Education in Afghanistan: Socio-Demographic and Economic Survey in the provinces of Bamiyan, Daykundi, Ghor, Kabul, Kapisa, Parwan (2011-2014)

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Key words: Education; Literacy; Average years of study; Attendance ratios; Net rate of enrolment; Expected years of schooling.

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1. Introduction

Education is important on its own, but education is also important because it is strongly related with three key demographic components: fertility, mortality and migration. During the process of demographic transition, in most societies better-educated women have fewer children, by their own choice, and information improves their access to modern methods of contraception (Lutz, 2014). Low mortality rates are associated with better educated persons in almost all societies. When migration flows are differentiated by level of education, this helps countries to plan for how migrants can be integrated in receiving societies, depending on their level of schooling.

Education also informs other demographic components pertaining to equity and marginalized populations. Education exposes gender inequalities, since repetition and dropout rates almost always are highly differentiated between boys and girls. Reduction of disparities between rural and urban areas and between regions (provinces, states) is frequently observed as an essential condition for sustainable human development. Also, special attention must be paid to populations in situation of vulnerability and social exclusion, as well as children with special educational needs. Countries must often implement programmes for children with special educational needs in order to succeed in attaining education for all.

Demographers advocate enhancing the prominence of education in the development agenda. In a recent book, Wolfgang Lutz contends that educational attainment must be considered explicitly as a standard demographic dimension, together with age and sex in a demographic analysis: “The underlying assumption is that educational attainment is not just one of many socio-economic factors that matter for population, as it is often viewed in conventional analysis, but is the single most important source of empirically observable population heterogeneity next to age and sex” (Lutz, 2014: 14-15).

The positive effects of education go beyond the present, becoming an essential condition to guarantee a sustainable economy. Current human capital is undoubtedly a result of past choices and actions. As such, development and strengthening of societies can only be achieved if present investments take into account future perspectives (Rigotti, 2012).
Developing countries are experiencing what Andrew Mason called ‘the first dividend’, which arises because changes in age structure influence the share of the population concentrated in working ages. The demographic transition – a youth bulge – leads to an increase in the share of the working age population that can last up to several decades. Countries stand to benefit from harnessing the demographic dividend: “The first dividend can have a lasting effect on economic growth if the gains in per capita income are used to create human capital by investing in health and education, to accumulate physical capital, to support technological innovation, to create growth-inducing institutions, etc.” (Mason, 2007, p.11).

Education is relevant not only for its role in enhancing understanding of the interrelationship between population and development, but also for including vulnerable demographic groups in society. Education provides the conditions for lasting sustainable development.

2. Data and Methodology

The study of education to identify trends and ongoing changes should, ideally, compare several points in time; for the present analysis, however, data for successive points in time are not available. Efforts were made to provide insights to understanding the situation as deeply as possible, based on available data. We focused on some of the traditionally used indicators of schooling, provided that data were available and reliable. Frequencies and tabulations were prepared for the subsequent analysis. The Socio-Demographic and Economic Surveys conducted in Afghanistan included questions which allow the elaboration of several indicators. They are:

- Can ...(name)… read and write a simple message in any language with understanding? Yes/No
- Has ...(name)… ever attended school/university? Yes/No
- What is ...(name)… highest grade/class completed?

These questions allowed the elaboration of indicators for persons 5 years of age and above for literacy, attendance and educational attainment, by levels of schooling (e.g. primary, secondary, high school). Attendance in university was not used, since the emphasis was on basic schooling level.
The variable –‘Grade/Class currently attending’ is of particular interest because it permitted us to evaluate access to and progress in the educational system among pupils actually enrolled, as observed in the next section.

2.1. Indicators in the measurement of education

This section provides definitions of key indicators used in the analysis.

• **Literacy rate**: ratio of number of people capable to read and write a simple message, with proper understanding in any language, to the total number of people. It will be calculated for populations aged 10-14, 15 and over, and 25 and over.

• **Attendance ratios by age group**: number of children of official school ages 7 to 12, 13 to 15 and 16 to 18 effectively enrolled at school, divided by the population of the corresponding age group. It expresses the participation of people who are within the range of official age to start each level, and are enrolled independently of the level.

