

# DELAYING MARRIAGE AND CHILDBEARING CAN IMPROVE EDUCATIONAL OUTCOMES IN BURKINA FASO'S SAHEL REGION

**Girls' educational attainment is important to their future livelihoods and their country's economy. When girls have more education, their prospects for employment, health, and overall well-being improve. Educated mothers are also more likely to have healthier children. Improving outcomes in education can increase women's human capital, ultimately reshaping the skills of a country's labor force.**



ALTHOUGH GIRLS' EDUCATION HAS BECOME A GLOBAL PRIORITY, barriers still exist that cause girls to leave school early. In sub-Saharan Africa, for every 100 boys who complete upper secondary school, only 83 girls do.<sup>1</sup> The drivers of early dropout among girls are multifaceted and inter-related. Traditional gender norms that prioritize girls' unpaid care responsibilities over their education foster low educational attainment, early marriage, and early childbearing among girls, often in combination. Economic need also plays a role: Early marriage and childbearing can constrain a young woman's employment opportunities and income potential, in turn motivating a desire for early marriage of her own children.<sup>2</sup>

While girls' educational attainment is improving globally, substantial regional, national, and subnational variation persists. In Burkina Faso, girls are not realizing national-level improvements in educational attainment equally at all subnational levels.<sup>3</sup> In Burkina Faso's Sahel Region, an administrative region in the northeastern part of the country, women and girls have lower levels of educational attainment compared to national estimates.<sup>4</sup> Girls in the Sahel Region are also more likely to marry and begin childbearing earlier than girls nationally.<sup>5</sup>

This research brief analyzes the contribution of early family formation (as indicated by early childbearing or early marriage), domestic care work, and economic need to girls' school dropout in Burkina Faso's Sahel Region. The analysis estimates and compares girls' expected years of schooling with and without dropout for reasons related to pregnancy, marriage, care work, or economic need. The results indicate that eliminating these reasons for girls' dropout could result in an increase of up to 1.3 additional years of schooling by age 18. Realizing such an increase in girls' education would have significant implications for household and national income. On average, an additional year of schooling increases girls' future labor market earnings by 14.5 percent in sub-Saharan Africa.<sup>6</sup>

Effectively addressing early school dropout rates will require multisectoral programs and policies that promote delaying marriage and childbearing, provide family planning and reproductive health information and programs, and encourage girls to stay in school. In addition to demonstrating the potential impact of multisectoral interventions to address girls' school dropout in Burkina Faso's Sahel Region, this research brief provides an analytical approach for other countries with comparable data to perform similar analyses.

## Gender Norms Limit Girls' Educational Attainment in Burkina Faso's Sahel Region

Adolescent childbearing and marriage begin remarkably early and are especially prevalent in Burkina Faso's Sahel Region. While the median age at first marriage is 18 years old nationally, more than 50 percent of girls marry before age 16 in Burkina Faso's Sahel Region.<sup>7</sup> Girls in this region also begin childbearing earlier than girls in any other region in the country, with 50 percent of women having their first child before 18 years of age.<sup>8</sup> In Burkina Faso, married girls typically give birth during the first 20 months of marriage.<sup>9</sup>

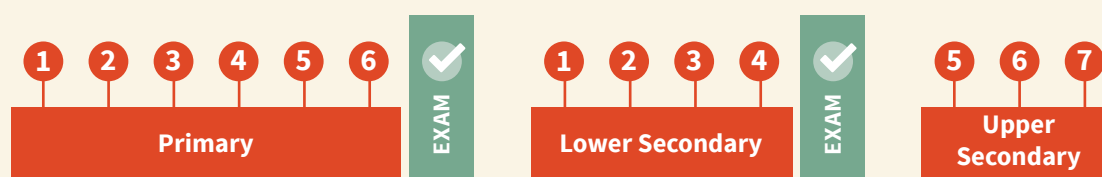
Traditional gender norms around domestic care responsibilities and early marriage are often associated with greater disparities between girls' and boys' educational attainment. While such norms appear to restrict girls'

available time for schooling and economic opportunity across Burkina Faso, the Sahel Region experiences the highest level of gender discrimination in social institutions (as indicated by formal and informal laws, social norms, and practices) of all administrative regions in the country.<sup>10</sup> Girls spend 16 times longer performing domestic work and devote 10 hours less per week to their education compared to boys, underscoring the competition between education and domestic work for girls' time. Likewise, attitudes and practices around marriage in Burkina Faso's Sahel Region suggest that women should be responsible for more unpaid care work than men.<sup>11</sup> As a result, when girls marry, their mobility is often further restricted by household and childcare responsibilities.<sup>12</sup> In Burkina Faso's Sahel Region, for every four boys who attend secondary school, only three girls do. In the rest of the country, girls attend secondary school at a slightly higher rate compared to boys.<sup>13</sup>

