



GIRLS LEADING

From Rural Economies to Global Solutions

Many of the most pressing global issues—climate change, economic development, health, and education—demand that we consider rural girls. The world changes as her life changes. Join the conversation at [#GirlsLeading](#).

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Contents

FOREWORD	2
ACKNOWLEDGMENTS	5
PROGRESS REPORT	10
20 AUTHOR PERSPECTIVES21
ECONOMY	
Why Rural Girls Will Claim the Future <i>By Sir Fazle Hasan Abed, Founder and Chairman, BRAC</i>	22
CLIMATE POLICY	
What Rural Girls Can Say: A Climate Change Story Untold <i>By Anoka Primrose Abeyrathne, Asian Pacific Representative, UN Habitat Youth Advisory Board, Women Deliver Young Leader</i>	25
MEN AND BOYS	
Men and Boys as Allies in the Empowerment of Rural Girls <i>By Gary Barker, President and CEO, Promundo</i>	28
SCHOOL MEALS	
School Feeding for Girls: A Win-Win for Gender Equality <i>By Ambassador Delphine Borione, Permanent Representative of France to the United Nations organizations in Rome.</i>	31
VIOLENCE	
Gender-Based Violence Against Rural Girls in Brazil <i>By Bárbara Jéssica da Silva Paes, Founder, Minas Program, Women Deliver Young Leader</i>	34
CLIMATE CHANGE	
Why We Need to Equip Rural Girls for Climate Change <i>By Shenggen Fan, Director General, International Food Policy Research Institute</i>	38
ENTREPRENEURSHIP	
Agricultural Enterprises: An Engine of Impact for Rural Girls <i>By Willy Foote, Founder and CEO, Root Capital</i>	42
RESOURCES	
Girls: Commodity or Resource in a Changing Climate? <i>By Renée Giovarelli, Senior Attorney and Advisor, Resource Equity</i>	46
PEACE AND SECURITY	
The Real Frontier of Peace and Security: Women and Girls in the Outlands <i>By Valerie M. Hudson, Professor and George H.W. Bush Chair in the Department of International Affairs, Texas A&M University</i>	49
DREAMS	
How Hopes and Dreams Become Jobs <i>By Purity Kagwiria, Executive Director, Akili Dada</i>	53
SMALLHOLDER FARMERS	
Investment in Smallholders + Girls in School = Africa's Success <i>By Agnes Kalibata, President, AGRA</i>	57

AGRIBUSINESS	
Attention Women and Girls: Farming Is For You Too	
<i>By Leah Lamon, Communications Director, Land O'Lakes.</i>	60
TECHNOLOGY	
Tech Dreams to Change the Future of Afghan Girls	
<i>By Roya Mahboob, CEO, Digital Citizens Fund.</i>	63
TRAFFICKING	
Rural Girls Could Be Agents of Peace—If Only They Weren't Trafficked	
<i>By Alaa Murabit, MD, High-Level Commissioner, SDG Global Advocate</i>	68
LEADERSHIP	
How Local Women Leaders Can Unlock Girl Power	
<i>By Alyse Nelson, President and CEO, Vital Voices Global Partnership</i>	72
EDUCATION	
Helping One Rural Girl to Become a Role Model	
<i>By Namanga Ngongi, Chair of the Boards, International Institute of Tropical Agriculture (IITA), African Fertilizer and Agribusiness Partnership (AFAP), and International Center for Evaluation and Development (ICED).</i>	76
SCIENCE	
The Magic of Science for Rural Girls	
<i>By Esther Ngumbi, Distinguished Post-Doctoral Researcher, University of Illinois at Urbana-Champaign</i>	79
SISTERS	
Sisters are seeds	
<i>By Deneka Thomas, Project Manager, Girl Be Heard Trinidad and Tobago, Women Deliver Young Leader</i>	83
WATER	
Water Security: A Wellspring for Rural Girls amid Climate Change	
<i>By Michael Tiboris, Fellow, Global Water, Chicago Council on Global Affairs</i>	86
EMPLOYMENT	
Rural Girls: Equal Partners on the Path to Employment	
<i>By Joachim von Braun, Director, Center for Development Research (ZEF), Bonn University</i>	92
GIRLS' STORIES	97
RECOMMENDATIONS FOR ACTION	101
Ages 0-2 INFANCY	105
Ages 2-5 EARLY CHILDHOOD	109
Ages 6-10 CHILDHOOD AND PRIMARY SCHOOL AGE	111
Ages 11-13 EARLY ADOLESCENCE AND LOWER SECONDARY SCHOOL	115
Ages 14-18 LATE ADOLESCENCE AND UPPER SECONDARY SCHOOL	122
Ages 0-18 ALL LIFE STAGES	126
CONCLUSION	137
AUTHORS	140



Girls Leading: From Rural Economies to Global Solutions

By Catherine Bertini, *Distinguished Fellow, Global Food and Agriculture, Chicago Council on Global Affairs, Former Rockefeller Foundation Fellow, @C_A_Bertini*

Once upon a time, I was a girl in a small town. I had a roof over my head, meals on the table, and caring and supportive parents. Yet my environment taught me that girls could cheer on teams but not play sports ourselves, could read and write but could not excel in math and science, and could go to school but not aspire to careers beyond motherhood, marriage, nursing, and teaching. My parents and community believed otherwise, and so did I. I believed then and continue to believe now that the world would be better with girls leading—from politics to medicine to agriculture to global goal-setting.

In many communities today, it is hard to be a girl and to strive beyond the “place” decided for her. This can be especially true in rural areas that may be more traditional. The presumption often is that a girl will drop out of school as soon as she finds a husband, have many children, and be subject to work from dawn until midnight until she is too old to continue.

However, girls are leading despite the convictions of some in their communities. Leaders like Malala Yousafzai show the world the power of a girl. And there are millions of Malalas leading around the world, as girls and as women. They are in houses of parliament, they are chiefs, they lead in classrooms, laboratories, sports fields and in their homes. They are leading already, and millions of parents, teachers, and political leaders are supporting them.

Since I chaired the 2011 report *Girls Grow: A Vital Force in Rural Economies*, progress has been made in many areas of girls' lives and has stalled in others. Revisiting this topic, it became clear that not everyone sees the well-being, development, and cultivation of leadership among rural girls as critical. Addressing the challenges of girls, rural and urban, may seem the natural responsibility of education or health professionals. It may not seem the obvious responsibility of the agriculture and mining sectors or of conservation groups, who may otherwise invest in rural communities and therefore have an impact on rural girls' lives. For that reason, I decided to invite voices from a range of geographies, experiences, and sectors to examine and reveal the relationship between rural girls and the world around them. I firmly believe that we cannot have progress on global goals without direct progress for girls in rural areas who so often lag behind their urban peers and boys in their communities. They merit direct attention as an important population on their own rather than to only be grouped with women, with "children," or as a component of rural households.

This conviction that investing in girls is the most productive commitment one can make to improve the world came to me one day when I was about halfway through my 10-year term as executive director of the United Nations World Food Programme. I saw that women were the key to nourishing communities; they did everything in their power to enable their family to thrive. Making sure girls were educated and empowered as adults was the key to ensuring they were able to pursue opportunities themselves and continue this cycle of investment in others.

Later, as I became involved in agricultural development and promoting policies to help improve farmers' lives, I frequently encountered rural girls and women and the challenges they faced. Rural girls and women are highly represented in low- or no-wage agricultural work; they juggle farming with raising children, fetching water and firewood, taking care of households, and providing support for families while also attending school, going to market, or holding other jobs. The labor burden of rural women exceeds that of men in low-income countries, and their work is very often unpaid.¹ The problem starts when they are girls. Data shows that girls work more hours than boys and that the volume of work gets worse with age. By the time girls reach 10 years old they are working 50 percent more than their male peers. That's 120 million more hours each day worked by girls.²

In my mind, girls and rural economies became synonymous. We cannot achieve significant improvements for one without the other.

If every girl in the world had a basic education, the world would change. But as the authors of these essays point out, we are not there yet. The girls still missing this opportunity are more often in rural areas. Educated girls marry later, have fewer children,³ have better health outcomes for themselves and their children,⁴ are less likely to contract HIV/AIDS,⁵ are more likely to send their children to school,⁶ are more productive farmers,⁷ earn more

income, are more involved in leadership roles in communities, better understand their legal rights, and positively impact the national economy.⁸

Realizing all of these benefits requires a lifecycle approach. As a global community, we cannot expect to focus solely on one time frame of a girl's life, however impactful, to change the landscape entirely. The effects of gender inequality are cumulative. That is why this report's recommendations are organized by age.

The authors of *Girls Leading* share data and stories of personal struggle and triumph as well as reasons for stalled progress and solutions for action. They are a chorus of varied voices painting a picture of why action for rural girls is urgently needed.

Now we would like to engage *you*. Girls, boys, men, and women. Politicians. Business leaders. Academics. Scientists. Agricultural professionals. Community leaders. Everyone.

How do you see rural girls leading, and who is leading alongside them? What is getting in the way, and what are the stories you can share about how barriers are being broken? Share them with us using #GirlsLeading.

Educating and supporting girls to be healthy and empowered in rural communities is a solution to so many challenges—local and global, immediate and long-term. It's well beyond time to see and act on it so girls can lead the way.

Endnotes

- 1 Cheryl Doss, "The Role of Women in Agriculture" (ESA Working Paper No. 11-02, FAO, Rome, March 2011), 16–17, <http://www.fao.org/docrep/013/am307e/am307e00.pdf>.
- 2 United Nations Children's Fund, *Harnessing the Power of Data for Girls: Taking Stock and Looking Ahead to 2030* (New York: UNICEF, October 2016), <https://data.unicef.org/resources/harnessing-the-power-of-data-for-girls>.
- 3 Q. Wodon et al., *Economic Impacts of Child Marriage: Global Synthesis Report* (Washington, DC: The World Bank and International Center for Research on Women, June 2017), 3, <http://documents.worldbank.org/curated/en/530891498511398503/pdf/116829-WP-P151842-PUB-LIC-EICM-Global-Conference-Edition-June-27.pdf>.
- 4 Elizabeth M. King and Rebecca Winthrop, "Today's Challenges for Girls' Education" (Global Economy & Development Working Paper 90, Brookings Institution, Washington, DC, June 2015), viii, <https://www.brookings.edu/wp-content/uploads/2016/07/Todays-Challenges-Girls-Educationv6.pdf>.
- 5 Gene B. Sperling and Rebecca Winthrop with Christina Kwauk, *What Works in Girls' Education: Evidence for the World's Best Investment* (Washington, DC: Brookings Institution, 2016), 44–47, <https://www.brookings.edu/wp-content/uploads/2016/07/whatworksingirlseducation1.pdf>.
- 6 United Nations Children's Fund, *Progress for Children: A Report Card in Gender Parity and Primary Education* (New York: UNICEF, April 2005), 7, https://www.unicef.org/publications/files/PFC2_rev_July_2005_3506_Eng_01.pdf.
- 7 Catherine Bertini, *Girls Grow: A Vital Force in Rural Economies* (Chicago: The Chicago Council on Global Affairs, 2011), 11, https://www.thechicagocouncil.org/sites/default/files/GirlsGrowReportFinal_v9.pdf.
- 8 Jo Bourne, "Why Educating Girls Makes Economic Sense," *Global Partnership for Education* (blog), March 26, 2014, <https://www.globalpartnership.org/blog/why-educating-girls-makes-economic-sense>.

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Thank you

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This unique anthology of commentary, experience, and evidence about rural girls would not be possible without our dedicated and talented authors. Thank you for your significant contributions to this project and your willingness to shed light on the many dimensions of rural girls' lives and the ways their experiences impact the world.

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We hope this project will be a living resource and a starting point for greater action supporting rural girls around the world.



Girls Grow Reflections: 2011

In 2009 the Chicago Council on Global Affairs launched the seminal Girls in Rural Economies project to examine the status of girls in rural settings around the globe. The project culminated in the 2011 report *Girls Grow: A Vital Force in Rural Economies*, arguing that investing in the health and safety of rural girls as well as their personal and professional development has the potential to transform rural economies, leading to economic growth and social stability in low-income countries.

The *Girls Grow* report was chaired by Catherine Bertini, guided by 11 distinguished committee members, and supported by development practitioners in fields from health and human rights to agriculture and anthropology. It offered seven broad recommendations and specific actions that the global community could undertake to empower rural girls to help themselves, their families, their communities, and their nations. Since the report's publication, the global policy landscape has evolved to include more policies and institutions that address the needs of rural areas and the needs of girls. However, meaningful progress has not necessarily been made where these two areas overlap: rural girls. To demonstrate the vital need to recognize rural girls' potential to become agents of change, the Chicago Council has undertaken this update to *Girls Grow* to show how global policy, advocacy, and economic priorities have developed from 2011 to today and to make further recommendations for moving forward.

Who can move the agenda forward

Three partners have a critical role to play in leading on this issue going forward: the G7, national governments, and the private sector. The G7, with its enormous influence on the global agenda, is foremost in setting the vision and goals for the world to follow. The G7's priority themes for 2018, ratified at the summit in Charlevoix, Canada, are climate change, the future of work, economic growth, and security threats. The G7's public engagement papers for the priorities refer explicitly to the empowerment, improvement, and inclusion of girls. The priorities underline, for example, that women who are given equal opportunities to succeed can become powerful agents of change and that women's active involvement in the peace process historically yields longer-lasting treaties. This year's report, *Girls Leading: From Rural Economies to Global Solutions*, demonstrates how and where each of the G7's four priorities has entry points for rural girls and women and what the payoffs will be in the future.

Second, national governments are on the front line. They control the resources, laws, and frameworks that can ensure rural girls get what they are not getting now. Girls are an important national resource for a country. The country's government is in the strongest position to provide meaningful growth and positive guardianship through the provision of education, social protection, healthcare, equal rights, and access to agricultural assets.

National governments can no longer sustain the structural oppression of women and girls if they hope to develop in tandem with their global allies and harness the social, economic, and political power of an equally empowered citizenry. For meaningful growth to occur, national governments must change the laws and frameworks that pin rural girls down. By providing education, social protection, health care, equal rights, and access to economic opportunities in both rural and urban communities to rural girls, national governments

can achieve the Sustainable Development Goals (SDGs) and truly turn girls into powerful agents of change.

Third, the private sector has a crucial stake in the future of work for rural girls. The private sector has unique resources to advance two bottom lines: financial profit and positive social impact on girls, achieved through programs in education, nutrition, health, and skills training. The private sector, moreover, is a natural partner for implementing the SDGs because of its access to timely, disaggregated data flowing from its corporate commitments. This data would serve to monitor progress and identify areas that need more investment. Private-sector companies, especially those working in the food and agriculture industries, have a positive role to play, along with an opportunity to take a proactive stance against issues around child labor.

Girls are an important national resource for a country. Each country's government is in the strongest position to provide meaningful growth and positive guardianship through the provision of education, social protection, healthcare, equal rights, and access to agricultural assets.

Where further progress can be made

To shed light on how institutions can evolve and fill the policy void, this section reviews progress made since 2011 with respect to rural girls. The areas reviewed in this section are tied to the seven recommendations made in *Girl's Grow*:

1. Improve data collection about rural adolescent girls.
2. Expand opportunities for rural adolescent girls to attend secondary school.
3. Equip girls to be entrepreneurs.
4. Empower girls to have an active voice in high- and low-level politics.
5. Prepare girls to be stakeholders in agriculture and natural resource management.
6. Provide girls with comprehensive health information and services.
7. Improve girls' safety and security.

DATA COLLECTION

The absence of data about rural girls continues to be a roadblock to policy action. Fewer births of girls are recorded compared to boys, particularly in rural areas. Additionally, there is insufficient disaggregation of data at the intersection of age, gender, and location. Inadequate evidence about rural girls' experiences makes it difficult to conduct research, design policies, and implement programs.¹ There is also a lack of adequate methods to collect the data.

The SDGs contain indicators that require measurement of girls, thereby pressuring development agencies and national governments to be more accountable and report progress as 2030 approaches.² Plan International's 2016 report, *Counting the Invisible*, underscores the need for data on girls' experiences.³ Moreover, it examines the indicators proposed for the SDGs and discusses challenges to using these indicators. For instance, the report notes that only three of the 14 indicators used to measure SDG 5 (achieve gender equality and empower all women and girls) are regularly collected in most countries and have agreed statistical methodologies.⁴



There has been increasing awareness of the need for good gender data since 2011, but the data itself has yet to be collected and the methodologies yet to be determined and implemented.

Data2X, an initiative launched in 2012 by the UN Foundation and supported by the William and Flora Hewlett Foundation and the Bill & Melinda Gates Foundation, explains the need for gender data (i.e., data disaggregated by sex):

We have no data or bad data on issues that disproportionately affect women and girls but that society does not highly value such as informal and unpaid work and intimate partner violence. Data gaps reflect biases in traditional social norms that see women as 'reproducer' and the household as a single unit. Gender biases both impede and distort data collection.⁵

There has been increasing awareness of the need for *good* gender data since 2011, but the data itself has yet to be collected and the methodologies yet to be determined and implemented. Unique challenges exist for determining and developing appropriate methodologies for collecting data about rural girls. These challenges, however, are not



insurmountable. India, for example, has developed new technology to mitigate these difficulties. India is building a national database that assigns a unique 12-digit identification number to everyone over 15 years old, with the aim of issuing each one an identity card to be linked to fingerprints and iris scans. This database promises far greater transparency and accountability, which in turn would have tremendous potential for the provision of social services to rural girls and for the prevention and investigation of sex crimes.⁶ This example indicates that it is possible to improve data about rural girls and that there is much more that institutions can do to support the implementation of similar efforts globally.

EDUCATION

Since 2000 there has been significant progress in girls' enrollment in secondary school and a narrowing of the educational gender gap. However, much of this progress in girls' primary school enrollment began in 2008 and tapered off by 2012.⁷ In 2011, the year *Girls Grow* was published, UNESCO began an annual review that provides greater insight into gender differences in educational attainment. At the secondary school level, gender disparities vary significantly by region and income level. In general, the rural poor are far less likely to have access to educational opportunities than the wealthy. But rural girls are uniquely disadvantaged; in poor, rural areas in Sub-Saharan Africa and South Asia, girls are still far less likely than boys to enroll in and graduate from school.⁸

There are some positive developments at the country level. Among countries with low school attendance rates, Bangladesh saw a 15 percent rise in rural girls' schooling from 2010 to 2012, and El Salvador saw an increase of 18 percent between 2013 and 2015. But the number of girls out of school remains unacceptably high. In 2011 some 32 million girls of primary school age were not in school; by 2016 the number had increased to 34 million.⁹ Nonetheless, the progress that *has* been made indicates that all actors can do more to improve girls' education. The recommendations in this year's *Girls Leading* report focus especially on ways that rural girls' access to education can improve through the efforts of the G7, national governments, and the private sector.

INNOVATION AND ENTREPRENEURSHIP

Entrepreneurship has emerged as a crucial element of the future of work in the global arena. Most notably, the G20's 2011 Employment Task Force has emphasized the need to increase support for the school-to-work transition, such as apprenticeships, entrepreneurship training, and vocational education.

