8 . 7}$ | $\mathbf{8 . 2}$ | $\mathbf{2 6 . 9}$ |
| Male | 82.1 | 77.1 | 17.5 | 6.1 | 23.6 |
| Female | 19.3 | 15.9 | 24.0 | 17.6 | 41.7 |
| Kuchi | 64.4 | $\mathbf{6 1 . 0}$ | $\mathbf{2 3 . 3}$ | $\mathbf{5 . 4}$ | $\mathbf{2 8 . 7}$ |
| Male | 91.4 | 87.2 | 20.8 | 4.7 | 25.5 |
| Female | 36.6 | 33.9 | 29.8 | 7.2 | 37.0 |
| National | 49.8 | $\mathbf{4 5 . 7}$ | $\mathbf{1 6 . 8}$ | $\mathbf{8 . 2}$ | $\mathbf{2 5 . 0}$ |
| Male | 80.0 | 74.9 | 15.4 | 6.4 | 21.8 |
| Female | 18.5 | 15.5 | 22.8 | 16.5 | 39.3 |

The table above provides another perspective into the labour market. Labour force participation is high among the Kuchi people compared to the rest of the population. Unemployment rate nationally is about $8 \%$, and is higher in urban areas. About $17 \%$ of the national population is underemployed. In fact, $12 \%$ of females and $42 \%$ males of age above 14 said that they were willing to work more hours. [5]

Data from NRVA ${ }^{239}$ (Figure 59) shows that $40 \%$ of the Afghan population of age 14 and above is employed in agriculture (farming and livestock). The figure is even higher if considering child labour. Female participation is highest ( $47 \%$ ) in the sector of livestock, and then in manufacturing ( $23 \%$ ). Education is the only service-oriented sector where female participation is higher than male participation. Female participation is non-existent in trade, construction, transportation, and other formal sectors.

Figure 59: Percentage of Employed Population of Age 14 and Above by Sex and Sector

[^100]

## Perceptions on economy and employment ${ }^{20}$

The Asia Foundation Survey of the Afghan People 2014 indicated that more than one-third (39.6\%) of Afghans say that their economic situation was better last year than this year, while $36.9 \%$ say it has not changed since last year. The percentage of Afghans who say their economic situation has improved over the past year is $21.5 \%$. For the first time, this year the survey looked at the issue of migration. Nearly one quarter (22.3\%) of Afghans say that they left Afghanistan at some point over the past 23 years (i.e., since the fall of the Najibullah government), while 14.5\% say they moved from one province to another. While war and insecurity were the most commonly cited reasons for leaving the country or province, economic reasons are also salient. Among those who left the country, $27.0 \%$ say they did so due to the economy or lack of jobs, and among those who moved from one province to another, an even higher proportion (38.8\%) moved for economic or employment reasons. With regard to the self-reported unemployment rate, the percentage of Afghans who say they are unemployed and currently looking for work increased significantly from $6.6 \%$ in 2013 to $10.7 \%$ in 2014. This trend with decreased labour demand and higher unemployment levels was also identified in the ALSC (2013/2014) survey.

Men's self-reported unemployment has dropped from a high of $25.5 \%$ in 2009 to $10.0 \%$ in 2014, while women's self-reported unemployment has increased from a low of $0.1 \%$ in 2009 to a high of $11.3 \%$ in 2014. Because the percentage of women who say they are working remains steady, this increase in self-reported unemployment likely does not represent an increase in women's joblessness, but rather an increase in interest among women to join the workforce. Over time, the percentage of Afghans who say that female members of their family contribute to household income has increased from $13.9 \%$ in 2009 to $22.4 \%$ in 2014. The percentage of households with women contributing to household income varies widely between provinces, from a low of $1.1 \%$ in Khost to a high of $63.7 \%$ in Nooristan.
Average monthly reported income is $\$ 190$ USD (10,839 Afghanis) with Afghans in rural areas reporting a significantly lower household income of \$170 USD per month (9,701 Afghanis) than Afghans in urban households (\$261 USD per month, or 14,903 Afghanis).
Income shows a significant positive correlation with self-reported happiness; Afghans with higher incomes report higher levels of happiness. However, beyond a threshold of $\$ 700$ USD (40,000

[^101]Afghanis) per month, the relationship is no longer significant.

### 5.1.3 Employability of Education System Leavers and Graduates

The employability of education system leavers can be analysed from three perspectives241: access to work; the optimal use of employment potential (over-qualification), and remuneration.

## Access to work/unemployment

Each year, the survey ${ }^{242}$ asks Afghans about their employment status, including whether they are currently jobless and looking for work. This question does not produce an official employment or unemployment rate, but it does reveal meaningful trends over time. In 2015 nearly three-fourths (72.8\%) of Afghan men report that they are working, lower than last year's reported rate of 80.0\%, while $87.0 \%$ of Afghan women say that they are housewives, and $5.5 \%$ say they are working.

One notable change is a decrease in the percentage of women who say that they are jobless and looking for work. Whereas $11.0 \%$ of women in 2014 said they were without work, and seeking it, this number dropped to $3.1 \%$ in 2015. This decrease does not reflect any change in the wording or coding of the survey question. Some of these changes may be related to rising concerns over security (i.e., women may be less likely to actively seek work due to a deteriorating security situation in their local area).

Figure 60: Self-Reported Unemployment


The optimal use of employment potential (over-qualification),
In 2013, 51\% of the respondents said that they were employed ${ }^{243}$. The definition of "employed" used in the survey is "being paid for work." The figure below shows the distribution of employment categories among those respondents. Forty-five \% of those who are employed work in agriculture, either as farmers ( $36 \%$ ) or farm labourers ( $9 \%$ ). The next largest employment categories are skilled workers/artisans (10\%) and informal sales/business (9\%).
$87 \%$ of those under the age of 35 are employed, and $91 \%$ of those between the ages of $35-54$ are employed. Only $76 \%$ of those aged 55 or over are employed. These figures represent only those

[^102]people who are available for employment, not those who are housewives, students, or retirees. 86 \% of the women surveyed say they are housewives. Housewives may still earn some money for their families, but are generally not available for employment. For all respondents, on average $5 \%$ of all women and $79 \%$ of all men surveyed are employed, with men in rural areas being statistically more likely to be employed than men in urban areas. The overall national employment rate for men is $89 \%$ with significant regional variation.

## SMEs and the Traditional Apprentice System

As previously mentioned, about 600,000 to 1,060,000 young people in Afghanistan are receiving in-company training as apprentices making the informal sector the largest training provider in the country ${ }^{244}$. Apprentices are on average 17 years old and undergo training which lasts between 3 and 10 years or even longer. Inside companies the apprentices have the status of learner, earn a small training remuneration and finish their training with a typical work task in their occupation to the satisfaction of a client and the company owner. The final examination is completely informal. All training regulations are based on traditions and conventions. Many apprentices do not meet the formal entry requirements of a TVET school and are not even allowed to attend any school during working hours. The way in which companies and the training of apprentices are organised has strong structural similarities with in-company training systems in some European countries, Germany in particular. It seems that the ministries and Afghan society are not aware of the enormous development potential of the traditional apprenticeship system. This vast development potential and the large cost-saving potential of the traditional in-company training system for the public sector are also not reflected in the TVET Strategy for Afghanistan.

Table 38: TVET ${ }^{245}$ Projects and Annual targets 1386/2013-13488/2020

| Results/Projects | Indicators |  | Annual Targets |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| $\begin{aligned} & \text { Improve access to quality } \\ & \text { TVET } \end{aligned}$ | No. of TVET students |  | 61000 | 95143 | 129286 | 163429 | 197571 | 231714 | 265857 | 300,000 |
|  | Percentage of TVET graduates employed in market |  |  | 50\% | 55\% | 60\% | 65\% | 65\% | 65\% | 70\% |
| Project 1) Incrase exrollment in TVET | No. of TVET students | female | 8145 | 18410 | 28675 | 38940 | 49205 | 59470 | 69735 | 80,000 |
|  |  | male | 52855 | 76733 | 100611 | 124489 | 148366 | 172244 | 196122 | 220,000 |
|  |  | total | 61000 | 95143 | 129286 | 163429 | 197571 | 231714 | 265857 | 300,000 |
|  | No. of TVET teachers | female | 524 | 906 | 1289 | 1671 | 2053 | 2435 | 2818 | 3,200 |
|  |  | male | 1757 | 2763 | 3769 | 4775 | 5782 | 6788 | 7794 | 8,800 |
|  |  | total | 2281 | 3669 | 5058 | 6446 | 7835 | 9223 | 10612 | 12,000 |
|  | No. of TVET employees | female | 814 | 1212 | 1610 | 2008 | 2406 | 2804 | 3202 | 3,600 |
|  |  | male | 3605 | 4604 | 5604 | 6603 | 7602 | 8601 | 9601 | 10,600 |
|  |  | total | 4419 | 5816 | 7214 | 8611 | 10008 | 11405 | 12803 | 14,100 |
|  | No. of TVET schools |  | 155 | 177 | 200 | 222 | 245 | 267 | 290 | 312 |
|  | No. of TVET Institutes |  | 89 | 91 | 92 | 94 | 95 | 97 | 98 | 100 |
|  | No. of schools for children with disabilities |  | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |

[^103]| Project 2) Construct and equip TVET centers | No. of TVET centers with usable building | 65 | B0 | 100 | 120 | 145 | 170 | 195 | 225 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. of TVET centers constructed per year | 15 | 20 | 20 | 25 | 25 | 25 | 30 | 30 |
|  | No of TVET dormitories constructed per year | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
|  | No of TVET centers equipped | 60 | 80 | 100 | 120 | 140 | 160 | 180 | 200 |
| Project 3) Provide shat-term vocational training | No. of vecational trainees |  | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 |
| Project 4) Improve the quality of TVET | No of TVET feelds with revised curriculinn | 75 | 80 | 85 | 90 | 95 | 100 | 105 | 110 |
|  | $\%$ of students who have access to fill set of textbooks | 40\% | 50\% | 55\% | 60\% | 65\% | 70\% | 75\% | 80\% |
|  | Number of textbooks printed and distributed | 400,000 | 450,000 | 200,000 | 100,000 | 100,000 | 50,000 | 50,000 | 50,000 |
|  | No of textbook autbors who participated in capacity development | 20 | 30. | 40 | 50 | 20 | 20 | 10 | 10 |
|  | No of TVET tencher tramed | 2.494 | 4,127 | 5,760 | 7,393 | 9.026 | 10,659 | 12,292 | 12,500 |
| Project 5) Improve the quality of TVET management | No of TVET centers visited regularly per year | 261 | 282 | 303 | 324 | 345 | 374 | 403 | 432 |
|  | No. of TVET employees trained per year | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 350 |

Source: National Education Strategic Plan 2015-2020 (Draft)
We do not have any data on the employability of graduates from various types of vocational education and training. But there is a serious mismatch between the demand and supply of skilled labour. So far, almost all attention in the formal TVET sector has been focused on the supply side, while the demand side has been neglected. The MOE DM TVET in its planning and reporting only focuses on inputs and outputs but not on outcomes (employability of graduates): Table 40 above summarises MOE's TVET projects and annual targets.: (1) Increase enrolment in TVET, (2) Construct and equip TVET centres, (3) Provide short-term vocational training, (4) Improve the quality of TVET, and (5) Improve the quality of TVET management ${ }^{246}$.

A World Bank paper ${ }^{247}$ summarises the barriers to matching the demand and supply: The mismatch between the demand and supply of skilled labour is a result of inadequate institutional response to policy needs. Among the barriers to matching demand and supply, the critical ones are as follows:

- Absence of a robust institutional system for the sector

The institutional system for the sector as a whole is fragmented. There are multiple ministries and other bodies involved with the management of TVET, whether formal or informal. While the Government is now trying to bring order into the system (through specific directions to the two leading Ministries of Education and Labour), the absence of a single Regulatory mechanism for the sector remains a major constraint on standardization, certification and licensing. This was anticipated in the ANDS and the NESP, which envisaged the development of a TVET Strategy and plan for the medium term and setting up of a National Vocational Education and Training Board.
There have been some positive developments in this regard under the ongoing Afghanistan Skills Development Project (ASDP), which was the first attempt to address skills issues systemically in Afghanistan. However, clearly more emphasis needs to be placed on the development of the system.

> - Poor quality of the skills delivery system

[^104]The delivery system for skills training lacks standardized curricula, which are general and not in line with industry needs. Moreover, the lack of textbooks and reference materials for students and instructional materials for teachers, affect the quality of skills training. Practical training is either non-existent or of poor quality due to lack of infrastructure and skilled trainers

- Absence of reliable Labour Market Information System Labour market and industry related information is not reliable as no continuing system for collection of such information exists. The only available sources are periodic and irregular sample information collected by various agencies. Furthermore, the available information is not used for policy-making purposes on TVET or labour training. This has also led to a disconnect between the market and the skills delivery systems.
- Lack of linkage between the labour market and the TVET sector

TVET service providers in general have no mechanisms to interact with industry, or to incorporate relevant technologies into their curricula, which would make their skills delivery market relevant. A corollary of this is the absence of formalized placement activities. As a result, graduates, especially those from the formal TVET stream, find it difficult to get jobs. Reportedly, in the informal sector, rates of employment post training are high. However, it is unclear whether this refers to full employment and/or skills- relevant employment.

The barriers to matching demand and supply have been viewed from different perspectives. A survey by the USAID, lists the barriers as (i) SME awareness of TVET in the country, (ii) negative perceptions of TVET, and (iii) SME unwillingness to pay for TVET. The UNESCO sponsored Joint Sector Review of TVET identified (i) lack of coordination between Ministries, (ii) funding shortages, (iii) reforms that do not fructify on the ground, and (iv) lack of trained teachers in TVET, and others.

The most radical critique of the current TVET system, however, has been formulated in a series of studies and working papers from $\mathrm{GIZ}^{248}$ The formal TVET system, which caters for approximately $5 \%$ of the relevant youth, seems to ignore the presence of a large informal vocational and skills training system, which caters for up to $60 \%$ of the relevant age group. The entry requirements to the formal TVET system bars the majority of youth, who are illiterate or who have dropped out from school. The majority of enrolled TVET students do not have technical and vocational qualifications as their primary objective ${ }^{249}$, and $78 \%$ indicated that TVET schools did not provide employable skills, which would allow them to take up job positions. The quality of the TVET system is alarming: a joint DM TVET and GIZ test revealed that $85 \%$ of TVET teachers were incompetent to teach their subjects. Two thirds of students found that the schools did not have good facilities and they stated that basic workshop tools and equipment were not good. TVET system management is poor and ineffective, curricula are irrelevant and outdated, teacher performance is poor and as a result of the low level of services, monitoring and evaluation, many schools look untidy and dirty, students are highly dissatisfied with the performance of teachers and the school management, and the school management is dissatisfied with the DM TVET. There is a lack of administrative instruments and qualifications and in part inadequate commitment on all levels, including in some cases the deficient school management. System steering and system monitoring tools are unknown, not yet developed or not in place. Last but not least, service orientation seems to be an unknown concept on all levels ${ }^{250}$.

The figure below shows the relative distribution among Afghans responding to the question what is

[^105]your main occupation? We see that $45 \%$ indicate agriculture as their main occupation.

Figure 61: Main Occupation


Figure 62: Average Income by Highest Education Achieved


Source: Survey of the Afghan People 2014, The Asia Foundation
The 2014 survey 251 looked at the remuneration levels. Average monthly reported income was $\$ 190$ USD (10,839 Afghanis; 1 USD = 57.1 Afghanis) with Afghans in rural areas reporting a significantly lower household income of $\$ 170$ USD per month ( 9,701 Afghanis) than Afghans in urban households ( $\$ 261$ USD per month, or 14,903 Afghanis) ${ }^{252}$. Afghans in rural households also reported a larger household size ( 10.3 people per rural household compared to 9.3 people per

[^106]urban household), which affects their relative wealth. Reported income is significantly affected by region and education as well. Income increases with education level (Fig62). Those who complete high school (grade 12) report $64 \%$ more income, in average monthly earnings, compared to those who never went to school. Those who completed university have the highest average income, at \$431 USD per month.

