

# Making Change with Cash?

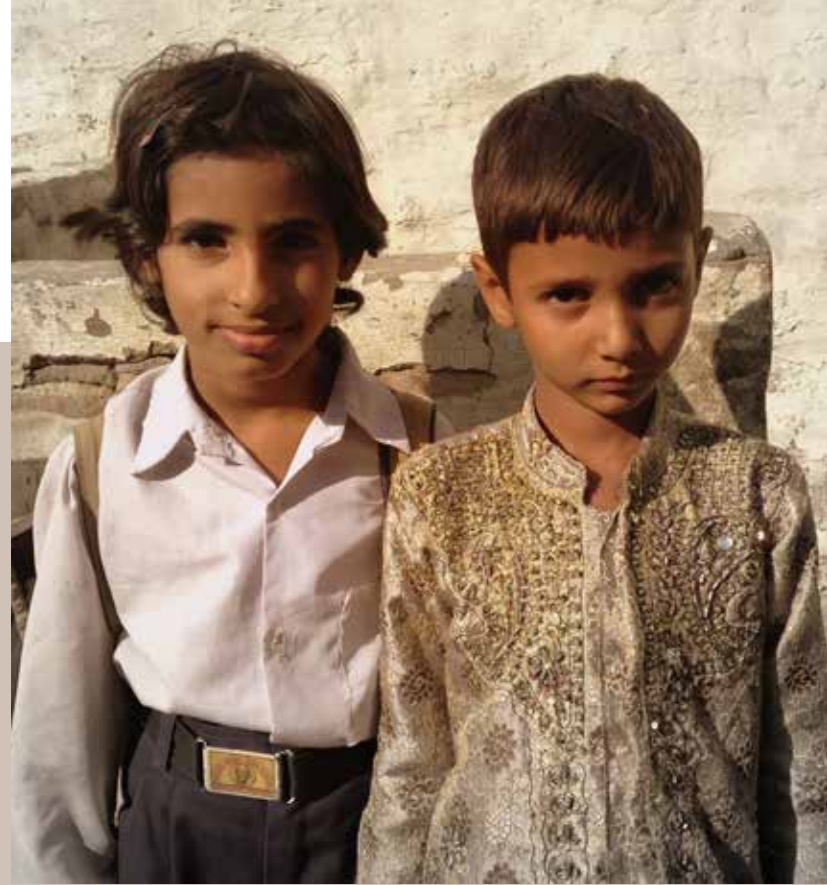
## Impact of a Conditional Cash Transfer Program on Girls' Education in India

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### INTRODUCTION

India is home to one-third of the world's 720 million child brides. A recent report shows that 47 percent of girls in India are married before their 18th birthday<sup>1</sup>. Child marriage not only violates human rights, but also adversely affects most development outcomes and increases a girl's vulnerability to violence and risk of early childbearing. Amongst the range of solutions to address child marriage, economic incentive programs like conditional cash transfers (CCTs), have been found to be effective. CCTs have become a popular tool for achieving social outcomes and behavioral change, including delaying child marriage.

CCTs designed to delay early marriage have largely used education or school completion as a pathway to address that shift. Evidence shows that keeping girls in school has a demonstrably positive effect in delaying marriage and can protect girls against child marriage. In addition, education – especially quality education – also tends to level the playing field for young girls, engendering