While progress for rural girls is difficult to measure due to the data problems described above, several development entities are beginning to assess the effects of increasing a focus on rural girls' entrepreneurship in education. In 2014, the Global 4-H network met in Seoul, Korea, to commit to growing the network of 4-H participants worldwide from the current 7 million, half of them girls and young women, to 25 million by 2025.¹⁰ Additionally, programs focused on women's entrepreneurship are growing globally, including development initiatives like the Rural Enterprises Programme in Ghana. This eight-year, US\$185 million project by the International Fund for Agricultural Development improves access to technology, skills, and financial services to support micro- and small enterprises. The International Fund for Agricultural Development reported that significant improvements in participants' enterprises have been observed.¹¹ Overall, evidence suggests that targeting women entrepreneurs results in higher success rates, and global efforts to reach rural girls should be bolstered in order to overcome the host of structural barriers to their success. This report presents further actions that can be taken to nurture entrepreneurship and innovation among rural girls, and the benefits of doing so.

POLITICAL EMPOWERMENT

The issues at stake in empowering rural girls' voices and agency range from the personal to the political. Empowerment can mean having an active voice in deciding whom to marry or which career to pursue, in addition to having a government that acknowledges the challenges of rural girls and faithfully represents their interests. Youth attitudes about government vary around the world, but the International Youth Foundation's 2017 Youth Wellbeing Survey, which covered 30 countries, found that 67 percent of surveyed young people did not believe their countries cared about their wants and needs.¹² Interestingly, youth from lower-income countries reflected a greater sense that their countries cared than higher-income countries.

Girls have been increasingly acknowledged as valuable government advisors and advocates. For instance, in 2011, the same year as *Girl's Grow's* publication, the United Nations established the International Day of the Girl Child for the first time. Since this declaration, there have been more and more movements to bring girls' voices to the fore through events, films, and book projects as well as official forums like the "Girls 20" group, which aims to influence the G20. These will be featured throughout *Girls Leading*. Recognizing that bringing increased attention to girls is critical to governance capacities, *Girls Leading* highlights the particular need to welcome rural girls' voices to the table in local, national, and global settings. Moreover, it will provide suggestions for how to do so.

NATURAL RESOURCE MANAGEMENT

Programs like 4-H equip girls and young women with entrepreneurship training, agricultural knowledge, and natural resource management skills. However, a key part of preparing adolescent girls to be major stakeholders in agriculture and natural resource management



is securing land access for women and ensuring that financial services are accessible to girls so they are empowered to be decision makers. With women holding only 12.8 percent of agricultural land worldwide, major efforts are needed to increase the number of women farm holders and expand women's role in agriculture and natural resource management.¹³ Some notable work has been done to address the legal, cultural, and financial barriers to women playing a leadership role in agricultural and natural resource sectors. Reviewing this progress points to ways additional strides can be made to help girls take on natural resource management roles.

India provides a good example of the positive impact of modifying legal structures as well as the limits of these modifications. In India the Hindu Succession Act of 1956 significantly restricted land inheritance rights for female relatives, which some argue is a fundamental structural factor in the continuing disempowerment of women. After several states implemented reforms, the national government passed a law in 2005 granting equal access to inheritance rights for women. However, cultural norms about the value of girls and women, in addition to practices like the dowry, have persisted. In many cases, inheritance did not increase for daughters despite the new law. But additional effects for women and girls are beginning to emerge. An intergenerational analysis published in the *American Economic Review* in 2017 demonstrates that while there was a documented and significant increase in the number of years of schooling for the first generation of girls affected by the land tenure reform, in the next generation there was no statistically significant impact on girls' education, and boys' education levels decreased slightly.¹⁴ Thus, legal reform in India demonstrates that legal adjustments are important but ultimately insufficient on their own. Further work to address cultural and social limitations must be done.

Given the persistence of social and cultural challenges, programs have been created to address the attitudes of families toward women's inheritance and to prepare girls to inherit and manage land in accordance with their rights. The "Girls Project" by Landesa is one such program. Landesa works to champion and advise on policies and strategies for strengthening women's land rights. It also includes a program focused on sensitizing boys to the new rights and responsibilities of girls so that as girls come of age, their participation in land management is seen positively.

In addition to legal and cultural barriers, women and girls face significant financial barriers to attaining managerial roles. Overall, access to bank accounts among young adults is shrinking. The number of adults with access to a bank account rose from 51 to 69 percent from 2011 to 2017, but the gender gap remains unchanged at a stubborn 7 percent.¹⁵ Since the number one reason for not opening a bank account is reportedly “not enough money to open an account,” helping adolescent girls and young women access economic opportunity is the primary way to help them gain financial services access. But there are also programs and policies that target adolescents and young women directly, and in those places progress is visible. In Uganda, for example, the percentage of women with accounts rose from 15 to 23 between 2011 and 2014.¹⁶ Overall, recent trends at the global and national levels indicate that steps are being taken to support girls legally, socially, and financially in land management roles, but more can certainly be done.

Given the persistence of social and cultural challenges, programs have been created to address the attitudes of families toward women’s inheritance and to prepare girls to inherit and manage land in accordance with their rights.

HEALTH

The top two causes of death among adolescent girls globally are suicide and maternal mortality, a strikingly brutal statistic for people barely entering their second decade of life. There has been progress, and maternal mortality rates are down around the world by considerable amounts, falling by 44 percent since 1990.¹⁷ However, the highest risk factors for death are rurality, poverty, and being under the age of 18 years. This means that rural girls are among the most at risk in the world.¹⁸

While there have been improvements in rural girls’ access to health services since 2011, there is still much work to be done. For instance, although the overall HIV infection rate declined by 16 percent from 2010 to 2016, there has been an alarming increase in HIV and AIDS infection rates among adolescent girls and young women in high-prevalence regions. New infections among adolescent girls and young women aged 15 to 24 years were 44 percent higher than they were among men in the same age group. In Sub-Saharan Africa the number of adolescent girls and young women aged 15 to 24 years newly infected with HIV was double the number of young men.¹⁹ Greater emphasis must be placed on HIV services for rural girls and young women to address and prevent challenges like these. Moreover, rural girls are less likely to have access to sexual health education and health centers, and only 56 percent of births are attended by a health professional in rural regions, compared to 87 percent in urban settings. The lack of adequate access to educational and medical resources indicates that this is a key area where more can be done.

Another health-related area to address is mental health. As mentioned above, suicide is one of the leading causes of adolescent girls’ deaths. Poverty is strongly correlated with incidence of suicide; 78 percent of suicides take place in low- and middle-income countries.



Compounded by persistent gender discrimination and limited access to opportunity, poor girls in communities with few opportunities for mental health treatment are uniquely afflicted by suicide. For example, rural women in China have died by suicide at a rate far higher than men and than the global average for decades, but concerted efforts have helped to lower it.²⁰ Still, in Southeast Asia as a whole, suicide rates among rural girls and women remain very high. The rate of death by suicide is 27.92 per every 100,000 females between 15 and 19 years, more than five times the rate in Europe and the Americas.²¹ And while rates are lower in the United States, suicides have become increasingly prevalent in recent years, hitting a 40-year high in 2015 among girls aged 15 to 19 years. The US Centers for Disease Control and Prevention has also mapped where suicides have been increasing in the general population. The most substantial rates of increase are in rural states, showing yet again that rural girls are an invisible but critically affected demographic.²² Globally, more can and should be done to address the mental health needs of rural girls.

The highest risk factors for death are rurality, poverty, and being under the age of 18 years. This means that rural girls are among the most at risk in the world.

SAFETY AND SECURITY

It is impossible to report on progress regarding global rates of violence against girls due to a lack of data, and rates of violence against women do not appear to show any measurable global change in the time since *Girl's Grow*. This is another reason to develop methodologies to better capture the experiences of rural girls. One thing we do know is that violence against rural girls is most likely to occur at the hands of an intimate partner. The statistics are stark: 1 in 10 girls worldwide has been forced into a sexual act to which she did not consent, and the number of women married before 18 years stands today at 750 million. India, which has the highest rate of early marriage in the world at 27 percent, also has seen the most dramatic reduction in child marriage, falling from 50 percent a decade ago. However, some states, like Bihar, have child marriage rates as high as 69 percent. Early marriage is also highly correlated with domestic abuse within a marriage. In South Asia 29 percent of women who were married before the age of 15 reported domestic violence within the past year, a rate 9 percent higher than their counterparts who married

as adults.²³ Rural girls and women are also vulnerable to long-held beliefs—often held by abuser and abused alike—that sexual violence is justified. Globally, 44 percent of girls believe it is sometimes justified for women to be abused by their partners.²⁴

While intimate partners and family members are the main threat to girls' health and safety, schools can also foster sexually threatening environments. An estimated 246 million boys and girls experience school-related violence, and one in four girls reports she never uses latrines due to fears about her safety. Attitudes must change for norms and policy to follow suit. In some places, current events indicate a promising shift away from attitudes and beliefs that victimize rural girls. For example, in India mass protests took place in early 2018 against the rape and killing of a five-year-old girl in Kashmir. The levels of public outrage had not been seen since the prolonged sexual torture and death of a 21-year-old woman on a bus in New Delhi in 2012. The ensuing public debate spurred the government into passing tougher laws on violence against women.²⁵ These events and general knowledge about the violence girls face demonstrate the dire need to improve data about rural girls' experiences as well as the need to develop policies to prevent such violence from happening. The connection between physical violence and state security must be kept in mind as policymakers work to eliminate violence against girls. *Girl's Leading* explores the critical need to address these issues and proposes suggestions for tackling them.

Endnotes

- 1 "Girl Center," Population Council, last modified 2018, <https://www.popcouncil.org/girlcenter>.
- 2 United Nations, "About the Sustainable Development Goals," United Nations, accessed November 16, 2018, <https://www.un.org/sustainabledevelopment/sustainable-development-goals>.
- 3 Plan International, *Counting the Invisible: Using Data to Transform the Lives of Girls and Women by 2030* (Woking, UK: Plan International, 2016), <https://plan-international.org/publications/counting-invisible>.
- 4 Plan International, *Counting the Invisible*, 6.
- 5 "Frequently Asked Questions," data2x, last modified 2017, <https://web.archive.org/web/20180618080244/http://www.data2x.org/resources/faqs>.
- 6 Upmanyu Trivedi, "Aadhaar: World's Largest ID Database Exposed by India Government Errors," *The Economic Times*, May 15, 2018, accessed November 16, 2018, <https://economictimes.indiatimes.com/news/economy/policy/worlds-largest-id-database-exposed-by-india-government-errors/articleshow/64169884.cms>.
- 7 UNESCO Institute for Statistics, "School Enrollment, Primary, Female (% Gross)" (data, The World Bank), accessed November 16, 2018, <https://data.worldbank.org/indicator/SE.PRM.ENRR.FE>.
- 8 UNESCO, *Global Education Monitoring Report Gender Review 2018: Meeting Our Commitments to Gender Equality in Education* (UNESCO: 2018), <https://unesdoc.unesco.org/ark:/48223/pf0000261593?posInSet=1&queryId=4bea3255-ad2e-4e9f-8eb2-622c01d84e9a>.
- 9 UNESCO Institute for Statistics, "Children Out of School, Primary, Female" (data, The World Bank), accessed November 16, 2018, <https://data.worldbank.org/indicator/SE.PRM.UNER.FE>.
- 10 Global 4-H Network Summit, "Global 4-H Sets its Sights on 25 Million Members," *Global 4-H Network Summit* (blog), October 12, 2016, accessed November 16, 2018, <http://global-4-h-network.com/blog/posts/global-4-h-sets-its-sights-on-25-million-members>.
- 11 Independent Office of Evaluation, *Project Evaluation: Republic of Ghana Rural Enterprises Project, Phase II, Interim Evaluation* (Rome: International Fund for Agricultural

- Development, October 2011), accessed November 16, 2018, <https://www.ifad.org/documents/38714182/39731686/rep.pdf/adda1cd2-6bd7-4c41-9167-95dd2685d860>.
- 12 Ritu Sharma, 2017 *Global Youth Wellbeing Index* (Baltimore: International Youth Foundation, 2017), <https://www.youthindex.org/sites/default/files/2017YouthWellbeingIndex.pdf>.
 - 13 Ana Paula de la O Campos et al., *Gender and Land Statistics: Recent Developments in FAO's Gender and Land Rights Database* (Rome: Food and Agriculture Organization of the United Nations, 2015), <http://www.fao.org/3/a-i4862e.pdf>.
 - 14 Nayana Bose and Shreyasee Das, "Women's Inheritance Rights, Household Allocation, and Gender Bias," *American Economic Review* 107, no. 5 (2017): 150–53.
 - 15 Asli Demircug-Kunt et al., "Account Ownership," in *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution* (Washington, D.C.: World Bank Group, 2018), 18–33, https://globalfindex.worldbank.org/sites/globalfindex/files/chapters/2017%20Findex%20full%20report_chapter1.pdf.
 - 16 Asli Demircug-Kunt et al., "Account Ownership."
 - 17 World Health Organization, "Maternal Mortality" (fact sheet, February 16, 2013), accessed November 16, 2018, <http://www.who.int/news-room/fact-sheets/detail/maternal-mortality>.
 - 18 World Health Organization, "Suicide" (fact sheet, August 24, 2018), accessed November 16, 2018, <http://www.who.int/news-room/fact-sheets/detail/suicide>.
 - 19 Avert, "Women and Girls, HIV and AIDS," Avert, accessed November 16, 2018, <https://www.avert.org/professionals/hiv-social-issues/key-affected-populations/women>.
 - 20 Susan Brink, "The Truth Behind the Suicide Statistic for Older Teen Girls," *Goats and Soda*, NPR, June 2, 2015, accessed November 16, 2018, <https://www.npr.org/sections/goatsandsoda/2015/06/02/409731413/suicide-no-1-cause-of-death-for-older-teen-girls>.
 - 21 Rachel Lewis, "Suicide Rate for Teen Girls Hits 40-Year High," *TIME*, August 4, 2017, <https://time.com/4887282/teen-suicide-rate-cdc>.
 - 22 Centers for Disease Control and Prevention, "Suicide Rising Across the US: More Than a Mental Health Concern" (data, CDC's National Vital Signs Statistics System), last updated June 7, 2018, <https://www.cdc.gov/vitalsigns/suicide/infographic.html>.
 - 23 Rachel Kidman, "Child Marriage and Intimate Partner Violence: A Comparative Study of 34 Countries," *International Journal of Epidemiology* 46, no. 2 (April 2017): 662–75, <https://doi.org/10.1093/ije/dyw225>.
 - 24 Girls Not Brides, "Violence Against Girls," Girls Not Brides, accessed November 16, 2018, <https://www.girlsnotbrides.org/themes/violence-against-girls>.
 - 25 Maria Thomas, "India's Supreme Court Upholds Death Penalty for 2012 Delhi Gang-Rape Convicts," *Quartz: India*, July 9, 2018, <https://qz.com/india/1323589/nirbhaya-verdict-supreme-court-upholds-death-penalty-for-2012-delhi-gang-rape-convicts>.

20 AUTHOR PERSPECTIVES



Girls Leading: From Rural Economies to Global Solutions brings together 20 authors to share their perspectives on rural girls and their potential to break the cycle of poverty and hunger and contribute to growth and development for their families, communities, nations, and the world. As the following 20 essays make clear, the future depends on rural girls' inclusion and empowerment. The essays encompass a myriad of voices and experiences, with authors coming from legal, academic, NGO, multilateral, diplomatic, private-sector, medical, and technology backgrounds. The authors draw on their research and firsthand experiences to highlight the needs of rural girls and solutions to the challenges they face. The experiences of rural girls are highlighted throughout. Collectively, these essays make a compelling case for greater attention and action to support rural girls across goals and sectors.



Why Rural Girls Will Claim the Future

REUTERS/Parwiz



By [Sir Fazle Hasan Abed](#), *Founder & Chairman, BRAC*

A girl's role in the rural economy is both precarious and filled with potential. In today's societies in transition, age-old traditions of oppression are in conflict with rapid social and economic changes. Urbanization is happening at such a fast pace that soon the rural-urban divide will all but disappear. These changes lead to new opportunities for girls as they grow into womanhood, but they also open up great uncertainties.

The economic success of these societies will be determined largely by how well we manage these uncertainties. We can start by creating viable opportunities for girls to enter the workforce. In my native Bangladesh, an estimated 4 million women now work in the ready-made garment sector, most of them having migrated from rural areas to the cities in search of a better life. Many of these women work long hours in dangerous and unsafe conditions, as became painfully clear in the 2013 collapse of the Rana Plaza garment factory complex, which killed 1,134 workers.

Yet it would be a mistake to condemn the rise of manufacturing and concurrent urbanization as a curse on Bangladesh's women. In years past, a Bangladeshi girl would often be married off at the age of 14 or younger. She would then remain trapped in a life of deprivation, rarely even leaving her husband's village. This still happens to an alarming degree, but girls from backgrounds of extreme poverty are increasingly proving themselves capable of disrupting intergenerational cycles of suffering and exploitation. Urban migration is taking place in part because of investments made in girls' education in recent decades.

In Liberia and Sierra Leone, where BRAC runs an array of social and economic empowerment programs, girls played a central role in managing the Ebola crisis.

Girls who could read basic instructions and measurements, even if only enough to work a sewing machine in a garment factory, were able to leave the village in search of a better life. They uprooted themselves in order to give their daughters a chance of an even better education. Many are now becoming entrepreneurs and taking on roles that were previously the domain of men.

To ensure our societies continue to progress, we need to radically increase the choices available to girls. We must provide the skills and knowledge they need to cope and thrive amid rapid ongoing change. BRAC recently developed a skills training program that deploys a traditional apprenticeship model that has been used for thousands of years, but until now was open only to boys. Around 60 percent of the participants are girls between the ages of 14 and 18. A randomized controlled trial shows that this apprenticeship program, called Skills Training for Advancing Resources (STAR), gives a huge boost to labor market participation and increases participants' earnings by 44 percent. It has opened up professions that would have otherwise been off-limits to girls such as mobile phone repair, appliance repair and maintenance, and light engineering. Research also shows the program spurs additional hiring by employers as opposed to merely training participants who displace other workers.



I love studying. My favorite subjects are history, geography, French, and science. I want to become a qualified midwife because I've seen a lot of difficulties in my community, especially where I live. We don't have a health center and all that. So that's what I want to become: a qualified midwife.

—Fanta Mballo, 18, Kolda, Senegal

In many countries girls are on the front lines not only with regard to economic transformation but also in other areas of development such as healthcare. In Liberia and Sierra Leone, where BRAC runs an array of social and economic empowerment programs, girls played a central role in managing the Ebola crisis. After the epidemic hit, schools shut down as the countries came to a halt. When family members fell ill, girls often had to take on the responsibility of managing the household, caring for the sick, and looking after younger siblings.