• **Gross enrolment ratio to primary/secondary education and high school**: ratios of persons, independently of age who, at the time of the survey, were attending Classes 1 to 6, Classes 7 to 9 and Classes 10 to 12, respectively, to the total number of children of these respective age groups.

• **Net rate of enrolment to primary/secondary education and high school**: ratios of children of official school ages 7 to 12, 13 to 15 and 16 to 18 who, at the time of the survey, were attending Classes 1 to 6, Classes 7 to 9 and Classes 10 to 12, respectively, to the total number of children of these age groups. This shows the fraction of people who are within the range of the official/theoretic age to start such level, and effectively enrolled in it.

These indicators have limitations, however. Though they were used to assess the current state of the school system, all the previous indicators fail in **foreseeing the educational situation**. They represent the stock, but not the flow of students. Several other issues should be considered, including the transitions within school system, where not only access takes an important role, but also repetition, promotion and drop out from one year to another. Another relevant issue concerns the capacity of the school system to receive and keep students in school.
Indicators on years of schooling, defined as follows, add some insight into the flow of students, at least partially, since there are no other surveys to capture time dynamics.

2.2. Expected years of schooling

The indicator on school life expectancy (SLE) can be defined as the “number of years a person of school entrance age can expect to spend within the specified levels” (UNESCO Institute for Statistics, 2009: 265). According to UIS Glossary, this indicator may be used to provide an idea on “the overall level of development of an educational system in terms of the average number of years of schooling that the education system offers to the eligible population, including those who never enter school”. It is calculated by summing the age-specific enrolment rate for the population of school age, which ranges between 7 to 18 years of age, in all referred provinces.

A complementary indicator, the school life expectancy net of repetition (SLEN) was produced by the UIS. This indicator seeks to estimate the “number of years of schooling that a child of a certain age can expect to attain in the future, excluding years spent repeating grades”.

SLE is interesting as a means of evaluating how many years children tend to spend in the education system without repetition. It must be seen in terms of the whole school-age population. Hence, the indicator does not intend measuring the number of years or the number of grades completed that an enrolled student will experience until the end of his or her school life. Since it is an average, it is probable that pupils actually enrolled will receive a greater number of years of education than measured by SLEN.

The difference between SLE and SLEN equals the number of years spent due to repetition of grades. The data required are enrolment by age and level of education; population by single year of age; in addition to repeaters by age and level of education. It is possible to estimate the SLE, but not the SLEN. This is a common data challenge in developing countries, where there are no administrative registers, or the data are defective. In an effort to overcome this kind of constraint, Rigotti et al (2013) proposed an indicator

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similar to SLEN, named adjusted expected years of schooling (AEYS). The ‘adjusted’ differentiates it from the expected years of schooling (EYS).

The **expected years of schooling** represents the average length of stay in the system, or the total amount of time the set of school-age population were enrolled, assuming they remained in school throughout the year (Rigotti et al, 2013). The Human Development Report defined EYS as “the years of schooling that a child can expect to receive given current enrolment rates” (UN, 2010:15). More formally, it defined EYS as the “number of years of schooling that a child of school entrance age can expect to receive if prevailing patterns of age-specific enrolment rates were to stay the same throughout the child’s life” (UN, 2010:15).

The **adjusted expected years of schooling** is closer to the objective of schooling, assuming that completion of successive school years can be considered an approximation of greater or lesser education (see section 1.2.1.). In addition to age and rate of enrolment, the adjustment also takes into consideration the grade of enrolment.

To understand their meanings, both indicators will be described below.\(^5\)

### 2.2.1. Estimation of EYS

EYS, at the age \(\alpha\) at the start of the educational trajectory, are calculated by adding up specific rates of enrolment by age weighted by the respective amplitude of the age group, measured in year \(t\), according to formula (1).

\[
EYS_\alpha = \sum_{\alpha} n \times (n)^m_x
\]

(1)

where

\[
(n)^m_x = \frac{P(f_x)}{P(x)}
\]

and:

\(\alpha = \text{age at the start of school trajectory}\)

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\( \omega = \text{upper age limit} \)

\( n = \text{age interval} \)

\( n_f x = \text{number of pupils between ages } x \text{ and } x+n \text{ enrolled in school, in year } t \)

\( nP x = \text{population between ages } x \text{ and } x+n, \text{ in year } t \)

\( n_m x = \text{rate of enrolment of pupils between ages } x \text{ and } x+n, \text{ in year } t \)

The relationship \((n \times n_m x)\), measured in year \( t \), represents the rate of enrolment weighted by the corresponding age interval. It indicates the total amount of time the set of pupils between ages \( x \) and \( x+n \) were enrolled, assuming they remained in school throughout the year.