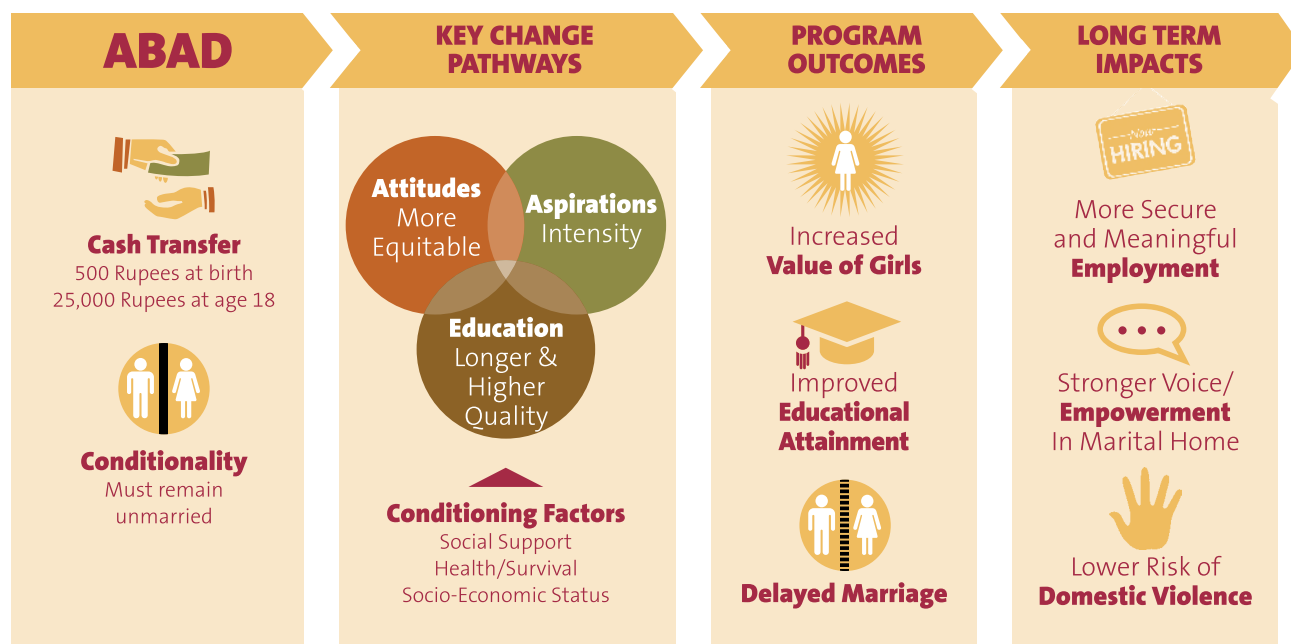
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equality, enhancing their access to resources and strengthening their agency, including negotiating to delay marriage within their families.

Given the strong association between girls' education and delayed marriage, several CCTs aimed at increased educational attainment in school have been evaluated to assess their impact on the age of marriage. However, only a few CCTs designed to delay marriage have been assessed to gauge their impact on girls' educational attainment.

This study, undertaken by the International Center for Research on Women (ICRW) is one of the few that falls in the latter category. It assesses the educational impact of *Apni Beti Apna Dhan* (ABAD), a CCT implemented in Haryana, India to delay girls' marriage. In a large quasi-experimental study of beneficiary and eligible non-beneficiary girls, we found that this CCT impacts girls' education only until the 8th grade and not for higher education beyond this level. We also found that the program had no effect on marriage before age of 18. The majority of beneficiaries and non beneficiaries were unmarried after they had turned 18 and at the time of the second survey.

Figure 1: Conceptual Framework: IMPACCT Study



## THE APNI BETI APNA DHAN PROGRAM

The *Apni Beti Apna Dhan* (ABAD), or “Our Daughters, Our Wealth,” program was among the first long-term protracted CCT programs in India that aimed to enhance the value of girls and delay their marriage. The Government of Haryana implemented it between 1994 and 1998. It was unique among India’s large-scale CCT interventions because the beneficiaries faced a protracted period before they could receive the cash. Disbursement was explicitly conditioned on delaying marriage until at least the age of 18.

Households belonging to disadvantaged subgroups in the population (Scheduled Castes and Other Backward Castes) or those living below the poverty line were eligible to enroll in the program if their daughter was born between 1994 and 1998 and was amongst their first three children. The program offered two points of transfer: 1) a small cash disbursement to mothers (500 Indian Rupees) within 15 days of delivering an eligible girl; and 2) a savings bond of 2,500 Indian Rupees purchased by the government in the name of the girl upon enrollment within three months of her birth. The bond was expected to grow to about 25,000 Indian Rupees (approximately \$384 at today’s rate) redeemable at age 18, provided the girl was not married.

## EVALUATION OF THE PROGRAM

The first cohort of girls enrolled in the ABAD program turned 18 in 2012. This provided a unique opportunity to evaluate the

CCT to understand its impact on both education and marriage outcomes. ICRW, supported by a Cooperative Agreement from the United States Agency for International Development (USAID), undertook an evaluation study between 2010 and 2015.