We found that effective training and empowerment programs boosted girls' resilience in the midst of disaster. BRAC runs a network of clubs for adolescent girls in Sub-Saharan Africa, including Liberia and Sierra Leone, called Empowerment and Livelihood for Adolescents (ELA). In a girls-only safe space, the program offers life skills and livelihood training led by peer mentors. Working in Sierra Leone, scholars from the London School of Economics, University College London, and the World Bank found that while Ebola caused post-crisis school enrollment to drop more than 20 percentage points, participation in this program offset that effect almost entirely. ELA effectively inoculated female survivors against many of the worst long-term impacts of the crisis.

Our next step must be to encourage girls to be as technology savvy as boys, with opportunities to be at the cutting edge of knowledge through the study of engineering and information technology, including artificial intelligence. Such disciplines will be among the pillars of the 21st-century knowledge society. Here, too, girls must be on the front lines.

The future now belongs to the daughters of the women I have described. Their mothers faced epidemics and tragedies with courage and grit so that the next generation might rise from poverty. We owe it them to ensure that all girls have opportunities to learn, thrive, and lead our societies forward.



What Rural Girls Can Say: A Climate Change Story Untold



By [Anoka Primrose Abeyrathne](#), *Asian Pacific Representative, UN Habitat Youth Advisory Board, Women Deliver Young Leader*

All across South Asia, young girls in rural areas are facing the brunt of climate change in ways that may appear completely unrelated to climate change: accelerating poverty, leading to early marriages; rural girls being bartered off to well-off families to whom money is owed; suicides of desperate and destitute farmers, leaving their children, especially their young daughters, at the mercy of their patriarchal communities.

At face value, these situations may seem far removed from climate change. In reality, however, the challenges are inextricably linked.

Behind the farmer's suicide: untimely and heavier than normal monsoon rains wrought havoc on his crops, dashing any hopes for income at a time when he was already being crushed under the weight of his outstanding debts. He hoped that by taking his life, the insurance money that followed would help his family stay afloat.

Behind the young girl bartered off to a well-off family: unexpected and devastating flooding forced her family to flee their ancestral lands and migrate to a new and harder life in a different part of the country.

Behind the young girl bartered off to a well-off family: unexpected and devastating flooding forced her family to flee their ancestral lands and migrate to a new and harder life in a different part of the country.

Behind rural girls without access to education or employment opportunities: because the community cut down all the trees and plundered the rivers of any remaining fish, they now have no resources to rely on to sustain their livelihoods.

These examples illustrate how climate policies have fallen short and why the Paris Agreement and the Sustainable Development Goals relating to climate change remain a distant reality.



In the past what we cultivated used to produce good yield. Now, the production has greatly reduced. There were good rains. Now, the weather has significantly changed. The rain [begins] late and [stops] early. This has negative impact on the production.

—Caregiver from Leki, Ethiopia

This gulf exists because we view climate change and rural girls in silos. We see rural girls as a women’s empowerment challenge and fail to approach solutions in a holistic manner. We must connect the dots between sustainable development, education, livelihoods, and climate change if we wish to see girls in rural areas—and society at large—thrive and prosper.

Our decision makers need to look at the whole picture. The failure to do so has resulted in climate policy being labelled as “antidevelopment” and “antigrowth.” Policymakers need to look beyond the documents and technicalities to focus on the realities at the grassroots level where the growing numbers of affected vulnerable communities live.

Rural girls in particular are left with the very short end of the stick because of climate change-based migration, loss of childhood opportunities, and barriers to education. For all our aims at equality and empowerment, we fail to perceive the intricate web that the environment spins in their lives. Rural girls are unable to voice their concerns about the increasing inequalities before them or the abject poverty they are mired in as a result of climate change. The failure to do so results in generations facing the repercussions of climate change-led issues, which will eventually metastasize like an aggressive tumor.

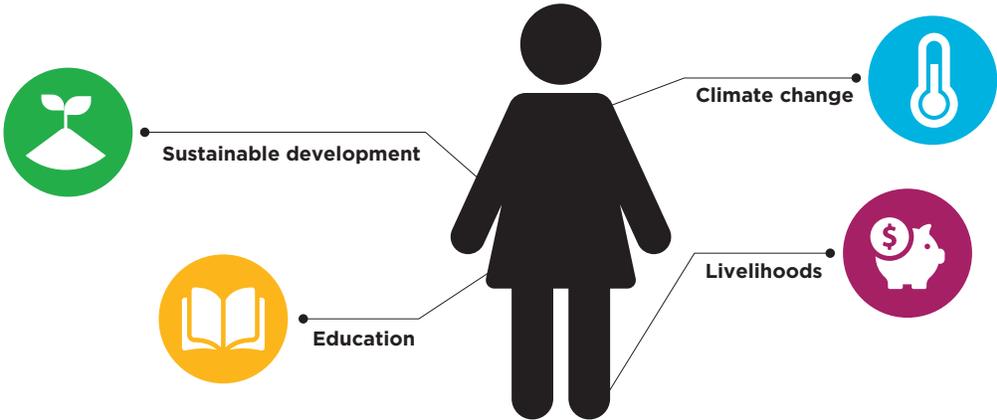
Girls from rural areas do not have access to policy channels, and most do not use social media for these purposes and are not likely to. They do not see the importance of their voices, having been excluded from policy dialogues and decision-making processes for so long.

This is what needs to change for climate policy to succeed. We need to stop seeing climate change as a purely scientific phenomenon. It is a largely human-led effect, which affects humans themselves, especially the girls and women of remote and rural corners of the world. Only once we commit to understanding, recognizing, and voicing these realities will we effectively shift serious attention and action on this growing global crisis—one that threatens our very civilization.

Many corporate institutions are already adopting girls and climate change-related initiatives through women empowerment programs at the rural sites where their factories are located. These companies are also adopting essential programs to ensure sustainable and ethical use of resources because of costs such as reuse of water and reduction of energy intensity through solarization.

These are the types of actions that should translate into policy—not with effusive or lofty policies, but simple, action-oriented policies that support climate action, environmental consciousness, and in turn the countless rural girls of our generation. That is true policy applicable in this day and age, not the volumes of words that gather dust and waste valuable time on its “interpretation.”

We must connect the dots between sustainable development, education, livelihoods, and climate change if we wish to see girls in rural areas—and society at large—thrive and prosper.





Men and Boys as Allies in the Empowerment of Rural Girls



By [Gary Barker](#), *President & CEO, Promundo*

There is some good news when it comes to gender equality around the world. The younger generation of boys and girls in the world's poorest countries are more likely to be educated and to have access to the internet than their parents. They are also more likely to believe that boys and girls as well as women and men should have equal opportunities. But the good news pretty much stops there.

Global research on men and gender equality from Promundo finds that women and girls in rural areas often face higher rates of violence from male partners, more barriers to education and paid work, and heavier care burdens than women and girls in urban areas. Furthermore, everywhere we have studied the issue in the Global South, rural men have more conservative views about their wives and daughters.

Life is not easy for boys and men in rural areas either. Across regions of the world in which we have worked, poverty continues to drive young men to urban areas for work and makes it difficult for them to form families. For some rural-based men, there is an acceptance that women should also work. But other men, like this one in Morocco, are not ready to accept the full empowerment of women: "Today, a man has to be of a high standing, with a university diploma, to be able to marry and have children. A salary of 3,000 dirhams (US\$300) is not enough for the needs of a family. And so women also have to go to work. *That's a problem.*"

Increasingly, our research has found that men's economic stress—in rural and urban areas—is one of the drivers of their use of violence against women. We also find that some

men, especially in rural areas, resist the participation of their wives or partners in economic empowerment, paid work, or microcredit programs. And in some cases, we find that men's use of violence against women in some settings in Africa and South Asia goes up in the short term when their wives or partners participate in economic empowerment programs.

Men like this one in Morocco are not ready to accept the full empowerment of women: “Today, a man has to be of a high standing, with a university diploma, to be able to marry and have children. A salary of 3,000 dirhams (US\$300) is not enough for the needs of a family. And so women also have to go to work. That’s a problem.”

How then can we engage men and boys as allies to empower women and girls and to reduce violence against them? Promundo's research has found that school-based violence prevention programs (particularly gender-transformative methodologies for students and teachers such as [Program H](#)), community norm change approaches, bystander intervention programs, and parent training to reduce use of corporal punishment can work. All of these have shown evidence of impact in rigorous evaluation studies. A recently completed [randomized controlled trial \(RCT\)](#) of [Program P](#) for fathers and couples, adapted and implemented in rural parts of Rwanda, found that men in the intervention group are nearly half as likely to use violence against their female partners and less likely to use violence against their children.

“

**Our roles are equal; there is nothing she can do that I can't do.
Similarly, there is nothing I can do that she can't do.**

—Promundo participant from Rwanda

In conflict-affected areas, where communities affected by violence, trauma, and displacement have few support programs, the work to build peaceful societies must also include psychosocial support methodologies such as [Living Peace](#) and [Youth Living Peace](#). These approaches are particularly important in light of research identifying a strong link between men experiencing or witnessing violence and trauma in conflict and later perpetration of violence at home.

Rural girls' inequitable burden of unpaid house and care work also forms significant barriers to their education, economic empowerment, and participation in peace and security processes. Thus, our MenCare campaign works to engage boys and men in sharing the domestic work as a key strategy to alleviate the disproportionate burden on girls. This includes gender-transformative programming to encourage nonviolent participation in care work; advocacy to promote parental leave, end corporal punishment, and challenge structural inequalities; and media campaigns to inspire men and boys to share the domestic work with girls and women. The RCT of MenCare's Program P revealed that men who participated in the intervention spent almost one hour more per day on unpaid care work as compared to men in the control group.

All of these approaches have two things in common. First, they focus on engaging men and boys in questioning ideas about manhood that too often continue to position women and girls as second-class citizens. These gender-transformative interventions focus on changing restrictive gender norms and inequitable attitudes about masculinity. Second, they build on engaging men and boys who already believe in gender equality. Low-income men in parts of the Global South are often perceived as automatically or inherently oppositional to women's rights and girls' empowerment. Our work builds on the positive—tapping into the voices of men and boys who believe in equality and who live it—men like this individual from a rural area in Rwanda, who says: “Our roles are equal; there is nothing she can do that I can't do. Similarly, there is nothing I can do that she can't do.”

Engaging men and boys in rural girls' empowerment cannot be implemented as a quick-fix, “male champions” solution. Shifting men's attitudes, practices, and notions of masculinity must include approaches to create supportive structures, institutions, and policies in close connection with women's movements and girls' perspectives. But we know that change is possible. And that men and boys must be a part of it.



School Feeding for Girls: A Win-Win for Gender Equality



By Ambassador Delphine Borione, *Permanent Representative of France to the United Nations organizations in Rome*

Education is essential to gender equality and girls' empowerment. This is undeniable: it has been illustrated and demonstrated many times over. Education helps break the vicious circle of poverty in many ways. As adults, educated girls are more likely to take part in the economic system, participate actively in the labor market, generate incomes, and therefore provide for their needs and those of their family. Moreover, girls who go to school are less exposed to violence, early marriage, early pregnancy, or diseases, including HIV. The benefits of education on girls are multiple, presenting significant opportunities to build and strengthen their empowerment.

1 IN 10

GIRLS IN THE WORLD IS OUT OF SCHOOL.



Yet girls still face many difficulties to access education. According to UNESCO, 1 in every 10 girls in the world is out of school. Dropout figures are especially high in Sub-Saharan countries. There are numerous barriers to rural girls' access to school, preventing them from fully embracing the opportunities given by education. In most cases, girls are kept out of school to participate in domestic tasks or to help their family. Parents are usually unaware of the opportunities offered by a regular and qualitative education or cannot afford the "cost" of education—even though the money spent can constitute both an investment and a future income. The obstacles for girls to go to school undercut their chances to build a safer and brighter future. Overcoming these hurdles must be a priority. Sustainable solutions must be implemented to foster girls' access to school and prevent dropouts—not only for the girls themselves or their families but for the whole of society.



We couldn't get breakfast last year. We used to go to school without eating anything. We could not follow lessons properly due to hunger, and this contributed to the dropout of my sister and myself.

—Shashitu, Leiki

Among the solutions for rural girls' education found over time, school feeding programs stand out as a key remedy. By offering children nutritive and healthy meals, snacks, or take-home rations, school feeding programs promote school enrollment and attendance. The food provides a compelling incentive for families to enroll girls in school, helping to close the domestic expense gap that would otherwise influence parents' decision making. School feeding programs also have an important impact on girls' health and cognitive development. They significantly strengthen their ability to learn and therefore increase their capacity to get the most out of the education they receive. These short-term benefits of girls' education and health can actually contribute to long-term impacts on the economy by increasing performance, productivity, and employability as adults. A study conducted by the World Food Programme showed that every US\$1 invested in school feeding programs brought a US\$3 to US\$8 economic return.

In March 2018, France endowed a new international strategy for gender equality that reaffirms its commitment to reaching SDG 5 (achieve gender equality and empower all women and girls). The French gender strategy defines a broadened approach by mainstreaming gender, not only in France's development cooperation but also in every aspect of France's foreign policy. One of the key sectorial pillars of the international strategy for gender equality is to ensure free and equal access for girls to basic social services and, in particular, to education. In this respect, France is strongly engaged in fighting against barriers that

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prevent girls' access to school. By offering plurisectorial benefits, school feeding programs are perfectly aligned with the gender mainstreaming approach endowed by France. Support for school feeding programs indeed constitutes a cornerstone of its contributions to the World Food Programme, with a special focus on Sub-Saharan countries.

I am strongly convinced that school feeding programs, by fostering school enrollment and attendance, can not only contribute to bridging the gender gap in rural areas, but can also help girls fulfill their potential to be central actors of the economic system. If we want to overcome the barriers impacting girls' ability to be leaders in their communities, school feeding programs deserve our fullest attention and support. Their contribution to achieving girls' empowerment, especially in rural areas, cannot be underestimated.



Gender-Based Violence Against Rural Girls in Brazil

REUTERS/Zohra Bensemra



By [Bárbara Jéssica da Silva Paes](#), *Founder of Minas Programa, Women Deliver Young Leader*

Girls in rural Brazil often face conditions that undermine their safety and well-being. An estimated 14 million Brazilian women live in rural regions and in extractive reserves, including *quilombola* and indigenous communities.¹ Many of them are young girls. Child mortality rates in rural Brazil are higher than in urban areas, and children and adolescents are often relegated to work in family agriculture and face sexual exploitation and domestic violence.²

Gender-based violence is a widespread phenomenon across Brazil, and many of those who face this harsh reality are girls. In 2014 the Brazilian female population reached over 103 million, and an estimated 20 percent of them have reported suffering some sort of violence perpetrated by a man.³ At the same time, 70 percent of all those who suffer sexual violence in the country have been identified as children and adolescents.⁴

Movimento da Mulher Trabalhadora Rural do Nordeste is a social movement born out of the historical struggle of rural female workers to guarantee their rights.⁵ As one of the coordinators of the organization, Maria Verônica de Santana sees ending violence against rural girls and women as indispensable for the movement. “As a women’s movement, we believe that confronting any and all forms of violence is a principle to get autonomy. Without fighting violence, we will not be able to advance in political participation,” Maria Verônica said. “We believe that what we have achieved in improving rural girls’ lives is the result of all the historical struggles of the local women’s movement. We still need to make

One-fifth of Brazilian women have experienced **gender-based violence**.³



great progress. The many cases of physical violence and lack of perspectives for young girls (which we also consider a form of violence) are still numerous.”

Maria Verônica shares that the pressure for young girls to get married and to be obedient to romantic partners—as well to other men of the family—still persists in the mindsets of many of those who live in the rural areas. “The lack of autonomy over their own bodies occurs in a much more perverse way in rural areas, where family and community relations exert a weight on women’s lives.” And that often results in devastating scenarios for young girls: many of them end up marrying during their adolescent years, plunging them into a life where domestic violence and abuse is not rare. According to one estimate, Brazil is ranked fourth in the world in absolute numbers of women married or cohabitating by the age of 15.⁶

The ability to openly discuss violence against girls in the Brazilian rural context is a barrier that still needs to be faced. For a significant part of the population, gender-based violence is still a topic that does not need to be or that should not be publicly discussed. In addition, authorities still do not see violence against girls and women as a matter of public security. Maria Verônica believes there is a reason for that: “Taking women [and the issues they face] from the private sphere and occupying public spaces is such a challenge [because] it makes gender-based violence a political issue and not a private, family situation.”

“Machismo and the patriarchy are still very present in the rural communities I work,” according to Raquel de Moura, an educator from Casa da Mulher do Nordeste, a feminist nonprofit located in Pernambuco, a state in the northeast region of Brazil. The dominance of conservative values is an impending issue for Raquel. She believes it might inhibit many girls from speaking out about the violence they face. Gender-based violence in Brazil can have especially problematic consequences for rural girls, since access to the justice system, economic resources, and support services for victims is very scarce in those regions. According to both Raquel and Maria Verônica, the public structures and tools used to fight violence against girls and women do not reach the rural regions.

The fact that important public services like specialized security and justice care, shelters for victims of domestic violence, mental health facilities, and other programs are absent from the rural areas in Brazil is also seen by many activists as a violation of girls’ and wom-



en's rights. "By not promoting adequate public policy to mitigate violence against women in rural areas, the government ends up reinforcing this phenomenon," says Maria Verônica.

Violence against women is an issue that calls for incisive action from the state through the promotion of public policies aimed at guaranteeing the security of girls and women. In this sense, it is imperative that quality information is produced and made available. Official information and statistics on violence against rural girls in Brazil is essential to the elaboration of public policies aimed at mitigating this phenomenon as well as for the organizations and activists working to defend girls' rights. However, high-quality data about the prevalence, frequency, and consequences of violence against women and girls is not being produced and published.⁷ "The inability of grasping the full extent in which violence against rural girls plays out can be limiting," Raquel says. The life conditions as well as the safety and well-being of rural girls need to be properly assessed, measured, and understood in order to design strategies to end the violence they suffer.

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In March 2018, Brazilian women leaders visited the United Nations headquarters in New York for the 62nd session of the Commission on the Status of Women.⁸ The meeting was focused on the challenges and opportunities in achieving gender equality and the empowerment of rural women and girls. Now, governments must immediately attend to addressing violence against girls and women in the rural context. The lack of sufficient institutional responses⁹ to gender-based violence is unacceptable, and the creation of effective public policy aimed at improving the lives of rural girls must be prioritized.