## Cultural perceptions of women in Afghan society ${ }^{253}$

Many Afghans agree that differences between men and women exist and are best preserved through recognized standards of behavior. None dispute the centrality of women in the society. Respect for women is a notable characteristic and few wish to destroy this esteemed status, nor deny what Islam enjoins or Afghan culture values. The argument rages over definitions of precisely what constitutes honorable behavior for women in terms of modern realities, especially in the light of today's monumental reconstruction needs which demand full participation from every Afghan citizen.
The current zealous need to protect women's morality stems from the fact that Afghan society regards women as the perpetuators of the ideals of the society. As such they symbolize honor -- of family, community and nation -- and must be controlled as well as protected so as to maintain moral purity. By imposing strict restraints directly on women, the society's most sensitive component symbolizing male honor, authorities convey their intent to subordinate personal autonomy and thereby strengthen the impression that they are capable of exercising control over all aspects of social behavior, male and female.
The practice of purdah, seclusion, (Persian, literally meaning curtain), including veiling, is the most visible manifestation of this attitude. This concept includes an insistence on separate spaces for men and women and proscriptions against interactions between the sexes outside the mahrammat (acceptable male guardians such as father, brother son and any other male with whom a women may not marry). These restrictions severely limit women's activities, including access to education and employment outside the home. Many are largely confined to their homes.

## Women and work ${ }^{254}$

Women and work was raised in the Asia Foundation survey (2015) with the question "Some people say that women should be allowed to work outside the home, while others say that women should not be allowed to work outside of the home. What is your opinion on this?" While some Afghans say that women should be allowed to work outside the home, not all employment opportunities are seen as equally acceptable. This year, respondents were asked to evaluate the acceptability of different types of employment venues for women. Of these, schools are seen as most acceptable, with $83.6 \%$ in agreement. Among Afghans who said that women should not be allowed to work outside the home, $64.7 \%$ nonetheless still agreed that schools are acceptable. This may be because in the case of community-based schools, schools are usually located inside the home. A close second are hospitals or clinics, with $80.8 \%$ of Afghans in agreement that these are acceptable places for women to work, followed by government offices (70.0\%). For employment in the police or the army, $41.9 \%$ agree that women's participation is acceptable. Among those who agree that women should be allowed to work outside the home, $48.7 \%$ disagree (somewhat or strongly) with women's employment in the police or army. Even less acceptable, according to Afghans surveyed, is for women to work for a non-governmental organization (NGO). A total of $40.9 \%$ of Afghans agree that working for an NGO is acceptable, while $58.1 \%$ disagree ${ }^{255}$.

[^107]Figure 63: Views on Women Working Outside the Home

|  | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ | $\%$ |
| WOMEN SHOULD BE <br> ALLOWED TO WORK <br> OUTSIDE THE HOME | 70 | 70 | 69 | 67 | 64 | 62 | 66 | 63 | 68 |
| WOMEN SHOULD NOT <br> BE ALLOWED TO WORK <br> OUTSIDE THE HOME | 27 | 28 | 27 | 29 | 38 | 35 | 33 | 36 | 30 |
| REFUSED | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| DONT KNOW | 2 | 2 | 4 | 3 | 3 | 2 | 2 | 1 | 2 |
| TOTAL | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Figure 64: Is it Acceptable for Women to Work in the Following Places?

=STRONGLY AND SOMEWHAT AGREE ■STRONGLY AND SOMEWHAT DISAGREE

### 5.1.4 Economic Return of Different Education Levels

The country's investment in education services is based on raising the productivity of society, in both economic and social aspects. It is the economic benefits gained through undertaking different levels of education, that accrue to the individual through improved lifetime income streams, to society through the higher productivity, and from a range of societal benefits and externalities. The public sector in investing in education, is seeking to achieve both economic and social benefits. Given the government's limited financial resources, obtaining cost benefit estimates on the returns to education, is a useful tool for policy and decisions on intra-sectoral allocations and investments. These returns are specific to the country context, and dependent on the characteristics of labour market supply and demand in that location.

A cost benefit analysis requires being able to assess the returns to education (lifetime earnings by education level), the probability of employment, the public cost of education, and the individual's direct costs while undertaking the education study, and the opportunity cost of their time, that is the foregone income.

In Afghanistan there is a limited pool of labour market data sources and analysis, and a lack of labour market tracer studies to support quantitative assessment. The CSO ALCS 2013/ 2014 Report (2016) is the most recent data source, and is useful as it included a survey section focused on the labour market. The Report's Chapter 5 provides details on the labour market, with employment rates by highest level of education (for men and women) ${ }^{256}$, including by location (urban/ rural). The analysis of employment by sex and job status, and by sector and occupational category is provided. Also monthly earnings (mean and median) by age, gender, and job status are provided for day labourer, own-account worker, employer, salaried worker-private, and salaried worker-public workers.

The Report findings have been outlined in this Chapter, and in relation to teachers in Chapter 3. In terms of the labour market, the agriculture sector remains prominent and despite the expansion of the services sector, around 90 percent of the employed (and underemployed) workforce is in lowskilled occupations.

Gender differences in labour market outcomes are stark: Women's monthly earnings are lower than men's earnings in all job status categories except in the public sector. The survey findings are even more marked when occupation is accounted for, men on average earning at least 30 percent more than women. Males accounted for two thirds of all jobs in the professional categories, and 88 percent of jobs in other skilled categories ${ }^{257}$.

There are also marked gender differences in the distribution of occupations. While participation rates are low ( $29 \%$ ), unpaid family work and agriculture account for at least two thirds of female employment, and women's mean and median monthly earnings are much lower than men's in equivalent occupations. Comparison of labour indicators between 2007-08 and 2012-13 suggests that there has been a large shift of the labour force from working to unemployed, particularly in the urban sector. A substantial slowdown in growth constrained by persistent uncertainty surrounding political and security transition, increased levels of conflict and a downturn in aid, are likely to be underlying factors ${ }^{258}$.

As detailed in the Report the prospects of getting decent employment (ie. jobs in salaried public and private employment, or as employers which accounts for 21 percent of all employed persons) are strongly mediated by the level of education attained, with levels of education beyond secondary having a significant impact on the chances of finding such employment. This means that 79 percent of the employed workforce is in what is deemed vulnerable employment, working as day labourers, own-account workers and unpaid family workers.

Returns to Education, Lifetime Earnings and Probability of Employment. The Report while providing monthly income by job status, did not provide analysis on monthly income by education level, which is required for a cost benefit analysis. The CSO provided the ALCS dataset to the ESA team, and a statistician undertook regression analysis to assess income by level of education, and hourly wages by level of education and gender, and probability of employment. The initial findings while indicating the mean and median monthly salary increased with education level attended from primary, secondary, TVET and higher education, it was inconclusive in relation to teacher college education indicating that the salary base was lower than those with no formal schooling. This finding is inconsistent with the ALCS results that indicated day labourer monthly rates are below

[^108]those of teacher salaries. While further data regression analysis is required, using mincer earning functions, to explain and clarify the initial results, this was not possible within the study timeframe.

The labour market data from an earlier CSO 2007/2008 NRVA Report was analysed in a recent WB project document ${ }^{259}$, and the findings ${ }^{260}$ are similar to the CSO 2013/2014 ALCS in that education level is one of the key determinants of those in wage employment (ie. decent jobs), with 80 per cent of higher education graduates formal workers, 42 percent of secondary school graduates, and 26 percent for those with primary education or were dropouts.

In addition, probity regression models were used to estimate the marginal probability of wage employment. The findings indicated workers with primary, secondary education, vocational qualifications and higher education are 4, 17, 69 and 48 percent respectively more likely to get wage employment.

The WB study found that education attainment is positively correlated with earnings ${ }^{261}$. In terms of the returns to education, the findings ${ }^{262}$ were on average for those finishing primary school 13 to 15 percent higher earnings, completing secondary school increased wages by 40 to 42 percent, and for those graduating university an increased wage of 80 to 84 percent.

Currently the WB analysis using the 2007/2008 survey data is the most recent estimate available quantifying returns to education level based on earnings, and probability of employment. The WB in its' \$US 50 million investment for the MOHE Higher Education Development Project (2015), estimated the project internal rate of return at 16 percent. The estimate is based on the 2007/2008 NRVA data, graduate employment rates of 80 percent in year 1 and 100 percent from year 2, with wage increases of 5 percent.

There has been a marked showdown in growth in the Afghanistan economy since 2013, and this has resulted in some major changes in labour force participation and employment levels. A comparison of the key labour indicators between 2007/2007 and 2013/2014 shows a large shift of the labour force from working to unemployed, particularly in urban areas ${ }^{263}$. The 2013/2014 Report has not assessed the impact of these changes on returns to education, and given the rapidly expanding labour force these returns may be affected by the reduced labour demand in certain sectors.

Given the paucity of current 2013/2014 data, a full cost benefit analysis is not feasible. As a substitute, to obtain some preliminary findings, an initial analysis was undertaken to assess the economic internal rate of return (IRR) to education to an individual. The work is based on using:
(i) the NRVA 2007/2008 and the derived WB analysis for rates of return to education at different education levels (primary, secondary and higher education (14, 41 and 82 percent higher monthly earnings respectively) and assuming these rates of return remain relevant in 2015. Sensitivity analysis is undertaken to assess impact of lower returns;
the probability of employment, is based on the percentage of those employed using the CSO 2013/2014 data (Figure 5.5) noting as per that Figure, that the presented data is only consistent and reliable for males. The employment rate by highest level of

[^109]education is $54,56,51$ and 46 percent for no education, primary, secondary and higher education graduates respectively. This probability is multiplied by the wage to get the expected income;
(iii) for the wage base, are using the CSO 2013/2014 identified mean day worker monthly rate ( 6000 Afs ) as the base for a worker who has completed primary school. The no school child wage rate is assumed at 50 percent of the day worker rate until the individual reaches $13 / 14$ years (equivalent to having spent six years in primary school. The wage increase per year is $0,1,2$ and 3 percent for no schooling, primary, secondary and higher education graduates respectively;
(iv) Lifespan earnings, assumption is a 40 year participation in the workforce in line with current trends;
(v) Unit recurrent costs per student for different levels of education in 2015, is as detailed in Chapter 3;
(vi) Development costs in 2015 are pro-rated to per student (the development expenditure on and off budget);
(vii) Direct costs to the individual/ household are based on an indicative 670 Afs per month for a secondary student (i.e. expenditure by a middle income urban household), and for a higher education student an indicative 6700 Afs per month as per the recent WB Higher Education Development Project (2015) estimate.

The internal rates of return to education from the above analysis should be treated as preliminary estimates only, given the data and assumptions required. From the perspective of the economy, and the investment in an individual (covering public expenditure, direct private expenditure and opportunity cost) undertaking education from no schooling to primary, primary to secondary, and secondary to public higher education, generates a positive internal rate of return for each of these incremental levels of education attained (over the individuals working lifespan) of 5 percent on completion primary, 5 percent on secondary and 7 percent on higher education.

In terms of the sensitivity analysis, a 50 percent increase in employment rates at each level has only a marginal effect, with IRRs of 6,5 , and 8 percent for primary, secondary and higher education respectively, and an increase in wage differential for education increases the IRRs to 6, 7 and 10 percent respectively. The IRRs are sensitive to a decrease in wage differential for education, with a 50 percent reduction decreasing the IRRs to 4 , 2, and 4 percent respectively.

The analysis is based on the economic return only, and as indicated the IRRs while positive are not high. As discussed in this chapter, there are significant societal, health, household and overall community benefits from education. These benefits are not included or quantified in the above analysis. If able to be estimated, and included the resulting IRRs would be higher. For a female, while the analysis could not be undertaken, the data indicates lower workforce participation at all levels, and lower wage rates even for the equivalent occupations, with the exception of the public sector. Labour force participation rates for those with secondary education were 25 percent in 2007/2008, and rates rapidly rose for female higher education graduates. Given the larger role females have in the Afghan household the incremental social benefits obtained from education will be very significant.

## Analysis of CSO NRVA 2011/2012 Data

The regression analysis on the CSO NRVA 2011/2012 data is used to assess the level of statistical correlation between key variables. It can be used to assist in answering key questions, such as whether and how much to invest in the education sector, the size of any economic gains to educating more people, or educating people more? The NRVA dataset analysis provides some important clues.

There was a weak correlation between the level of education attained by an individual, and whether or not they are employed in the service sector such as health, education, and NGOs (correlation coefficient $=0.34$ ). The average individual, who was employed in the service sector had 10.6 years of formal education. Thus, it is possible that people with higher education find it easier to shift from agriculture and blue-collar jobs to white-collar jobs. Women with tertiary education were also found to have a labour force participation rate of $78 \%$, as compared to an overall female labour force participation rate of $19 \%{ }^{264}$.
We looked at the NRVA dataset to find the relationship between educational attainment and economic status. We calculated the correlation between the income of the household, and the total number of years of formal education adults above 20 years of had received in the household. We found that there was a weak positive correlation (correlation coefficient $=0.29$ ) as can be seen in the scatterplot below (Fig.65). In addition, a regression of the household income against the number of years of formal education showed that the relationship is significant at the $1 \%$ level.

About $10 \%$ of the variation $\left(R^{2}=0.10\right)$ in the household income was determined by this factor alone. The correlation between the total income in the household and the maximum level of education that any household member had attained was slightly weaker (correlation coefficient $=0.24)^{265}$.

Figure 65: Correlation between education and income ${ }^{266}$


The correlation between the income of the household, and the total number of years of formal education adults above 20 years is weak as can be seen from the scatterplot in figure 65.

[^110]Of course, education alone does not determine the income of a household. We developed a regression model, which included other factors, which could potentially determine the income of a household. (See Household model in Annex p. 27)

## A Regional Example on Education Rates of Return

While the rates of return to education are specific to the country context, this example from India267, is included to indicate the level of analysis that is possible when quantitative data is available. The India study (from 1967) details the internal rates of return to educational investment, and on the relative impact of different levels of schooling. The internal rates of return are highest for primary schooling (16.8 percent) closely followed by literacy ( 15.9 percent) and then middle level (13.7 percent) and higher. The policy implications from this data indicates that significant resources should be allocated to the lower levels of education.

Table 39: Internal Rates of Return to Educational Investment in India

| Marginal Internal Rates of Return to Increment of Schooling |  |
| :--- | :---: |
| Increment of schooling | Percent internal rate of return |
| Literate over illiterate | 15.9 |
| Primary over literate | 17.0 |
| Middle over primary | 11.8 |
| Matriculates over middle | 10.2 |
| Bachelor over matriculation | 7.0 |
| Engineering degree over matriculation | 9.8 |
| Engineering degree over Bachelor | 9.7 |
| Average Internal Rates of Return to Levels of Schooling Relative to Illiteracy Studies |  |
| Level of schooling | Percent internal rate of return |
| Literacy | 15.9 |
| Primary | 16.8 |
| Middle | 13.7 |
| Bachelor | 8.9 |
| Engineering | 9.6 |

Source: Gounden, A.M.N. "Investment in education in India." Originally published in the Journol of Human Resources 2.3 (Summer 1967): 347-358, o 1967 by the Board of Regents of the University of Wisconsin System. Reproduced by the permission of the University of Wisdonsin Press.

### 5.1.5 The Training-Employment Balance (Macro Approach)

The alignment (or misalignment) of the supply and demand of work is generally illustrated by a country's employment and unemployment levels. The tool most commonly used for the macro evaluation of this alignment is the training employment balance sheet. To use this, the following information is required: The number and distribution of jobs for two given time-periods and the average schooling profile over the period. These data, however, were not available.

[^111]
### 5.1.6 Anticipation of Future Labour Market Needs

We compared the trends in the labour market between $2008^{268}$ and $2012^{269}$ by comparing the data from the NRVA surveys from those years. The results are shown in Table 40 below.

The data we have does not give us an accurate sense of the demand in the labour market. Nevertheless, we can compare the changes in the different types of jobs the population was engaged in to get a sense of what we can expect in the coming years. The share of unpaid family worker has decreased by more than half, except for urban males. 6\% of urban males in 2012 as opposed to $3 \%$ in 2008 engaged in unpaid family work. The share of female own-account workers has increased about twofold, and the share of male own-account workers has decreased overall. The portion of female Kuchi workers engaged in own-account work has increased almost 4 times. In urban areas, the number has decreased for both males and females. There is an increase in the percentage of urban, rural, and Kuchi day labourers of both sexes. The share of salaried workers has increased overall. Nationally, the share of female workers engaged in Salaried work has increased 4 times from $3 \%$ to $12 \%$. Overall, there is a growth in paid and formal work, particularly for females. Should this trend continue, more of the workforce (particularly females) will need higher levels of education to contribute efficiently to the economy.