The evaluation of the ABAD CCT program aimed to answer the following questions:

1. Did the ABAD program succeed in delaying marriage for girls?
2. Were girls enrolled in the ABAD program more likely to stay in school and/or complete schooling?
3. Do attitudes and behaviors among parents and girls in ABAD households indicate more value for girls and support for alternatives to marriage?

The stated intention of ABAD was to enhance the “value” of the girl child. The meaning of value was not clearly defined in the ABAD program objectives. In our conceptual framework for the study we measure two main outcomes as indicators of a girl’s value: 1) Marital status 2) Educational attainment (See Figure 1).

We focused on marital status as the main outcome because remaining unmarried until the age of 18 was the only condition for receipt of the cash benefit. We measure educational attainment as the second outcome since it serves as both a mechanism for delaying age of marriage as well as an indicator of the value of girls. The latter is especially

important in Haryana because girls have lower school completion rates than boys, especially at the secondary level. Additionally, what constitutes a girl's value in Haryana is deeply influenced by the constructs of girls' marriageability and the essentiality of some education for marriage. In the conceptual framework for the study we hypothesized three change pathways through which the CCT would enhance the value and status of girls and thereby enhance their educational attainment and delay their marriage:

- Attitudes of parents would become more gender-equal.
- Parents and girls would have intensified their aspirations for a better future.
- Girls would stay longer in school and thus have higher educational attainment.

## METHODOLOGY

No baseline information was collected when the program started in 1994. During the first year of the study (2010-11), we gauged the extent of the CCT coverage, collaborated with the Government of Haryana to assess the availability of beneficiary records and secured buy-in from key stakeholders. We also conducted a formative study to understand how beneficiaries were identified and enrolled in the program by outreach workers.

Our evaluation was designed as a quasi-experimental, mixed-methods study with two time periods, one before and one after the girls turned 18. We compared the beneficiaries, or those who met the eligibility criteria and enrolled in ABAD, to the eligible non-beneficiaries – those who met the eligibility criteria but did not enroll in the program.

We conducted two rounds of surveys with girls (and their mothers) born in 1994-1998. In the second round of the survey we followed up the older girls (born 1994-1996) who would be over 18 years of age to assess the impact on their age of marriage and the impact of the ABAD cash benefit.

We followed a multi-stage sampling design. First the 2001 census frame was used to select four districts randomly from 19 using the Probability Proportional to Size (PPS) sampling. Subsequently we selected 300 Primary Sampling Units (PSUs) from the four districts, again proportional to the village population size.

For both levels of selection, we used the female literacy rate and the proportion of Scheduled Caste as indicators for implicit stratification. In both survey rounds, we asked girls and their mothers detailed questions about their background, education, marriage, work, aspirations, gender-equitable norms, program enrollment and (for beneficiary girls) their plans to use – or their actual use of – the cash

benefit. Household and village questionnaires in the first round captured additional relevant data.

Table 1 provides the sample size achieved in two rounds of the survey and the final sample that was used for analysis (after necessary exclusions)<sup>2</sup>. This brief uses data from the second round of the survey (i.e. 3,944 girls) to examine the program's impact.

**Table 1 Sample Size**

	Older Cohort	Younger Cohort	Mothers
Round 1 (2012-13)	5694	4444	9556
Round 2 (2014-15)	5297	-	5241
Final Sample used for Analysis from Round 2	3944	-	3944

The impact of the program on girls' education was analyzed using bivariate probit models with instrumental variables, as our outcome variables were dichotomous (described in the results). We controlled for the fact that households that participated in ABAD could be systematically different from those that did not participate<sup>3</sup>.

We used an instrument that can predict enrollment in ABAD (satisfying the relevance of the instrument) without directly affecting any of the two outcome variables (age of marriage and educational attainment), satisfying the exclusion restriction. We used measures of program uptake (i.e. proportion of beneficiaries) in castes other than their own, within the village, as our instrument. Program uptake in PSUs (villages) was a good indicator of random variation in the success of the ABAD program enrollment officer (such as the village level outreach worker or the school teacher).