### The General Education System in Burkina Faso and Girls' Participation

In Burkina Faso, children are required to attend school for 10 years, from ages 6 to 16.<sup>1</sup> Children should start the six grades of primary school at age 6 and complete the four grades of lower secondary by age 16, if they did not repeat any grades. To move to lower secondary school, students are required pass an exam in their last year of primary school. Students must then pass another exam at the end of lower secondary school if they wish to advance to upper secondary school.

#### School Levels and Corresponding Grades in Burkina Faso



Source: UNESCO International Bureau of Education, "Burkina Faso," [www.ibe.unesco.org/sites/default/files/Burkina\\_Faso.pdf](http://www.ibe.unesco.org/sites/default/files/Burkina_Faso.pdf).

The risk of becoming married or pregnant extends to primary school girls, particularly as many students in Burkina Faso are older than the official age for their grade. For example, more than 40 percent of 15-year-old female students in Burkina Faso are in primary school.<sup>2</sup>

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## **Analyzing Drivers of School Dropout Among Girls in Burkina Faso's Sahel Region**

Our analysis estimates the number of years that girls in Burkina Faso's Sahel Region are expected to spend in school until age 18 and the additional number of years that girls would spend in school if dropout causes related to pregnancy, early marriage, care responsibilities, and economic need were eliminated. In addition, we compare this region-specific result to estimates for the rest of the country—that is, the total for all regions excluding the Sahel.

To estimate expected years of schooling for girls who enter school, the analysis uses region-, grade-, and sex-specific promotion, repetition, and dropout rates in a multiple decrement life table analysis. We completed this analysis separately for each school level (primary, lower secondary, upper secondary), which amounts to an assumption that girls who make it through the last year of the primary or lower secondary level successfully complete any exam required to enter the next level. Therefore, overall dropout rates may be underestimated, but not necessarily the proportionate effect of pregnancy, marriage, and interdependent care work and economic reasons. When estimating girls' expected years of schooling, if reasons related to pregnancy or marriage, unpaid care work, and economic need were eliminated, the analysis adds the probability of dropping out due to the following reasons: (1) got pregnant, (2) got married, (3) take care of children, (4) family needs help, (5) could not pay for school, and (6) need to earn money. Eliminating these reasons together relaxes the strong assumption that these reasons for dropout are independent. The analysis retains the assumption that dropping out for other reasons is independent of the factors captured in the six reasons listed above.

At the time of the analysis, the most recent data available on reasons for dropout at the national level came from the 1998-1999 Demographic and Health Survey (DHS) for Burkina Faso. This survey did not include data on reasons for school leaving by region, so given cultural, geographic, and other similarities between Burkina Faso's Sahel Region and neighboring Mali, we used similar data from the 1995-1996 DHS for Mali to estimate the Sahel Region's cause-specific distributions for reasons for dropping out of primary and secondary school. In short, our analysis assumes,

with respect to girls' stated reasons for leaving school, Burkina Faso's Sahel Region aligns more closely with national estimates for Mali than national estimates for Burkina Faso.

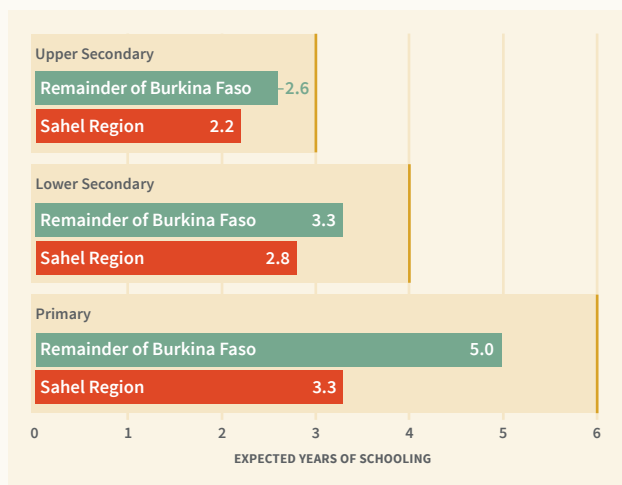
The DHS data collected on reasons for dropout ask for the main reason for dropout, so the cause-specific dropout rates likely underestimate the full effect of each reason. Analyses by Mensch et al. support this claim that the DHS data underestimates the effects of pregnancy and marriage on girls' school dropout. They find that using reproductive histories to estimate pregnancy- or marriage-related dropout rates produces higher rates than women reported in response to questions about their reasons for leaving school.<sup>14</sup> Eliminating interdependent causes simultaneously in our analysis mitigates this bias towards underestimating the effect of each.