Table 40: Labour Market Trends by Type of Employment 2008 and 2012 (NRVA) ${ }^{270}$

| \% of Employed Population 2008 (By Sex) | Urban |  |  | Rural |  |  | Kuchi |  |  | National |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | F | Total | M | F | Total | M | F | Total | M | F | Total |
| Day labourers | 14 | 3 | 12 | 22 | 1 | 14 | 14 | 1 | 9 | 20 | 1 | 14 |
| Salaried workers | 29 | 27 | 29 | 8 | 2 | 6 | 2 | 0 | 1 | 12 | 3 | 9 |
| Employers | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| Own account workers | 54 | 31 | 50 | 57 | 20 | 43 | 62 | 15 | 44 | 56 | 20 | 44 |
| Unpaid family workers | 3 | 39 | 9 | 12 | 77 | 36 | 22 | 84 | 46 | 11 | 75 | 33 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Vulnerable employment | 71 | 73 | 71 | 91 | 98 | 94 | 98 | 100 | 99 | 88 | 96 | 91 |


| \% of Employed <br> Population 2012 <br> (By Sex) | Urban |  |  | Rural | Kuchi |  |  | National |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | May labourer | 14 | 8 | $\mathbf{1 3}$ | 26 | 5 | $\mathbf{2 2}$ | 26 | 6 | $\mathbf{2 0}$ | 23 | 6 | $\mathbf{2 0}$ |
| Salaried worker <br> (private) | 18 | 10 | $\mathbf{1 7}$ | 6 | 3 | $\mathbf{5}$ | 5 | 0 | $\mathbf{3}$ | 9 | 4 | $\mathbf{8}$ |  |
| Salaried worker <br> (public) | 19 | 40 | $\mathbf{2 2}$ | 9 | 3 | $\mathbf{8}$ | 1 | 0 | $\mathbf{0}$ | 11 | 9 | $\mathbf{1 1}$ |  |
| Employer | 2 | 1 | $\mathbf{2}$ | 1 | 0 | $\mathbf{1}$ | 1 | 0 | $\mathbf{0}$ | 1 | 0 | $\mathbf{1}$ |  |
| Own-account <br> worker | 41 | 28 | $\mathbf{3 9}$ | 50 | 44 | $\mathbf{4 9}$ | 54 | 54 | $\mathbf{5 4}$ | 48 | 42 | $\mathbf{4 7}$ |  |
| Unpaid family <br> worker | 6 | 14 | $\mathbf{7}$ | 8 | 45 | $\mathbf{1 4}$ | 14 | 40 | $\mathbf{2 1}$ | $\mathbf{8}$ | 39 | $\mathbf{1 3}$ |  |

[^112]| Total | 100 | 100 | $\mathbf{1 0 0}$ | 100 | 100 | $\mathbf{1 0 0}$ | 100 | 100 | $\mathbf{1 0 0}$ | 100 | 100 | $\mathbf{1 0 0}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Vulnerable <br> employment | 61 | 49 | $\mathbf{5 9}$ | $\mathbf{8 4}$ | $\mathbf{9 4}$ | $\mathbf{8 6}$ | $\mathbf{9 4}$ | 100 | $\mathbf{9 6}$ | 79 | $\mathbf{8 7}$ | $\mathbf{8 1}$ |

Note: NRVA 2009 uses a different definition of working-age (16 years and above) as opposed to NRVA 2013 (14 years and above).

## SECTION 2: THE SOCIAL IMPACT OF EDUCATION

While economists have long recognised and measured the lifetime benefits of education from improved learning opportunities ${ }^{271}$. it is only recently that they have begun to study the effects of education on other personal and social outcomes. The evidence from these studies suggests that the social returns to education are substantial and justify significant public subsidization of this activity, as the implied social benefits from the impact of education can be sizeable.

A growing body of evidence ${ }^{272}$ suggests that education can reduce crime, improve health, lower mortality, and increase political participation. In a summary of the empirical evidence: ${ }^{273}$ the following approximate estimates of the social rate of return to education was cited: Dynamic effects on economic growth were $1 \%-2 \%$, the effect on knowledge spill overs were $1 \%-2 \%$, non-market benefits were estimated at $3 \%-4 \%$, while tax and transfer effects were $2 \%$ adding up to total benefits in the range of $7 \%-10 \%$. These studies suggest that the social return to education is similar to the private economic returns associated with higher lifetime earnings, which are also in the range of 7-10 \%.

### 5.2.1. The Choice of Social Development Variables

As shown above, education in addition to its individual economic benefits has positive noneconomic externalities, as a factor of change in individuals' social behaviour. These effects can include aspects as diverse as health, reproductive behaviour, high-risk behaviour, or civic attitudes. The different effects can be evaluated at the household level according to four key dimensions: (i) the promotion of health; (ii) the control of fertility; (iii) civic commitment; and (vi) living conditions.

In Afghanistan there are few studies on the social benefits of education. AMICS, however, has made it possible to look at some of the correlations between levels of education and a number of selected effects on women's health, marriage age, child mortality, place of birth delivery and nutritional status of children.

### 5.2.2 Estimation of the Net Effects of Education

## Health

There is substantial evidence ${ }^{274}$ suggesting that educational attainment improves health. It estimates that an additional year of high school improves self-reported health outcomes by 15-30\%

[^113]in the US, while European-based studies ${ }^{275}$ typically estimate slightly more modest impacts. We found the same pattern in Afghanistan. In Afghanistan AMICS have reported on the effects of education on health and hygiene, use of sanitation facilities, infant mortality and nutritional status of children. In all cases, the impact of increased educational levels has proven to be high.

|  | Education Level <br> (Percentage benefitting) |  |
| :--- | :--- | :--- |
| Social Effect/Benefit | None | Secondary <br> or higher |
| Health and Hygiene: |  |  |
| Designated Place for Handwashing | 55 | 76 |
| Availability of soap and water | 68 | 79 |
| Infant and child mortality | 74 | 55 |
| Infant mortality rate | 103 | 73 |
| Child mortality rate |  |  |

Table 41Use and sharing of sanitation facilities

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Users of improved sanitation facilities |  |  |  |  | Users of umimproved sanitation faclities |  |  |  |  | Open defection (se faclity. bush, fiold) | Teal | Number of howabeld mambers |
|  | Not thared | Public facility | Shared by |  | Maxing CK . | Noe sharad | Public helitit | Shared by |  | Maxis DK |  |  |  |
|  |  |  | 5 households or Sen | Moce than 5 houpholdn |  |  |  | 5 hourehoidr or lesa | More then 5 hovereholds |  |  |  |  |
| Aegian |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Central | 274 | 1.4 | 5.5 | $1 / 4$ | 0.0 | 52.4 | 2.4 | 70 | 15 | 00 | $0 \cdot 9$ | 1000 | 16.232 |
| Ceneral |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hegliende | 19.) | 1.2 | 0.7 | 0.1 | 00 | 245 | 1.7 | 0.5 | 05 | 00 | 50.2 | 1000 | 3,449 |
| Eut | 39.6 | 03 | 2.0 | 0.2 | 0.0 | 277 | 0.5 | 1.9 | 0.3 | 0.0 | 27.5 | 100.0 | 11.335 |
| Norit | 344 | 0.2 | 0.2 | 0.2 | 0.0 | 46.7 | 0.5 | 1.7 | 0.4 | 0.0 | 15.5 | 1000 | 14.055 |
| North Ease | 16.5 | 0.4 | 1.5 | 0.3 | 0.1 | 71.0 | 1.3 | 45 | 1.0 | a. 1 | 3.1 | 1000 | 16.557 |
| South | 29.1 | 0.4 | 0.3 | 0.6 | 0.0 | 4.7 | 0.7 | 0.1 | 0.3 | 0.0 | 23.7 | 1000 | 13, 2 25 |
| South Eart | 290 | 07 | 1.3 | 0.0 | 00 | 44.3 | 0.6 | 12 | 0.4 | 0.0 | 221 | 1000 | 12.867 |
| Wear | 30.1 | 0.2 | 2.6 | 0.2 | 0.0 | 30.8 | . 0.8 | 3.9 | 0.3 | 0.1 | 31.1 | 100.0 | 13,393 |
| Residente |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Untan | 51.2 | 1.5 | 8.1 | 1.7 | 0.1 | 29.5 | 20 | 59 | 1.4 | 0.1 | 0.6 | 100.0 | 18.000 |
| Rural | 236 | 0.3 | 1.1 | 0.2 | 00 | 404 | 0.1 | 23 | 0.5 | 00 | 21.3 | 1000 | 88.713 |
| Edveation of household head |  |  |  |  |  |  |  |  |  |  |  |  |  |
| None | 25 \% | 0.4 | 1.4 | 0.1 | 0.0 | 46.4 | 1.2 | 27 | 0.6 | 0.0 | 11.2 | 1000 | 69034 |
| Primury | 24.1 | 0.6 | 3.2 | Q 0 | 0.0 | 505 | 0.1 | 46 | 1.0 | 0.0 | 14.3 | 1000 | 11.587 |
| Secondivy - | 40.2 | 10 | 3.4 | 0.7 | 0.1 | 420 | 0.9 | 31 | 0.8 | 0.0 | 78 | 1000 | 21.09 |
| Wealth index quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Poorear | 7.9 | 0.2 | 0.3 | 0.0 | 0.0 | 31.6 | 1.2 | 1.1 | 0.3 | 0.0 | 57.3 | 1000 | 20.338 |
| Second | 18.5 | 03 | 0.9 | 0.2 | 0.0 | 57.0 | 1.2 | 26 | 0.4 | \$0 | 12.) | 1000 | 20.340 |
| Middie | 272 | 03 | 0.9 | 0.0 | 0.0 | 57.6 | 1.1 | 27 | 0.7 | 00 | 9.6 | 1000 | 20.344 |
| Foarth | 350 | 03 | 2.3 | 0.3 | 0.0 | 83.7 | 1.0 | 17 | 0.9 | 08 | 2.4 | 1900 | 20.345 |
| Pichert | 53.6 | 1.4 | 5.5 | 1.6 | 0.1 | 30.4 | 1.2 | 4.8 | 12 | 0.1 | 0.2 | 1000 | 20.347 |
| Total | 285 | as | 10 | 0.5 | 00 | 46.1 | 1.1 | 30 | 0.7 | 0.0 | 17.7 | 1000 | 101713 |
| 1 MICS Indizatue 4.3; MDG Indizator 7.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |

The use and sharing of sanitation facilities is correlated with wealth index quintiles. A correlation is also found with the education level of the head of household. For instance, the greatest proportion

Average and Local Average Treatment Effects of Education when Compulsory Schooling Laws Really Matter," American Economic Review, 96(1):152-175.
${ }^{275}$ E.G. Clark, Damon and Heather Royer (2010) "The Effect of Education on Adult Health and Mortality: Evidence from Britain", Working Paper. Kemptner, Daniel, Hendrik Jurges, and Steffen Reinhold (2010)
"Changes in Compulsory Schooling and the Causal Effect of Education on Health: Evidence from Germany," Working paper 10200, Mannheim Research Institute for the Economics of Aging (MEA), University of Mannheim.; Silles, Mary A (2009) "The Causal Effect of Education on Health: Evidence from the United Kingdom," Economics of Education Review, 28:122-128.
of households with access to an improved water source are those where the head of household has attained secondary level education or higher (40\%). Also, open defecation is common among the poorest households: $21 \%$ of those with no education against $8 \%$ of those with secondary or higher.

## Nutritional status of children

Almost one in three children under age five in Afghanistan are moderately or severely underweight ( $31 \%$ ). More than a half of children ( $55 \%$ ) are moderately or severely stunted or too short for their age, and $18 \%$ are moderately or severely wasted or too thin for their height (AMICS Table 5.1). If we correlate with education levels, we find that there is a strong correlation between the Nutritional status of children and their mother's education. The proportion of moderately or severely underweight is $32 \%$ for mothers with no education and $22 \%$ for mothers with secondary education. The percentage of stunted is $56 \%$ for mothers with no education and $43 \%$ for educated mothers. Percentage of children "wasted" or too thin for their height is $18 \%$ for mothers with no education and $11 \%$ for educated mothers.

Table 42 Percentage of Children under Five According to Three Indices of Nutritional Status

|  | Weight for age |  |  | Number of children under age 5 | Height for age |  |  | Number of children under age 5 | Weight for height |  |  |  | Number of children under age 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Underweight <br> percent below |  | Mean Z. Score (SD) |  | Stunted <br> percent below |  | Mean Z. Score (SD) |  | Wasted <br> percent below |  | Overweight <br> percent above $+25 D$ | Mean Z. Score (5D) |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{gathered} -2 \\ S D^{\prime} \end{gathered}$ | $\begin{aligned} & -3 \\ & 5 D^{2} \end{aligned}$ |  |  | $\begin{gathered} -2 \\ S D^{3} \end{gathered}$ | $\begin{gathered} -3 \\ S D^{4} \end{gathered}$ |  |  | $\begin{array}{r} -2 \\ 3 D^{5} \end{array}$ | $\begin{gathered} -3 \\ S D^{6} \end{gathered}$ |  |  |  |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| None | 31.9 | 18.0 | -1.1 | 11.976 | 56.0 | 39.1 | $-2.0$ | 11,348 | 18.4 | 11.8 | 21.0 | 0.4 | 11,085 |
| Primary | 26.6 | 14.7 | -0.9 | 657 | 47.4 | 30.6 | -1.7 | 629 | 12.3 | 8.0 | 16.1 | 0.5 | 616 |
| Secondary + | 22.0 | 11.6 | -0.7 | 583 | 42.8 | 24.4 | $-1.4$ | 560 | 11.4 | 6.0 | 16.6 | 0.3 | 544 |
| Total | 31.2 | 17.6 | -1.1 | 13.220 | 55.0 | 38.0 | $-2.0$ | 12.544 | 17.8 | 11.3 | 20.6 | 0.4 | 12.246 |

Source AMICS

## Fertility

There is a strong correlation between education level on one side and on the other marriage patterns, women's age at first delivery and place of delivery. Educated women tend to marry later, be less engaged in polygamous marriages, have first child at a later age and deliver at health facilities in stead of at home.

Table 43: Correlation between women's education level and patterns of marriage and birth

|  | Education Level |  |
| :--- | :--- | :--- |
| Social Effect/Benefit | None | Secondary <br> or higher |
| Woman's age of marriage: |  |  |
| Before 15 | 17 | 5 |
| Before 18 | 48 | 26 |
| Percentage of women aged 15-49 in polygamous marriages | 8 | 4 |
| Percentage of women who had a live birth before age 18 | 29 | 8 |
| Birth place of delivery |  |  |
| Home | 69 | 25 |
| Health facility | 29 | 74 |

The AMICS study found a strong correlation between education and marriage patterns as can be seen from Tables 43 and 44 ..

Table 44: Correlation Between Age, Education and Marital Status of Women Aged 15-49

| Percentage of women age 15-49 years who first married before their 15 th birthday, percentages of women age $20-49$ years who first married before their 15 th and 18 th birthdays, percentage of women age 15-19 years currently married, and the percentage of women currently married who are in a polygamous marriage, Afghanistan, 2010-2011 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage married before age $15^{1}$ | Number of women age 1549 years | Percentage married before age 15 | Percentage married before age $18^{2}$ | Number of women age 20 49 years | Percentage of women 15-19 years currently married ${ }^{2}$ | Number of women age $15-$ 19 years | Percentage of women age 15-49 years in polygamous marriage ${ }^{4}$ | Number of women age $15-49$ years currently married |
| -.. | +... | -... | .. | -... | +... | ...- | ..- | $\cdots$ | .-.. |
| Education |  |  |  |  |  |  |  |  |  |
| None | 17.0 | 17,359 | 19.5 | 48.0 | 13.903 | 24.9 | 3.455 | 7.5 | 13.244 |
| Primary | 9.9 | 1.595 | 16.3 | 44.5 | 766 | 15.3 | 830 | 3.7 | 714 |
| Secondary ${ }^{+}$ | 5.3 | 2.330 | 9.3 | 26.3 | 1.105 | 8.2 | 1.225 | 4.4 | 793 |

## Civic and Social Commitment

While more educated societies tend to be more democratic, the question is whether education in itself actually improves citizenship and political engagement. Some analyses ${ }^{276}$ suggest that an additional year of schooling increases voter registration and voting in the US, while European research ${ }^{277}$ estimates negligible impacts on voting in the UK and Germany. More generally, education appears to increase political interest and other forms of political participation, as well as the extent to which individuals are informed about politics. As with voting, impacts on these behaviours appear to be greater in the US than in Europe.

In Afghanistan it has been difficult to find data linking levels of education to civic and social commitment. What is the connection between education and democracy on one side, and insurgency and religious extremism on the other? There are many assumptions, but few are underpinned by research evidence.

It is a widely held notion that uneducated and illiterate youth are more susceptible to fundamentalist messages than more educated youths. It is believed that some parents chose to send their children to madrasahs in Pakistan, where such values are to some extent being nurtured. It has also been argued that better coverage and provision of public education might act as a counter-balance to this type of radicalisation.

The correlation between education and democratic values is not necessarily a purely positive one. In a paper 278", Borhan Osman argues that not all young Afghans who obtained better education, training and skills over the past decade use their knowledge to help democracy take roots; many are actually vehemently against democracy and its essential pillar, popular elections.