When the age interval is set to 1 (\( n=1 \)), the EYS would be the sum of enrolment rates. This is the form employed by UNESCO and used in the composition of the international HDI.

One of the shortfalls of the EYS is that it does not capture enrolment structures of the age-specific rates, which in turn could represent different rates of promotion, repetition, late entry and drop out — therefore, creating comparative difficulties, especially if there are different policies for promotion to higher grades among regions under comparison.

2.2.2. Estimation of AEYS

To overcome the problem of deviations not detected by EYS, weights are proposed for specific frequency rates according to students’ contribution of schooling years, adding a new variable: grade. Thus, by comparing age and grade, it is possible to determine the weight of specific rates. Formula 2 calculates AEYS. It should be noted that henceforth \( n=1 \) will be considered.

\[
AEEA_x = \sum_{x=0}^{\omega} \sum_{i=1}^{z} \left( \frac{a_{i,x}}{r_{i,x}} \right) \times \frac{f_{i,x}}{p_x} \quad (2)
\]

\( i = \text{grade of pupils aged } x \)

\( z = \text{highest grade finished by pupils at age } x \)

\( a_{i,x} = \text{years of schooling concluded by pupils, up to grade } i \text{ at age } x \)

\( r_{i,x} = \text{years of schooling a regular pupil would have concluded by grade } i \text{ at age } x \)
\[ f_{i,x} = \text{number of pupils enrolled in grade } i \text{ at age } x \]
\[ p_x = \text{population at age } x \]

Each of these weighted rates is simply a substitution for \( n \) in equation (1) by the contributed years of schooling, adjusted by the age-grade distortion. The adjusted indicator is a better representation of the contribution, at each age, to EYS during the \((\omega-\alpha)\) years in school.

The ratio \( \left( \frac{a_{i,x}}{f_{i,x}} \right) \) is the adjustment factor, and its values were originally adjusted to the Brazilian school system (Rigotti et al, 2013). The indicators EYS and AEYS were calculated for the six provinces of Afghanistan, between the ages of 7 and 18. Data refer to school attendance according to the Socio-Demographic and Economic Survey conducted in Afghanistan (Afghanistan, SDES, 2011-2014).

The AEYS reflects the transition rates at the school system, i.e. promotion, repetition and drop out, intending to be a proxy for the knowledge accumulated at school, but taking into account the repetition, besides adapting it to the reality of developing countries: “The advantages of using this indicator are that it represents a measure that takes into account both stock and flow dimensions in the school system and is easy to calculate and does not require standardization in comparisons involving countries with distinct age structures” (Rigotti et al, 2013, p.1).

Conceptually, AEYS is similar to SLEN as proposed by UIS, while EYS defined in the Human Development Report is nearer to SLE. In this report we adapt them to the data available in Socio-Demographic and Economic Survey.\(^6\)

In summary, the EYS here elaborated, will represent the average length of stay in the system (similar to SLE), or the total amount of time the set of school-age population were enrolled, assuming they remained in school throughout the year (Rigotti et al, 2013). On the other hand, AEYS is closer to the meaning of schooling (similar to SLEN), assuming that completion of successive school years can be considered an approximation of greater or lesser education. In addition to age and rate of enrolment, the adjustment also

\(^6\) For additional methodological details and examples, see: http://www.ipcundp.org/pub/IPCWorkingPaper117.pdf
takes into consideration the grade of enrolment, which was measured in the survey as part of the variable regarding the Grade/Class currently attending, by each grade, and single year of age.

3. Main Findings

In the sections below each of the indicators defined in Section I will be analysed.