Since the program had variable uptake, enrollment of other girls in the village would have an influence on an individual's enrollment, as information about the program was often disseminated by word of mouth<sup>4</sup>. By allowing only enrollment rates for non-caste members and excluding beneficiaries from one's own caste, we achieved a predictor of program uptake for individual households in the village but avoided the social influence on the main outcomes that would come mostly from families in one's own caste. The caste-stratified society of Haryana creates influence barriers between castes, so the instrument satisfied the exclusion restriction. We tested the instrument for predicting program uptake and found it strong and significant.

Our analysis controls for factors at the individual, household

or village level that affect the outcome variable. We also control for district level variations by using district fixed effects in the models. Finally, unless otherwise specified, all the estimates presented here account for sample weights (probability of selection of the village and household non-response rates).

This brief estimates the impact of the program on girls' educational attainment by using the following educational outcomes: (i) whether the girl is currently studying; (ii) whether the girl has completed 8th grade; (iii) whether the girl has completed 12th grade (only for those who were 18 or above).

At the time of the second survey most of the girls were between 18 and 21 years of age and past the legal age of marriage and school completion (not accounting for failure). The outcomes for completion of 8th and 12th grade standards are important milestones in schooling in India. Girls currently studying hold the possibility of transitioning into secondary and higher education but they could stop going to regular school and pursue distance education or vocational education.

We also collected qualitative data in four rounds, conducting 241 in-depth and semi-structured interviews with beneficiary and non-beneficiary girls and their parents, and 57 key informant interviews with government officials and village functionaries.

## Social Norms around Girls Education in Haryana

There has been a significant improvement in the educational attainment of girls in Haryana over time. Data available show that the gross enrollment ratio (GER)<sup>5</sup> for girls at the primary and upper primary level of schooling is not only high (98 percent and 94 percent) but also only marginally lower than the national average (101 percent and 89 percent). However, it is lower for girls who belong to the Scheduled Caste (48 percent) and Other Backward Caste girls (45 percent). Typically, girls begin to drop out of school at the secondary levels where the GER falls to 86 percent, a 12 percent reduction in gross enrollment rates from the primary level. Enrollment falls further to 69 percent for tertiary education (graduation and higher), which is near the time when girls reach a marriageable age<sup>6</sup>. At secondary and tertiary level the GER in Haryana is higher than the national average. The rates of enrollment vary for boys and girls and also for disadvantaged and wealthier families.

The higher enrollment in primary and secondary schooling in Haryana compared to the national average may be attributed to the rapid expansion of government schools and financial

incentive programs for girls that have been implemented over the years. However, while the figures are higher than the national average, they mask the differences between all girls and girls from disadvantaged families as the data from the primary level of schooling suggest.

The qualitative research yielded several insights into the gendered importance accorded to girls' and boys' education in Haryana. With a rapidly changing agrarian economy there is a greater reliance on non-agriculture related work and growing competition over limited employment opportunities. Education for boys is deemed necessary to build their human capital and skills and enhance their ability to secure desirable jobs. Education for girls is predominantly linked to enhancing their attributes for marriage. Investments in education for boys stem from the expectation that they will provide economic support to their parents in their old age. Girls on the other hand are groomed for marriage from the time they are young. Girls are considered "someone else's wealth" (*paraya dhan*)<sup>7</sup> and parents cannot have any economic expectations from girls once they are married. Thus it is believed that investments made in a girl will bear returns to her marital family and not her natal one.

The importance of girls' education in the marriage market is most succinctly captured in our study by a village elder in a focus group discussion held in Ambala: "*When they are to get married...first thing they ask is whether the girl is educated or not.*" There are subtle negotiations around the levels of education and the suitability of a match. The knowledge and abilities that a girl acquires from schooling are valued mostly in the context of her marital roles and responsibilities. For instance, a father from Hissar notes: "*...being educated is also important, but if the girl is educated and does not provide food to her parents in-law, then what is the use of such education? ... Let's say there is a cow and she has great horns, but if she does not provide milk then what is the use of it.*"

Parents also view education as necessary to equip girls with skills to negotiate the uncertainties of a married life. Being educated and employable can equip a girl should she have a troubled marriage or need to provide economic support to the marital family.