Education is shown to have an effect on crime prevention and reduction. Research suggest that increases in education would reduce both violent and property crimes and that the long-run

[^114]impacts of early childhood and school-age interventions on juvenile delinquency and adult crime can be substantial for disadvantaged youth ${ }^{279}$. The studies have shown that education-based interventions and policies appear to reduce crime and delinquency most among the least able, most disadvantaged.

There is also growing evidence that preschool and school interventions at early ages can reduce delinquency and crime years later; although not all programs do ${ }^{280}$. Given the empirical strategies used to estimate the impacts of schooling on crime, health, and citizenship, we know much about the impact of additional years of high school but much less about the effects of higher education. Much of the available evidence is US-based. While a number of very recent studies have begun to analyse the wider benefits of education in Europe, very few studies exploit data from developing countries where education levels are much lower.

## Living conditions

What is the correlation between level of education and poverty? The most recent ALCS it found that it is negative:

Table 45: Poverty headcount, share of poor and total population, by selected household head education (in percentages)

| Household head's education characteristics | Poverty rate | Share of <br> poor | Share of <br> population |
| :--- | :--- | :--- | :--- |
| Literacy |  |  |  |
| Illiterate | 46.1 | 72.9 | 69.9 |
| Literate | 27.8 | 27.1 | 38.0 |
| Educational attainment <br> No education | 45.0 | 81.0 | 70.5 |
| Incomplete primary school (less than grade | 29.8 | 1.2 | 1.6 |
| 5) |  |  |  |
| Completed primary school (grade 5 or | 30.2 | 6.4 | 8.4 |
| higher) | 28.2 | 3.2 | 4.5 |
| Completed lower secondary school | 22.9 | 5.1 | 8.7 |
| Completed upper secondary school | 22.6 | 1.3 | 2.3 |
| Teacher college completed | 13.2 | 1.2 | 3.6 |
| University/technical college/ post graduate |  | 0.4 | 0.4 |

The ALCS found that: ".... the household head's literacy and educational attainment level strongly correlate with poverty. Poverty rates are highest for people in households headed by an illiterate individual ( $46 \%$ ), and poverty rates decrease steadily as the household head acquires more education. People living in households headed by individual with 'No education' are 1.5 to almost 3.5 times more likely to be poor than individuals living in households headed by someone with

[^115]education above primary school. In line with the findings from NRVA 2011-12 (CSO 2014), even partial schooling at the primary level is enough to substantially reduce the likelihood of being poor." 281

What is the correlation between female education and social benefits? There is a large body of academic literature suggesting that women's education leads to significant social development. Educated people and the children of educated parents tend to be healthier, more empowered regarding their own lives and their society, and socially more tolerant and resolution-seeking. many of the observed social impacts are linked to women's education, hence, the importance of girls' education for future social welfare ${ }^{282}$. Some of the most notable social benefits include decreased fertility rates and lower infant mortality rates, and lower maternal mortality rates. Closing the gender gap in education also increases gender equality, which is considered important both in itself and because it ensures equal rights and opportunities for people regardless of gender. Women's education has cognitive benefits for women as well. Improved cognitive abilities increase the quality of life for women and also lead to other benefits. One example of this is the fact that educated women are better able to make decisions related to health, both for themselves and their children. Cognitive abilities also translate to increased political participation among women. Educated women are more likely to engage in civic participation and attend political meetings, and there are several instances in which educated women in the developing world were able to secure benefits for themselves through political movements. Evidence also points to an increased likelihood of democratic governance in countries with well-educated women ${ }^{283}$.

There are also benefits relating to the woman's role in the household. Educated women have been found to experience less domestic violence, regardless of other social status indicators like employment status. Women with an education are also more involved in the decision-making process of the family and report making more decisions over a given time period. In particular, these benefits extend to economic decisions. Besides the intrinsic value of increasing a woman's agency, having women play a more active role in the family also brings about social benefits for family members. In a household where the mother is educated, children and especially girls are more likely to attend school. See below the effect of an educated mother on children's participation in ECD programmes. In households where a mother is not educated, adult literacy programs can indirectly help to teach mothers the value of education and encourage them to send their children to school. There are also a number of other benefits for children associated with having an educated mother over an educated father, including higher survival rates and better nutrition (see above under "health").

Table 46: Effect of Mother's Education on Child's enrolment in ECD Programmes

|  | Education Level |  |
| :--- | :--- | :--- |
| Social Effect/Benefit | None | Secondary <br> or higher |
| ECD |  |  |
| \% Children attending organised early childhood education | 0.7 | 9.4 |

[^116]
### 5.2.3 Consolidation of the Net Social Effect of Education

As noted previously in this chapter quantifying the social benefits from education are significant, and in Afghanistan limited work has been undertaken to quantify the benefit. They are important and need to be considered as part of the overall benefit in policy, planning and determinations on intra-sectoral resource allocations.

In concluding this section on social impact of education, it would have been helpful to summarise the results obtained for each of the four dimensions studied (health, the control of fertility, civic commitment and living conditions) and compute the cost-efficiency and internal rate of return for each level of education. Such analysis would provide education sector decision makers with useful quantitative information to guide the intra-sectorial allocation of resources on the social benefit of education. As noted, at this stage the data and information required is not available to enable such analysis.

## Conclusions and Recommendations

The labour market is challenging, in an economy with lower growth, large numbers of new entrants joining the workforce each year, and high levels of underemployment and unemployment. On the supply side, the labour force is largely informal and generally poorly educated, with 40 percent not gainfully employed (underemployed or unemployed). Only 21 percent of all employed are in salaried private and public sector employment. There are very distinct gender differences with significantly lower levels of paid workforce participation by women, and with lower wage rates.

On the demand side, the economy continues to be agriculturally based and the agriculture sector accounts for 40 percent of employment, manufacturing for less than 10 percent, with trade, transport, finance, real estate and insurance sectors accounting for a less than 20 percent. Most businesses are family run SMEs, with employment linked to family or network connections.

Economic growth is expected to come from the agriculture sector, and from mining and energy sectors when the key projects in these sectors are operational. The agriculture sector growth and value addition, and that in the service sector, will require increased productivity, SME investment, and improved skilled labour resources. One key aspect is improved labour productivity, in having skilled labour that is able to meet sector/ industry needs. This involves ensuring that the education systems are quality based, producing graduates with required skill competencies for work and life.

In Afghanistan, quantitative data on labour market demand is limited, and in the absence of labour market tracer studies, is reliant on CSO NRVA and ALCS data, and on the Asia Foundation perception surveys. The studies undertaken, indicate that education improves employment prospects and income level. The WB study (using NRVA 2007/2008 data) found that education attainment is positively correlated with earnings ${ }^{284}$. In terms of the returns to education, the findings ${ }^{285}$ were on average for those finishing primary school 13 to 15 percent higher earnings, completing secondary school increased wages by 40 to 42 percent, and for those graduating university an increased wage of 80 to 84 percent.

[^117]From the perspective of the economy, while the available data is limited, the analysis indicates that the economic internal rates of return from the public investment in individuals completing primary, secondary and higher education is positive. While these returns are low, they are indicative of the economic return from investing in education, and improving labour skills and employment prospects. In addition to the economic benefits there are significant social benefits from education (improved health, hygiene and child mortality rates, improved nutrition rates, living conditions, fertility control and civic commitment). These have been identified, though not quantified and will increase the overall economic return to education.

The critique of the formal TVET provision could be summarised in it being irrelevant to labour market needs, negligent and ignorant of the main training provider in the country, the informal apprentice system. The formal TVET system is dysfunctional, expensive, inefficient, ineffective and wasteful.

To improve the labour market skills and capacity, there is need for a fundamental paradigm shift: The education sector needs to assess and strengthen linkages with industry, employers and SMEs to improve the targeting and competency of skilled graduates to meet market demands. This will require review of approaches and course structures, particularly in the review of TVET to improve effectiveness and performance of both the formal TVET and the traditional systems. Minimizing the school based TVET system and modernising the traditional apprentice system might yield substantial savings and offer better opportunities for developing relevant, modern and employable skills.

Given the government fiscal constraints, seeking opportunities for public-private partnerships and sponsorships with industry sectors to develop targeted skill training seems to hold a promising potential for a more relevant and affordable skills training system.

At the wider government level, stronger coordination between government ministries involved in labour, finance and education, and with industry bodies to provide a stronger base for targeting skill development and economic growth, education sector planning and investment. This will require a financial commitment and the supporting institutional framework for the collection of quantitative labour market data and applied market research and analysis.

## CHAPTER 6 EQUITY

Equity in education looks at the proportional access to, and benefits from, educational services by socially distinct groups. The issue of equity can be examined from, e.g. the lenses of gender, geography, language and ethnicity. The distribution of Education has set the target to increase gender parity in primary education to 1 , in lower secondary to 0.8 , and in upper secondary to 0.7 by $2020^{286}$.

## SECTION 1: EQUITY IN ENROLMENT AND LEARNING ACHIEVEMENTS

### 6.1.1 The Absolute Gap in Performance between the Two Groups

Net enrolment rates in primary education have shown a steady increase from 1380 (2001) to 1394 (2013) and the gender gap has shown a small decline from about $24 \%$ to $22 \%$. As shown in the table below, the absolute gender gap increases by grade: from $18,5 \%$ at grade 1 to $23,7 \%$ at grade 12.

Figure 66 Net enrolment in Primary Education


Source EFA 2015 Review
In comparison (see table below) the gross enrolment rates showed a significant surge in the years immediately following the abolition of the Taliban regime, possibly responding to a high accumulated demand. From 2005 the GER started to decline and after 2010 it remained almost stagnant for a couple of years before it again started to increase from 2012 at a level concomitant to the NER. Higher male gross enrolment may be affected by the fact that a lot of boys enter school late.

Figure 67 Gross enrolment in Primary Education

[^118]

## Source EFA 2015 Review

GER and NER figures conceal significant gender gaps, which tend to increase with higher levels of education.

Table 47 Absolute Gap: Cumulative gender disparities in access to general Education grades 1,6 \& 12 and grade 12 graduation rates in year 1393/2014 (2014)

|  | M | F | T | M | F | Gap |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | \% | \% |  |
| Grade 1 | 663.848 | 456.200 | 1.120.048 | 59,27\% | 40,73\% | 18,54\% |
| Grade 6 | 450.889 | 285.414 | 736.303 | 61,24\% | 38,76\% | 22,47\% |
| Grade 12 | 185.167 | 114.158 | 299.325 | 61,86\% | 38,14\% | 23,72\% |
| Gr12 <br> Graduates | 179.639 | 110.811 | 290.450 | 61,85\% | 38,15\% | 23,70\% |

Source: EMIS 1393/2014
In addition to the gender gap there is a large gross enrolment gap between provinces: from less than $20 \%$ in Zabul, the province with the lowest performance, to $80 \%$ and above ${ }^{287}$ in the best performing provinces.

Figure 68 Gross Enrolment Ratio in Provinces

[^119]

Source EFA 2015 Review

### 6.1.2 The Parity Index

The changes in educational opportunities since 2001 directly affected the gender equity indicators. Although both girls and boys benefitted from improved access to school, the relative impact for girls was much greater. As can be seen in the gender parity index figure on the following page, the ratio of female-to-male literacy - sharply increases from just over $20 \%$ for persons around 30 years old (who were too old to effectively benefit from the change in 2001) to $70 \%$ for children around age 12. This figure indicates that at this age the share of girls that is able to read and write is $70 \%$ of the share of boys that is able to do so. In absolute terms, the gap between the male and female literacy rates is fairly stable around 36 percentage points from older ages up to around age 23 (except for the age group 36 to 37 , where the gap is somewhat smaller). At this age, also the absolute gap starts to decrease from 35 to below 18 percentage points around age 12. This agebased assessment confirms that literacy for the younger generations in Afghanistan has improved, and that, relatively, girls benefitted more than boys and have begun to catch up with them. This difference could be explained by increased gender parity in schools, in particular at primary level. Probably, in no previous generation has the gender gap for literacy been so small. ${ }^{288}$

Figure 69: Literacy rate, by sex, and by age; Gender equity indicators, by age ${ }^{289}$


The graph below shows the gender parity index by province based on data from $2011^{290}$. While the national gender parity index is 0.65 , the variation among provinces is noticeable. The figure is 0.15

[^120]in Uruzgan and 0.9 in Badakhshan and Herat.
Figure 70 Gender Parity in provinces


In 2007-8, gender parity in primary education was 0.69 that in secondary education was 0.49 , and that in tertiary education was 0.28 . These figures increased to $0.74,0.53$, and 0.42 respectively in 2012. This indicates that the gender gap in education has been closing though not eliminated. Female literacy has gone from 29\% in 2005 to $48 \%$ in 2012. Between the same years, male literacy went from $43 \%$ to $64 \%{ }^{291}$.

The ratio of girls to boys attending primary and secondary education is provided in the table below (Fig. 71) These ratios are better known as the Gender Parity Index (GPI). Note that the ratios included here are obtained from net attendance ratios rather than gross attendance ratios ${ }^{292}$. The table shows that gender parity for primary school is 0.74 , indicating a difference in the primary school attendance between girls and boys, with 74 girls attending primary school for every 100 boys. The indicator drops significantly by the secondary level, to 0.49 . The disadvantage to girls is particularly pronounced in the Southern region ( 0.47 for primary education and 0.16 for secondary education), as well as among children living in the poorest households ( 0.62 for primary education and 0.23 for secondary education) and in rural areas ( 0.69 for primary education and 0.39 for secondary education).

Figure 71 Education gender parity Net Adjusted ratio NAR primary and secondary school

[^121]| Ratio of adjusted net attendance ratios of girls to boys, in primary and secondary school, Afghanistan, 2010-2011 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Primary school adjusted net attendance ratio (NAR), girls | Primary school adjusted net attendance ratio (NAR). boys | Gender parity index (GPI) for primary school adjusted NAR' | Secondary school adjusted net attendance ratio (NAR), girls | Secondary school adjusted net attendance ratio (NAR). boys | Gender parity index (GPI) for secondary school adjusted NAR ${ }^{3}$ |
| Region |  |  |  |  |  |  |
| Central | 67.4 | 87.6 | 0.77 | 36.0 | 65.8 | 0.55 |
| Central Highlands | 71.8 | 83.1 | 0.86 | 33.8 | 54.1 | 0.62 |
| East | 41.8 | 67.2 | 0.62 | 13.0 | 49.5 | 0.26 |
| North | 56.8 | 65.0 | 0.88 | 27.0 | 42.9 | 0.63 |
| North East | 51.0 | 65.5 | 0.78 | 23.7 | 40.4 | 0.59 |
| South | 13.5 | 28.6 | 0.47 | 3.0 | 19.0 | 0.16 |
| South East | 30.4 | 66.1 | 0.46 | 15.3 | 57.4 | 0.27 |
| West | 50.8 | 60.2 | 0.84 | 18.5 | 29.7 | 0.62 |
| Residence |  |  |  |  |  |  |
| Urban | 72.8 | 82.5 | 0.88 | 48.6 | 61.8 | 0.79 |
| Rural | 40.6 | 58.9 | 0.69 | 14.5 | 38.5 | 0.38 |
| Mother's education |  |  |  |  |  |  |
| None | 43.2 | 60.8 | 0.71 | 20.1 | 40.9 | 0.49 |
| Primary | 79.7 | 88.8 | 0.90 | 49.6 | 67.1 | 0.74 |
| Secondary + | 90.6 | 93.7 | 0.97 | 79.0 | 83.5 | 0.95 |
| Wealth index quintile |  |  |  |  |  |  |
| Poorest | 30.1 | 48.3 | 0.62 | 5.5 | 24.0 | 0.23 |
| Second | 37.5 | 55.2 | 0.68 | 10.9 | 32.6 | 0.33 |
| Middle | 39.4 | 59.8 | 0.66 | 13.8 | 37.8 | 0.36 |
| Fourch | 52.5 | 69.5 | 0.76 | 22.6 | 50.9 | 0.44 |
| Richest | 72.8 | 84.8 | 0.86 | 46.3 | 64.9 | 0.71 |
| Total | 46.4 | 62.9 | 0.74 | 21.1 | 42.8 | 0.49 |
| ${ }^{1}$ MICS indicator 7.9; MDG indicator 3.1; ${ }^{2}$ MICS indicator 7.10; MDG indicator 3.1 |  |  |  |  |  |  |

Source: AMICS ${ }^{293}$

### 6.1.3 The Parity Line

The following parity index (Fig. 72) was calculated for 2014 based on the effective promotion rates for each grade. We can see that parity has yet to be achieved, particularly in the upper-primary, lower-secondary grades. We have no explanation as to why grade 12 stands out like it does.

