

# Cost of Inaction: Girl's education in Afghanistan.

## Executive Summary

### Key messages

- Afghanistan struggled with over 4.2 million children out of school (of which 60% are girls) before the political transition. Potential costs of no education are high for boys and girls alike in terms of lost earnings. But not educating girls is especially costly in part because of the relationships between educational attainment, child marriage, and early childbearing.
- Over 3 million girls previously attending secondary schooling have need denied their rights to education in the past year. Close to half are unlikely return should school reopen today.
- US\$5.4 billion earning potential from education is lost to Afghanistan should the country fail to educate the girl child to complete secondary education.
- This loss can be minimized to only US\$0.5 billion should the authorities decide not to prolong the return of secondary education and economic participation of girls and women. This should however be accompanied by concerted efforts to return all girls to school. The costs of this interruption alone could be as high as USD3.7 billion if 65 per cent of the girls previously enrolled fail to return and complete secondary school.
- The real gross domestic product (GDP) can therefore only be a fraction of the possibility that could be achieved with girl's and women's education and economic participation. Afghanistan will be unable to regain its GDP lost during the transition and reach its potential productivity without girls' education.

### Background

Afghanistan has undergone economic and social transformation since the change of political leadership on August 15<sup>th</sup>, 2021. The new leadership (de-facto authorities) have issued decrees (new laws) that have significantly affected the economic and social livelihoods for the population especially women and girls. Women are now not allowed to hold any managerial positions and should be working without interactions with male colleagues. Girls above grade 7 are currently not allowed to be in school until new rules on learning modalities are put in place.

Education has been a priority in Afghanistan for the past 20 years. With these investments, school attendance rose to over 9.2 million in 2019 of which 38 per cent were girls<sup>1</sup>. Before the crises about 3 million girls were attending secondary school, 700,000 in lower secondary and 2.3 million in upper secondary<sup>2</sup>. Despite these efforts, over 4.2 million children remain out of school, of which 60 per cent are girls<sup>3</sup>. For girls that manage to start school, majority (83 per cent) were able to stay on until grade six, 93 per cent of girls completing primary successful transition to secondary school<sup>4</sup>. However fewer girls were able to transition to higher education participate in labour force. 2021 statistics show that only 23 per cent of women (15 +) in Afghanistan were in labour force<sup>5</sup>.

### The economic return for educating

Individuals benefit from education both financially and non-financially. The latter includes improvements in health and family planning. The following analysis only considers financial returns, thus provides a lower-bound estimate of the total returns. To capture the financial returns of education, we can use observable wage differences between workers with different education levels in the labour market. The basic idea behind wage premiums is that the economic impact of any level of education can be measured by the effect of schooling on labour productivity and wages. In other words,

---

<sup>1</sup> NSIA, 2020, Key statistical indicators

<sup>2</sup> EMIS 2018/2019

<sup>3</sup> NSIA, 2020, Key statistical indicators

<sup>4</sup> Central Statistics Organization (2018), Afghanistan Living Conditions Survey 2016-17. Kabul, CSO

<sup>5</sup> ILO.2021. Country profiles - ILOSTAT

productivity and wages should increase if an individual’s education level increases. In that sense, wage premium estimates are a measure of returns to education since they reflect the direct private benefit of education completion. More specifically, the ‘Mincerian’ wage regressions is the common method in the literature to estimate such differentials<sup>6</sup>. However, to get a reliable estimate, one requires good household-level data on wage income, education and demographics to conduct the calculations. For Afghanistan there is basically no publicly available household labour data set. Hence, for our analysis we used the estimates from a World Bank study which used data from the 2013-14 ALCS data set<sup>7</sup>.