3.1. Literacy rates

Figure 1 shows one of the most basic indicators, literacy rates for the six provinces. This shows substantial regional disparities, as well as gender and cohort inequalities (Table 1). Kabul and Kapisa present the highest literacy rates, while Bamiyan and Ghor had the lowest percentage of population, aged 15 years and above, who could write and read a simple message.

When considering age groups (Table 1), a clear improvement in literacy is observed; older cohorts, 25 years of age and above at the survey date, had lower literacy rates than those who were 15 years and above. Data indicate a progressive increase in school coverage: the younger the cohort, the highest the literacy rate.

Table 1 shows that female rates are always lower than for men, though it is possible to observe a steady diminishing of the gender gap. Table 2 compares the youngest population with the older cohorts, revealing a decrease in the female-to-male ratios. Bamiyan and Daykundi hold an intermediate position for both groups, 15 years and above, as well as 25 years and above. It is noteworthy that the gap drops steeply for the youngest age group in both provinces. Daykundi presents the highest ratio for the population aged 10 to 14 years, allowing us to infer that this province surpassed Kabul, which has higher ratios for older cohorts. Therefore, in both provinces the efforts to overcome gender inequality seems to be successful.

In some provinces, the higher the rate for men the greater the gender gap, as in Parwan, Kapisa and Kabul. On the other hand, Ghor holds the lowest rates for both genders, and the differences between men and women are relatively high in all age groups.
Figure 1: Literacy rates by gender, 15 years of age and above (2011-2014)


Table 1: Literacy rates by gender and age group (2011-2014)

<table>
<thead>
<tr>
<th>Provinces</th>
<th>10 to 14</th>
<th>15 and over</th>
<th>25 and over</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Kabul</td>
<td>85.5</td>
<td>68.9</td>
<td>71.4</td>
</tr>
<tr>
<td>Bamiyan</td>
<td>68.4</td>
<td>56.2</td>
<td>46.1</td>
</tr>
<tr>
<td>Daykundi</td>
<td>71.0</td>
<td>64.3</td>
<td>49.4</td>
</tr>
<tr>
<td>Ghor</td>
<td>51.9</td>
<td>35.1</td>
<td>33.6</td>
</tr>
<tr>
<td>Kapisa</td>
<td>84.7</td>
<td>63.9</td>
<td>66.3</td>
</tr>
<tr>
<td>Parwan</td>
<td>80.2</td>
<td>53.4</td>
<td>59.3</td>
</tr>
</tbody>
</table>


Literacy rates for the three chosen age groups provide a general picture of the ‘stocks’ of population literacy. They also provide a first glance at the evolution of the school system, since older generations tend to reflect the past coverage, while the majority of youngest students still are attending school. The rates suggest an improvement of schooling and great regional diversity, but this assessment must be complemented with following indicators, directly related with attendance and the age/grade relationship.

Table 2: Women to men ratios of literacy rates by age group (2011-2014)

<table>
<thead>
<tr>
<th>Provinces</th>
<th>10 to 14</th>
<th>15 and over</th>
<th>25 and over</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kabul</td>
<td>0.81</td>
<td>0.53</td>
<td>0.39</td>
</tr>
<tr>
<td>Bamiyan</td>
<td>0.82</td>
<td>0.38</td>
<td>0.17</td>
</tr>
<tr>
<td>Daykundi</td>
<td>0.91</td>
<td>0.45</td>
<td>0.18</td>
</tr>
<tr>
<td>Ghor</td>
<td>0.68</td>
<td>0.24</td>
<td>0.11</td>
</tr>
<tr>
<td>Kapisa</td>
<td>0.76</td>
<td>0.39</td>
<td>0.20</td>
</tr>
<tr>
<td>Parwan</td>
<td>0.67</td>
<td>0.31</td>
<td>0.16</td>
</tr>
</tbody>
</table>

3.2. Attendance ratios by age group

In general, the attendance ratios show a wide range among the six provinces (Table 3). The coverage of the educational system has room to continue increasing, since the highest average attendance of 73% in Kapisa is still low, for the age group aged 7 to 12 years (Figure 2). The gender imbalance varies considerably, reaching almost 30% more for men in Parwan, while the lowest differences are registered in Daykundi at 5.9% and Bamiyan at 8.4%. Ghor remains in an intermediate position regarding gender imbalance, but has the lowest ratio in terms of attendance at an average of just 44% for the whole population.