Figure 72 Parity Index of Effective Promotion Rate Across Grades

[^122]

### 6.1.4 Scatter Charts

Please refer to the charts under 6.1.3 and 6.1.7, where scatter plots or scatter graphs were applied.

### 6.1.5 Maps

The maps on the following page illustrates the stark differences in adult literacy rate, by province and by sex (in percentages) ${ }^{294}$.

### 6.1.6 Social mobility tables

We do not have any data on the social mobility of the Afghan population. The changes in literacy level between ages, however, may serve as a proxy for the changes in social opportunities over time (see 6.1.2 the parity index on literacy levels).

The tables on the following page show the variation in male and female literacy levels by province. Male literacy is significantly higher than female and varies from 50-100\% in the central provinces and Balkh province to between 0-9 \% in Helmand Province. In contrast, female literacy is low all over with a variation between $0-9 \%$ to $15-19$, except Kabul, where female literacy is between 30$39 \%$.

Figure 73 Male Literacy by province

[^123]

Figure 74 Female Literacy by province


### 6.1.7 Odds ratios

We calculated the odds of graduating for female students compared to male students for each province using the projected 2014 data from EMIS 2015. We used the following formula:

Odds Ratio (OR) = (female graduates/females enrolled) / (male graduates/males enrolled)
Figure 75 Odds Ratio (OR) for female graduation by province


An OR higher than 1 indicates that the probability of females graduating is higher than that of males.
In 21 of the 35 provinces, female students have a $20 \%$ lower probability of graduating than male students (OR is less than 0.8). In five of the provinces, Balkh, Faryab, Ghazni, Herat and Kabul City, female students are actually more successful in graduating than male students.

We also have data on the number of male and female teachers in 2014 which we used to calculate the female-male teacher ratio for each province. We then plotted the OR against this ratio to see if the ratio provides any clue to the odds of female graduation. We excluded Kabul City as an outlier in this analysis since the city had a female-male teacher ratio of 2.97 , which was more than twice the ratio for any other province (Fig. 76).

A higher proportion of female teachers than males increases the propbability of female graduation. We found that the female-male teacher ratio is closely related to the $O R\left(R^{2}=0.47\right.$ in the linear model and $\mathrm{R}^{2}=0.57$ in the logarithmic model ). A higher positive female-male teacher ratio signals a higher odds of graduation for females. If we consider the logarithmic model, the predictive capacity decreases as we move towards a higher female-male teacher ratio.

Figure 76 Odds Ratio for Female Graduation Against Female/Male Teacher Ratio


Some community based education programs have been found to be effective in reducing the gender gap. A study gauging the effects of community based education in rural afghanistan found that such programs were very effective in reducing the gap in enrolment between male and female students. In a a village with a community based school, enrolment of girls into primary school increased about $52 \%$ compared to villages with no such schools. The gap, however, increased with age. That is, as female students get older, they find it difficult to stay enrolled. This can be attributed to cultural norms which limit females' mobility and restrict them from attending schools offerring higher grades which are generally farther away ${ }^{295}$.

## SECTION 2: MEASURING EQUITY IN THE DISTRIBUTION OF PUBLIC RESOURCES

## 6. 2.1 The Structural Distribution of Public Education Resources

Public expenditure on education is unevenly distributed among the provinces in Afghanistan. The reasons for this imbalance is not known and merits further analysis. A study of MoE education expenditure for the period of 2011-2014 ${ }^{296}$ showed huge disparities across provinces in terms of average expenditure per pupil. In the 2014 fiscal year, 14 provinces received above the national average of recurrent expenditure per pupil. 12 provinces received 500 AFS or more below the national average recurrent expenditure per pupil and those provinces were in a very critical situation. The remaining 9 provinces received between 0-500 AFS less than national average. In 2011 and 2012, the number of provinces in the category "critical situation" was 8, while in 2013 and 2014 that number of "critical" provinces had increased to 12 . However, the number of provinces that received more than the national average fluctuated during the period: from 11 provinces in 2011 to 13 provinces in 2013 and 2014,. The number of provinces that received between 0-500 less than the national average also fluctuated during the period: from15 provinces in 2011; over 8 provinces 2013, to 9 provinces in 2014. The annual variation over three years and the distribution between provinces is shown in the table below.

[^124]Table 48 Provincial per pupil expenditure status 2011-2014

| S.N | Province | 2011 | 2012 | 2013 | 2014 | Analysis |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Badakhshan | A | B | A | A | 3A 1B |
| 2 | Badghis | C | C | C | C | 4C |
| 3 | Baghlan | A | A | A | A | 4A |
| 4 | Balkh | B | B | B | B | 4B |
| 5 | Bamyan | A | A | A | A | 4A |
| 6 | Daykundi | C | C | C | C | 4C |
| 7 | Farah | B | B | A | A | 2B 2A |
| 8 | Faryab | B | B | C | C | 2B 2C |
| 9 | Ghazni | C | C | C | C | 4C |
| 10 | Ghor | C | B | C | B | 2C 2B |
| 11 | Helmand | B | A | B | B | 2A 2B |
| 12 | Herat | C | C | C | C | 4C |
| 13 | Jawzjan | A | A | A | A | 4A |
| 14 | Kabul City | A | A | A | A | 4A |
| 15 | Kabul Province | B | A | A | A | 3A 1B |
| 16 | Kandahar | B | B | A | B | 3B 1A |
| 17 | Kapisa | A | A | A | A | 4A |
| 18 | Khost | B | B | B | C | 3B 1C |
| 19 | Kunar | A | A | A | A | 4A |
| 20 | Kunduz | B | B | C | C | 2B 2C |
| 21 | Laghman | B | B | B | B | 4B |
| 22 | Logar | A | A | A | A | 4A |
| 23 | Nangarhar | C | C | C | C | 4C |
| 24 | Nimroz | B | C | B | C | 2B 2C |
| 25 | Nooristan | B | B | B | B | 4B |
| 26 | Paktika | C | C | C | C | 4C |
| 27 | Paktiya | B | B | C | C | 2B |
| 28 | Panjsher | A | A | A | A | 4A |
| 29 | Parwan | A | A | A | A | 4A |
| 30 | Samangan | B | B | B | B | 4B |
| 31 | Sar-e-pul | B | B | C | C | 2B 2C |
| 32 | Takhar | B | B | B | B | 4B |
| 33 | Urozgan | C | C | C | B | 3C 1B |
| 34 | Wardak | A | A | A | A | 4A |
| 35 | Zabul | A | A | A | A | 4A |
| A: Above the national average, B: Below national average , C: Critical situation received less than AFS |  |  |  |  |  |  |

The 2014 distribution of public expenditure by province is depicted in the chart below.
Figure 772014 provincial average expenditure per pupil297

[^125]

Source MOE AFMIS, EMIS
The number of schools per 1000 students shows huge variations between the provinces and between rural - urban locations. The ratio tends to increase with distance from urban centres.

Figure 78 Number of Schools per 1000 Students 1392/2014


Using data from EMIS, we calculated the number of schools per 1000 students in the urban and rural areas of each province. We can see that there are in fact more schools per 1000 students in rural compared to urban areas in most provinces. However, this analysis only provides a limited view of access to physical educational resources. While there might be more schools available for each student in rural areas, it is also likely that the schools are farther from them ${ }^{298}$.

[^126]
### 6.2.2 Distributive Equity in Public Education Expenditure: Social Disparities in the Appropriation of Education Resources and Benefit Incidence Analysis

Table 49 Primary school attendance ${ }^{299}$

| Percentage of children of primary school age attending primary or secondary school (adjusted net attendance ratio), Afghanistan, 2010/1/ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male |  | Female |  | Total |  |
|  | Net attendance ratio (adjusted) | Number of children | Net attendance ratio (adjusted) | Number of children | Net attendance ratio (adjusted)' | Number of children |
| Region |  |  |  |  |  |  |
| Central | 87.6 | 1,361 | 67.4 | 1,278 | 77.9 | 2,639 |
| Central Highlands | 83.1 | 302 | 71.8 | 312 | 77.4 | 614 |
| East | 67.2 | 1,221 | 41.8 | 1,040 | 55.5 | 2,261 |
| North | 65.0 | 1,269 | 56.8 | 1,229 | 60.9 | 2,499 |
| North East | 65.5 | 1,380 | 51.0 | 1,328 | 58.4 | 2,708 |
| South | 28.6 | 1,496 | 13.5 | 1,215 | 21.9 | 2,710 |
| South East | 66.1 | 1,138 | 30.4 | 857 | 50.8 | 1,996 |
| West | 60.2 | 1,306 | 50.8 | 1,165 | 55.8 | 2,471 |
| Residence |  |  |  |  |  |  |
| Urban | 82.5 | 1,605 | 72.8 | 1,527 | 77.8 | 3,133 |
| Rural | 58.9 | 7,868 | 40.6 | 6,897 | 50.4 | 14,766 |
| Age at beginning of school year |  |  |  |  |  |  |
| 7 | 50.8 | 1,913 | 41.4 | 1,824 | 46.2 | 3,737 |
| 8 | 55.4 | 1,430 | 48.3 | 1,259 | 52.1 | 2,699 |
| 9 | 67.9 | 1,878 | 47.8 | 1,639 | 58.5 | 3,516 |
| 10 | 66.0 | 1,178 | 48.5 | 924 | 58.3 | 2,102 |
| 11 | 72.8 | 1,707 | 50.3 | 1,480 | 62.3 | 3,187 |
| 12 | 65.7 | 1,367 | 44.3 | 1,298 | 55.3 | 2,665 |
| Mother's education |  |  |  |  |  |  |
| None | 60.81 | 8,807 | 43.2 | 7,766 | 52.6 | 16,572 |
| Primary | 88.8 | 311 | 79.7 | 319 | 84.2 | 630 |
| Secondary + | 93.7 | 349 | 90.6 | 336 | 92.2 | 685 |
| Wealth index quintile |  |  |  |  |  |  |
| Poorest | 48.3 | 2,065 | 30.1 | 1,750 | 40.0 | 3,815 |
| Second | 55.2 | 1,900 | 37.5 | 1,620 | 47.0 | 3,521 |
| Middle | 59.8 | 1,927 | 39.4 | 1,663 | 50.4 | 3,589 |
| Fourth | 69.5 | 1,812 | 52.5 | 1,701 | 61.2 | 3,513 |
| Richest | 84.8 | 1,769 | 72.8 | 1,690 | 79.0 | 3,459 |
| Total | 62.9 | 9,474 | 46.4 | 8,424 | 55.2 | 17,898 |
| ${ }^{1}$ MICS indicator 7.4; MDG indicator 2.1 |  |  |  |  |  |  |

Source AMICS: Afghanistan Multiple Indicator Cluster Survey (AMICS), UNICEF, June 2012
We have not been able to compute the geographical distribution of benefits in terms of net attendance as a function of the structural distribution of resources. Table 38 above, however, shows the distribution of benefits between major regions of Afghanistan but due to available data it was not possible to correlate benefit incidence to distributive equity.

[^127]The table also shows that only $55 \%$ of children of primary school age (7-12) attend school. Attendance in urban areas is $78 \%$ while in rural areas it is only $50 \%$. The proportion of children attending primary or secondary school increases with the child's age up to the age of 11. Attendance starts to decrease from age 12. Primary school attendance shows significant variance between children living in the poorest households ( $40 \%$ attendance) and those living in the wealthiest households ( $79 \%$ attendance).

## Secondary school net attendance ratio (NAR)

About $32 \%$ of secondary school age children attend school. Secondary school net attendance ratio (NAR) for girls $(21 \%)$ is more than two times lower than that of boys $(43 \%)$. The NAR of rural secondary school age children is two times lower than their counterparts in urban areas. The attendance of secondary school children living in the poorest households is about four times lower than their counterparts living in the wealthiest households. Regional disparities in secondary NAR are significant. Attendance in the Southern region (12\%) is the lowest among all eight regions and about five times lower than attendance in the Central region (51\%), where it is the highest. About one in ten (9\%) children of secondary school age are attending primary school when they should be attending secondary school.

Table 50 Secondary school attendance

|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male |  |  | Female |  |  | Total |  |  |
|  | Net attendance ratio (2dusted) | Percent attending primiry school | Namber of ctillaren | Net artondance ratio (adpurted) | Percent attendrg primary satool | Number of children | Net atendence fatio (iBuited) | Percent attendirg prinury sctiod | Number al chidien |
| Region |  |  |  |  |  |  |  |  |  |
| Comeal | 65.8 | 6.6 | 1.272 | 36.0 | 6.6 | 1,337 | 50.5 | 6.6 | 2.609 |
| Cenral Higtundr | 54.1 | 16.3 | 232 | 33.8 | 15.2 | 256 | 43.4 | 15.8 | 486 |
| Enst | 49.5 | 13.4 | 842 | 130 | 4.3 | 697 | 33.0 | 9.3 | 1539 |
| North | 429 | 124 | 1.06) | 270 | 64 | 1,011 | 35.2 | 94 | 2.094 |
| North East | 40.4 | 12.6 | 1.177 | 23.7 | 6.2 | 1,256 | 318 | 93 | 2.433 |
| Scuth | 170 | 32 | 1.47 | 3.0 | 1.1 | 1,123 | 12.1 | 23 | 2.600 |
| South East | 57.4 | 127 | 916 | 153 | 3.4 | 728 | 38.8 | 8.7 | 1,637 |
| West | 29.7 | 17.1 | 989 | 18.5 | 13.8 | 443 | 24.2 | 155 | 1,932 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urinen | 61.8 | 8.9 | 1.469 | 48.6 | 5.8 | 1,467 | 55.3 | 74 | 2.876 |
| Rumal | 38.5 | 11.0 | 6.519 | 145 | 6.6 | 5.937 | 27.1 | 8.9 | 12456 |
| Age at beginining of achool year |  |  |  |  |  |  |  |  |  |
| 13 | 353 | 28.6 | 1.308 | 240 | 153 | 1,482 | 29.3 | 21.5 | 2.790 |
| 14 | 42.8 | 17.6 | 1,480 | 225 | 98 | 1,103 | 34.2 | 14.2 | 2.582 |
| 15 | 48.4 | 76 | 1.485 | 240 | 4.6 | 1.197 | 369 | 6.2 | 2802 |
| 16 | 47.6 | 4.1 | 979 | 22.1 | 3.2 | 976 | 34.9 | 3.6 | 1.955 |
| 17 | 44.0 | 2.4 | 1790 | 18.0 | 1.7 | 1,590 | 318 | 2.1 | 3.30 |
| 18 | 36.8 | 21 | 938 | 14.2 | 2.1 | 875 | 25.9 | 2.1 | 1814 |
| Mother's education |  |  |  |  |  |  |  |  |  |
| Nowe | 40.9 | 15.1 | 4.895 | 20.1 | 8.9 | 4,319 | 312 | 122 | 9.214 |
| Pimary | 67.1 | 125 | 166 | 49.6 | 13.1 | 186 | 57.9 | 128 | 353 |
| Secondry + | 83.5 | 9.5 | 204 | 79.0 | 5.2 | 192 | 81.3 | 7.4 | 396 |
| Canoot ber determined | 47.1 | 4.5 | 218 | a. | 1.7 | 358 | 228 | 2.8 | 575 |
| Wealch index quintile |  |  |  |  |  |  |  |  |  |
| Poorest | 24.0 | 11.7 | 1543 | 55 | 5.7 | 1,294 | 15.6 | 9.0 | 2837 |
| Second | 32.6 | 10.2 | 1.4\% | 10.9 | 5.4 | 1,150 | 22.3 | 8.0 | 2846 |
| Midre | 37.8 | 11.4 | 1589 | 138 | 60 | 1,452 | 26.4 | 88 | 3.041 |
| Fourth | 509 | 10.1 | 1569 | 226 | 8.0 | 1,585 | 368 | 9.4 | 3.174 |
| Archent | 64.9 | 9.2 | 1,772 | 46.3 | 6.4 | 1.663 | 55.7 | 7.9 | 3,434 |
| Total | 42. | 10.6 | 7, 號 | 21.1 | 64 | 7.34) | 32.4 | 86 | 15,.132 |

## Perceptions on Women and Education

Expanded educational opportunities for girls have been a major achievement in Afghanistan's development over the past decade. However, not all Afghans agree with the principles of equal access at all levels of education. From 2006-2013, the survey asked respondents whether they agreed that women should have equal access to educational opportunities as men. The percentage, who agreed with the statement has been high, but declining, from $91.5 \%$ in 2006 to
83.2\% in 2013. The 2014 survey took this question a step further. It asked Afghans about their support for women's education at specific levels and in certain arenas. The highest level of support for women's education is at the level of Islamic madrasa education (92.3\%), while the lowest is for scholarships to study abroad (33.4\%). The threshold of support for women's equal access to education drops below $50.0 \%$ when travel outside the province is required. Within traditional communities, women's physical proximity to the family is seen as particularly important ${ }^{300}$.