While education is an important attribute for marriage a girl's sexual purity and chastity are the foremost prerequisite for a "good marriage". Anxieties pertaining to girls' chastity are exacerbated by the perception that the social environment in Haryana has deteriorated over the last 20 years. A particular phrase, *mahaul kharab hai* ("the social environment is bad"), was often used to describe how the environment has changed for girls. This includes ideas of sexual violence against girls, peculiarities of caste-based oppression, high levels of unemployment amongst young men, dominance of young men in common spaces and recent incidents of elopements by young

boys and girls. Consequently, once a girl attains puberty, parents are often reluctant to send their daughters outside the village for higher education as they fear for girls' safety.

In fact, once a girl reaches 16 or 17 years of age, the primary focus is on her marriage rather than education. This is particularly common in poorer households because the cost of dowry increases as the girls become older. Even though a girl may marry at or after the age of 18, parents start to look for suitable grooms around the time the girls are 16 or 17 years old. If a suitable match is found a girl may be married irrespective of how it may impact her educational status or opportunities. For girls who drop out of school early but aspire for higher education, their hope is that their parents will negotiate with the prospective in-laws to allow them to continue studying. However, decision-making around continuing education after marriage lies entirely with the in-laws and more often than not, girls are not allowed to continue their education after marriage.

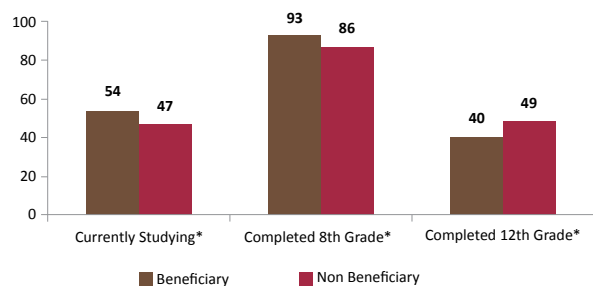
## FINDINGS

### Program enrollment positively affects the completion of 8th grade

A key finding from the multivariate analysis is that enrollment in ABAD positively and significantly affected the probability that a girl would complete 8th grade. In terms of effect size we find that the probability of completing 8th grade increases by 11 percentage points for the beneficiary girl (Table 2 below). There is no positive or significant effect of ABAD on the completion of 12th grade or pursuing higher studies (college). The proportion of girls who completed 12th grade is almost half of those who completed 8th grade (Figure 2).

The reason the program impact does not sustain beyond 8th grade can be partly explained by the fact that secondary education for girls in Haryana is conditioned by several factors around girls' marriage. After 8th grade, a girl's education is based on her parent's economic circumstances and aspirations for her, and availability of secondary schools near her village. Parents' decision to send a girl to a secondary school outside the village is not only affected by the economic costs but also the social costs of protecting a girl from the perceived risk of sexual violence. Parents are reluctant to send their daughters outside the village for higher education out of fear for girls' safety. Beyond the 8th grade, girls' education takes on several different trajectories, including dropping out, enrollment in vocational education or open schooling, repeating years or waiting for marriage. These circumstances are common to both program beneficiaries and non-beneficiaries, and the effect of the program on girls' education at higher levels was not significant. Enrollment in ABAD did not improve educational attainment of beneficiary girls after they complete 8th grade.

Figure 2: Educational Attainment across Beneficiary Status (All Girls)



\*significant at 5%

Table 2: Impact of ABAD Program on Girls' Education

Currently Studying <sup>1</sup> (Takes the value 1 if girl is currently studying; 0 otherwise)	Average Marginal Effects	---
	Coefficient	0.326
Completed 8th Grade <sup>1</sup> (Takes the value 1 if girl has completed 8th grade; 0 otherwise)	Average Marginal Effects	0.118**
	Coefficient	0.734***
Completed 12th Grade <sup>2</sup> (Takes the value 1 if girls has completed 12th grade; 0 otherwise)	Average Marginal Effects	---
	Coefficient	0.473

After controlling for girl's age, mother schooling, father's schooling, caste, wealth quintile in 1994, distance to secondary school in 1994, total children, proportion of girl children and district dummies.

Our bivariate probit model with instrumental variables controls for selection into the program.

Standard errors are clustered at the PSU level; \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ . Estimates account for sampling weights.

Average marginal effects are percentage point change calculated from the coefficient of beneficiary impact from the analysis. Average Marginal Effects are not presented for insignificant estimates.