Table 3: Attendance rates by gender and age group (2011-2014)

<table>
<thead>
<tr>
<th>Provinces</th>
<th>7 to 12</th>
<th>13 to 15</th>
<th>16 to 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>Female</td>
<td>Total</td>
<td>Male</td>
</tr>
<tr>
<td>Kabul</td>
<td>79.74</td>
<td>64.78</td>
<td>72.49</td>
</tr>
<tr>
<td>Bamiyan</td>
<td>67.85</td>
<td>59.41</td>
<td>63.79</td>
</tr>
<tr>
<td>Daykundi</td>
<td>74.36</td>
<td>68.49</td>
<td>71.54</td>
</tr>
<tr>
<td>Ghor</td>
<td>51.12</td>
<td>35.74</td>
<td>43.96</td>
</tr>
<tr>
<td>Kapisa</td>
<td>83.44</td>
<td>62.06</td>
<td>72.97</td>
</tr>
<tr>
<td>Parwan</td>
<td>79.86</td>
<td>51.26</td>
<td>65.89</td>
</tr>
</tbody>
</table>


In some provinces, total attendance is higher within the age group 13 to 15 years of age, as is the case for Daykundi and Kabul. It is noteworthy that male attendance for that age group is higher than the previous one in all provinces. This suggests a delay in the intake rates of boys in the school system, since this indicator does not consider the level of schooling. In contrast, the attendance ratio for women decreases from the first age group to the second, indicating a probable drop-out of school. Regarding the age group 16 to 18 years, attendance is lower for both men and women, but it is lowest for women. Remaining in school is still a benefit only for a few in Afghanistan.
3.3. Gross enrolment ratio to primary/secondary education and high school

Analysis of the gross enrolment ratio by level of schooling helps to understand the delay in access to schooling. As seen in Table 4 and Figure 3, the first age group always presents a gross ratio greater than the attendance, i.e. most of students are older than the appropriate age for the respective grades. Two factors can explain this occurrence: (a) a delay into the entry of school; and/or (b) high repetition rates. Gender inequalities are also remarkable, particularly in Parwan, Ghor and Kapisa, where women to men ratios are 0.63, 0.71 and 0.76, respectively (Table 5). In all the six provinces, the older the cohorts, the lower the gross ratios, a situation that is aggravated for women. The enrolment rates in primary school shows a highly differentiated access to school by gender, which penalizes women.

**Table 4: Gross enrolment ratio by gender and age group (2012-2012)**

<table>
<thead>
<tr>
<th>Provinces</th>
<th>7 to 12</th>
<th>13 to 15</th>
<th>16 to 18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
<tr>
<td>Kabul</td>
<td>91.00</td>
<td>72.97</td>
<td>82.26</td>
</tr>
<tr>
<td>Bamiyan</td>
<td>85.18</td>
<td>75.09</td>
<td>80.32</td>
</tr>
<tr>
<td>Daykundi</td>
<td>92.98</td>
<td>87.21</td>
<td>90.20</td>
</tr>
<tr>
<td>Ghor</td>
<td>63.03</td>
<td>44.53</td>
<td>54.42</td>
</tr>
<tr>
<td>Kapisa</td>
<td>102.63</td>
<td>77.65</td>
<td>90.39</td>
</tr>
<tr>
<td>Parwan</td>
<td>101.25</td>
<td>64.01</td>
<td>83.06</td>
</tr>
</tbody>
</table>

Table 5: Women to men ratios of literacy rates*, by age group (2011-2014)

<table>
<thead>
<tr>
<th>Provinces</th>
<th>7 to 12</th>
<th>13 to 15</th>
<th>16 to 18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kabul</td>
<td>0.80</td>
<td>0.68</td>
<td>0.61</td>
</tr>
<tr>
<td>Bamiyan</td>
<td>0.88</td>
<td>0.62</td>
<td>0.47</td>
</tr>
<tr>
<td>Daykundi</td>
<td>0.94</td>
<td>0.78</td>
<td>0.62</td>
</tr>
<tr>
<td>Ghor</td>
<td>0.71</td>
<td>0.57</td>
<td>0.27</td>
</tr>
<tr>
<td>Kapisa</td>
<td>0.76</td>
<td>0.58</td>
<td>0.40</td>
</tr>
<tr>
<td>Parwan</td>
<td>0.63</td>
<td>0.41</td>
<td>0.32</td>
</tr>
</tbody>
</table>


* Female literacy rate divided by male literacy rate.