## Perceptions on the role of women in education and society ${ }^{301}$

In 2014 the survey ${ }^{302}$ asked respondents whether women should have the same educational opportunities as men at various levels and in various arenas. There is strong support for women's education in Islamic madrasas (92.3\%), primary schools (83.9\%), high schools (82.0\%), and universities in their home province ( $71.9 \%$ ), but less support for women to study in another province (45.2\%) or to go abroad on a scholarship (33.4\%). Around two-thirds (67.8\%) of Afghans say that women should be able to work outside the home. This year, respondents were asked whether they agree or disagree that women should be able to work in a range of specific employment environments. Schools are seen as most acceptable (with 83.6\% of Afghans in agreement), followed by hospitals or clinics (80.8\%) and government offices (70.0\%). There was much lower support for women's employment in the police or the army (41.9\%) and nongovernmental organizations (NGOs) (40.9\%).

## Afghanistan should expand access and improve equity in education, health, and basic services to promote equal opportunity

In its October 2015 update of the NRVA it was suggested that welfare inequalities should be reduced by levelling the playing field for human development: 303 It was found hat inequality had played a major role in diluting the poverty-reduction effect during a period of economic growth and that massive inflow of international assistance targeted to high-conflict areas had contributed to widening geographic inequalities. Moreover, investments in rural areas did not contribute to poverty reduction as the poor lacked the human capital to take advantage of better employment. The NRVA update analysis concluded that with education and health levels among the lowest in the world, Afghanistan would need to continue expanding access and improving equity in education, health, and basic services to promote equal opportunity, inclusive job creation and broad-based growth. In particular, the country would need to reduce the educational disadvantage of poor children and girls. Afghanistan should consider strengthening demand-side interventions to improve access to secondary schools in rural areas, especially for girls, including exploring using cash transfers and scholarships. Moreover, to promote equality in human capital accumulation Afghanistan would need interventions to ensure that children receive adequate nutrition, immunization and care before reaching school age, not the least because a growing body of research shows that benefits of health and nutrition for infants can have long lasting effects that persists through life, and conversely that damages from childhood disease and malnutrition in terms of lost opportunity for learning can be difficult to undo.

## Conclusions and Recommendations on Equity

## Conclusions

The proportional access to, and benefits from, educational services by socially distinct groups is highly inequitable in Afghanistan, and Public expenditure on education is unevenly distributed among the provinces.

[^128]Girls and women are seriously disadvantaged. The GPI at primary level is 0.74 , at secondary level 0.49 , and there are large Rural/Urban discrepancies.

School Life Expectancy varies from 12.4 years for urban boys to 4.4 for rural girls.
In addition, there is a large gross enrolment gap between provinces, from less than 20\% in Zabul to $80 \%$ and above in the best performing provinces.
In absolute terms, the gap between male and female literacy rates is fairly stable around 36 percentage points from around age 23 to older ages up.
There is widening disparity between poor/non-poor. $5.1 \%$ of the poorest women are literate against $50.3 \%$ of the richest women.
Kuchis are persistently disfavoured. The literacy rate was 7.2 \% (F 1.2\%) in 2012 against a national average of $31.4 \%$ ( 53.5 urban, 25.0 rural)

## Recommendations

EMIS data should capture and map inequity along the following lines:

- Enrolment/OOSC
- Rural-Urban
- Girls/Boys
- Poor/Disadvantaged
- By Province and District
- 'Language

Planning could be improved by graphic mapping of inequalities (GIS)
Equitable distribution of public resources could be facilitated by prioritising gross inequities (e.g." red zones")

Research and policy analysis should identify reasons for inequity and explore options for its reconciliation.

## References

AAN: "Cheating and Worse: The university entry (Kankor) exams as a bottleneck for higher education", AAN, 26 February 2014

AAN: Afghan Youth for Democracy? Not all of them, Borhan Osman, AAN, 2014
Aboud, F.EW.: "Evaluating the Impact of AKF-Afghanistan's Preschool Programme in Afghanistan", AKF, December 2014

Afghanistan Skills Development Project (ASDP) Deputy Ministry of TVET Ministry of Education, Jan 2013

Ahmadi, M.J.: "Multilingual education in Afghanistan: Achievements, challenges, and policy options", 4th International Language and Education Conference Bangkok, 6-8 November, 2013

AMICS - Afghanistan Multiple Indicator Cluster Survey, UNICEF, June 2012
AMICS, Afghanistan Multiple Indicator Cluster Survey 2012
ARTF Financing Strategy Financial Year 1394-1396 (2015-2017)
Atayee, J.: How to improve policymaking at the Ministry of Education, Afghanistan. An analysis of the policy formulation processes of National Education Strategic Plans 1 and 2, ATP Thesis IIEP, Paris 2012.

BEACON: Basic Education for Afghanistan Consortium (BEACON) - Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA), Afghanistan Endline Report December 2014

Burde, D, and Linden, L.L.: "Bridging Education to Afghan Girls: A Randomized Controlled Trial of Village-Based Schools", American Economic Journal: Applied Economics, 2013, 5(3): 27-40

Burde, D.: "Community-Based Education in Afghanistan: Ensuring Equitable Access", PPT. CBE Roundtable 11 August 2015.

Burde, D., Middleton J.A., and Wahl, R.: "Islamic studies as early childhood education in countries affected by conflict: The role of mosque schools in remote Afghan villages", International Journal of Educational Development, 41 (2015), pp 70-79

Burde, Middleton and Samii: Community-Based Schools and Institutionalized Access to Education in Rural Afghanistan, 2015; "Handing over PACE-A Community-Based Classes to the MOE: A Study of Experiences and Outcomes", USAID, 2011
Card, D. (1999) "The Causal Effect of Education on Earnings", in Ashenfelter, O and D Card (eds), Handbook of Labour Economics, Vol. 3, Part A, 1801-1863.

CSO: Afghanistan Living Condition Survey (2013/2014), Report, The Central Statistics Organization 2016

Curriculum Framework Afghanistan, Volume I, MOE Compilation and Translation Department1382/2003

Darling-Hammond, L.: "Teacher education and student learning", Journal of Teacher Education, Vol. 51, No. 3, May/June 2000 166-173

Disability in Afghanistan: Taking a Capabilities Approach to look at Research Challenges and Policy Implications, Handicap International et al 2005

Education Sector Analysis Methodological Guidelines (Volume 1), UNESCO, September 2014
"Educational Sub-National Assessment", Altai Consultants, 2015.
EJSR 2013, Education Joint Sector Review, Ministry of Education, 2013
Afghanistan National EFA 2015 Review, MOE 2014
EMIS: Education Management Information System (EMIS) database, Ministry of Education, August 2015 (http://moe.gov.af/en/page/1831/3031)

EPDC Afghanistan NEP 2014
Evaluation Report: Evaluation of Swedish Support in the Education Sector in Afghanistan - 2012, by Pouras Consult; SIDA , 2013

GIZ: Study on Education Dropouts and Illiterate Youth, GIZ, September 2014
GoIRA: The Constitution of Afghanistan, Islamic Republic of Afghanistan, 2004
Hall, S.: "Designing Livelihood Programmes for Displaced Population in Urban Settings in Afghanistan: Labour Market Assessment in Afghanistan and Pakistan", Samuel Hall Consulting, 2013. commissioned by the Danish Refugee Council (DRC), Afghanistan.

Hall, S: Economic Assessment and-Labour Market Survey of Mazar.i-Sharif, Pul-Khumri, Kandahar City and Kunduz City. Commissioned by Mercy Corps, 2012

Hayward, F.M.: "Education for All and Higher Education - some often ignored consequences of success: The Case of Afghanistan", Ministry of Higher Education, December 2013

Hayward, F.M.: "The Limits on Access to Higher Education: Realities that have been ignored for too long", Draft MOHE, June 2013

Heckman, J. J, Lochner, L., and Todd, P: (2008) "Earnings Functions and Rates of Return," Journal of Human Capital, 2(1):1-31.

Hunte, P.: Household Decision-Making and School Enrolment in Afghanistan Case Study 1: Chahar Asyab District, Kabul Province, Afghanistan Research and Evaluation Unit, December 2005

Ibrahimi, N :"Bureaucratic Policies and Patronage Politics: Prospects and Challenges of Private Higher Education in Afghanistan", AAN. June 2014

IMF Staff Report, November 13, 2015
"Language Policy: Challenges for Education in Afghanistan" Unpublished manuscript - no Author information or year.

Lochner 2011: Lochner, Lance (2011) "Non-Production Benefits of Education: Crime, Health, and Good Citizenship," in Hanushek, E, S Machin, and L Woessmann (eds), Handbook of the Economics of Education, Vol. 4, Ch. 2, Amsterdam: Elsevier Science.

Mansory, A.: A Study of DT3 Program: Teaching quality and Students' Learning achievements, 2011

MOE: Afghanistan National Education for All (EFA) Review Report 2015, Ministry of Education, Islamic Republic of Afghanistan, June 2014

MOE: Afghanistan National EFA Review Report 2015, MOE
MOE: Education Joint Sector Review 2013, Ministry of Education, Islamic Republic of Afghanistan, December 2013

MOE: Education Management Information System (EMIS) database, Ministry of Education, August 2015 (http://moe.gov.af/en/page/1831/3031)
MOE: MOE 100 Days Plan, 2015
MOE: Inclusive and Child Friendly Education Policy, 2014
MOF Development Cooperation Report, 2012-2014 (draft)
MOF Medium Term Fiscal Framework 1394/2015
MOF 1394 (2015) Budget Paper
MOHE: National Higher Education Strategic Plan, 2015-2020 (April 2015) draft
MOLSAMD: Current Status of TVET in Afghanistan, by Dr. Mayel, Program Executive Director, May 2015, NSDP, Ministry of Labor, Social Affairs, Martyrs \& Disabled

Monitoring Trends in Educational Growth (MTEG) Afghanistan: Strengthening Afghanistan's Learning Assessment System, ACER, Australian Council for Educational Research, 2013

MTEF: The mathematical, reading and writing literacy of Class 6 students in Afghanistan. Preliminary results of a learning assessment in 13 provinces, ACER Australian Council for Educational Research, 2014

MTEG: Class 6 School Factors in Afghanistan 2013. The Relationship Between School Factors and Student Outcomes from a Learning Assessment of Mathematical Reading and Writing Literacy, ACER, 2015

Muskin, Joshua A.: Student Learning Assessment and the Curriculum: Issues and Implications for Policy, Design and Implementation, IBE UNESCO, 2015

National Disability Survey in Afghanistan (NDSA). December 2004 and July 2005 by Handicap International in collaboration with the Ministry of Martyrs and Disabled and Social Affairs (MMDSA), the Ministry of Public Health (MoPH) and the Central Statistic Office (CSO)

NatEdProfile-2014-EPDC NEP Afghanistan
National Higher Education Strategic Plan 2010-2014, MOHE

National Higher Education Strategic Plan: 2016-2020, Ministry of Higher Education, Kabul, Afghanistan. MoHE (2015),

National Risk and Vulnerability Assessment 2011-12, Afghanistan Living Condition Survey, Central Statistics Organization, 2014

National Risk and Vulnerability Assessment 2007-2008, ICON-INSTITUTE, 2009
NESP (2025-2020) Draft, MOE June 2014
Noori, B.: Afghanistan Education Expenditure Analysis form an Equity Perspective, IIEP, June 2015

NRVA 2013 (same as above 2011-12)
NRVA Update Analysis, October 2015
OECD, Development Aid at a Glance, Statistics Developing Countries, 2015 Edition
PIRLS: "Progress in International Reading Literacy Study" (Mullis et al., 2012b, p. 65, 68)
Public Expenditure Tracking Survey (PETS); Synthesis Report, Altai Consulting, 2011
Raouf, A. S.: "School Facilities in Afghanistan Current Gaps and Challenges for the Future", paper MOE,2013.

Ridell, W.C.: The Social Benefits of Education: New Evidence on an Old Question, www.economics.ubc.ca/.../pptx pressie-craig-riddell

Samuel Hall Consulting (2013). "Afghanistan's Future in Transition: A Participatory Assessment of the Afghan Youth", research commissioned by DMoYA, UNDP, UNFPA, and UNICEF; Kabul, 2013.

Shah, J.: Drop Outs: Causes and Effects of Drop Outs at Primary Level. Master Thesis,, Univ. of Mardan

Sherani, K.S.: Public and Private Schools in Afghanistan - Comparing some aspects of public and private schools in Kabul city, Karlstad University, 2014

Summary Analysis: The mathematical, reading and writing literacy of Class 6 students in Afghanistan. Preliminary results of a learning assessment in 13 provinces, Doc:
MTEGAfg_Class6_PolicyBrief_ENG, ACER, 2014
Survey of the Afghan People 2013. The Asia Foundation
Survey of the Afghan People 2013. The Asia Foundation
Survey of the Afghan People 2015. The Asia Foundation
Taylor, G.: "Draft Report on TA and Capacity Building for Results", MOE 2015

Third Party Review of Pre-service and In-service Teacher Training programs, EQUIP Evaluation, ISAPS, 2014, MOE 2015

The Comprehensive National Disability Policy in Afghanistan Submitted to Minister of Martyrs and Disabled Kabul. October, 2003

UN report highlights employment challenges in Afghanistan By SAJAD - Tue Jun 05 2012,
UNESCO: Education Indicators Technical guidelines, UNESCO UIS, 2009
UNESCO: EFA Global Monitoring Report 2013/124, UNESCO 2014
UNESCO: Education Sector Analysis Methodological Guidelines (Volume 1), UNESCO, September 2014

UNICEF: The Investment Case for Education and Equity, UNICEF 2015
USAID: "Handing over PACE-A Community-Based Classes to the MOE: A Study of Experiences and Outcomes", USAID, 2011

WB Project paper: Second Skills Development Project, March 1, 2013
WB Second Skills Development Project, 2013
World Bank, Afghanistan Country Snapshot, October 2015
World Bank, Afghanistan in Transition, 2013
World Bank, Where does Bangladesh Stand in Terms of Achieving EFA Goals by 2015, HD Unit, SA Region, August 2007
www.cw4wafghan


[^0]:    ${ }^{1}$ Rasmussen, P.E., Kelly, A., Education Sector Analysis Afghanistan, Pouras Consult, April 2016
    ${ }^{2}$ Of these 8.393 M are in public schools and 0.274 M are in private schools, and in addition there are 0.305 M in Islamic schools, AEJSR 2015, MOE
    ${ }^{3}$ Technical and Vocational Education and Training (TVET)
    ${ }^{4}$ lbid.
    ${ }^{5}$ Ministry of Higher Education (MOHE) data

[^1]:    ${ }_{7}^{6}$ ALCS 2013/2014, CSO (2016)
    ${ }^{7}$ ALCS 2013/2014, CSO (2016)
    ${ }^{8}$ AMICS 2012. Attendance is net (NAR) i.e. total number of pupils of the official school age group who are attending primary or secondary education levels, expressed as a percentage of the corresponding population.
    ${ }^{9}$ AMICS 2012. In comparison, primary NAR according to comparable national MICS varies between $49 \%$ in Sind Pakistan (2014), 57.9\% in Punjab (2015), 73.2\% in Bangladesh (2013/14) and 76.3\% in Nepal (2014).

[^2]:    ${ }^{10}$ ALCS 2015
    ${ }^{11}$ Ibid.
    ${ }^{12}$ Burde et al, "Handing over PACE-A Community -Based classes to MOE ...," USAID, 2011
    ${ }^{13}$ Public Expenditure Tracking Survey (PETS); Altai Consulting, 2011

[^3]:    ${ }^{14}$ NESP 2015-2020 Draft (2014)
    ${ }^{15}$ The Asia Foundation's Survey of the Afghan People 2014

[^4]:    ${ }^{16}$ Central Statistical Office (CSO), National Risk and Vulnerability Analysis (NRVA) Surveys (2007/2008, 2011/2012), and Afghanistan Living Conditions Survey (ALCS) 2013/2014
    ${ }_{18}^{17}$ Regression analysis using mincerian earning functions.
    ${ }^{18}$ Controlling for age, gender, location and sectors of employment; the dependent variable is log hourly wage; reference categories are rural, male and agriculture sector.
    ${ }^{19}$ Small and Medium Enterprises (SME)

[^5]:    ${ }^{20}$ MOF Development Cooperation Report, 2012-2014 (draft)

[^6]:    ${ }^{21}$ National Risk and Vulnerability Assessment 2011-12, Afghanistan Living Condition Survey, Central Statistics Organization, 2014
    ${ }^{22}$ Ibid.