We used the most recent data available on overall (not cause-specific) dropout rates. Grade-specific dropout rates were not available from the same years across all grade levels, so we opted to use the most recent statistics reported by the government of Burkina Faso.<sup>15</sup> We used 2015-2016 and 2016-2017 annual statistics for primary school data and 2012-2013 and 2013-2014 annual statistics for secondary school data. These years are close enough that the rates can be calculated as if they occurred in the same period. The authors are not aware of structural changes in education or governance between the two periods that might have created an exceptional decline or increase in school attendance that could confound results.

## **Girls' Educational Attainment in Burkina Faso's Sahel Region Lags Behind the Rest of the Country**

While girls' educational attainment and gender parity in school are improving nationally, our analysis finds that girls in Burkina Faso's Sahel Region are expected to have fewer years of schooling than girls in the rest of the country. Girls who enter primary school in the Sahel Region are only expected to achieve 3.3 of the total six years of primary school, while girls in the remainder of the country are expected to achieve five years. Girls who enter lower secondary school are expected to average 2.8 of total four years, which is about half a year less than what girls in the remainder of the country are expected to receive (see Figure 1, next page).

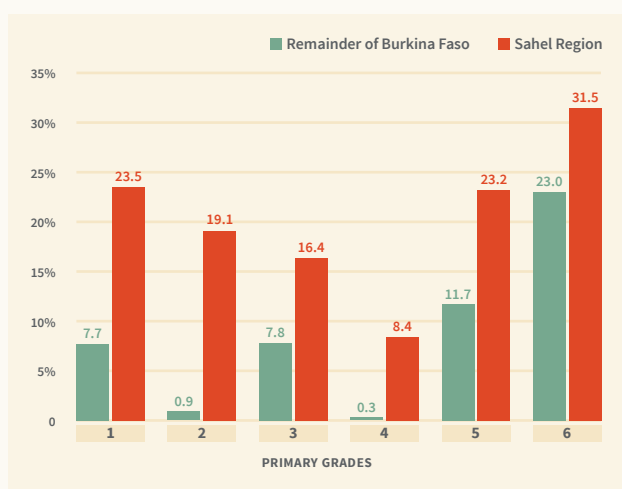
**FIGURE 1: Girls in Burkina Faso's Sahel Region Are Expected to Receive Fewer Years of Schooling Than Girls in the Rest of the Country**



Source: PRB analysis of the data.

High dropout rates in Burkina Faso’s Sahel Region contribute to the low expected years of schooling. At almost all primary grades, girls are at least twice as likely to drop out of school compared to girls in the rest of the country (see Figure 2). However, girls in the Sahel Region who reach the last grade of primary school drop out of school at rates closer to the those in the rest of the country, which is when students must pass exams to transition to the first year of lower secondary school. The higher national dropout rate in the last grade of primary school may reflect that many students do not pass the exam required to move to the next grade so choose to drop out of school.

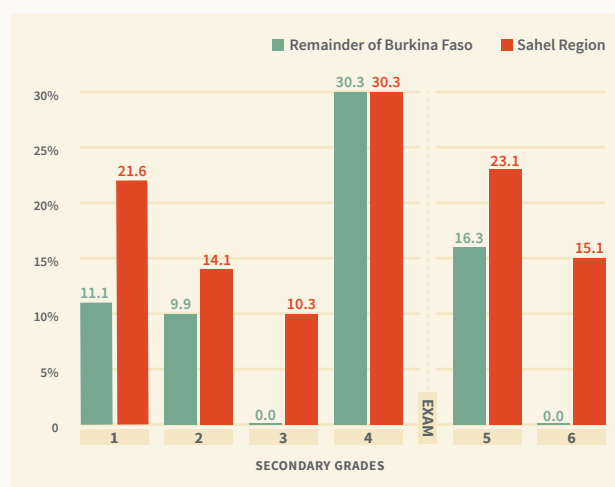
**FIGURE 2: Girls in Burkina Faso's Sahel Region Have Twice the Chance of Dropping Out in the First Four Years of Primary as Girls in the Rest of the Country**



Source: PRB analysis of the data.