Figure 3: Gross enrolment ratio for population aged 7 to 12, by gender (2011-2014)


The pattern is similar for the age group 13 to 15 years of age, but the levels decrease, especially in those provinces where the gross ratio is higher at the first age group as is the case in Kapisa and Parwan. In these particular provinces, the gross ratio holds a deeper difference between these two age groups, possibly it means that many girls and boys aged 13 to 15 were attending the first grades of the primary school – in other words, it is possibly a result of age/grade distortion.

In Bamiyan, Daykundi and Kabul, there is a smaller difference between male gross enrolment ratios of the 7 to 12 and 13 to 15 age groups, but this is not the case for female rates. Again, this suggests a longer-lasting school life for boys in contrast to a premature drop out of girls.

Analysing the last age group, a sharp decline in the gross ratios is apparent, indicating that the school system receives less than half of the size of the cohorts that
should be attending high school – the only exception is Kabul, where the rate for the total population is almost 60%, explained by a higher male rate of around 70.4%. As the previous age groups show relatively high gross ratios, they suggest that in Kabul the gross enrolment ratio for population aged 16 to 18 can be explained by adults (19 years old and above) attending high school. Actually, each age group holds higher gross ratios when compared with attendance rates, indicating the occurrence of an older population in each level.

The low participation of women reinforces the inference that they abandon school much sooner than men. The regional inequalities are also significant, ranging from almost 45% in Kabul to less than 10% in Ghor.

### 3.4. Net rate of enrolment in primary/secondary education and high school

Net enrolment rates complement the big picture of regional and gender inequalities, and also shed light on the constraints for promotion among schooling levels. In general, the primary level shows a much higher fraction of people who are effectively enrolled in the proper age group (Figure 4). This is not surprising, since repetition postpones the entrance to the subsequent classes, which results in decreasing the net rates, as age progresses.

Kapisa shows the greater net rate of population aged 7 to 12, where the male participation was the highest among all provinces. But the women did not get the same performance, since their rates were lower than that of the province of Daykundi. In this sense, Daykundi holds the lower gender gap, equivalently as to the attendance ratio. In Ghor the male enrolment rate is lower than the female rates of all other provinces.

| Table 6: Net rate of enrolment by gender and age group (2011-2014) |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| **Provinces**   | **7 to 12**     | **13 to 15**    | **16 to 18**    |
|                 | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| Kabul           | 74.42 | 60.43  | 67.64 | 52.25 | 36.54  | 44.57 | 42.87 | 27.34  | 35.4  |
| Bamiyan         | 64.30 | 56.92  | 60.75 | 38.95 | 27.33  | 33.15 | 25.42 | 14.13  | 20.03 |
| Daykundi        | 71.56 | 66.34  | 69.05 | 39.67 | 33.15  | 36.48 | 23.92 | 17.24  | 20.73 |
| Ghor            | 49.35 | 34.63  | 42.5  | 25.2  | 15.8   | 20.87 | 15.79 | 5.20   | 10.33 |
| Kapisa          | 83.41 | 62.02  | 72.93 | 57.83 | 32.79  | 45.18 | 49.58 | 21.27  | 35.03 |
| Parwan          | 79.83 | 51.22  | 65.86 | 52.89 | 22.8   | 38.16 | 41.36 | 15.29  | 28.54 |

The net enrolment rates for the population aged 13 to 15 (Figure 5) reveal an abrupt decay in relation to the previous group, even among provinces that exhibit relatively high rates for the 7 to 12 age group, such as Kapisa, Parwan and Kabul. This corroborates the assumption of late entry into school system, and it also confirms the evidence of huge gender and regional inequalities. Net enrolment rates for the population aged 16 to 18 follow the same pattern, speaking to the difficulty of completing the corresponding level of schooling.
In summary, analysis of these three indicators reveals that attendance rates for the population aged 7 to 12 are closer to the primary net rates, for both boys and girls, as would be expected. This means that people attending schools at these ages are enrolled in the proper level of schooling. On the other hand, gross enrolment ratios reveal that many people attending school in each level are older than the age officially recommended.