[^7]:    ${ }^{23}$ The Central Statistics Organization, CSO 2015
    ${ }^{24}$ NESP (2025-2020) Draft, MOE June 2014
    ${ }^{25}$ UNdata
    ${ }^{26}$ NRVA 2013

[^8]:    ${ }^{27}$ Afghanistan Multiple Indicator Cluster Survey (AMICS), UNICEF, June 2012
    ${ }^{28}$ National Risk and Vulnerability Assessment 2011-12, Afghanistan Living Condition Survey, Central Statistics Organization, 2014
    ${ }^{29}$ While EMIS data are actual, the AMICS data are sampled HH data, which allowed us to estimate the school age population.
    ${ }_{30}$ UNdata, if no other source is mentioned
    ${ }^{31}$ This section is based on the NRVA 2013, where poverty is measured by three indices: The headcount, the poverty gap and the squared poverty gap.

[^9]:    ${ }^{32}$ The Gini Index measures the extent to which the distribution of consumption among individuals or households differs from a perfectly equal one. A value of 0 represents absolute equality with everybody consuming the same amount, a value of 100 absolute inequality, where all consumption is concentrated in one person.

[^10]:    ${ }^{33}$ In the table "Total" should presumably read "average". The total for 2011-13 was 12.013, From: National Risk and Vulnerability Assessment 2011-12, Afghanistan Living Condition Survey, Central Statistics Organization, 2014

[^11]:    ${ }^{34}$ National Risk and Vulnerability Assessment 2011-12, Afghanistan Living Condition Survey, Central Statistics Organization, 2014

[^12]:    ${ }^{35}$ National Risk and Vulnerability Assessment 2011-12, Afghanistan Living Condition Survey, Central Statistics Organization, 2014

[^13]:    ${ }^{36}$ MOE EMIS does not capture literacy and all estimates are based on sampled projections, which makes calculations prone to inaccuracy. The MOE National Literacy Strategy is based on NRVA 2008 data. We have used later versions like NRVA 2011-12 and the World Bank EPCD as sources.
    ${ }^{37}$ EPDC Afghanistan NEP 2014
    ${ }^{38}$ From Afghanistan National EFA 2015 Review

[^14]:    ${ }^{39}$ Afghanistan Multiple Indicator Cluster Survey (AMICS), UNICEF, June 2012

[^15]:    ${ }^{40}$ Afghanistan National EFA Review Report 2015
    ${ }^{41}$ NRVA 2011-12, 2013
    ${ }^{42}$ NRVA 2011-2012
    ${ }^{43}$ AMICS op. Cit.

[^16]:    ${ }^{44}$ HE MoPH Suraya Dalil 06 May 2014, TOLOnews.com Nov. 22.2014
    ${ }^{45}$ Index Mundi, (2014) "Afghanistan Infant Mortality Rate," p. 1.
    ${ }^{46}$ According to some sources, many people in the South have a naturally higher MBMI than those in other regions.
    ${ }^{47}$ AMICS
    48 Pajhwok Afghan News, Dec. 2 2012, cit. From Wikipedia/Demographics of Afghanistan

[^17]:    49 lbid.
    50 World Malaria Report 2014
    51 Irinnews.org: "AFGHANISTAN: Over half the population at risk of malaria - Health Ministry"
    ${ }^{52}$ This study was carried out between December 2004 and July 2005 by Handicap International in collaboration with the Ministry of Martyrs and Disabled and Social Affairs (MMDSA), the Ministry of Public Health (MoPH) and the Central Statistic Office (CSO)
    ${ }^{53}$ www.unescapsdd.org/files/DPC Afghanistan.doc

[^18]:    ${ }^{54}$ http://www.aoad-af.org/
    ${ }^{55}$ MOE: Inclusive and Child Friendly Education Policy, 2014

[^19]:    ${ }^{56}$ Ethnicity is a sensitive issue and for fear of political conflict its significance is often downplayed. The data are from US Department of State, cited in operationspaix.net.

[^20]:    ${ }^{57}$ Encyclopedia Iranica: "Afghanistan languages " From Wikipedia/Demographics of Afghanistan
    ${ }^{58} \mathrm{Ibid}$.
    ${ }^{59}$ www.state.gov/documents/organization/171751.pdf

[^21]:    ${ }^{60}$ The World Post, 04/19/2016
    ${ }^{61}$ lbid.
    ${ }^{62}$ Survey of the Afghan People 2015. The Asia Foundation

[^22]:    ${ }^{63}$ AMICS

[^23]:    ${ }^{64}$ AMICS p. 128

[^24]:    ${ }^{65}$ MOF Budget Papers and IMF Staff Report (November 13, 2015), 2015 Article Consultation and First Review under the Staff Monitored Program
    ${ }^{66}$ World Bank Afghanistan Country Snapshot, October 2015
    ${ }^{67}$ IMF Staff Report (November 13, 2015), 2015 Article Consultation and First Review under the Staff Monitored Program

[^25]:    ${ }^{68}$ MOF Medium Term Fiscal Framework (2015), and IMF Staff Report (November 13, 2015), 2015 Article Consultation and First Review under the Staff Monitored Program

[^26]:    ${ }^{69}$ IMF Staff Report (November 13, 2015), 2015 Article Consultation and First Review under the Staff Monitored Program

[^27]:    ${ }^{70}$ OECD, Development Aid at a Glance, Statistics Developing Countries, 2015 Edition
    ${ }^{71} 1394$ (2015) actual external resources not available for full year (March 2016). Estimate is based on the MOF 1394 (2015) year to date (for 11 months) and pro-rated for month 12 . It will be updated when data available.
    ${ }^{72}$ IMF Article 4 Consultation (November 2015)

[^28]:    ${ }^{73}$ MOF 1394 (2015) Budget Paper
    ${ }^{74}$ MOF Development Cooperation Report 2012-2014 (draft)
    ${ }^{75}$ World Bank, Where does Bangladesh Stand in Terms of Achieving EFA Goals by 2015, HD Unit, SA Region, August 2007
    ${ }^{76}$ MOF Budget Papers

[^29]:    ${ }^{78}$ EFA 2015 Review, Afghanistan (June 2015)
    ${ }^{79}$ MOE EMIS 1394
    ${ }^{80}$ MOE Joint Education Sector Review, 2012

[^30]:    ${ }^{81}$ ALCS 2013/14, CSO

[^31]:    ${ }^{82}$ MOF Medium Term Fiscal Framework (2015), and IMF Staff Report (November 13, 2015), 2015 Article Consultation and First Review under the Staff Monitored Program
    ${ }^{83}$ MOF MTFF (December 2015)

[^32]:    ${ }^{84}$ MOE EMIS Enrolment by programme 1393/2014
    ${ }^{85}$ General Education, GE covers grades 1-12 in three programmes: Primary (1-6), Lower Secondary (7-9) and Higher Secondary (10-12)

[^33]:    ${ }^{86}$ Education Joint Sector Review 2013, Ministry of Education, Islamic Republic of Afghanistan, December 2013
    ${ }^{87}$ For a discussion of the implications of this shift in school age, see Annex
    ${ }^{88}$ The high number of permanently absent constitutes a significant source of statistical error for calculations of GER, NER, PTR, PCR, unit costs etc. For political reasons MOE and GoIRA want to register absentees as enrolled as the deletion of this category would impact negatively on a number of MOE key performance indicators.
    ${ }^{89}$ Afghanistan National Education for All (EFA) Review Report 2015, Ministry of Education, Islamic Republic of Afghanistan, June 2014
    ${ }^{90}$ Education Management Information System (EMIS) database, Ministry of Education, August 2015 (http://moe.gov.af/en/page/1831/3031)

[^34]:    ${ }^{91}$ Education Joint Sector Review 2013, Ministry of Education, Islamic Republic of Afghanistan, December 2013
    ${ }_{92}$ Afghanistan National Education for All (EFA) Review Report 2015, Ministry of Education, Islamic Republic of Afghanistan, June 2014
    ${ }^{93}$ Ibid.
    ${ }^{94}$ See Annex for a discussion of the quality of EMIS data
    ${ }^{95}$ Education Management Information System (EMIS) database, Ministry of Education, August 2015 (http://moe.gov.af/en/page/1831/3031)
    Afghanistan Multiple Indicator Cluster Survey (AMICS), UNICEF, June 2012

[^35]:    ${ }^{96}$ For technical details on the calculation please refer to the Annex
    ${ }^{97}$ Source: ALCS 2015, CSO

[^36]:    ${ }^{98}$ ALCS 2015, CSO

[^37]:    ${ }^{99}$ For calculation details, please refer to Annex
    ${ }^{100}$ Education Joint Sector Review 2013, Ministry of Education, Islamic Republic of Afghanistan, December 2013
    ${ }_{101}$ AEJSR 2015
    102 AEJSR 2015
    ${ }^{103}$ Afghanistan National Education for All (EFA) Review Report 2015, Ministry of Education, Islamic Republic of Afghanistan, June 2014

[^38]:    ${ }^{104}$ AMICS 29012 : 115, Table 10.4
    ${ }^{105}$ Ratios presented in this table are adjusted since they include not only primary school attendance, but also secondary school attendance in the numerator.

[^39]:    ${ }^{106}$ MOE EMIS show the proportion of CBE students as $2,1 \%$ which is a percentage of students in all programmes, including TTC, TVET and Literacy classes. We find the proportion of CBE students as a percentage of general education students more appropriate.
    107 "Handing over PACE-A Community-Based Classes to the MOE: A Study of Experiences and Outcomes", USAID, 2011
    ${ }^{108}$ Ibid.
    ${ }^{109}$ Burde, Middleton and Samii: Community-Based Schools and Institutionalized Access to Education in Rural Afghanistan, 2015; "Handing over PACE-A Community-Based Classes to the MOE: A Study of Experiences and Outcomes", USAID, 2011
    110 "From: Community-Based Education in Afghanistan: Ensuring Sustainable Access",PPT presentation at CBE Round Table 11 Aug.2015, by Burde, Middleton and Samii
    ${ }^{111}$ Burde, Middleton and Samii: Community-Based Schools and Institutionalized Access to Education in Rural Afghanistan,

[^40]:    ${ }^{112}$ Please refer to Chapter 4 Section 3 Management of Teachers for a discussion on problems and potential for recruiting CBE teachers
    ${ }_{113}$ AEJSR 2015
    ${ }^{114}$ Ratios presented in this table are adjusted since they include not only secondary school attendance, but also attendance to higher levels in the numerator

[^41]:    ${ }_{115}$ AMICS 29012 : 115, Table 10.5
    ${ }^{116}$ MOE EMIS 1393/2014
    ${ }^{117}$ From a meeting with private school owners, managers, teachers and students at MOE 12.09.2016

[^42]:    ${ }^{118}$ K.S. Sherani, Public and Private Schools in Afghanistan - Comparing some aspects of public and private schools in Kabul city, Karlstad University, 2014
    ${ }^{119}$ Niamatullah Ibrahimi :"Bureaucratic Policies and Patronage Politics: Prospects and Challenges of Private Higher Education in Afghanistan", AAN. June 2014
    ${ }^{120}$ Aboud, F.EW.: "Evaluating the Impact of AKF-Afghanistan's Preschool Programme in Afghanistan", AKF, December 2014

[^43]:    ${ }^{121}$ AMICS Afghanistan Multiple Indicator Cluster Survey (AMICS), UNICEF, June 2012

[^44]:    ${ }^{122}$ Comments from other sources suggest that these AMICS data do not reflect the realities, especially for rural areas.

[^45]:    ${ }^{123}$ ALCS 2015, CSO
    ${ }^{124}$ Education for All and Higher Education - some often ignored consequences of success: The Case of Afghanistan, Fred M. Hayward, Ministry of Higher Education, December 2013 125 Ibid.

[^46]:    ${ }^{126}$ Ibid.
    ${ }^{127}$ According to Acting Minister for Higher Education Ministry, Mohammad Osman Babary in News Afghanistan: "Reported Fraud in Kankor Exam Sparks Concerns in Parliament", Saturday, 04 April 2015

[^47]:    ${ }^{128}$ ] Education Management Information System (EMIS) database, Ministry of Education, August 2015 (http://moe.gov.at/en/page/1831/3031)

[^48]:    ${ }^{129}$ Education Indicators Technical guidelines, UNESCO UIS, 2009
    ${ }^{130}$ CSO data are household based, while MOE EMIS data are based on actual figures, and CSO data and population projections are typically significantly lower than those based on the UN projections.

[^49]:    ${ }^{131}$ ALCS 2015, CSO

[^50]:    ${ }^{132}$ National Risk and Vulnerability Assessment 2011-12, Afghanistan Living Condition Survey, Central Statistics Organization, 2014

[^51]:    ${ }^{133}$ Reier, Nov.2015, op.cit.

[^52]:    ${ }^{134}$ MOF Development Cooperation Report, 2012-2014 (draft)

[^53]:    ${ }^{135}$ Source: UNESCO Education Statistics, IMF (WEO) for GDP per capita. For countries in which 2013 data not available the nearest year is used. For Afghanistan the expenditure is based on MOE and MOHE expenditure.

[^54]:    ${ }^{136}$ Source: MOE EMIS, and for 1394 (2015) general education students (government schools) 8.393 million and islamic students 0.305 million (EMIS 1394), in total 8.699 million. Student numbers of other categories in 1394, based on the MOE Education Joint Sector Review (February 2016). For MOHE, source NHESP draft (April 2015) and for 1394 data (MOHE communication March 2015)

[^55]:    ${ }^{137}$ MOE Human Resource Development Department
    ${ }^{138}$ EMIS 1394 (2015) and MOE Education Joint Sector Review Summary (February 2016)

[^56]:    ${ }^{139}$ OECD, Development Aid at a Glance, Statistics Developing Countries, 2015 Edition
    ${ }^{140}$ World Bank, Afghanistan in Transition, 2013
    ${ }^{141}$ World Bank, Afghanistan in Transition, 2013

[^57]:    ${ }^{142}$ MOF Development Cooperation Report 2012-2014 (draft)
    ${ }^{143}$ MOF Development Cooperation Report 2012-2014 (draft)

[^58]:    ${ }^{144}$ MOF Development Cooperation Report, 2012-2014 (draft).

[^59]:    ${ }^{145}$ ARTF donors, a large number of bilateral donors have supported EQUIP, there is a pool of donors with larger financial contributions (Canada, Germany, USAID and since 2015 DANIDA), and followed by Sweden, Finland, Norway, Australia, Italy, Spain, and Estonia. Some of the smaller donors have no current commitment outstanding. The WB administers the ARTF, and through IDA also contributes funding.
    ${ }^{146}$ EQUIP II, as per ARTF website, last update 19/2/2016, grant of \$US408 million with \$US322 million disbursed and $\$$ US86 million available. Project closes $31 / 12 / 2016$, and implementation rated as marginally unsatisfactory.

[^60]:    ${ }^{147}$ ARTF Financing Strategy Financial Year 1394-1396 (2015-2017)

[^61]:    ${ }^{148}$ MOE EMIS figures, and as per MOE regulations it includes those registered students as absentee students
    ${ }^{149}$ MOE recurrent budget under curriculum development and teacher training is used for teacher training college expenditures, as all costs for in-service teacher training courses are funded under EQUIP II.

[^62]:    ${ }^{150}$ Education Joint Sector Review Report (1391), MOE National Education Strategic Plan, 2015-2020 (Draft) July 2014, Afghanistan National Education for All Report, 2015
    ${ }^{151}$ B.Noori, Afghanistan Education Expenditure Analysis form an Equity Perspective, June 2015

[^63]:    ${ }^{152}$ MOHE, National Higher Education Strategic Plan, 2015-2020 (April 2015) draft
    ${ }^{153}$ MOE Staff Pay and Grading Scale (2016). Teachers monthly salary (with 10 years experience) for different level of qualifications, is the following with year 12 education 7000 Afs, with year 14 education 7250 Afs, with a bachelors degree 8900 Afs, and Masters degree 9200 Afs.

[^64]:    ${ }^{154}$ World Bank, Afghanistan Country Snapshot, October 2015
    ${ }^{155}$ CSO Afghanistan Living Condition Survey (2013/2014) Report, 2016

[^65]:    Source ALCS 2013-2014

[^66]:    ${ }^{156}$ P. Hunte, Household Decision-Making and School Enrolment in Afghanistan Case Study 1: Chahar Asyab District, Kabul Province, Afghanistan Research and Evaluation Unit, December 2005

[^67]:    ${ }^{157}$ MOHE, National Higher Education Strategic Plan, 2015-2020 (April 2015) draft

[^68]:    ${ }^{158}$ MOE, National Education Strategic Plan (2015-2020) Draft (June 2014); MOHE National Higher Education Strategic Plan (2015-2020), (April 215) draft; A. S. Raouf paper, School Facilities in Afghanistan Current Gaps and Challenges for the Future, 2013.