The results of the mincer wage regression conducted by Garotte-Sanchez are outlined in 1 and show a clear significant and positive effect between the years of education and average wage outcomes. The effect size of education is 3.9 per cent, meaning that each further year of education at school increases wages, on average, by 3.9 per cent, which is well below the global average of 10 per cent <sup>8</sup> indicating labour demand constraints in Afghanistan. The returns to education however appear to be non-linear in that there are higher returns to primary education, with an effect size of 5 per cent per year, compared to 3.3 per cent for secondary education and 4.7per cent for tertiary education. This means that having completed primary education, the wage is on average 5 per cent higher in contrast to individuals that have not completed primary education. For secondary education, people earn on average 3.3 per cent more compared to people that have only completed primary education and individuals that have completed tertiary education earn about 4.7 per cent more than people that have completed secondary education.

**Table 1: Estimated returns to education for Afghanistan**

Education Level	Annual Returns (Significance)
All education	3.9%***
Primary education	5.0%***
Secondary education	3.3%***
Tertiary education	4.7%***

Using the education return estimates, we estimate the discounted benefits of education which will otherwise be lost over the lifetime (18-65 years) from the girls previous enrolled in secondary school before the transition. Potential costs of no education are high for boys and girls alike in terms of lost earnings. But not educating girls is especially costly in part because of the relationships between educational attainment, child marriage, and early childbearing which are not accounted for in this analysis.<sup>9</sup>

**Counting the economic costs of reduced girls’ participation in school.**

Applying the annual returns to secondary education on the average annual wages provides a wage premium<sup>10</sup> to education of about US\$ 339 per year from 18 years age. With experience over the years, the wage premium of education increases to US\$827 at pick earning potential of educated labour force. To calculate the present value (PV) of this earning potential over the years to today, we apply a discount rate of 10 per cent<sup>11</sup> to all future cash flows.

<sup>6</sup> Mincer, J. 1974. Schooling, Experience, and Earnings. Human Behavior & Social Institutions No. 2.

<sup>7</sup> Garrote Sanchez, D. 2018 Managed Labor Migration in Afghanistan: Experience and Evidence with International Afghan Labor Mobility at Micro Level. World Bank, Washington, DC.

<sup>8</sup> Montenegro, C. E., and Patrinos, H. A. 2014. Comparable Estimates of Returns to Schooling Around the World. World Bank Group. Policy Research Working Paper No. 7020.

<sup>9</sup> Quentin Wodon, Claudio Montenegro, Hoa Nguyen, And Adenike Onagoruwa (2018): The cost of not educating girls-MISSED OPPORTUNITIES: THE HIGH COST OF NOT EDUCATING GIRLS (<https://openknowledge.worldbank.org/bitstream/handle/10986/29956/HighCostOfNotEducatingGirls.pdf?sequence=6&isAllowed=y>)

<sup>10</sup> The wage premium is the difference between the wages of educated labour force against the income they would have received in the status quo situation (i.e. their income with no secondary education).

<sup>11</sup> This figure is selected based on previous cost-benefit analyses in Afghanistan and is the typical rate used by the World Bank

Assuming the cohort of three million can complete their secondary education and be engaged in economic activity, they will earn a total of US\$5.4 billion<sup>12</sup> in current dollars to the Afghanistan economy over their lifetime. However, with only 23 percent<sup>13</sup> of women engaged in labour force in 2020, this means the total lost income to the economy will be US\$1.3 billion (about 6 per cent of Afghanistan's gross domestic product in 2020) from this cohort.

The impact of this one year of education lost is not negligible. The one-year lost means delay in entering the job market from school with the same secondary qualification. If schools are opened for girls today, the loss translates to only about US\$500 million (2.5 per of GDP in 2020). However, given a 35 per cent and 17 per cent chances of completing lower and upper secondary school respectively, the impact of this interruption alone could be as high as US\$3.7 billion.

This is a lower bound estimate as we only calculate the losses from the current cohort of secondary school going girls. We did not take into consideration the losses from the policy knock on effect on reduced enthusiasm for primary education. The higher benefits from university education are also not being considered as well as the negative impacts from the relationships between educational attainment, child marriage, and early childbearing.

---

<sup>12</sup> Discounted lifetime earnings (PV) of \$1,695 for lower secondary and \$1,819 for upper secondary

<sup>13</sup> ILO.2021. [Country profiles - ILOSTAT](#)