Data on the 13 to 15 age group help to explain gender inequalities. Girls in this age group present lower attendance rates than the younger 7 to 12 age group, and their net rates are much lower than the total corresponding attendance. This means girls who attend schools were enrolled at the primary level, but few move on to the secondary level. In contrast, boys at the same age hold attendance rates always greater than previous age groups, meaning a late but higher entry into that school level.

3.5. Expected years of schooling

Table 7 shows the expected years of schooling and its adjusted version, by gender. At a first glance, the EYS presents much greater figures than those observed for the average years of studies of the population 25 to 59 years of age. It corroborates the early statement: the younger the population the better the educational performance. However, the time spent at school is still short of completing primary education; part of the school-age population was favoured with more than nine years of schooling in only a few provinces, e.g. male
populations in Kabul, Kapisa and Parwan. In these provinces, female students did not spend the same time, i.e. 7.1 years, 6.5 years and 5.1 years, respectively. Bamiyan and Daykundi show similar figures, although the EYS has been lower than the amount of years necessary to complete primary education.

In all six provinces, time spent by male students in schools is enough, or at least near enough, to complete primary education. Time spent female students is much lower, and far from sufficient to complete primary education. Conditions for women are worst in Ghor, where they complete less than four years of primary school.

Table 7: Expected years of schooling for population aged 7 to 18, by gender (2011-2014)

<table>
<thead>
<tr>
<th>Province / gender</th>
<th>Expected years of schooling (7 to 18 years) by gender – Afghanistan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------</td>
</tr>
<tr>
<td>EYS</td>
<td>8.02</td>
</tr>
<tr>
<td>AEYS</td>
<td>7.14</td>
</tr>
<tr>
<td>EYS-AEYS</td>
<td>0.88</td>
</tr>
</tbody>
</table>


Figure 7: Expected years of schooling for population aged 7 to 18, by gender (2011-2014)

Even when students of all provinces spent time enough to complete primary education, the AEYS indicates that this does not mean completing the correspondent level of schooling. The low proportion of actual graduation is apparent in Table 6, presenting the percentage of population between 15 and 19 years of age that completed primary school. As the AEYS corroborates, only the male population in Kabul is able to reach the number of years corresponding to primary education. If the patterns remain the same – age-specific
enrolment rate, promotion, repetition and drop out – it cannot be expected that people living in the six provinces will complete primary education, especially in the case of girls.

Regarding the persistent gender gap, some places deserve particular attention. Female years of schooling barely reach two thirds of the male AEYS in Ghor, Kapisa and Parwan. However, the difference between EYS and AEYS indicates a relatively low repetition rate for women. Despite its subtle appearance, if accumulated over the years, this would represent a significant advantage in efficiency.\(^7\) The last row in the Table 7 indicates that repetition rarely surpasses one year in the school system. Indeed, the difference between EYS and AEYS should be the years is schooling lost by repetition, provided that there is no defective data. Once female students start their school life, they will probably not experience a high repetition rate.

4. Discussion

One of the more important challenges in reaching a thorough understanding of the education situation in the six Afghan provinces covered by the survey is the lack of data to compare different points in time. This limitation was somewhat mitigated by the availability of one of the most traditional and frequently used pieces of information, namely: the highest grade/level completed, by age and sex. This variable allowed us to measure indicators such as gross enrolment ratio, percentage of population that completed a given level of schooling, average of years studied and expected years of schooling. The indicators of attendance and enrolment – gross and net – are important in their own right, since they construe a diagnosis of the current conditions of the educational system. The assessment of the capacity and efficacy of the education system, as well as the human capital formation, could be partially interpreted from graduation and completion rates, usually by ages immediately subsequent to the proper age of graduation.