[^69]:    ${ }^{159}$ World Bank, Afghanistan in Transition, 2013
    ${ }^{160}$ MOF Development Cooperation Report, 2012-2014 (draft)
    ${ }^{161}$ MOF Development Cooperation Report, 2012-2014 (draft)

[^70]:    ${ }^{162}$ From Rasmussen, P.E.," Quality and Standards", unpublished article

[^71]:    ${ }^{163}$ Interview with H.E. Minister of Education Dr Assadullah Hanif Balkhi, 2.9.2015

[^72]:    ${ }^{164}$ For a Summary of the goals of NESP 1, NESP 2 and IP, see Annex to Chapter 4

[^73]:    165
    See for example: Obaid Ali: "Cheating and Worse: The university entry (kankor) exams as a bottleneck for higher education",AAN , 26 February 2014

[^74]:    ${ }^{166}$ Mansory, A.: A Study of DT3 Program: Teaching quality and Students' Learning achievements, 2011
    ${ }^{167}$ Basic Education for Afghanistan Consortium (BEACON) - Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA), Afghanistan Endline Report December 2014
    ${ }^{168}$ Class 6 School Factors in Afghanistan 2013. The Relationship Between School Factors and Student Outcomes from a Learning Assessment of Mathematical Reading and Writing Literacy, ACER, 2015

[^75]:    ${ }^{170}$ Mullis et al., 2012a, p. 90, 95
    ${ }_{172}{ }^{171}$ MTEG. Outcomes of A Learning Assessment of Mathematical, Reading and Writing Literacy, ACER, 2013
    ${ }^{172}$ PIRLS is an international examination of reading skills in grade 4. PIRLS means "Progress in International Reading Literacy Study". (Mullis et al., 2012b, p. 65, 68)

[^76]:    ${ }^{173}$ ALCS 2015, CSO

[^77]:    ${ }^{174}$ The age location of the up-turn in the late 20s is due to the combined effect of girls entering education at an advanced age, the application of five-year moving averages in the graph and age misreporting.
    ${ }^{175}$ ALCS 2015 (2013/14)

[^78]:    ${ }_{177}^{176}$ This section is largely based on AMICS 2012 pp.104-110
    ${ }^{177}$ AMICS 2012, op. cit.

[^79]:    ${ }^{178}$ www.cw4wafghan.ca

[^80]:    ${ }^{179}$ www.cw4wafghan.ca
    ${ }^{180}$ Ibid. Op.cit.
    ${ }^{181}$ ACER DMTEGAfg c6 op cit
    ${ }^{182}$ Burde \& Linden PACE-A Handover

[^81]:    ${ }^{183}$ MTEG: Class 6 School Factors in Afghanistan 2013. The Relationship Between School Factors and Student Outcomes from a Learning Assessment of Mathematical Reading and Writing Literacy, ACER, 2015
    ${ }^{184}$ Burde et al: PACEA Report to Danida p. 14
    ${ }^{185}$ Linda Darling-Hammond, Journal of Teacher Education, Vol. 51, No. 3, May/June 2000 166-173
    ${ }^{186}$ MTEG, ACER op. Cit.

[^82]:    ${ }^{187}$ DMTEGAfg-C6, ACER
    ${ }^{188}$ Ibid.
    ${ }^{189}$ Source: DMTEGAfg-C6
    ${ }^{190}$ DMTEGAfg-C6, ACER

[^83]:    191 "Language Policy: Challenges for Education in Afghanistan" Unpublished manuscript - no Author information or year.
    ${ }^{192}$ Ibid.

[^84]:    ${ }^{193}$ Based on : Mohammad Javad Ahmadi: "Multilingual education in Afghanistan: Achievements, challenges, and policy options", 4th International Language and Education Conference Bangkok, 6-8 November, 2013 ${ }^{194}$ DMTEGAfg-C6
    ${ }^{195}$ DMTEGAfg-C6

[^85]:    ${ }^{196}$ Atayee, J.: How to improve policymaking at the Ministry of Education, Afghanistan. An analysis of the policy formulation processes of National Education Strategic Plans 1 and 2, ATP Thesis IIEP, Paris 2012.

    197 "Educational Sub-National Assessment", Altai Consultants, 2015.
    ${ }^{198}$ See MOE Organogram in Annex

[^86]:    ${ }^{199}$ MOE 100 Days Plan
    ${ }^{200}$ Refer to Annex: EMIS School Census Form 2015
    ${ }^{201}$ The 9 provinces were: Farah, Kandahar, Laghman, Balkh, Parwan, Kapisa, Panshir, Nangahar, Kabul Province.

[^87]:    202 Evaluation Report: Evaluation of Swedish Support in the Education Sector in Afghanistan 2012, by Pouras Consult; SIDA , 2013
    ${ }^{203}$ Based on Draft Report on TA and Capacity Building for Results by G. Taylor
    ${ }^{204}$ The Asia Foundation's Survey of the Afghan People 2014

[^88]:    ${ }^{205}$ Quotation from an anonymous MOE senior officer
    ${ }^{206}$ TSR is sometimes referred to as pupil -teacher ration (PTR)
    ${ }^{207}$ See table with TSR by province in Annex
    ${ }^{208}$ EFA 2015 Review Afghanistan, MOE, 2014
    ${ }^{209}$ MOE Annual Report 1390
    ${ }^{210}$ EJSR 2013

[^89]:    ${ }^{211}$ EMIS 1393

[^90]:    ${ }^{212}$ PACE-A Handover Report Final
    ${ }^{213}$ Ibid,

[^91]:    ${ }^{214}$ ISAPS: Third Party Reviw of Pre-service and In-service Teacher Training programs, EQUIP Evaluation ${ }^{215}$ Ibid.

[^92]:    ${ }^{216}$ This section is based on ISAPS: Third Party Review of Pre-service and In-service Teacher Training programs, EQUIP Evaluation
    ${ }^{217}$ Schwille, J., Dembélé, M., \& Schubert, J. (2007). Global Perspectives on Teacher Learning: Improving Policy and Practice. International Institute for Educational Planning (IIEP) UNESCO.
    ${ }^{218}$ TED. (2010). Progress Report 2010: Teacher Education Department (pp. ii). Kabul: Teacher Education Department, Ministry of Education.

[^93]:    ${ }^{219}$ ISAPS: Third Party Reviw of Pre-service and In-service Teacher Training programs, EQUIP Evaluation

[^94]:    ${ }^{220}$ Interview with Min of Ed 2.9.2015
    ${ }^{221}$ Curriculum Framework Afghanistan, Volume I, MOE Compilation and Translation Department1382/2003
    ${ }^{222}$ Based on interviews with private school managers and teachers at MOE 12.09.2015, UNESCO consultant I. Shahab, 15.12.2015 and with Dr. A.Z. Gullistani, Director of CD 16.12.2015
    ${ }^{223}$ Based on interviews with private school managers and teachers at MOE 12.09.2015, UNESCO consultant Mr. I. Shahab.

[^95]:    ${ }^{224}$ Based on: Public Expenditure Tracking Survey (PETS); Synthesis Report, Altai Consulting, 2011

[^96]:    ${ }^{225}$ Meeting with private school principals and owners at MOE 12 September 2015

[^97]:    ${ }^{226}$ Hall 2014: Economic Assessment and Labour Market Survey of Mazar.i-Sharif, Pul-Khumri, Kandahar City and Kunduz City. Commissioned by Mercy Corps, 2012 227 CSO ALCS 2015
    ${ }^{228}$ Reier, G.: "WP 69: Technical and Vocational Education and Training (TVET) in Afghanistan - Initial Vocational Educational Training and what needs to be done", GIZ Afghanistan, Nov. 2015

[^98]:    ${ }^{229}$ Hall, op. Cit.
    ${ }^{230}$ Hall op.cit.
    ${ }^{231}$ Ibid.
    232 Ibid.
    ${ }^{233}$ CSO, op.cit.
    ${ }^{234}$ Hall, op. Cit..

[^99]:    ${ }^{235}$ Reier Nov. 2015 op. cit.
    ${ }^{236}$ CSO ALCS 2015
    ${ }^{237}$ National Risk and Vulnerability Assessment 2011-12, Afghanistan Living Condition Survey, Central Statistics Organization, 2014

[^100]:    ${ }^{238}$ National Risk and Vulnerability Assessment 2011-12, Afghanistan Living Condition Survey, Central Statistics Organization, 2014
    ${ }^{239}$ Ibid.

[^101]:    ${ }^{240}$ Survey of the Afghan People 2014, The Asia Foundation

[^102]:    ${ }^{241}$ ESA Methodological Guidelines, 2014
    ${ }^{242}$ Survey of the Afghan People 2015, The Asia Foundation
    ${ }^{243}$ Survey of the Afghan People 2013, The Asia Foundation

[^103]:    ${ }^{244}$ Reier Nov. 2015, op.cit.
    ${ }^{245}$ TVET: Technical and Vocational Education and Training

[^104]:    ${ }^{246}$ NESP III, Draft
    ${ }^{247}$ WB Second Skills Development Project, 2013

[^105]:    ${ }^{248}$ See Reier, G. : "WP 59: Afghan National Technical And Vocatiojal Education and Training Strategy Analysis, criticism, suggestions for improvement", GIZ, Jan, 2015; Reier, G,: Technical and Vocational Education and Training (TVET) in Afghanistan-Initial Vocational Educational Training and what needs to be done, GIZ, Nov. 2015
    ${ }^{249}$ GIZ TVET Tracer Study 2012, in Reier WP 69, Nov 2015. Op.cit.
    ${ }^{250}$ Reier, Nov. 2015, op.cit.

[^106]:    ${ }^{251}$ Survey of the Afghan People 2014, The Asia Foundation
    ${ }^{252}$ We do not have information on regional variation in monthly reported income

[^107]:    ${ }^{253}$ From Afghanistan: "GENDER ROLES", countrystudies.us/afghanistan/58.htm
    ${ }^{254}$ Ibid.
    ${ }^{255}$ These percentages are national averages. A regional breakdown by province would likely yield significant variation in attitudes.

[^108]:    ${ }^{256}$ CSO, ALCS 2013/2014 Report (2016), Figure 5.5 the data for men and women indicates the same percentage of employment by education level for both men and women. This would need to be reviewed as differs from the text in other parts of Chapter 5.
    ${ }^{257}$ Hall, op. Cit.
    ${ }^{258}$ CSO op. Cit.

[^109]:    ${ }^{259}$ WB, Higher Education Development Project, Afghanistan, Project Appraisal Document, July 2015
    ${ }^{260}$ Controlling for age, gender, location and economic sector.
    ${ }^{261}$ Regression analysis using mincerian earning functions.
    ${ }^{262}$ Controlling for age, gender, location and sectors of employment; the dependent variable is log hourly wage; reference categories are rural, male and agriculture sector.
    ${ }^{263}$ CSO ALCS Report 2013/2014, 2016 Table 5.4

[^110]:    ${ }^{264}$ National Risk and Vulnerability Assessment 2011-12, Afghanistan Living Condition Survey, Central Statistics Organization, 2014
    ${ }^{265}$ National Risk and Vulnerability Assessment 2011-12, Afghanistan Living Condition Survey, Central Statistics Organization, 2014
    ${ }^{266}$ Measured by total number of years of formal education of all adults above 20 years and aggregate household income.

[^111]:    267 Richard K. Caputo: Policy Analysis for Social Workers; Sage, 2014

[^112]:    ${ }^{268}$ National Risk and Vulnerability Assessment 2007-2008, ICON-INSTITUTE, 2009
    ${ }^{269}$ National Risk and Vulnerability Assessment 2011-12, Afghanistan Living Condition Survey, Central Statistics Organization, 2014
    ${ }^{270}$ The ALCS 2013/2014 data was not available at this level of disaggregation.

[^113]:    ${ }^{271}$ Card, David (1999) "The Causal Effect of Education on Earnings", in Ashenfelter, O and D Card (eds), Handbook of Labour Economics, Vol. 3, Part A, 1801-1863.; Heckman, James J, Lance Lochner, and Petra Todd (2008) "Earnings Functions and Rates of Return," Journal of Human Capital, 2(1):1-31.
    ${ }^{272}$ Lochner 2011: Lochner, Lance (2011) "Non-Production Benefits of Education: Crime, Health, and Good Citizenship," in Hanushek, E, S Machin, and L Woessmann (eds), Handbook of the Economics of Education, Vol. 4, Ch. 2, Amsterdam: Elsevier Science.
    ${ }^{273}$ W.Craig Ridell: The Social Benefits of Education: New Evidence on an Old Question, www.economics.ubc.ca/.../pptx_pressie-craig-riddell
    ${ }^{274}$ Mazumder, Bhashkar (2008) "Does Education Improve Health? A Reexamination of the Evidence from Compulsory Schooling Laws", Economic Perspectives, 2-16.; and Oreopoulos, Philip (2006) "Estimating

[^114]:    ${ }^{276}$ Dee, Thomas S (2004) "Are there Civic Returns to Education?" Journal of Public Economics, 88(9-
    10):1697-1720.; Milligan, Kevin, Enrico Moretti, and Philip Oreopoulos (2004). "Does Education Improve Citizenship? Evidence from the United States and the United Kingdom," Journal of Public Economics, 88(9-10):1667-1695.
    ${ }^{277}$ E.g. Siedler, Thomas (2010) "Schooling and Citizenship in a Young Democracy: Evidence from Postwar Germany," Scandinavian Journal of Economics, 112(2):315-338.
    ${ }^{278}$ Afghan Youth for Democracy? Not all of them, Borhan Osman, AAN, 2014

[^115]:    ${ }^{279}$ Machin, Stephen, Olivier Marie, and Suncica Vujic (2011) "The Crime Reducing Effect of Education," Economic Journal, 121(522), 463-484; Lochner, Lance and Enrico Moretti (2004) "The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-Reports," American Economic Review, 94(1): 155-189.
    ${ }^{280}$ Lochner, L. "The impacts of education on crime, health and mortality, and civic participation", VOX CEPR's Policy Portal, October 2011

[^116]:    ${ }^{281}$ ALCS 2015, Draft version
    ${ }^{282}$ See for example: The Investment Case for Education and Equity, UNICEF 2015
    ${ }^{283}$ See for example EFA Global Monitoring Report 2013/124, UNESCO 2014, which presents some results of the link between education levels and degree of civic engagement in general.

[^117]:    ${ }^{284}$ Regression analysis using mincerian earning functions.
    ${ }^{285}$ Controlling for age, gender, location and sectors of employment; the dependent variable is log hourly wage; reference categories are rural, male and agriculture sector.

[^118]:    ${ }^{286}$ Education Joint Sector Review 2013, Ministry of Education, Islamic Republic of Afghanistan, December 2013

[^119]:    ${ }^{287}$ We have reason to believe that the GER figures in the highest perfoming provinces may be inflated.

[^120]:    ${ }^{288}$ Based on ALCS 2015, CSO
    ${ }^{289}$ ALCS 2015, CSO
    290 Education Joint Sector Review 2013, op. cit.

[^121]:    ${ }^{291}$ Afghanistan National Education for All (EFA) Review Report 2015, Ministry of Education, Islamic Republic of Afghanistan, June 2014
    ${ }^{292}$ The last ratios provide an erroneous description of the GPI mainly because in most of the cases, the majority of over-aged children attending primary education tend to be boys

[^122]:    ${ }^{293}$ AMICS - Afghanistan Multiple Indicator Cluster Survey, UNICEF, June 2012

[^123]:    ${ }^{294}$ ALCS 2015, CSO

[^124]:    ${ }^{295}$ Bringing Education to Afghan Girls: A Randomized Controlled Trial of Village-Based Schools, Dana Burde and Leigh L. Linden, American Economic Journal: Applied Economics 2013.
    ${ }^{296}$ Noori, B.: Afghanistan Education Expenditure Analysis From An Equity Perspective, Master Thesis, ATP, IIEP, 2015

[^125]:    ${ }^{297}$ Noori, B.i: Afghanistan Education Expenditure Analysis From an Equity Perspective, Master Thesis, ATP, IIEP, 2015

[^126]:    ${ }^{298}$ Education Management Information System (EMIS) database, Ministry of Education, August 2015 (http://moe.gov.af/en/page/1831/3031)

[^127]:    299 Ratios presented in this table are adjusted since they include not only primary school attendance, but also secondary school attendance in the numerator.

[^128]:    ${ }^{300}$ Survey of the Afghan People 2014, The Asia Foundation pp. 133 ff .
    ${ }^{301}$ Survey of the Afghan People 2014, The Asia Foundation (Executive Summary p.11)
    ${ }^{302}$ Survey of the Afghan People 2014, The Asia Foundation,
    ${ }^{303}$ From NRVA Update Analysis, October 2015