Endnotes

- 1 ONU, “Mulheres rurais querem trabalho, crédito, políticas de habitação e uma vida sem violência,” *ONU Mulheres*, March 23, 2018, <http://www.onumulheres.org.br/noticias/mulheres-rurais-querem-trabalho-credito-politicas-de-habitacao-e-uma-vida-sem-violencia>.
- 2 Jorge Atílio Lulianelli, “Crianças e jovens: as principais vítimas,” in *Direitos negados: a violência contra a criança e o adolescente no Brasil*, 2nd ed. (New York: UNICEF, 2006), https://www.unicef.org/brazil/media/4021/file/Direitos_Negados.pdf.
- 3 SESC, *Mulheres Brasileiras e genero nos espacos publico e privado* (São Paulo: SESC, August 2010), https://fpabramo.org.br/publicacoes/wp-content/uploads/sites/5/2017/05/pesquisaintegra_0.pdf.
- 4 BBC, “70% das vítimas são crianças e adolescentes: oito dados sobre estupro no Brasil,” *BBC News*, April 24, 2017, <https://www.bbc.com/portuguese/brasil-36401054>.
- 5 Working within the nine states of the northeast region of the country, MMTR-NE defends feminist, agro-ecological, antiracist values. Its mission is to build fair and egalitarian relations between women and men in the Brazilian Northeast.
- 6 Viviana Santiago, “El sei que voce duvida, mas existe sim casamento infantil no Brasil!” *PLAN International* (blog), October 3, 2017, <https://plan.org.br/blog/2017/10/eu-sei-que-voce-duvida-mas-existe-sim-casamento-infantil-no-brasil>.
- 7 Open Government Partnership, “How Is Open Government Related to Violence Against Women in Brazil?” Open Government Partnership Stories, March 7, 2017, <https://www.opengovpartnership.org/stories/how-is-open-government-related-to-violence-against-women-in-brazil>.
- 8 UN Women, “CSW62 (2018),” UN Women Commission on the Status of Women, accessed December 3, 2018, <http://www.unwomen.org/en/csw/csw62-2018>.
- 9 The website containing information about the programs promoted by the Brazilian government to end violence against rural women was last updated in 2013.



Why We Need to Equip Rural Girls for Climate Change

REUTERS/Lorgina Minguito



By [Shenggen Fan](#), *Director General, International Food Policy Research Institute*

Globally, women and girls face greater vulnerabilities—economic, social, and cultural—than men and boys. There are 330 million poor women and girls—5 million more than poor men and boys—and women are more likely to be food insecure than men in every region. ¹Women and girls face further pervasive disadvantages from lower education levels, less access to agricultural information and extension services, and limited land ownership and authority over household resource allocation. ²

Under climate change, gender-based inequalities contribute to a disproportionate impact on women and girls, as described in a recent IFPRI report. ³ These inequalities include differences in household responsibilities—such as fuel and water collection—as well as access to resources and institutions. ⁴ Gender-based differences in capacities to absorb and adapt to climate-related shocks—as well as differences in household decision making—can also lead to coping mechanisms that disadvantage girls. New research provides insight into the specific challenges faced by girls due to climate-related negative income shocks on households in developing countries.

One common household response to negative income shock is to withdraw children, especially girls, from schools. Financially stricken families lack the funds needed to support education, including clothing and other school-related expenses, and will need children to assist in household chores. ⁵ A study in Ghana found that increased time hauling water significantly lowers the proportion of girls aged 5 to 15 attending school. Furthermore,

One common household response to negative income shock is to withdraw children, especially girls, from schools.

having more children under age five also reduced the proportion of girls attending school, likely due to the need for childcare. Households headed by males also showed a lower proportion of girls attending schools, as female heads may have stronger preferences for daughters to continue their education.

Research indicates that another hypothesized result of income shock is the early marriage of girls, especially in regions where bride payment is customary. Households may resort to this coping mechanism to secure a safer or more food-secure household for daughters while also relieving economic burden on the household.⁶ A study conducted in a different region however did not indicate statistically significant evidence of shocks inducing earlier marriage of girls.⁷ While causal evidence is weak, the issue warrants further research, as 25 countries with the highest rates of reported child marriage are considered fragile states or countries at high risk of natural disasters.⁸ The relationship between climate change, education, and early marriage is important, as girls with fewer years of schooling are more likely to marry early, and child marriage reduces educational attainment.⁹

Climate impact on agriculture affects the well-being and livelihoods of women and girls. Projections show that by 2050 wheat yields will be 49 percent and 36 percent lower in South Asia and Sub-Saharan Africa, respectively, and rice yields will be 15 percent lower in both regions due to climate change. Lower yields would not only result in greater food insecurity and lower incomes, but also could lead to unequal nutritional outcomes for females due to gender dynamics such as preferential allocation of foods to men, with women, once again, eating less and last.¹⁰

Addressing these specific challenges facing rural girls and women will be key not only for their empowerment but also to address climate change. One priority will be to invest in girls' education and training. Educating girls can decrease their chances of early marriage

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and enhance future employment opportunities.¹¹ It is also imperative that girls' education includes training on climate-related resources and improved adoption of climate-smart practices.¹² Education for both women and men is a key factor in household coping mechanisms disadvantaging girls. In Bangladesh, for example, a male household head's education was significantly associated with better nutrition and education outcomes for both girls and boys. When women were more educated, younger girls aged 6 to 10 as well as older boys and girls aged 11 to 17 were more likely to receive more education.¹³

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Girls, who are the future of rural economies, need to be equipped to adapt to their changing environment. Research has become one of the most critical tools in this effort, as the limited evidence and knowledge we have needs amplification. Building a solid evidence base for the relationship between climate change and girls' education, nutrition, health, and welfare is vital for girls' lives. Participatory research is also needed to provide context-specific knowledge of experiences to build on coping strategies and priorities that have already been proved. In this regard, institutions such as the CGIAR Collaborative Platform for Gender Research will play a crucial role.

Endnotes

- 1 UN Women, *Turning Promises into Action: Gender Equality in the 2030 Agenda for Sustainable Development* (New York: UN Women, 2018), <http://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2018/sdg-report-gender-equality-in-the-2030-agenda-for-sustainable-development-2018-en.pdf>; FAO et al., *The State of Food Security and Nutrition in the World 2017: Building Resilience for Peace and Food Security* (Rome: FAO, 2017), <https://docs.wfp.org/api/documents/WFP-0000022419/download>.
- 2 C.R. Doss, “Designing Agricultural Technology for African Women Farmers: Lessons from 25 Years of Experience,” *World Development* 29, no. 12 (2001): 2075–92; C. Doss et al., “Gender Inequalities in Ownership and Control of Land in Africa: Myth and Reality,” *Agricultural Economics* 46, no. 3 (April 2015), <http://doi.org/10.1111/agec.12171>; FAO, *The State of Food and Agriculture 2010-11: Women in Agriculture: Closing the Gender Gap for Development* (Rome: Food and Agricultural Organization of the United Nations (FAO), 2011), <http://www.fao.org/publications/sofa/2010-11/en>; C. Kieran et al., “Examining Gender Inequalities in Land Rights Indicators in Asia,” *Agricultural Economics* 46, no. S1 (September 2015): 119–38, <http://doi.org/10.1111/agec.12202>; A. Peterman et al., “Understanding the Complexities Surrounding Gender Differences in Agricultural Productivity in Nigeria and Uganda,” *Journal of Development Studies* 47, no. 10 (2011): 1482–509.
- 3 Elizabeth Bryan et al., “Gender-Sensitive, Climate-Smart Agriculture for Improved Nutrition,” in *Africa South of the Sahara: Regional Strategic Analysis and Knowledge Support System (ReSAKKS), Annual Trends and Outlook Report 2017*, ed. Alessandro De Pinto and John M. Ulimwengu (Washington, DC: International Food Policy Research Institute, 2017), https://www.resakss.org/sites/default/files/Ch9%20ReSAKSS_AW_ATOM_2016_Final.pdf.
- 4 Bryan et al., “Gender-Sensitive, Climate-Smart Agriculture for Improved Nutrition.”
- 5 Ellen Chigwanda, *A Framework for Building Resilience to Climate Change through Girls’ Education Programming* (Washington, DC: Brookings Institution, December 2016), <https://www.brookings.edu/wp-content/uploads/2016/12/global-20161202-climate-change.pdf>.
- 6 Cheryl Doss et al., “Women in Agriculture: Four Myths,” *Global Food Security* 16 (March 2018): 69–74, <https://doi.org/10.1016/j.gfs.2017.10.001>.
- 7 Marshall Burke, Erick Gong, and Kelly Jones, “Income Shocks and HIV in Africa,” *The Economic Journal* 125, no. 585 (May 2014): 1157–89, <https://doi.org/10.1111/ecoj.12149>.
- 8 Gayle Tzemach Lemmon, “Fragile States, Fragile Lives: Child Marriage Amid Disaster and Conflict” (working paper, New York, Council on Foreign Relations, 2014); Chigwanda, *A Framework for Building Resilience to Climate Change*.
- 9 Chigwanda, *A Framework for Building Resilience to Climate Change*.
- 10 UN Women, *Turning Promises Into Action*; Helen Harris-Fry et al., “Status and Determinants of Intra-Household Food Allocation in Rural Nepal,” *European Journal of Clinical Nutrition* 72 (2018): 1524–36, <https://doi.org/10.1038/s41430-017-0063-0>; World Bank, *Gender in Agriculture Sourcebook (English) Agriculture and Rural Development* (Washington, DC: World Bank, 2008), <http://documents.worldbank.org/curated/en/799571468340869508/Gender-in-agriculture-sourcebook>.
- 11 Quentin Wodon et al., *Economic Impacts of Child Marriage: Global Synthesis Report* (Washington: World Bank and International Center for Research on Women, 2017).
- 12 Bryan et al., “Gender-Sensitive, Climate-Smart Agriculture for Improved Nutrition.”
- 13 Hazel J. Malapit et al., “Gender Empowerment Gaps in Agriculture and Children’s Well-Being in Bangladesh” (IFPRI Discussion Paper 1470, Washington, DC, International Food Policy Research Institute (IFPRI), 2015), <http://ebrary.ifpri.org/cdm/ref/collection/p15738coll2/id/129730>.



Agricultural Enterprises: An Engine of Impact for Rural Girls



By [Willy Foote](#), *Founder & CEO, Root Capital*

Odalís Noeme Guerrero was raised in the remote highlands of the Peruvian Andes. Ever since she was a little girl, she wanted to be a coffee farmer. But her father, a coffee producer himself, claimed it was “man’s work” and refused to let her join. While her brothers inherited property when they came of age, Odalís did not.

But Odalís wasn’t ready to give up. When her father refused to support her studies at the nearby technical institute, she paid her own way—waking up every day at 5 a.m. to clean other people’s houses and care for their children before class. Eventually, she convinced her father to let her practice farming on a small, unproductive plot that he had long given up on. Over time, she boosted production on that parcel from 200 to an incredible 1,800 pounds of coffee per harvest.

When we met Odalís, she was part of a two-member technical team at UNICAFEC, a coffee cooperative that aggregates 400 smallholder farmers. In fact, she was the only woman agronomist in the entire province of San Ignacio, teaching farmers how to properly prune, fertilize, and increase their yields. She’s illustrative of both the barriers that rural girls and young women face as well as the individual, household, and community benefits that are possible when they can equitably participate in the workforce. Odalís’ story is also the story of an overlooked but catalytic engine of impact in rural communities: the agricultural business.

Girls and women are the backbone of farming families. In low- and middle-income countries, they make up [48 percent](#) of the agricultural workforce; in some areas, up to 79 per-

cent. Young women, in particular, are a growing force. Today's youth population—1.2 billion and rapidly rising—represents both a challenge and a huge demographic opportunity for rural communities.

At the same time, young women face bigger constraints to rural workforce participation than young men. They have limited access to inputs such as seeds and fertilizer. They typically don't own or inherit land. If they want to invest in farm renovations or build a small business, they are less likely to be approved for a loan. When they find productive employment, they will almost certainly be paid less. And because of social norms and division of household responsibilities, they face constraints to working outside the home.

For young women like Odalis who are just entering the workforce, these barriers may seem insurmountable. But agricultural businesses—cooperatives, farmer associations, and small private enterprises—are well positioned to help rural girls minimize these obstacles and maximize opportunities. These businesses aggregate hundreds or even thousands of smallholder farmers, enabling their members to access local and global markets and earn higher incomes. They also provide critical services such as agronomic training and micro-credit that help producers make investments to build sustainable livelihoods.



The benefits that agricultural enterprises bring to smallholder farmers writ large are well documented. More recently, donors, lenders, and even some rural businesses themselves have begun making targeted investments to support rural women and girls. Although more data is needed, the results thus far are extremely promising.

Here’s just one example. Root Capital launched its Women in Agriculture Initiative in 2012 with the express goal of promoting greater economic opportunity for women by supporting small and growing businesses that are committed to gender inclusion. As part of this program, we partnered with rural enterprises in our lending portfolio to analyze barriers to full workforce participation of their female farmers and employees. We leveraged the deep gender expertise of Value for Women, which specializes in evaluating business practices with a gender lens, to help these enterprises design projects to improve their inclusion of women and enhance workers’ quality of life. In the pilot phase in 2017, we awarded \$20,000 in grants—supported by the IKEA Foundation and the Wagner Foundation—to three businesses in Kenya to implement their chosen projects, from creating internal savings and credit circles to constructing on-site childcare facilities to training women in new productive skills. Our assessment of the pilot phase found evidence of benefits at the individual, household, and enterprise levels. Among other things, workers reported increased savings, confidence, and capacity. Businesses reported gains in productivity, cost savings, and a more consistent supply base.



I advised my parents to plant trees, and they did plant eucalyptus trees along the river bank ... and even the community in Leki planted trees under the Safety Net [Productive Safety Nets Program] project and the rain returned to us.

—Biritu, aged 16, Leki, Ethiopia

For adolescent girls transitioning into the rural workforce, investments like these can make the difference between eking out a subsistence livelihood and building long-term resilience. Our participatory design process means that young women’s voices are heard and interventions are tailored to their distinct challenges and strengths. By involving the leadership of the agricultural businesses—oftentimes men—projects such as this also have the potential to shift community norms and behaviors. One manager at a nut processing facility noted, “Through implementing [these grants], I’ve learned that women are among the most powerful tool in our society and in our factory.”

This is just one example of how agricultural businesses can partner with young women to advance their mutual interests. When girls and women are active participants in rural economies, they move the needle on a whole host of issues. They help close the gender gap in education, reduce malnutrition, and invest a whopping 90 percent of their income back into their families (compared to 35 percent for men).



Maximizing these gains requires a cross-sector effort between businesses, philanthropists, gender experts, and more. Donors and investors in the development space need to prioritize a holistic gender and youth lens in their grant making and impact investing. Public-sector actors are well positioned to identify innovative and effective approaches to engaging young women in rural communities and inject larger amounts of capital to scale up impact. Finally, social lenders can draw on lessons from the work of Root Capital and others to help agricultural enterprises capitalize on the business-related benefits of investing in the next generation of female farmers, employees, and entrepreneurs. The next Odalis is out there, ready to grow a brighter future.

“

Through implementing [these grants], I've learned that women are among the most powerful tool in our society and in our factory.

—Manager at a nut processing facility



Girls: Commodity or Resource in a Changing Climate?



By [Renée Giovarelli](#), *Senior Attorney & Advisor, Resource Equity*

I have researched issues related to women and girls from over 40 countries. In every one of these countries it is common and often traditional for girls to be considered a commodity. When resources are limited because of poverty, climate change, or natural disaster, girls' usefulness as a commodity to exchange for something more valuable increases.

I believe that for this to change the international development community has to first acknowledge this fact and then convince girls, women, boys, men, policymakers, and government officials that girls are more valuable as educated, physically and mentally strong people with a voice—able to contribute to important conversations and national growth—than they are as young brides, uneducated household servants, or disposable property.

I know my view of girls' status sounds harsh, and it would be easy to dismiss my view as hyperbolic and attention-seeking. But let me describe the current situation for girls in West Bengal, India, as one example. For poor families in rural villages in West Bengal, each girl born to that family is a burden. With very limited resources, a daughter has to be fed and educated, and, most onerous of all, a dowry will have to be paid at the time of her marriage—how much will depend on the community standard, but it is always more than a poor family can afford. Certainly, while daughters live with their parents they contribute to the household by providing physical labor—they fetch wood and water and work as day laborers in brick factories or on large farms. But having too many daughters can bankrupt a family. For families with one daughter and one or more sons, the family may be able to

stay afloat because they will receive a dowry when their son marries. For families with many daughters and fewer sons or no sons, their survival is threatened.

What are their choices? Usually when young girls marry older men, the dowry is lower or no dowry has to be paid. If a family lacks enough money for school fees, girls have to leave school and the pressure to marry her off immediately becomes intense. If you let her grow older in your household, paying for her food and care, you will have to pay a larger dowry and she will lose her looks, making it more difficult to marry her off. Girls who remain in school are less likely to be married off. Today, there is some recognition that an educated girl is worth more than an uneducated girl, which is a start.

Now, add to this precarious life a natural disaster caused by climate change. Three out of four people living in poverty rely on agriculture and natural resources to survive. Floods and droughts brought on by climate change threaten food production and supply. According to the *Global Report on Food Crises*, climate disasters triggered food crises across 23 countries—mostly in Africa—with shocks such as drought leaving more than 39 million people in need of urgent assistance. Picture a family that is barely surviving losing their home or their land or their animals. Or their land simply produces less. Perhaps they have one or more adolescent girls who can go to the city and earn money as a servant in a household or can be married to a 60-year-old man who will not require a dowry and will take away one obligation. These girls are at risk of being trafficked, their commodification complete.



I always say that education is the best heritage you can give, better than giving them a piece of land. Nobody is going to get their studies out of their minds, but a piece of land—you sell it and that's it.

—Rural mother, Peru

Climate change is a huge and multifaceted issue. How do we get a country to focus on how it will affect adolescent girls? I think we have to see and treat adolescent girls as a resource, an asset in the fight against climate disaster and poverty. First, they must know their rights, their strength, and their value. Second, we must help them organize around the things they can do. For example, girls can raise food on very small pieces of land to help feed their family or raise funds. Many girls are optimistic and enthusiastic. They have not yet been beaten down by a lack of choice and agency. They are excited by bringing something new and valuable to their families. I have seen girls in West Bengal raise mushrooms in plastic bags under their beds and sell them for cash, which they give to their father. Suddenly, their fathers see their daughters differently. Girls who know their rights and

3 OUT OF 4

PEOPLE LIVING IN **POVERTY** RELY
ON **AGRICULTURE** AND NATURAL
RESOURCES TO SURVIVE.



are taught skills such as how to use their voice, how to grow food when land is scarce, dry, or too wet become a resource for their families. Girls who can fund their own education stay in school longer and marry later. We have seen this in West Bengal.

I wish I could wave a magic wand and open the world's eyes and hearts to the tremendous value of girls, but really girls can do that for themselves if given the information and knowledge they need. Let's help them get it.