<sup>1</sup> Analysis for all girls in the sample;  $N=3944$

<sup>2</sup> Analysis for girls above the age of 18 and should have completed 12th grade;  $N=3742$

### Education and girls' educational aspirations as mechanisms of change

Educational attainment, aspirations and gender equitable norms are key pathways in our conceptual framework that can lead to the final outcome of delayed marriage. These pathways – or mechanisms of change – are often as important as the magnitude of the program's impact on the main outcomes, especially when designing similar interventions. Girls' aspirations to study beyond 12th grade emerge as a significant mechanism of change. This program increases the probability of beneficiary girls to aspire to study beyond 12th grade by 19 percentage points (Table 3). Mothers' aspirations and girls'

gender equitable attitudes<sup>8</sup> are not significantly impacted by the program. However, while we also find that while the program positively affected the completion of 8th grade for girls, this effect did not sustain for the completion of 12th grade. This suggests that the beneficiary effect on aspirations is not high enough to override some of the other social and economic costs of girls pursuing higher education.

**Table 3: Impact of ABAD Program on Mechanisms of Change**

	Average Marginal Effects	Coefficients
Girl's Aspirations (Takes the value 1 for aspiring to study beyond 12th grade, 0 otherwise)	0.194**	0.573**
Mother's Aspirations (Takes the value 1 for aspiring to study beyond 12th grade, 0 otherwise)	-	-0.290
High GEMS (Gender Equitable Attitudes) (Takes the value 1 who have a GEMS score in the highest quintile; 0 otherwise)	-	-1.564

*After controlling for girl's age, mother schooling, father's schooling, caste, wealth quintile in 1994, distance to secondary school in 1994, total children, proportion of girl children and district dummies. Our bivariate probit model with instrumental variables controls for selection into the program. Standard errors are clustered at the PSU level; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Estimates account for sampling weights. Average marginal effects are percentage point change calculated from the coefficient of beneficiary impact from the analysis. Average Marginal Effects are not presented for insignificant estimates. Analysis for all girls in the sample; N=3944*

## CONCLUSION

Although ABAD originally was not designed or intended to influence girls' education, the program had a positive impact on girls' educational attainment up until 8th grade and aspirations for higher education (beyond 12th grade). Further while beneficiary girls in the program were more likely to have higher aspirations and complete 8th grade, this effect on educational attainment does not endure for secondary and higher levels of education.

These findings aligns with our qualitative research findings, which indicate that education for girls is valued largely in the context of marriage. Education is seen as an important attribute for girl's marriageability and not necessarily to enhance their potential for employment or new opportunities. Considered as the most essential and inevitable destiny of

a girl, once she reaches the ages of 16 or 17, marriage is prioritized over education even if they may marry after age 18.<sup>9</sup> About one-third of both beneficiary and non-beneficiary girls aged 18 years or more were pursuing higher education.

Marriage as a priority, lack of proximity to higher secondary educational facilities, as well as reluctance of parents to send girls outside the village for studies due to fear for their safety, are all possible reasons why ABAD has had no effect on the education of the enrolled girls, beyond grade eight.

In Haryana, where social norms offer few opportunities to girls and women outside of marriage and motherhood, education for girls is fraught with contradictions. While on one hand it opens possibilities, on the other hand social restrictions and expectations nullify any potential amplifying effect.

The original objective of the ABAD program was to improve the status of girls in Haryana, but the low value of girls and women in this state emerges from deeply entrenched gender-biased roles and expectations. We know both from the impact evaluations and qualitative research that ABAD has not been able to shift these norms. As other evaluations of CCTs have found, long-term change in social norms cannot rely on financial incentive programs alone.

Conditional cash transfer programs with immediate or protracted benefits have immense potential to be catalytic for girls' education and their future development. Alongside CCTs, there is a need for complementary interventions such as high quality schooling accompanied by reflective dialogues with parents and other key stakeholders to change gender norms in the communities where girls live. Additionally schools or out of school programs need to be available to provide girls with skills they can use for future employment. It is also critical to expand safe public spaces for girls so they are permitted to leave their villages and explore other possibilities through higher education and employment. And in settings like Haryana where norms around age of marriage have changed over time, financial incentives need to be targeted toward secondary and higher levels of education to increase pathways to employability. This would be the real game changer in girls' lives.