The positive effects of more years of education certainly go beyond its current period, given that education is an essential condition to sustainable development. Current choices and actions are shaping the human capital for the near future, which in turn will

\(^7\) In terms of efficiency, the EYS should be equals to the AEYS, i.e. the absence of repetition. Hence, the former will be always equal or greater than the latter, but in Kabul this is not the case. The explanation could be a premature entry at school, or mistaken declaration of age and/or grade complete.
sustain the next generations. This is particularly important in a country where fertility rates are considerably high.

The SDES indicators, despite the limitations related to data from one point in time, have been combined with the expected years of schooling to give a wider picture of current schooling. Analysis provides a glimpse of improvement, considering that conditions of the past, as captured in the education indicators of older cohorts, were generally much worse than for youngest groups. There is no doubt a significant improvement in attendance ratios has taken place in Afghanistan. This is a step towards achieving universal primary education, the first target of MDG 2. There is no doubt a significant improvement in attendance ratios has taken place in Afghanistan. Yet a definitive result of this study is that for girls, school is much less accessible than for boys, for all age groups.

Providing inclusive and equitable quality education and life-long learning opportunities for all, as agreed in the Incheon Declaration on Education 2030 and the new post-2015 development agenda, will bring huge challenges for the six provinces addressed in this study. Education directly reflects gender inequalities; as shown, repetition and drop-out rates are always highly differentiated between boys and girls. From the point of view of inclusion in primary school, education for boys presents a much more attainable goal in the provinces of Kabul, Kapisa and Parwan. But even for boys, attendance has been an opportunity available to just a few in Bamiyan and in Ghor. And, for all six provinces, the attendance ratio by age group indicates a notable delay at the entrance of the school system. A definitive result of this study is that for girls, school is much less accessible than for boys, for all age groups. Female attendance rates are always lower than for boys; further, they decrease as students grow older, signifying that difficulties in access are probably correlated to early school drop-out. This situation is more severe in Ghor, Kapisa and Parwan than in the other three provinces studied.

Most probably, children’s school life is more effective than the analysis of the whole system. The higher attendance (students enrolled independently of the level) compared with net rate of enrolment (students enrolled within the official age range corresponding to such level) allows us to infer a noticeable grade/age distortion, for boys and girls. Relatively, repetition is a minor problem, as it was inferred from expected years of schooling and its adjusted counterpart. For boys, education policies should prioritize
earlier access; for girls, education policies should prioritize not only early access, but also urgently increasing attendance rates and encouraging staying at school to decrease the drop out after 14 years of age.

Reduction of disparities between regions is frequently seen as a condition for sustainable human development:

- Regarding education for boys, the male population in Kabul seems to be near to completing a full course of primary schooling; the male population in Kapisa meets favourable conditions to attain these aims; and Bamiyan, Daykundi and Parwan are not too far from this goal. In Bamiyan and Daykundi, however, the conclusion of the ninth grade is not guaranteed, but with additional efforts it is a reachable goal.
- Regarding education for girls, results for provinces are highly heterogeneous in terms of female education. The expectation of a minimum of nine grades seems reachable, though with additional efforts, only in Kabul. Daykundi province might aspire to reach this target, but other provinces such as Ghor are so far from this goal that it could not be reached until 2020 or beyond.

To reduce disparity and spur progress in Afghanistan’s advances towards inclusive and equitable quality education and life-long learning opportunities for all, efforts must be made to expand the school system in all provinces, with special attention to those places where it is below the minimum, to ensure social inclusion and empowerment.

As a final note on data, information contained in the Socio-Demographic and Economic Survey programme can and should be used more extensively. For example, the data can be used to analyse how children’s education outcome is linked to other indicators, such as the educational attainment of both of their parents, household wealth and gender of the head of the household. Establishing these relations will certainly help in comparing the results observed in these Afghan provinces with findings that have been recognized in contemporary literature. This is even more relevant when considering the scarcity of comparable data from traditional sources such as World Development Indicators or UNESCO Institute for Statistics. Unfortunately, these additional in-depth analyses cannot be completed within the time currently available for this round of reports. Nevertheless, data are being explored and additional analyses are being prepared incorporating all of
these issues, as recommended. These in-depth analyses will be the subject of further research to be completed in a second stage.

5. Bibliography