The Real Frontier of Peace and Security: Women and Girls in the Outlands



By Valerie M. Hudson, Professor & George H.W. Bush Chair in the Department of International Affairs, Texas A&M University

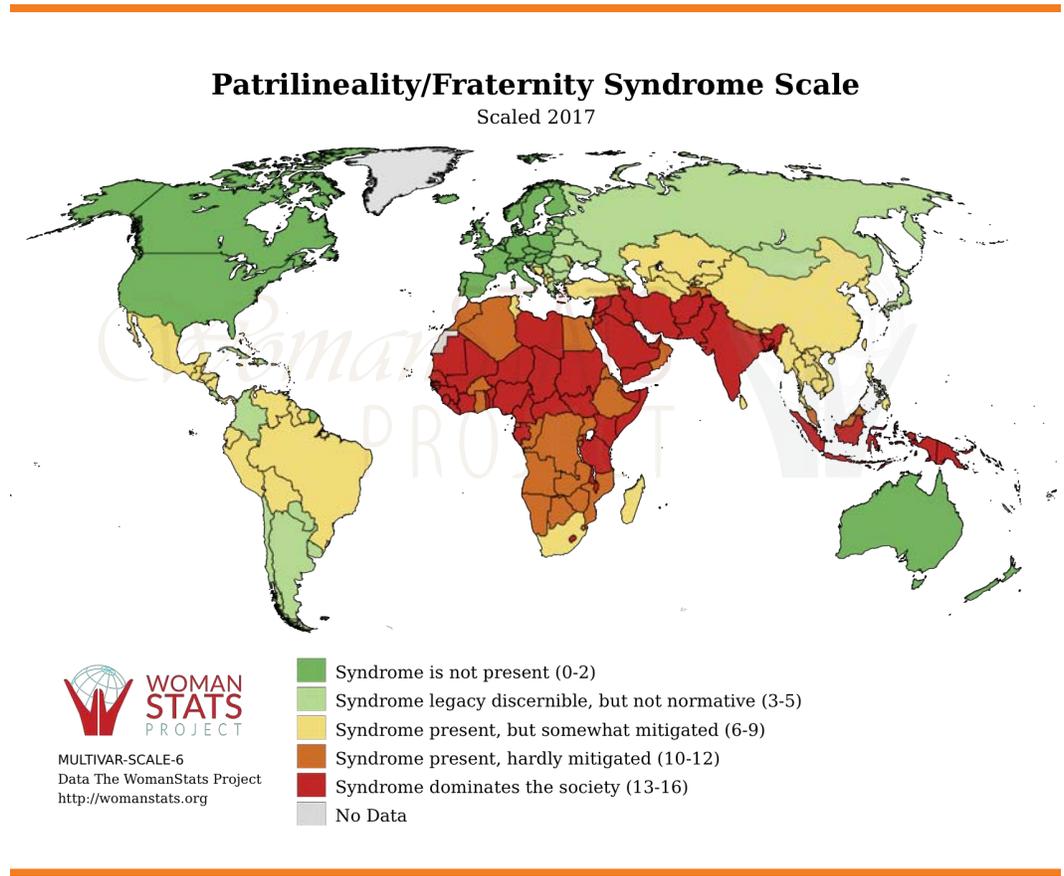
The evidence is growing that the situation of women and girls in rural areas is vitally important to the peace and security of their nations. My coauthors and I recently completed a four-year research project for the US Department of Defense under the auspices of its Minerva Initiative, utilizing the WomanStats Database, the largest compilation on the situation, status, and security of women worldwide, and our findings speak to this proposition.¹

We began our project with the theoretical premise that the first political order is the sexual political order, that is, how the two halves of humankind—the women and mothers, the men and fathers—have ordered their relations. This first political order, we assert, is expressed in marriage arrangements between men and women and in perceptions of the personal status of men and women within the collective. If that order is based on coercion and subordination, these characteristics will become a template in the society for relationships between all who are different or who hold different views. In that sense, then, women’s disempowerment at the household level should be an excellent predictor of macrolevel nation-state outcomes. To illustrate that assertion, consider that cross-national research has found that those holding the most gender-unequal attitudes are significantly more hostile to minority groups within their own country as well as to foreigners—and more likely to become involved in acts of political violence.²

To gauge the degree of women’s disempowerment at the household level, we developed an index comprising 11 variables: prevalence of patrilocal marriage, prevalence and

legality of polygyny, prevalence and legality of girl-child marriage, prevalence and legality of cousin marriage, women’s property and inheritance rights, degree of inequity in family law favoring males, prevalence of bride price and dowry customs, degree of son preference and sex ratio alteration in favor of males, overall level of violence against women, existence of societal sanction for femicide, and legal exoneration if a rapist offers to marry his victim. Because these 11 phenomena tend to co-occur and reinforce one another in an interlocking fashion, we called this index the “Patrilineal/Fraternal Syndrome,” or Syndrome for short. The scale of the index ranges from 0 to 16, with 0 the best and 16 the worst. These variables, we believe, comprise the straitjacket of a first political order based on the subordination of women.

We present a global mapping of the Syndrome here:



One important observation is that the situation of women and girls in rural areas is typically much worse on the Syndrome than in metropolitan areas. This is primarily due to the fact that customary and tribal law is more salient in rural areas than in cities. Law enforcement, spotty at best in metropolitan areas, can be frankly impotent in more isolated areas. Furthermore, issues of land and resource ownership are far more predominant in agricultural areas than in cities, and they are strongly gendered by the logic of patrilineality. Indeed, the correlation between the Syndrome and percentage of GDP derived from agriculture is highly significant. The Syndrome simply hits rural women and girls harder.

Given that fact, what is the relationship between the Syndrome on the one hand and peace and security on the other? Three words sum it up: strong, consistent, and significant. While in this essay it is impossible to display all of our findings, we can provide a sampling of our conclusions.

For example, if one is interested in food security, one should be interested in the disempowerment of women and girls. We found that only two variables emerged as significant predictors of food security: urbanization and the Syndrome. Thus, if one wanted to explain cross-national variations in food security, one would certainly have to integrate women's disempowerment at the household level as a key factor. For every step higher on the Syndrome scale, there is a 48 percent higher risk of a high (or worse) score on the Global Hunger Index.

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More traditional outcome measures of peace and security exhibit much the same pattern. For example, with relation to conflict and terrorism, the Syndrome emerged as a persistently significant explanatory variable. If you wish to understand the political stability of a nation, including measures of state fragility, quality and type of governance, and corruption, the Syndrome's tracking of the subordination of women and girls at the household level provides clearer answers than any of the other variables, including ethnoreligious fractionalization, urbanization, colonial history, civilization, terrain, and geographic borders.

These modelling results bolster our assertion that the subordination of women and girls, felt most keenly in rural areas, sets the stage for a whole host of negative outcomes for a nation-state, including its peace and security. While investments in girls' education, economic prospects, and political participation are all salutary, until and unless efforts are made to dismantle the Syndrome's interlocking bars, we will never uncage the potential of women—or the potential of their nation-states.

We urge a three-pronged opening gambit: raising (in reality, not just in formal law) the age of marriage for girls; reducing the prevalence of polygyny; and increasing the number of women in the judiciary (including law enforcement). In rural areas just these three initiatives would constitute nothing short of a revolution. We urge the next step to be instituting a formal joint title to marital assets for wives, which will be more feasible if the first three efforts are already under way.

In conclusion, it is possible that those who are the least powerful under the current social system—women and girls—hold the key to transformations that would bring greater levels of peace and security to their nations. And women and girls in the outlands are in a unique position to be the vanguard of this process.

Endnotes

- 1 Valerie M. Hudson, Donna Lee Bowen, and Perpetua Lynne Nielsen, “The First Political Order: Sex, Governance, and National Security” (in preparation).
- 2 Elin Bjarnegard, Karen Brouneus, and Erik Melander, “Honor and Political Violence: Micro-Level Findings from a Survey in Thailand,” *Journal of Peace Research* 546, no. 6 (2017): 748–61; Elin Bjarnegard and Erik Melander, “Pacific Men: How the Feminist Gap Explains Hostility,” *The Pacific Review* 30, no. 4 (2017): 478–93, www.doi.org/10.1080/09512748.2016.1264456.



How Hopes and Dreams Become Jobs



By [Purity Kagwiria](#), *Executive Director, Akili Dada*

While conducting a visit to a new project site, I had a chat with a program manager of one organization in Tanzania, where the president recently banned the readmission of girls who take a break from school due to teenage or early pregnancy. The program manager explained to us that they were no longer encouraging girl-mothers to pursue their education. Instead, they were training them in entrepreneurship and giving them loans to start businesses. “Since the girls have already lost their chance at education, they now have a responsibility to the next generation they have brought about and therefore need to be equipped to take care of their children,” she chimed.

I inquired what sorts of jobs these girls end up getting. The program manager informed me that they could make soap and grow groundnuts to sell, among other low-income forms of self-employment. Basically, these girls—already coming from rural, underserved, and poor backgrounds—are being sent into a spiral of poverty due to early pregnancies that in many cases could be as a result of sexual abuse.

As someone who grew up with my grandparents in a poor household, that particular conversation grieved me a great deal. It’s taken me more than 10 years of actively working to start thawing the cycle of poverty in my own family. This began when I received a chance at a quality education due to the generosity of well-wishers in my village. The most wonderful thing from all the people who sponsored me is that they did not give me a timeline

to pay back the investment. They did not dictate what sort of career I could choose or how long I had to succeed. For the most part, even though the support was inadequate, it was consistent. Two families supported me for four years, including one extra year after I graduated from college and chose to take an unpaid internship instead of finding a paying job. These two families left the door open for me, and I always knew I could go to them anytime I was pressed for anything. I experienced many days of lacking, but what kept me going was that I knew there was someone rooting for me.

Rural girls still face forced and early marriages, a lack of quality education, and role models.

My unpaid internship equipped me with curiosity and skills in programming with girls and young women. As a young woman of 22 years, I found my passion in girls' and women's rights work because this organization allowed me to come to work in my afro, wear my black trousers and silver belts, and—above all—gave me responsibilities beyond photocopying and running errands. This passion has remained alive in me over the last 13 years that I have been working. My true north remains rooted in giving girls opportunities to discover the best versions of themselves, no matter what that takes.



Akili Dada, a Kenya-based leadership incubator for girls and young women from underserved backgrounds, has for the past 13 years been working on preparing girls and young women for the job market. We understand that any success at work is linked to the well-being of an individual, along with the spaces and opportunities they get to make critical strides toward sustainable jobs that uphold their dignity and challenge them both physically and mentally.

We approach the future of work through long-term programming with cohorts of girls and young women using the following strategies:

- 1. Financial investment:** We provide financial support to girls and young women for at least four years for high school students and at least a year for young women out of school. Since inception, we have awarded hundreds of comprehensive high school scholarships and are proud that 100 percent of our female graduates have marched onward into universities both in Kenya and abroad. We have also successfully incubated 51 young female social entrepreneurs over five years, many of whom have achieved an unprecedented impact in their communities. We are invested for the long term because the change we want to see takes time.
- 2. Leadership development:** We equip girls and young female leaders to make decisions, take up leadership roles, and influence change. We see this as a critical element in ensuring that more girls and young women come into full realization of who they are and so fulfill their potential. We believe that leaders first lead themselves—then others.
- 3. Feminist movement building and advocacy:** We strengthen the voices of girls and young women in their communities by igniting their passion and creating spaces for them to champion the issues they are passionate about. This in turn creates an army of girls and young women who are cheerleaders for each other, who are aware of the importance of supporting each other.
- 4. Mentorship:** We facilitate safe spaces and opportunities for girls and young women to build support systems for themselves. We tap into Africa’s oral cultural tradition by providing spaces where girls can easily talk with and learn from others ahead of them.



It’s taken me more than 10 years of actively working to start thawing the cycle of poverty in my own family. This began when I received a chance at a quality education due to the generosity of well-wishers in my village.

—Purity Kagwiria

We view the combination of these four strategies as a holistic approach to equipping girls and young women for their job markets. The future of work starts with building the individual and allowing her to explore her passions. Patience is needed to nurture this passion, given that we are experiencing a generational shift. Our female millennials are heart-driven and tend to do what makes sense to them. Gender-based discrimination is still a big issue in Africa and many other parts of the world, but young people today seem to have an invincible spirit that allows them to overcome these barriers more easily than those who came before. Of course, it’s not lost on them that a lot of sacrifices and efforts toward equality were made by previous generations.

Rural girls still face forced and early marriages, a lack of quality education, and a lack of role models. With programs such as Akili Dada, there is indeed hope that these girls can have a chance to dream of what they would like to be in the future.

The majority of the girls in our programs come from rural communities and were accorded opportunities to complete their high school education through Akili Dada. The girls in our Paza program had this to say about the future of work for girls and women in their home communities.



“ Prudence

Right now, if you tell a woman they can't do a certain thing, their mentality has shifted to another level. They don't seek work, they create work. Where I'm from, aunts and friends are having ideas, but I think something that's pushing them behind in terms of progress is capital to seed their ideas. But they are proactive in their own way. Whatever small thing they have, they are saving up to start businesses. They are the ones creating employment.



“ Elizabeth

I think the future of work for women is doing more than one thing. Women are doing more than just one job right now. In my village, I can see women are now in businesses and are taking up more opportunities.



“ Claris

There is more support coming in, which is not as it was before, where women would come up with an idea, but there's no support. Right now there is support from their brothers and husbands. I think the open-mindedness is something that will move Africa ahead generally.



“ Sunday

Currently and moving forward, I see the culture of where I come from favoring women more. Embracing education and the possibility of women being in places that were initially thought to be preserved for men is really favoring the women, and in the future I believe there will be more women in high-profile jobs.



Investment in Smallholders + Girls in School = Africa's Success



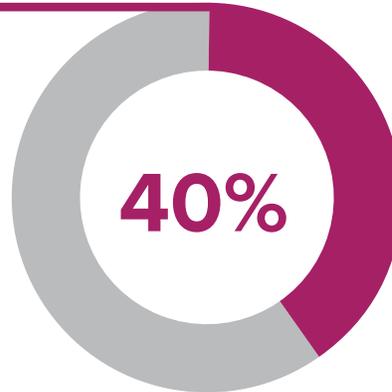
By [Agnes Kalibata](#), *President, Alliance for a Green Revolution in Africa*

A developed world knows just as well as the developing world that men have more opportunities than women. Some regions face more challenges than others. In Africa many factors hold girls back. In some places, it's conflict; in others, it's a lack of infrastructure. But the most important inhibitor is culture, with rural girls facing persistent inequalities stemming from long-held, deeply rooted traditions and cultural norms.

The odds notwithstanding, stories of success abound. I will share one such story of a young girl, not too unlike millions of others in Sub-Saharan Africa. She lived on a small farm in rural Uganda, displaced from her country of birth by political strife. From a tender age, she helped her parents work the land. Her first classroom was under a tree. She had neither books nor blackboard. All she had was the will to learn and the desire of her mother and father to give her a better life.

Whenever her parents made a little extra money—from a good crop or the sale of a cow—they would invest some of it in her education. She went from school to university and beyond. She worked as an agricultural scientist and was appointed a minister in her home country, Rwanda. She is now the head of a pan-African organization, driving action to transform smallholder farming into a thriving business so that other girls can get the opportunities she did.

Two-fifths of girls in Africa are married **before they turn 18.**



That girl, as you may have guessed, was me, but it could have been any other girl given the same opportunities. I share this story so that together we can strive to unleash the potential of all rural girls.

Instead, in Africa today, more than 49 million girls are out of primary and secondary school. Early marriage and teenage pregnancy are common, with 40 percent of girls getting married before they turn 18 years old. A rural girl who marries in her teens has almost zero chance of completing her secondary education. I have seen this firsthand. Over half of my female schoolmates were married by 16 years old, some as early as 13 years, as their families sought a dowry to ease their poverty.

So what can we do about it? Based on our work with our partners to make smallholder farming a thriving business and from my personal experience, I am convinced that agriculture is key to giving African families and rural girls a good start in life.

But for agriculture to achieve this ambition, it must first transform. If we invest in farmers, giving them access to better seeds and linking them to functional national and regional markets, incomes will double or even triple. Increased incomes bring truly significant benefits. First, farmers have the means to diversify into livestock and build an even stronger income base for themselves. This is what my parents did. Their cows helped see me and my



That girl, as you may have guessed, was me, but it could have been any other girl given the same opportunities. I share this story so that together we can strive to unleash the potential of all rural girls.

—Agnes Kalibata

siblings through school. Second, families can use hired farm machinery and labor, potentially freeing their daughters from daily domestic work in order to go to school. Because when money is tight, the male child's education gets priority.

But it isn't just about educating the girls. Men still hold the lion's share of positions of influence and power in Africa. To empower women, we need to empower and educate boys and men to understand that girls and women are just as good as they are and must be given opportunities to realize their full potential. I was lucky enough to come of age as a professional in Rwanda, a country with one of the highest rates of female labor force participation in the world. Under President Paul Kagame, who shows an unwavering commitment to gender equality, women are getting opportunities and having a say. I am one of them. I have seen what can happen when men in positions of power do not discriminate.



I got to where I am today not because I was special or lucky, but because my family did everything to ensure I had access to education. They did this through farming.

—Agnes Kalibata

By boosting agriculture across Africa, hence giving a huge chunk of our population the resources to educate their children, we can change the fabric and trajectory of our society. And change is happening, however slowly. According to the International Food Policy Research Institute, countries like Burkina Faso, Côte d'Ivoire, Ethiopia, Ghana, Kenya, and Rwanda, which make significant investments in agriculture, have seen productivity rise by up to 6 percent per year, spurring an average annual GDP increase of over 4 percent. Ethiopia is reducing rural poverty at a rate of 4 percent per year. Rwanda has reduced poverty by 25 percent in the last 15 years. Southeast Asia shows us how successful the agricultural investment strategy can be. Vietnam, for example, has since 1986 reduced poverty from 56 to 3 percent. China has moved over 440 million people out of poverty.

The path to success is so clear, but we still continue to waste the minds and talents of the world's most dynamic and young population. I got to where I am today not because I was special or lucky, but because my family did everything to ensure I had access to education. They did this through farming. Backing smallholders will allow other families to do the same—and let our girls finally show the world just what they can do.



Attention Women and Girls: Farming Is For You Too



By [Leah Lamon](#), *Communications Director, Land O'Lakes*

Remember the childhood song, “Old MacDonald”?

**Old MacDonald had a farm, E-I-E-I-O.
And on his farm he had a cow, E-I-E-I-O.**

As a farmer-owned cooperative, Land O’Lakes, Inc. believes that there is power in working together to create shared success. Part of that belief means that everyone needs to have a seat at the table. Women and men. Girls and boys. Young and old.

With women accounting for about one-third of all US farmers, the team at Land O’Lakes felt the Old MacDonald classic was long overdue for a rewrite. We want to shine a light on our female co-op members and celebrate the contributions they’re making to the agriculture industry.

In collaboration with vocal powerhouse and soul songstress Maggie Rose and Grammy-award winning songwriter Liz Rose, we launched a modern take on this celebration of farmers. The song is called She-I-O, and it opens with a call to arms for female farmers:

**You know Old MacDonald had a daughter, She-I-She-I-O.
Look what she does with what he taught her, She-I-She-I-O.
She’s got the future in her hands.
She’s proud of her roots and where she stands.**

She-I-O is full of powerful, poignant images of women teaching the next generation—of daughters and sons—what it takes to run a modern dairy farm. Images of women leading in agriculture and business are important for shaping how girls perceive the opportunities they might pursue. According to the USDA, 31 percent of farmers in the United States are women, constituting almost 1 million farmers managing 300 million acres of land. It would seem this message is getting through in the next generation as well: today, girls make up 45 percent of the membership of Future Farmers of America (FFA), an organization that initially did not allow girls to become members.