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## Endnotes

- 1 The State of the World's Children. UNICEF. 2015
- 2 Girls whose mothers were not available for the second round of survey have been excluded from the analysis. We also had to exclude non beneficiary girls who did not meet the rank condition of being among the first three children in their family.
- 3 While stringent conditions were set for eligibility to enroll in the program, there is a strong possibility that families may have self-selected into it. We cannot accurately measure program effects without addressing this self-selection.

- 4 We conducted two rounds of qualitative data collection to study in depth the implementation of the program and understand factors that affected enrollment in the program including self-selection.
- 5 Gross enrolment ratio (GER): Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school-year. School-age Population: Population of the age group which officially corresponds to the relevant level of education.
- 6 It however is only marginally lower than the GER for boys (28%) at the same level and higher than the national average for girls (19%). All India Status on Higher Education (AISHE) 2011-12
- 7 Over the years, these norms and assumptions have led to a skewed sex ratio and to seeking of brides from economically poorer regions.
- 8 The Gender Equitable Measurement Scale (GEMS) was constructed by combining 28 attitudinal statements into a score. This score was further categorized into quintiles. High GEMS is a categorical variable that takes the value 1 for GEMS score belonging to the highest quintile and 0 otherwise.
- 9 Our analysis of marriage outcomes show that majority of girls were unmarried at the time of the second survey. Of those who were married, participation in the ABAD program did not affect the probability of marriage before the age of 18.

## Acknowledgments

IMPACCT has been a long endeavor and many people have made invaluable contributions to the successful completion of this study. We would like to acknowledge our colleagues from the core research team, instrumental in developing and implementing this study: Anurag Mishra, Pranita Achyut, and Abhishek Gautam and former colleague Sunayana Walia. Sandeepa Fanda has provided excellent program management support to the team. We would like to acknowledge the unwavering and critical support of our team in Washington D.C.: Ann Warner, Suzanne Petroni, Kathryn Farley, Meroji Sebany, and former colleagues Sophie Namy, Gwennan Hollingworth, and Brian Heilman. We would like to thank our communications and advocacy colleagues Erin Kelly, Ibadet

Reller, Kirsten Sherk, Lyric Thompson, and Ketaki Nagaraju; Gillian Gaynair and Joanne Omgang for editorial support; and Adriana Barbieri and Buddy Vagnoni for designing this report. We acknowledge with thanks Sarah Kambou and Ravi Verma for their overall guidance, encouragement, and vision for this study.

Our research advisor David Bishai has been incisive and supportive, and a true mentor to us. He has guided us closely through all critical phases of data analysis and writing. We thank Anju Malhotra, Jyotsna Puri, Katherine Hay, Navsharan Singh, Tarun Roy, Feroza Mehrotra, Kavita Ramdas, Krishna Rao, Rajesh Gill, Rekha Masilmani, and Ilene Speizer as members of our research and advisory groups who have contributed immensely to the quality, rigor and robustness of this study with their timely reviews and inputs.

We would like to acknowledge the tremendous effort put in by our team for data analysis and management: Rachna Patel for quantitative data management and analysis; Kandala Singh, Chris Kurien, Aditi Vyas, Ruchika Negi, Tahiba Khan, Huma Tariq, and Vedika Khanna for supporting the qualitative data collection and analysis and insightful discussions on the context of girls in Haryana; the foot soldiers who ensured quality data with their unwavering presence on the ground: Shikha Srivastava, Ruquia Tabassum, Pankaj Sharma, Jyoti Pal, Kanchan, Ram Rajiv, Shilpa Kale, Mahendra Misra, Abhay Trivedi and Rakesh Misra. Acknowledgements are also due to our research agency AC Nielsen, especially Devendra Pratap and Pramod Padhy. We would like to thank Population Foundation of India, our advocacy partner, for their collaboration. We would also like to thank the Department of Women and Child Development, Haryana for their support. We thank Mihira Karra, Shegufta Sikder, Caitlin Thistle, Aysha Asifuddin, and Megan Matthews from USAID for their encouragement and support through the duration of the study.

Finally, we cannot thank enough the study respondents for their time and insightful responses. This publication was made possible by the generous support of the American people through the United States Agency for International Development under the terms of the IMPACCT Project (Award No. AID - OAA - A - 10 - 00071). The contents are the responsibility of ICRW and do not necessarily reflect the views of USAID or the United States government.