As girls reach childbearing age and marriage becomes increasingly likely, the effects of the high level of gender discrimination in Burkina Faso’s Sahel Region become more apparent in the everyday lives of the girls who live there.<sup>16</sup> Girls are more likely to drop out of secondary school than their counterparts in rest of the country in almost all grade levels. The exception is the last year of lower secondary school (Secondary 4), when girls in all regions of Burkina Faso experience exceptionally high dropout rates, as students must pass exams to transition to upper secondary school (see Figure 3).

**FIGURE 3: Girls in Burkina Faso's Sahel Region Are More Likely to Drop Out of Secondary School at Almost all Grade Levels**



Source: PRB analysis of the data.

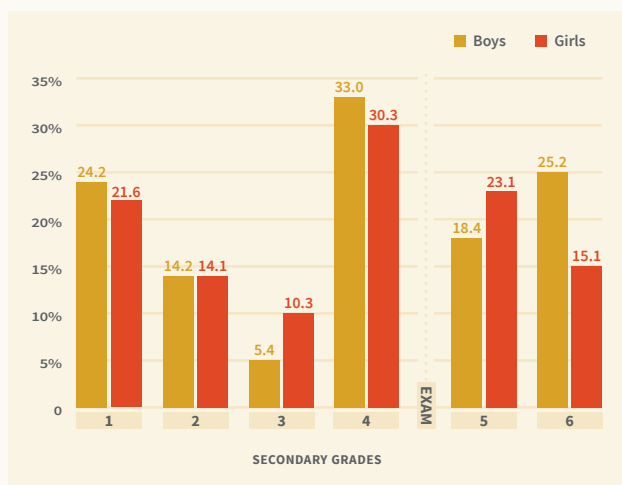
Note: For entrance into Secondary 5, students must both successfully complete Secondary 4 and pass an exam. The dropout rate may capture those who decided not to take the exam as well as those who failed.

## Girls in Burkina Faso’s Sahel Region Are More Likely to Drop Out of Secondary School Than Their Male Counterparts

The disparity between girls and boys attending secondary school is higher in Burkina Faso’s Sahel Region than any other region in the country: While on average, the rest of the country experiences gender parity in secondary school, in the Sahel Region, for every four boys who attend secondary school, only three girls do.<sup>17</sup> While economic need and exam failure may cause girls and boys to drop out of secondary school at similar rates, our analysis highlights specific time periods where girls’ likelihood of dropout increases. Girls drop out of the third and fifth years of secondary school, where the

official school ages are 15 and 17 respectively, at higher rates than boys (see Figure 4). With 50 percent of girls already married before age 16 in Burkina Faso's Sahel Region, at ages 15 and 17, many girls may already be experiencing increased domestic responsibilities or have begun childbearing.<sup>18</sup> Following the same pattern of higher overall dropout rates in exam years, boys and girls in Burkina Faso's Sahel Region also drop out of the last year of lower secondary (Secondary 4) at exceptionally high rates.

**FIGURE 4: Secondary School Dropout Rates in Burkina Faso's Sahel Region by Sex**

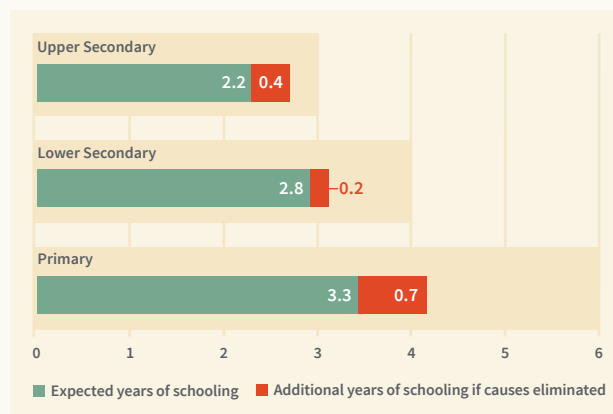


Source: PRB analysis of the data.

## Eliminating Dropout Related to Marriage, Pregnancy, Care Work, and Economic Need Increases Girls' Expected Years of Schooling

As girls get older, multiple activities and pursuits compete for their time: education, unpaid care responsibilities, and possibly marriage and childbearing. Thus, delaying marriage and childbearing until after age 18 could reduce the overlap in timing of increased care responsibilities and intensified economic need with secondary schooling. The analysis shows that if reasons related to pregnancy, marriage, unpaid care work, and economic need were eliminated, girls in Burkina Faso's Sahel Region who enter each level of schooling would be expected to spend 0.7 more years in primary school, 0.2 additional years in lower secondary school, and 0.4 more years in upper secondary school (see Figure 5).