**She had a dream. It made her strong.
Makes her work as hard as the day is long.**

Candice White, of Land O’Lakes member farm Dotterer Dairy, is the manager of the farm. She takes care of the cows, ensuring the herd is healthy. She’s responsible for running the 24-hour-a-day, seven-day-a-week milking parlor on the farm, making sure everything runs smoothly.

“Did I always want to be a farmer? No, I did not,” Candice says.

But, in 2007, after training and working as a hair stylist, the lure of the farm called her home.

Lori Butler, also of Dotterer Dairy, is convinced that women make great farmers.

Growing up, I got to help my father a lot. I walked around with my dad, with his glove on my arm, and I wanted to do what he was doing.



Watch here: https://www.youtube.com/watch?v=E1wKdPnDW_s

“I feel like the female voice in the ag industry is getting stronger. It’s growing,” she says. “If I had a daughter, my advice would be: You can do anything. You can be an engineer, you can be a cow feeder, you can be a crop manager. An agronomist. Anything.”

Faced with the challenge of feeding nearly 10 billion people by the year 2050, the agriculture industry needs everyone—men and women—engaged in finding innovations to feed the world. And this means planting the idea of agriculture and farming as a career for everyone into the hearts and minds of our kids. Land O’Lakes believes imagery and songs like She-I-O are one way companies can use their voice to start the conversation and influence attitudes.



If I had a daughter, my advice would be: You can do anything. You can be an engineer, you can be a cow feeder, you can be a crop manager. An agronomist. Anything.

“We are incredibly proud of reshaping a childhood anthem to reflect the incredible leadership of women in agriculture and on the farm, helping to feed the world and build strong communities,” says Tim Scott, Land O’Lakes senior vice president and chief marketing officer.

“Shining the spotlight on women farmers through this incredible musical partnership aims to turn perception on its head for food, agriculture, and for Land O’Lakes. We’ve only just begun.”



Tech Dreams to Change the Future of Afghan Girls

REUTERS/Yuri Gripas



By [Roya Mahboob](#), CEO, *Digital Citizen Fund*

Future economic stability depends on the workforce that will come from the young people of today. Future leaders in business and technology are being trained in schools around the world to grow and develop as scientists, inventors, and entrepreneurs, following whatever life path they decide. Technology is a crucial part of their success and the avenue that they turn to when sharing their ideas with the world.

But even with the great advances that have been made to establish equal opportunities and gender equality around the world, developing nations and conservative countries still struggle in providing access to education and technology for girls. This is especially true for girls in rural areas of Afghanistan and similar conservative countries.

As a young girl, I grew up living in constant fear of the Taliban. They had taken away our books, and we had nothing to connect us with the outside world. I dreamed of a way that I could read and then make books disappear so that the Taliban could not find them. Because I was a girl, I was not allowed to access technology and never saw a computer for the first part of my life. But my dream was to talk to other people and understand the rest of the world. I knew that I could do great things if only given the chance.

One day, I saw a computer for the first time. I learned that this box could talk to the rest of the world. As I talked with people online—people who did not look down on me because I was a girl—I grew more confident. Supported by a father who believed in me, I went to school and then university and learned more and more about technology. When I decided to start my own tech company, it was the internet that allowed me to raise money and find investors who would support and believe in me.



As a young girl, I grew up living in constant fear of the Taliban.

—Roya Mahboob

Starting my own company was not easy. Working in the business world as a woman is not easy. Without the support of my father and others who believed in me, I may not be the woman I am today. As I have worked with other women and started the Digital Citizen Fund to give them training and access to technology and opportunities, I saw how rural girls and women have been empowered to live their dreams through technology. It is a way that they can earn money, support families, and change the economy of their cities and countries for good.

The Afghan Dreamers, the all-girls robotics team from Afghanistan that competed in the FIRST Global Challenge in the United States in July 2017, is a shining example of the success that rural girls can have in a society. These girls have represented their nations around the world in the face of discrimination and difficulty. Many rural girls who pursue dreams in business or technology do not have their family's support. This makes life even more difficult for them. But when we saw the success of the robotics team's breakthrough and how they won the hearts of Afghanistan and the world, we were inspired to start a STEAM school in Afghanistan. This school will draw young girls and boys from all over Afghanistan, allowing them to learn and access education that they do not have today. They will come from rural as well as suburban areas and will be the bright, shining light for the future of their country.

Eventually we hope to start a university similar to the Massachusetts Institute of Technology in Afghanistan to further the educational opportunities for our young people. We envision a world that sees Afghanistan not as a nation of terrorism, war, and poverty, but as a place full of young, bright minds who will be the next generation of entrepreneurs, leaders, and business owners.

Gender bias starts with parents

Roya Mahboob talks about how Afghan girls often have no rights within families at the Council's Women and Global Development Forum on March 8, 2018, in Chicago.



Watch here: <https://www.youtube.com/watch?v=sZOXaXcqJCc>

Building tech centers in Afghan schools

Roya Mahboob talks about how her company is bringing technology to girls in Afghanistan at the Council's Women and Global Development Forum on March 8, 2018, in Chicago.



Watch here: <https://www.youtube.com/watch?v=GMnX4TXgruc>

Rural girls have just as much potential for success as any children around the world. The fact that they do not have access to the same education as other children is the reason the Digital Citizen Fund has built IT centers in Afghanistan and is working on the STEAM school for young girls and boys. It is my new dream that every child in Afghanistan, regardless of gender or the area in which they live, will have the same opportunities for success.

As technology continues to grow and businesses hire more young women for leadership positions, rural girls will gain a greater voice, be empowered to embrace their dreams, and advocate for themselves. The Afghan Dreamers robotics team has proved that change is possible and has shown the abilities of girls on the robotics team. Those girls are champions of a cause that will extend far beyond them to touch the lives of thousands in Afghanistan and around the world.

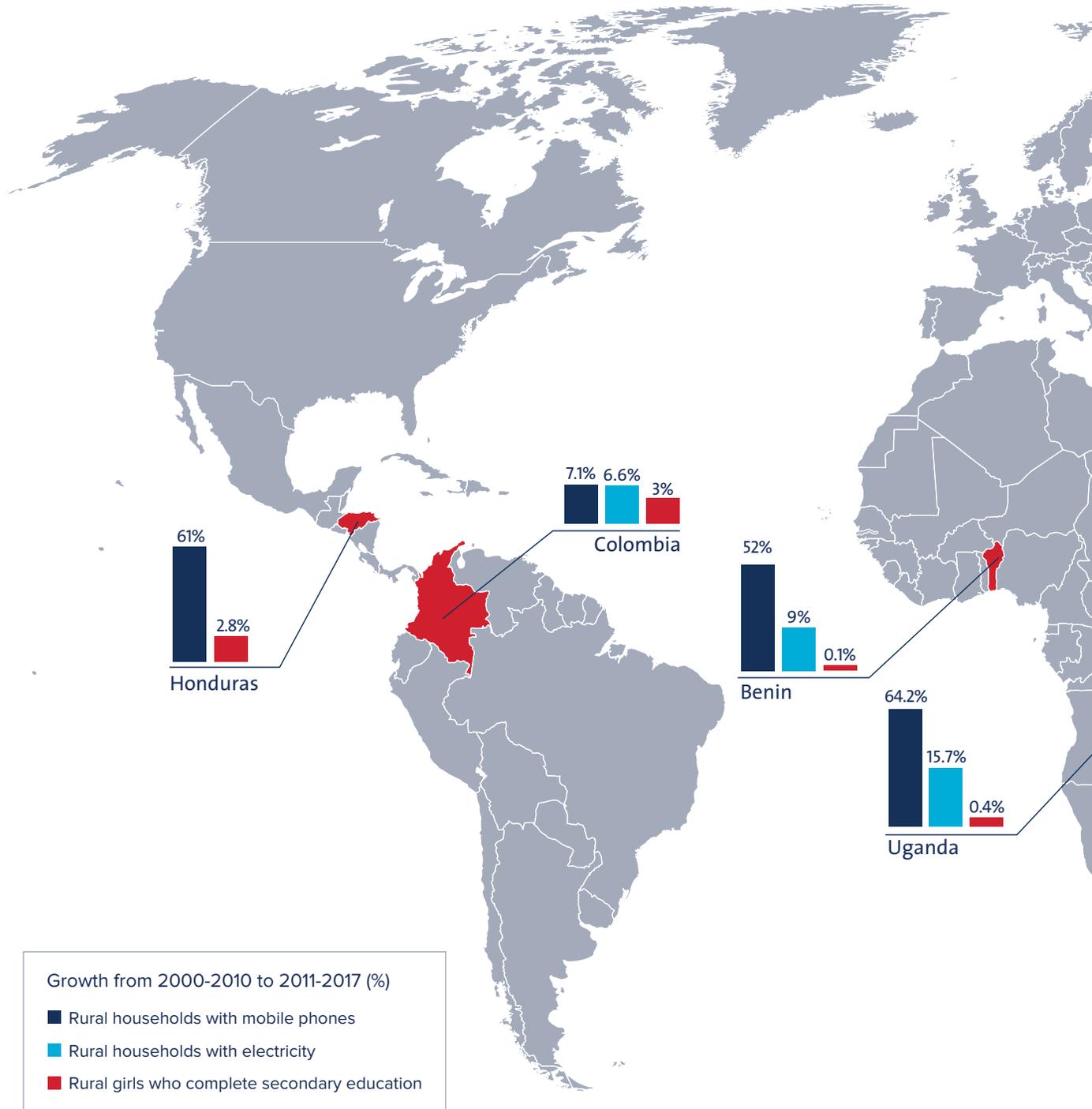
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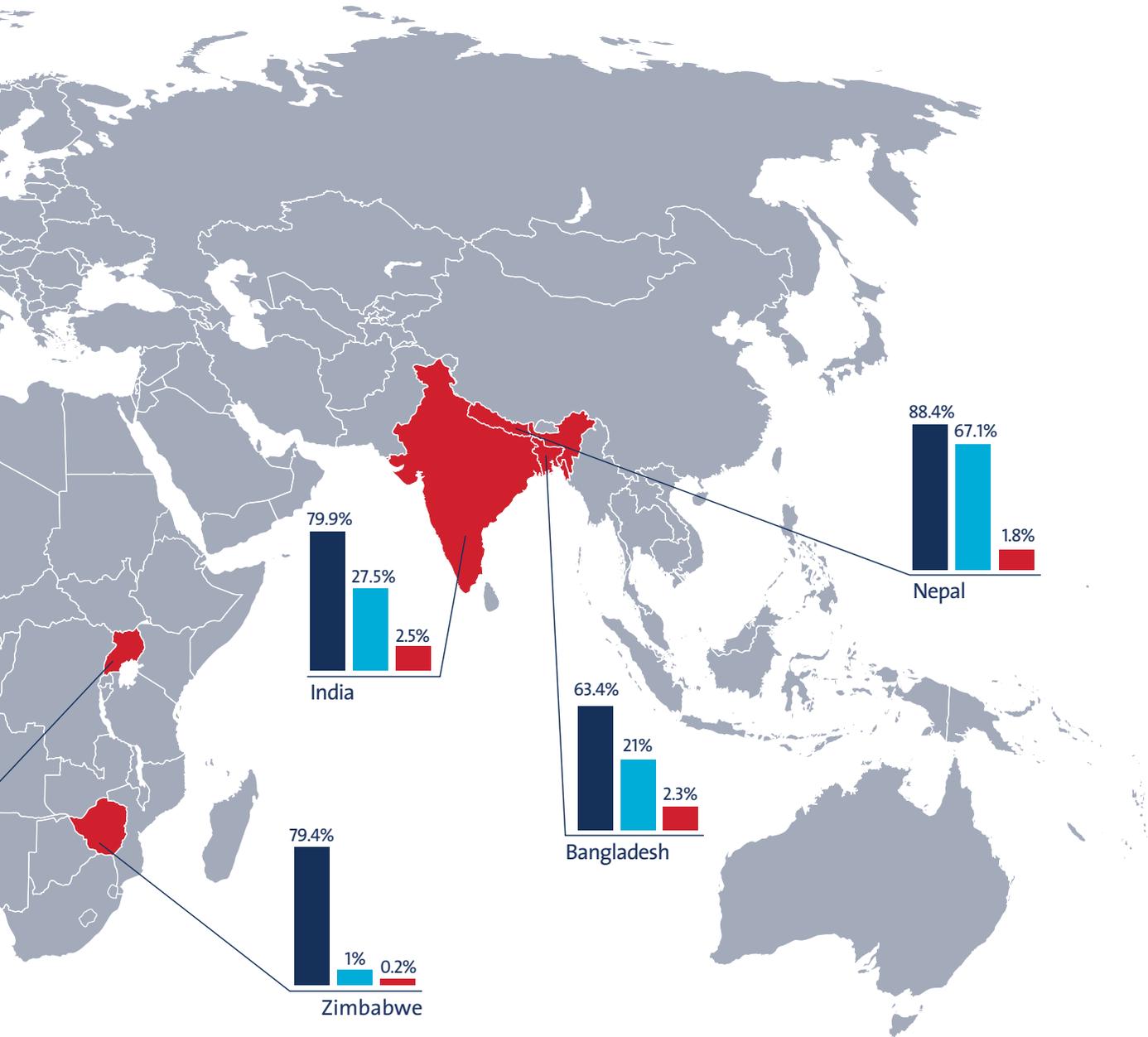
Starting my own company was not easy. Working in the business world as a woman is not easy. Without the support of my father and others who believed in me, I may not be the woman I am today.

—Roya Mahboob

Rural households with electricity, mobile phones, and completion of secondary school by girls

Digital technology and electricity are spreading throughout the rural world, but rural girl secondary education rates are flatlining. When rural girls do not complete primary and secondary school, their ability to access the jobs of tomorrow will be curtailed.







Rural Girls Could Be Agents of Peace—If Only They Weren't Trafficked



By [Alaa Murabit](#), *High-Level Commissioner, SDG Global Advocate, United Nations*

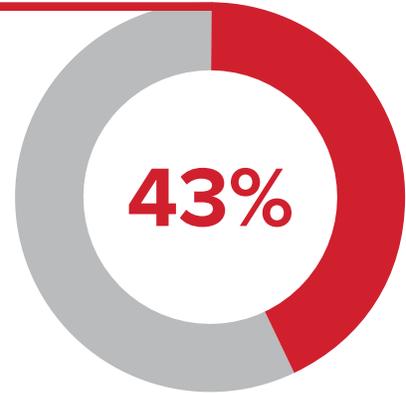
At the time of writing this piece on the hardships, resilience, and hope that surround the lives of rural girls, I am sitting in a small hut near Nuqui, a town of approximately 3,000 inhabitants in northern Colombia. It is known as one of the most dangerous areas on earth, a hotbed of human and drug trafficking as well as illegal gold mining activities. Many of the local communities' social leaders have been assassinated in the past months and years.

“

We never thought of marrying her so soon. I have [high blood] sugar and blood pressure problems and I suffer with kidney problems also. If I die, who will take care of the girl? People are always ready to slander a girl if she is alone.

—Mother of Ameena, Hyderabad, India

Rural women make up more than two-fifths, approximately, of the agricultural **workforce** in countries in the Global South.



Rewinding a few days back to when I started researching for this piece in Boston, I was looking at the dynamic realities of education, healthcare, and infrastructure and how they impact rural girls. But being here in Nuqui, in the heartland of South America’s trafficking activities and a bottleneck for south-north human trade, I realized that our approaches need to be so much more nuanced. Too often the buzzword of “sex trafficking” limits the conversation to the humanitarian tragedy of the rural victims of this crime. The buzzword fails to grasp the wide socioeconomic and security implications of trafficking, not only for rural girls but also their communities. The global imperative to act goes therefore beyond the motivation of compassion and morale. Preventing the trafficking of a rural girl means saving a rural community.

The rural communities impacted by human trafficking are not exclusive to the Global South, but are situated in countries of the Global North too. Notwithstanding the significant impact of domestic human trafficking in Global South countries, the purchasing power is, in contrast, not local and rural. The economic dynamics on the demand side that flourish the human trafficking business are international and prevalent in countries of the Global North.

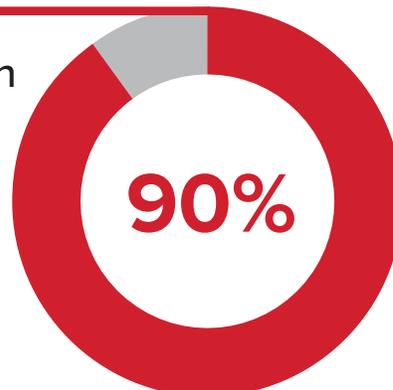




It is impossible to overstate the significance of rural girls for economic prosperity, security, and peace. Rural women represent over a quarter of the global population and approximately 43 percent of the agricultural workforce in countries of the Global South. Given their central role in the family’s economic and social structure, rural girls are viewed to be the most disadvantaged in terms of access to training, education, health, and human development. Their extreme poverty fuels the scams of the traffickers, who lure the rural girls away from their communities with the promise of good jobs, food, and education. The complex feelings of responsibility that the girls have for their families are subject to the manipulation of the traffickers. The impunity of the perpetrators in rural areas as a consequence of limited, nonexistent, or abusive law enforcement presence is an important contributing factor to the vulnerability of rural girls.

When a rural girl is trafficked, and likely sexually exploited, an often irreversible journey of suffering and trauma begins. As a result of sexual abuse, many victims experience mental health problems, drug addiction, and development delays, sexually transmitted diseases, and teenage pregnancies. Human trafficking survivor Karla Jacinto has spoken of how, throughout the years of her abuse, she was raped a total of 43,200 times. Survivor Lon has described how forced sex slavery “causes a deep pain and, if they [the girls] begin at early age, it can damage their heart and mind. It can damage their soul and take their loving away, and leave them with hated feeling inside.”

Once she is employed, a woman will **reinvest the vast majority of her income**, on average, into the community.



When a rural girl is able to complete her education, she is also more likely to get married later in life, have fewer children, and vaccinate those she has. Her children will have a higher probability of getting an education. Once she is employed she will reinvest on average 90 percent of her income into the community. Using the benefits of education, this girl thereby creates a cycle of education and income for her entire community. When a rural girl is trafficked, she is unfortunately unable to achieve these multitudes of accomplishments. It is surveillance, bombs, and bullets that enable and forcibly maintain temporary security—but education, healthcare, and infrastructure that are empirically proven to be the instruments of long-term peace and nation-building.

Given the multifold security challenges that our world is going to face as climate change takes effect and resources fall short, our societies are reliant on the leadership of rural girls as agents of peace and security.

The trafficking of a rural girl catalyzes a chain reaction that ultimately robs entire communities of their chance for lasting peace. We all know of the leadership potential of educated rural girls, including for environmental protection, GDP growth, improved family planning, and health. None of this happens when she is trafficked.

Human trafficking, both in demand and supply, is driven by profits. Current security policy is overspending billions per year on flawed and harmful measures that overly focus on militaristic agendas. These two facts combined demonstrate the urgency of shifting the conversation to focus on the economic realities and power structures. The economic reality is that human trafficking is driven by profit. If nobody paid for sex, sex trafficking would not exist. In order to effectively address the root causes of these national security risks, there needs to be a strong focus on the investment into the creation of infrastructure and ecosystems for people to build sustainable livelihoods at home.