**FIGURE 5: Girls' Expected Years of Schooling Increase When Dropouts Related to Pregnancy, Marriage, Care Work, and Economic Need Are Eliminated**



Source: PRB analysis of the data.

## Conclusions and Recommendations

Eliminating girls' school dropout for reasons related to pregnancy, marriage, care work, and economic need increases the expected years of schooling for girls in Burkina Faso's Sahel Region. Addressing school dropout is an important priority given the low educational attainment among girls in Burkina Faso's Sahel Region relative to girls in other parts of the country and boys in the same region. Reducing high rates of school dropout among girls in the Sahel Region requires interventions that address the multisectoral nature of links between fertility and education. Such interventions include:

- Implementing policies that address early family formation and discriminatory gender norms.
- Identifying and engaging local leaders and positive role models who can influence acceptance of socio-cultural attitudes that promote gender equality.
- Increasing community awareness of the benefits of delaying marriage to reduce school dropouts related to early marriage and pregnancy, as well as the burden of domestic care work.
- Increasing access to family planning and reproductive health for girls in the Sahel Region so that girls stay in school, particularly given their relatively higher rates of early marriage.

Delaying early marriage and preventing teenage pregnancy can keep girls in school longer, enhancing their potential to contribute to the country's economic growth, as women will be better equipped to enter the labor

force and earn higher wages. As a result, improving girls' educational attainment in Burkina Faso's Sahel Region not only enhances their future livelihoods but also expands the country's potential economic growth. Evidence on the potential gains of reducing girls' dropout can further urge decisionmakers to implement these and other multisectoral policies that promote delaying marriage and childbearing, improve access to family planning and reproductive health, and encourage girls to stay in school longer. Advocacy for policy change would be more effective with more recent and region-specific data on reasons for girls' school dropout. Routine data collection is required to better understand the reasons that girls drop out of school and to monitor the effects of efforts to reduce dropout by addressing the underlying causes. To enhance understanding of the drivers of school dropout

for girls, Burkina Faso's National Institute of Statistics and Demography should:

- **Collect routine data on reasons why girls drop out of school, specifically around early marriage and pregnancy.**
- **Regularly monitor and analyze the effects of early marriage and pregnancy on girls' dropout and educational attainment.**

As universal primary school education and girls' secondary education continue to be national and global priorities, it remains critical for Burkina Faso to continuously monitor the reasons that girls drop out of school, especially those related to fertility, so that policy interventions can address the multisectoral causes and effects of girls' educational attainment.<sup>19</sup>

## Methodology Notes

### GENERAL ASSUMPTIONS:

The analysis makes several general assumptions:

1. Students do not re-enter school after exiting.
2. Students start school in the first grade of primary school until they dropout or graduate.
3. Cause-specific probabilities of dropping out of school remain constant across primary school grades and change beginning with the first year of secondary school.
4. The data use grade level as an indication of age, which assumes individuals follow the official age-per-grade level and does not account for the actual age distribution within the grade.
5. All girls entering school at age 6 live through age 19, the age at which school would be completed if a student progresses through the grades as designed and completes the last year of upper secondary school.

### CALCULATING UNREPORTED DROPOUT RATES:

This multi-decrement life table analysis requires estimates of region-, grade-, and sex-specific proportions of the grade in year  $t$  that were promoted to the next grade-level, repeated the same grade-level, or dropped out before year  $t+1$ . Because promotion and dropout rates were not reported for the last year of primary school nor the last year of lower secondary school, we estimated these, validating our method by reproducing the reported promotion, repetition, and dropout rates that were reported for other grades. Estimates of unreported rates require administrative data from two consecutive annual reports to calculate promotion rates and repetition rates. The dropout rate is a residual. The *number of dropouts from a grade between year  $t$  and year  $t+1$*  is calculated as the *number of students enrolled in the grade in the given year  $t$  minus repeaters in the same grade in following year  $t+1$  minus new entrants to next grade level in the following year  $t+1$* . The dropout rate is the *number of dropouts from the grade between year  $t$  and year  $t+1$*  divided by the *number of students enrolled in the grade in year  $t$*  and multiplied by 100. Because upper secondary school is not compulsory, the calculated dropout rate may also capture those who decided to enter vocational programs or to not proceed with their education.

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For further details about our [methodology](#), please see the online appendix.

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