Given the multifold security challenges that our world is going to face as climate change takes effect and resources fall short, our societies are reliant on the leadership of rural girls as agents of peace and security. If we rob them of their childhoods in some of the most traumatic ways imaginable, this (and any other) vision for change will collapse. If we want to effectively prevent human trafficking of girls and redesign the peace and security ecosystem of rural communities, a threefold strategy is needed today: investment, education, and enforcement.

Along with my Omnis Institute cofounders, Dr. Aziza Khabbush and Christina Myers, I have talked to over 800 rural Afro-Colombian and indigenous girls in Nuqui about leadership and their power. I have also had difficult conversations with their families, local officials, and local leaders about the reality that many of these girls will have their futures robbed because of trafficking. I believe we can and should do better.



How Local Women Leaders Can Unlock Girl Power



By [Alyse Nelson](#), *President & CEO, Vital Voices Global Partnership*

We have reached a critical juncture in the global movement to empower girls. The strategic choices we make in the next decade will determine whether we realize historic advances or whether our movement stalls and even moves backward. This is especially true when it comes to the forgotten plight of rural girls. Just about every challenge faced by girls around the world—from early marriage to inadequate access to education—is exacerbated in rural communities.

Barriers are unique to specific environments, communities, and cultures. We need to do much more than tweak old models. What we need now, more than ever, are bold and unconventional approaches.

“

Enroll us in schools, provide skills acquisition, provide basic amenities (hospitals, electricity, water) so as to help us live our lives better and easier.

—Adolescent girl, 13 years, Misheru, Nigeria

If we want to jump-start progress for rural girls, we need to shift our focus. Lasting solutions for rural communities need to be locally sourced and locally led.

If we look back on lessons learned from the last few decades, we find countless examples of the international community failing to understand the unique context of rural environments. When a water contamination crisis threatened rural villages in Bangladesh, global actors came up with a communication campaign to inform villagers which wells were contaminated and which contained safe drinking water. Contaminated wells were painted red and uncontaminated wells were painted green. The campaign ended up having tragic, unintended consequences. People living in “red well” villages became stigmatized. Men were unable to find work, and young women were perceived as undesirable for marriage. As a result, rates of prostitution and human trafficking went up. Desperate and frustrated, villagers ultimately took to repainting the red wells green, triggering a drastic increase in water poisoning and contamination-related deaths.

More often than not, development failures like this one happen because we impose outside solutions without considering local contexts. We’ve prized theory over practice and bypassed local leaders instead of partnering with them. This oversight has been especially damaging in rural communities. As a result, the most vulnerable have been left behind. Rural girls have been largely neglected in global efforts, and we’ve seen very little progress on the particular barriers they face.



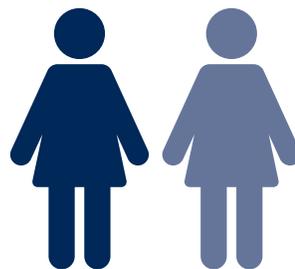
If we want to jump-start progress for rural girls, we need to shift our focus. Lasting solutions for rural communities need to be locally sourced and locally led.

Vital Voices has been investing in local women leaders since 1997. We search the world for leaders with a proven ability to overcome social, economic, and political barriers to progress. Each woman has deep roots in her community. She's connected and credible; she's able to communicate national and even international laws in ways that resonate and affect change at the local level. Most importantly, she uses culture to shift culture, because she knows that lasting change isn't imposed, it develops from within.

The single most important learning we've gained from 21 years of programming is that locally designed, locally implemented solutions are ultimately the only way to realize change. If we take this learning to heart, we will see tremendous results for rural girls in diverse communities around the world.

1 IN 2

**GIRLS IS MARRIED BY THE
TIME SHE IS 18.**



Senior Chief Theresa Kachindamoto is proof of that. In Malawi's Dedza District, Kachindamoto is singlehandedly reversing harmful cultural practices that keep rural girls out of school.

Dedza District sits between Mozambique and Lake Malawi and is home to 900,000 people. Half of Malawi's population lives under the poverty line, and the average family in Dedza lives on US\$11 a month. Even though a 2015 law set a minimum age of 18 years for marriage, the country has one of the highest rates of child marriage in the world: one in two girls is married by the time she is 18. For poor families, early marriage is a way to ease their economic burden. It's also an age-old custom that many consider a cultural rite.

Kachindamoto never expected to become one of Malawi's senior chiefs. Even though she has chieftain blood, she is also the youngest of 12 siblings. She was content living in the small city of Zomba and working as a secretary at the local college. But when she received a call informing her that she'd been made senior chief, she packed her bags and headed home to Monkey Bay.

She wore traditional red robes and set out to meet her people. In those first days, Kachindamoto met countless girls who were also wives and mothers. Most had dropped out of

school. They told her that some girls are beaten by their husbands and others die giving birth. “I said: ‘No, this is too much. I must do something,’” said Kachindamoto.

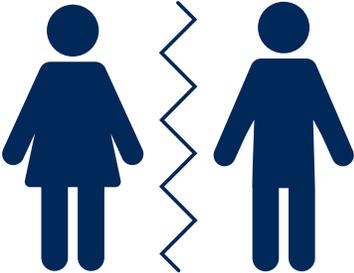
She decided to summon all village headmen, local church leaders, and NGO representatives. She told those gathered that she wanted all underage marriages to be terminated immediately. Further, she mandated that all village headmen sign and enforce an agreement to abolish child marriage and annul existing marriages. Anyone refusing to comply would be stripped of his position; and she kept her word. Kachindamoto dismissed seven village headmen, two of whom were women, when they wouldn’t comply. When they returned to say they’d annulled all child marriages, she gave back their titles.

The senior chief started going door to door, talking to parents. She built coalitions and passed by-laws that prohibit early marriage and sexual initiation customs. She has developed a network of “secret mothers and secret fathers” who keep an eye on other parents, making sure no one pulls their girls out of school.

Kachindamoto is trying to transform a nation and its culture around girls, and she’s starting locally with Dedza. She has faced severe resistance, including death threats and harassment. But she is unfazed. She knows that change will take time, and she refuses to back down. “If girls are educated, they can be and have whatever they want,” she said.

IN THE LAST 6 YEARS,
KACHINDAMOTO HAS
ANNULLED

2,049
CHILD MARRIAGES.



In the last six years, Kachindamoto has annulled 2,049 child marriages. Her example has inspired other Malawian senior chiefs to follow her lead. She has been successful because she developed a local solution to a local issue. She is proof that the key to empowering rural girls is to invest in local leaders and enhance their capacity to affect positive change.

We can deliver real results for rural girls if we mobilize global actors around locally sourced solutions. If we tap into local female leaders’ enormous potential, we can unlock the power of rural girls to transform their families, communities, and our world.



Helping One Rural Girl to Become a Role Model



By Namanga Ngongi, *Former President, Alliance for a Green Revolution in Africa*

The girl-child has been the center of attention for several decades. This has accelerated since the World Summit for Children in 1990, but only more recently has attention turned toward rural girls. This is fully justified because rural girls are particularly disadvantaged. They do not have the same opportunities as their brothers to develop their full potential. They constitute a disproportionately high share of the out-of-school children who are vulnerable to child labor, malnutrition, female genital mutilation, early and multiple pregnancies, early marriage, and sex trafficking.

Rural girls eat less and are more malnourished than their brothers. They have a greater burden of domestic work. They are married early and often bear from five to seven children. Is it any wonder that premature births, low birth weights, and infant and maternal mortality rates are so much higher in rural areas? Malnutrition has to be tackled seriously by governments, communities, NGOs, and development partners. If not, the efforts to build physical infrastructure to benefit rural girls will go to waste. But the most serious challenge for rural girls is their lack of access to education. We must take up the challenge of education in every way we can, in communities and villages, even with one girl-child at a time.

In April 2018, I traveled to Nairobi for a meeting. When I was there, I called Esther Muyoka, a shy young lady I met in the Chwele market in Western Kenya in March 2008. She happened to be in Nairobi, and we arranged to meet and catch up.

I had visited Chwele market, one of the largest in East Africa, while on a mission to Western Kenya as president of the Alliance for a Green Revolution in Africa (AGRA). I found Esther sitting in an internet café in the market. In the course of a brief conversation, I expressed a desire to visit a young person’s farm. Esther said that she had a vegetable garden on her father’s maize farm some five kilometers outside of the town. When we got there, her garden turned out to be a small patch of tomatoes and cabbage on her father’s “miserable-looking” farm. I asked if she liked agriculture, and she said yes. I then asked if she had studied it at school. Yes, she said, but the high school certificate results were not out yet. I asked if she would like to study agriculture. Again, she said yes, but her family could not afford the cost. I encouraged her to register at Moi University and to let me know if she was admitted. While still in the garden, her parents and uncle joined the conversation. The beauty of rural life!



**[E]ven if she were educated, it is still not possible to get a job...
so what’s the point in getting schooled?**

—Rural mother, India

It turned out that her grades were not good enough to gain direct entry into the university. She was advised to enroll in a technical school, obtain a diploma in agriculture, and then apply to the university. She did so, and with support from me, completed the diploma in two years. In 2010 she was admitted to study agriculture at Moi University. She graduated in 2013 with a BSc. Except for short-term internships and temporary jobs, she has not had full-time employment—but she has been able to change the fortunes of her family. Her



father's farm has now been diversified and is no longer so "miserable." She helped her brother gain admission into the police force. Her family's two-bedroom mud house is now a four-bedroom permanent house. As we talked and reminisced in Nairobi, I could not recognize the shy young lady I met 10 years ago. Esther is now self-confident, articulate, and determined to make a difference. She is a role model in her village.

Obtaining a university degree opens up opportunities, but this rural girl still has other obstacles to overcome.

Obtaining a university degree opens up opportunities, but this rural girl still has other obstacles to overcome. Employment is not based solely on qualifications. It depends heavily on connections, especially when jobs are scarce. Rural girls lack such connections. Esther, having gained some experience through internships and short-term employment, should go back to school for a graduate degree to increase her chances of employment or enroll in a youth entrepreneurship incubation program.

But a major step has been taken by one rural girl in Western Kenya. Esther has already demonstrated the great benefits that accrue to a family when a rural girl is given a chance to get an education. Millions more await opportunities to access education at any level. We can all contribute to make that possible and change families, communities, and the world.



The Magic of Science for Rural Girls



By [Esther Ngumbi](#), *Distinguished Post-Doctoral Researcher, University of Illinois at Urbana-Champaign*

The first time I left my rural Kenyan village was to attend Kenyatta University. During my first biochemistry lab, where men outnumbered women, I felt surprised and fascinated by every part of it and did not want to leave. I treasured every second I spent in the lab and was eager to return. I remember wondering why, throughout my earlier education, my peers and I did not have access to science laboratories and other educational tools that would help us to prepare for future careers.

“

Many rural children like me who succeed in their careers eventually come back to build their communities and countries. Investing in them is an investment in the greater good.

—Esther Ngumbi

The lack of exposure isn't the only challenge faced by rural girls, as I was then. Right now, more than 62 million girls around the world are deprived of an education. In addition, millions of young students living in rural areas in developing countries—the majority of whom are girls—face the prospect of lost opportunity and lower wages in the future because of the poor quality of their primary and secondary education.

Education is the UN Sustainable Development Goal 4. By that standard, quality education is one that enables all students, including rural girls, to reach their full potential, while preparing them for meaningful participation in our global world. Similarly, science and tech-



During my first biochemistry lab, where men outnumbered women, I felt surprised and fascinated by every part of it and did not want to leave.

—Esther Ngumbi

nology continue to facilitate sustainable growth and development of many nations while playing a major role in solving challenges like climate change, hunger, and lack of water and sustainable clean energy sources.

A good education and the concomitant infrastructure of libraries, laboratories, ICT centers, and vocational centers can help equip rural girls with the requisite knowledge and skills needed in labor markets. Education is crucial to prepare them to take on future careers as food technologists, data analysts, computer scientists, software experts, 3D designers, and childcare and healthcare experts.

I know what can come about when rural girls have access to the right resources. What I learned at university changed my life trajectory. A good education empowered me. It allowed me to pursue a science career. It opened new horizons and strengthened my pride and self-confidence. It liberated me and has allowed me to reach for the stars again and again. And today, I am actively giving back to my rural community in Kenya.

Many rural children like me who succeed in their careers eventually come back to build their communities and countries. Investing in them is an investment in the greater good. As the global world works toward the 2030 Sustainable Development Agenda, which pledges to “leave no one behind,” how can we ensure that rural girls—often the most marginalized group—are not left behind?

First and foremost, stakeholders including G7 countries, development partners, national governments, and everyone invested in closing the gender and development gaps have a

central role to play. They must create the necessary environment and provide the needed infrastructure, including good rural schools, rural centers of excellence in science, vocational training institutes, and other technology inspired rural centers. Doing so will help equip rural girls with the requisite knowledge and leadership skills needed to succeed in the 21st century. Furthermore, quality education can improve the economic health of nations, enhance civic participation, and reduce poverty and hunger across generations. Each additional year that a girl attends school can increase her earning power by 10 to 20 percent.

For each additional year that a girl attends school, she can **increase her earning power** by 10 to 20 percent.



There are also other continent-wide returns for investment in rural girls. Africa is the world's youngest region. By 2030 it will be home to 60 percent of world's under 25 population. By leveraging this demographic opportunity and empowering them with good educational opportunities and marketable skills, Africa and the world will benefit.

Thankfully, across Africa and around the world we are seeing more efforts to bring centers of excellence to rural areas. The African Institute for Mathematical Sciences is an initiative that has established six centers across the continent. These centers serve as a space that inspires and enables young students to shape Africa's future through STEM—science, technology, engineering, and math. In South Africa five science centers were recently launched in an effort to support hands-on science teaching and learning at schools.

Rural girls, irrespective of their origin, are creative, flexible, and possess many hidden talents that can assist in providing fresh ideas to solve today's pressing challenges and serving as a powerful future dynamic workforce.

Secondly, we must ensure that rural girls have access to training in soft skills that are increasingly important for careers now and in the future—communication, emotional intelligence, time management, critical thinking and analysis, adaptability, and problem solving. With these skills girls growing into women can increase their productivity and become an indispensable part of a workforce team. At the same time, we must provide broad mentoring to rural girls and give them access to leadership training to continue empowering this future workforce, while helping them to maneuver the complexities of a changing and dynamic world.

If rural girls are to have a part in the fields of sciences and technology, then key investments must be made today. Rural girls, irrespective of their origin, are creative, flexible, and possess many hidden talents that can assist in providing for fresh ideas to solve today's pressing challenges and serving as a powerful future dynamic workforce. We must invest in them now!





| Sisters are seeds



By *Deneka Thomas, Project Manager, Girl Be Heard Trinidad and Tobago, Women Deliver Young Leader*

Where I come from rural means
Behind God's back
It means, way past the lighthouse
Somewhere Deep South
It is far countryside where the lives of small town folk hides way
past the city lines
Somewhere, out of sight and out of mind
Here, we don't mind if portions of our population gets left behind

**Where I come from rural means
There are people being left behind God's' back
Backs turned
Eyes turn
Hearts turned cold
So they turn to alternative means like
Less corporate and more slash and burn
Being left behind hinders advancement
So young rural families have to burn to learn**

Where I come from rural sisters are silenced
Them seeds begging to be watered gets cut down before they
could blossom into gardens
Daisies asking to dance and grow beautiful except
They are expected to be mothers and martyrs
Not taught to be bright
Not taught how to soak up the sun
Only how to serve to sons
It is a sin in some homes to aspire and desire the vastness
of the world
Rural girls don't get to disperse in the wind and be dandelions

Where I come from

**Girls come from homes where they have to learn work
hard from young**

Some married off to men 3 times their age

We don't barter no more

**Don't trade herds of goats for things we need to
purchase no more**

Yet in some parts of the world we trade our daughters

For next to nothing

There is nothing but Neglect

Flowers trying to survive the night

**Hoping daddy or uncle or cousin don't come trying to look for
fruits that not ripe**

Where I come from we expect, a girl at the age of 12
To be pulled out of primary school to take care of her 6 siblings
Because daddy out there winning olympic medals in the field
of dead beat

And mummy have no time to do it on her own
Because she have to work two jobs to make ends meet

Where I come from rural means forgotten

Means forged from hardship and struggle

Means bush everywhere

Means a lack of know how and know who so seeds suffer

Means 2 in every three young girls abused

Means foreign

Means forgotten

Means a slip in memory

Means plow the land

Means the best roti makers

Means Think no more of

Means seeds in need of love

More poetry from Deneka Thomas.

<https://www.denekathomas.com/videos>



Water Security: A Wellspring for Rural Girls amid Climate Change

REUTERS/Danish Siddiqui



By [Michael Tiboris](#), *Fellow, Global Water, Chicago Council on Global Affairs*

Women and girls are primarily responsible for water collection in the developing world. Every day, 263 million people, almost entirely women and girls, travel at least 30 minutes from home to collect water.¹ This is an exceptionally time-consuming, physically demanding, and often dangerous activity.² The time lost because of household water insecurity represents an extraordinary loss of productive capacity for women who already face the “time poverty” of uncompensated labor necessary for managing a household and caring for dependents.

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We do not have bathrooms there. They have started, but the construction is not yet completed, and I don't like that aspect in the school. It is very difficult, particularly [for] girls and those who come from neighboring villages. During the monthly cycles, it is more difficult, so some girls don't come to school on those days.

—Rural girl, aged 15, Andhra Pradesh, India

Perhaps the most well-understood consequence rural girls face for water insecurity is poor school attendance. But girls are also exposed to the health risks of untreated water and the potential for contracting illnesses.³ Additionally, the rainfall shocks associated with climate change culminate in more violence directed at female family members.⁴ Water security-related risk of violence extends beyond the home: girls in multiple countries report harassment and assault during water collection and nighttime trips to latrines, ranking these trips as among the most dangerous places they go.⁵

Despite the very significant obstacles that water insecurity presents to women and girls, the fact that they are frequently connected to physical water access presents a relatively clear path of investment for improving rural girls' prospects.¹⁰

As a result, constant anxiety about maintaining an adequate water supply, at great personal risk, has very negative mental health consequences for female family members, who suffer acutely and repeatedly when water is not available. Concern about water availability ranks very highly in surveys of female family members in the developing world, and female family members tend to give their share of household water resources to men and dependents.⁶

Other aspects of girls' water insecurity are directly related to climate change. For example, women and girls are disproportionately more likely to be victimized by weather disasters, which will become increasingly frequent as the climate warms.⁷ Higher fatality rates for women in natural disasters create cascading effects on family resiliency and are linked to higher rates of infant mortality, early marriage, and trafficking of girls.⁸ Some of the effects of weather disasters are cumulative: repeated flooding in coastal Bangladesh caused by sea level rise and intense rainfall has put enough salt into drinking water sources to cause chronic hypertension and more frequent pregnancy complications.⁹

Despite the very significant obstacles that water insecurity presents to women and girls, the fact that they are frequently connected to physical water access presents a relatively clear path of investment for improving rural girls' prospects.¹⁰

One target is exceptionally clear: water security improvements tied explicitly to improving rural girls' school attendance. This can be done by more construction of private and secure toilet facilities at schools as well as investments to move communal water sources closer to where people live. There is already major mobilization on this front by USAID and others. Even greater efforts are needed to tie investment as clearly as possible to the massive benefits of girls' education and to the economic and social benefits which follow.

It is also important to expose the links between water insecurity, domestic violence, and mental health. Much effort goes into arguing that water insecurity creates economic losses, but it is much less frequently treated as a source of gender-based violence and girls'



mental health issues. The reality is that these need to be paired more extensively than they have been.

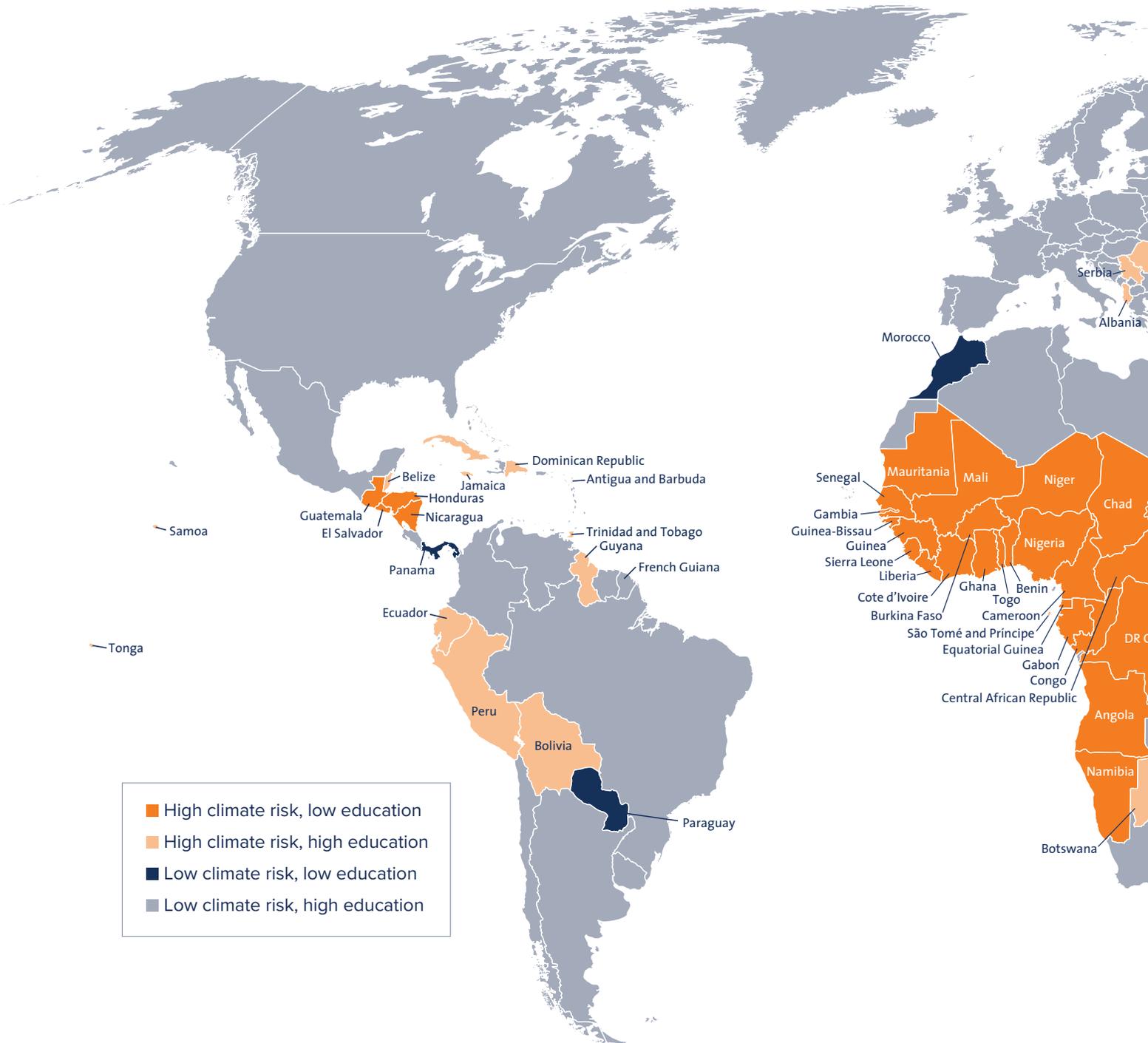
Improvements to rural girls' water security and the social, legal, and economic conditions that influence it are constituent to responding to climate change itself. More water security translates fairly directly into a greater capacity for girls to protect themselves from danger, build wealth, and increase their personal autonomy. Crucial among the development goals for rural girls are improving school attendance and helping them build productive farm businesses as they get older. Basic water access is a necessary component of meeting these goals.

Endnotes

- 1 WHO and UNICEF, *Progress on Drinking Water, Sanitation and Hygiene. 2017 Update and SDG Baselines* (Geneva: World Health Organization (WHO) and the United Nations Children's Fund (UNICEF), 2017).
- 2 Susan Sorenson, Christiaan Morssink, and Paola Abril Campos, "Safe Access to Safe Water in Low Income Countries: Water Fetching in Current Times," *Social Science & Medicine* 72, no. 9 (2011): 1522–26.
- 3 Sorenson, Morssink, and Campos, "Safe Access to Safe Water in Low Income Countries."
- 4 Rainfall shocks substantially increase domestic violence in Tanzanian households (Olukorede Abiona and Martin Foureaux Koppensteiner, "The Impact of Household Shocks on Domestic Violence: Evidence from Tanzania," discussion papers in *Economics* 16 (2016); in India (Sheetal Sekhri and Adam Storeygard, "Dowry Deaths: Response to Weather Variability in India," *Journal of Development Economics* 111 (2014): 212–23). Homelessness following disaster is dangerous for women and girls. In places where marriage age is connected to marriage payments, weather shocks impact age (Lucia Corno, Nicole Hildebrandt, and Alessandra Voena, "Weather Shocks, Age of Marriage and the Direction of Marriage Payments" (Working Paper, No. 40, Dipartimento di Economia e Finanza (DISCE), Università Cattolica del Sacro Cuore, 2016)).
- 5 M. Sommer et al., "Violence, Gender and WASH: Spurring Action on a Complex, Under-Documented and Sensitive Topic," *Environment and Urbanization* 27 (2015): 105–16.
- 6 Elijah Bisung and Susan J. Elliott, "Psychosocial Impacts of the Lack of Access to Water and Sanitation in Low- and Middle-Income Countries: A Scoping Review," *Journal of Water and Health* 15, no. 1 (2017): 17–30.
- 7 Greta Gaard, "Ecofeminism and Climate Change," *Womens' Studies International Forum* 49 (2015): 20–33.
- 8 Maitreyi Bordia Das, "The Rising Tide: A New Look at Water and Gender" (Washington, DC: The World Bank Group, 2017).
- 9 AHM Enamul Kabir, Tapos Kumar Chakraborty, and Gopal Chandra Ghosh, "Bio-Sand Filter (BSF): A Simple Water Treatment Device for Safe Drinking Water Supply and to Promote Health in Hazard Prone Hard-to-Reach Coastal Areas of Bangladesh," *American Journal of Environmental Protection* 5, no. 5 (2016): 107–12.
- 10 Bordia Das, "The Rising Tide."

Secondary education for girls and climate change risk

Many countries with high climate change risk also have the lowest levels of education for girls. Cutting a girl's education short limits her future potential and opportunity and robs the world of the future innovators, leaders, and works that are needed to build climate resilience in the communities most in danger.







Rural Girls: Equal Partners on the Path to Employment



By [Joachim von Braun](#), *Director, Center for Development Research (ZEF), Bonn University*

Girls and young women in low-income rural areas are surprisingly optimistic about their future.¹ For instance, in a large African survey, the vast majority expected their lives to be “better” (39 percent) or even “much better” (56 percent) in five years.² These expectations may be influenced by increased information through new media about opportunities elsewhere. However, girls are realistic; they dream less ambitiously than boys. For example, a study of rural Ethiopian girls revealed their lower aspirations in terms of future income, assets, and social status compared to boys.³ Rural girls’ trust in future opportunities is frustrated by reality. Consequently, they move on to more urban areas if they can. About 800 million girls aged 5 to 19 years reside in less-developed regions, about half of them in rural areas. They need extensive policy attention and supportive action.

To create opportunities for rural girls, it is crucial to improve their access to education. There is progress. Globally, the number of out-of-school children went down by about 112 million between 2000 and 2014,⁴ and the proportion of girls enrolled in basic education recently hit a historic high. Yet in most low-income countries (LICs), access to and quality of education is worse in rural than in urban areas.⁵ This applies also to China despite the nation’s fast economic development.⁶ Poverty, limited attention to girls’ nutrition, and schools

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[I’m] optimistic about getting good jobs and eventually being able to help others because of the education [I’m] getting.

—Adolescent girl, 15 to 19 years, Juba

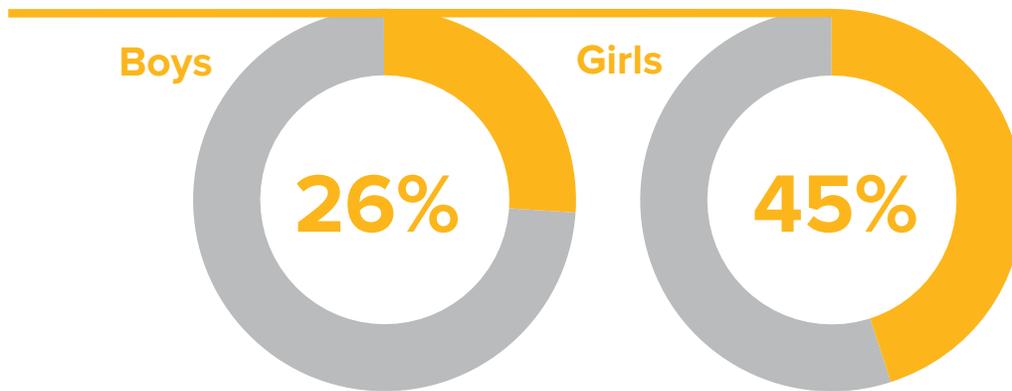
located far away from communities all hamper school attendance and learning.⁷ When school fees are no longer affordable, girls are usually required to stay home. It is estimated that only 25 percent of the poorest girls in LICs complete primary school.⁸

Rural girls are often put in charge of household tasks like fetching drinking water, collecting firewood, preparing food, taking care of younger siblings, and cleaning. As a result, girls in rural Ethiopia, for instance, are less likely to attend school full time and are more likely to be full-time child workers compared to boys. They work about 50 percent more than boys, contributing on average 20 hours per week to domestic chores.⁹ The consequences of child labor on rural girls translate into lower adulthood human capital, aspirations failure, and persistent poverty.

Gender-conscious policy today can indirectly change rural girls’ marginalization. This is demonstrated by the role model effect deriving from reserving leadership positions for women in village councils in India. This practice was found to decrease girls’ time allocated to household chores, reduce the educational gender gap, and increase parents’ occupational aspirations for adolescent girls.¹⁰ A much more aggressive approach of mo-



REUTERS/Khaled Abdullah



Nearly twice as many rural Ethiopian girls **left their villages** compared to boys over a 14-year period.¹¹

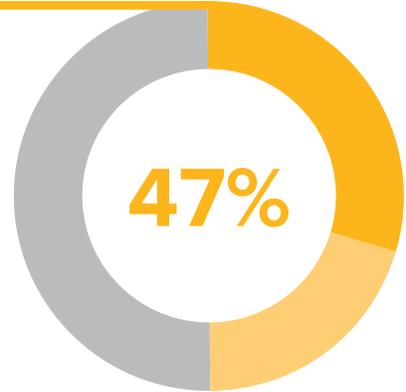
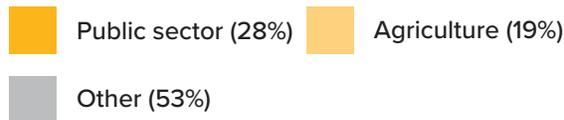
bilization and legal action is needed to overcome violence against women and girls. Rural girls frequently see their mothers beaten and exposed to domestic violence (more than 30 percent of women are affected in many countries in Africa, Latin America, and South Asia). Girls trafficking is still not getting enough attention despite repeated calls to action by Pope Francis.

Almost 75 percent of young women in the Africa youth survey stated that it is difficult to find a job. Thirty-five percent cited better jobs, coupled with better educational opportunities, as essential for making rural areas more attractive places to live and work. The Ethiopia study, which tracked girls and boys from childhood over 14 years, found that almost twice as many girls left their villages compared to boys over those 14 years (45 and 26 percent, respectively). However, the drivers differ: boys migrated to work (65 percent), whereas girls marry away (about 50 percent).¹¹ Apart from primary and secondary schools, training institutions for technical and vocational skills are needed in rural areas to equip girls to become entrepreneurs.

There is evidence from research all over the world, including rural Asia and Africa, that women are as productive farmers as men if they have equal access to means of production, markets, and land rights.

There is evidence from research all over the world, including rural Asia and Africa, that women are as productive farmers as men if they have equal access to means of production, markets, and land rights. But the reality is different, and girls see that their mothers are marginalized in farming. Still, agriculture is not as negatively viewed as its reputation may suggest. While the Africa youth survey shows that many young women would like to work in the public sector (28 percent), agriculture (19 percent) comes in second. Conditions in agriculture will need to change, however, to attract young women to stay in farming. They want improved access to mechanization, access to investment, land rights, informa-

Nearly half of young African women would **like to work** in either the public sector or agriculture.



tion (smartphones), and sufficiently high incomes. While about 3 percent of eight-year-old girls aspire to work in farming, this drops to 0.4 percent when they turn 15. Similarly, in South Africa and Morocco rural girls have lower aspirations of working in agriculture.¹²

All the partners willing to join forces with the growing cadre of rural girls ready to take action can look to the *Berlin Charter: Creating Opportunities with the Young Generation in the Rural World*.¹³ Prepared for the 2017 G20, the charter sets out a blueprint for sustainable rural development with young people as the driving force. The document was drafted with much youth involvement. It can serve as important political impetus and guidance for decision makers from the worlds of politics, business, and civil society, with a view to boosting their involvement in efforts to foster rural development and youth employment. Programs and policies should not only be designed for rural girls but also with them because children can be strong agents of change.¹⁴ In order to guarantee that rural girls' needs and aspirations are indeed met, it is of utmost importance to base actions on evidence that is obtained in close cooperation with them.



Endnotes

- 1 The kind research support and background information for this article by Heike Baumüller, Katharina Gallant, Essa Mussa, Oliver Kirui, and Georgina Wambui Njiraini is gratefully acknowledged.
- 2 The data draw on the results of a text message-based survey of more than 10,000 rural youth in 21 African countries commissioned by the German Ministry for Economic Cooperation and Development in spring 2017. The results reported here refer to the answers given by young women (18 to 24 years).
- 3 D.A. Mekonnen and N. Gerber, “The Effect of Aspirations on Agricultural Innovations in Rural Ethiopia” (ZEF-Discussion Papers on Development Policy No. 214, Center for Development Research (ZEF), University of Bonn, 2016).
- 4 UNESCO, “Education for People and Planet: Creating Sustainable Futures for All,” *Global Education Monitoring Report 2016* (Paris: UNESCO, 2016).
- 5 S. Desai, *World Development Report 2018: Learning to Realize Education’s Promise* (Washington, DC: World Bank, 2018).
- 6 Scott Rozelle, “China’s Rural Human Capital Gap and the Middle Income Trap” (Lecture, *Chinese Growth and Inequality: Future*, Stanford University, California, 2011).
- 7 FAO, “Education for Rural People and Food Security: A Cross-Country Analysis,” ed. P. De Muro and F. Burchi (Rome: FAO, 2007).
- 8 UNESCO Institute for Statistics (UIS), “Education” (Montreal: UNESCO, 2016), <http://data.uis.unesco.org>.
- 9 Essa Mussa, “Child Labour: An Ethiopian Perspective,” *Rural 21* 52, no. 3 (2018): 45–47, https://www.rural21.com/uploads/media/Rural2017_03__S45-47.pdf.
- 10 L. Beaman et al., “Female Leadership Raises Aspirations and Educational Attainment for Girls: A Policy Experiment in India,” *Science* 335, no. 6068 (2012): 582–86, <https://doi.org/10.1126/science.1212382>.
- 11 Mussa, “Child Labour.”
- 12 A. Giuliani et al., “Realities, Perceptions, Challenges and Aspirations of Rural Youth in Dryland Agriculture in the Midelt Province, Morocco,” *Sustainability* 9, no. 12 (2017): 871, <https://doi.org/10.3390/su9060871>; A. Kritzinger, “Rural Youth and Risk Society: Future Perceptions and Life Chances of Teenage Girls on South African Farms,” *Youth & Society* 33, no. 4 (2002): 545–72, <https://doi.org/10.1177/0044118X02033004003>.
- 13 BMZ, *Berlin Charter: Creating Opportunities with the Young Generation in the Rural World: Joint Call for Action by Science, the Private Sector and Civil Society* (Bonn: BMZ, 2017).
- 14 J. von Braun, “Children as Agents of Change,” in *Children and Sustainable Development: Ecological Education in a Globalized World*, ed. A.M. Battro, P. Léna, M.S. Sorondo, and J. von Braun (Cham: Springer International, 2017).



In their words

How three Senegalese girls overcame significant obstacles to stay in school.

Fanta, Safi, and Dieynabah are three Senegalese girls who defied the odds to stay in school. From managing the burdens of unpaid care work (fetching water, cooking, caring for others in the household), to traveling long distances to school, to going without electricity and water either at home or at school, these girls have overcome significant obstacles to pursue their dreams. These firsthand accounts of their amazing stories were documented by the ONE Campaign—a campaigning and advocacy organization of more than 9 million people around the world that is taking action to end extreme poverty and preventable disease, particularly in Africa—in collaboration with Tostan, a nonprofit that works in African communities to bring about sustainable development and positive social transformation. Critical to the ONE Campaign’s mission is making sure that every one of the over 130 million girls currently out of school is able to access and complete a quality education.

Fanta Mballo

Fanta Mballo, 18, lives in Kolda, Senegal. She was able to avoid early marriage—despite her parents’ encouragement to marry—in order to stay in school. She wants to become a midwife to ensure that there are more healthcare workers in her community.

I get up very early in the morning. Sometimes as early as 6. I revise my exercises a little. I sweep the house. I go and get water, wash the bowls, wash myself, and go to school. Sometimes I go [to school] at midday, sometimes from 10. In the afternoon I also go to school from 4 p.m., sometimes until 6, sometimes until 7, sometimes until 7:30. Every day, except Sunday.

We have a lot of problems back home. But it’s different now from what it used to be. Before they would marry us very young and without having been to school. But it’s not like that anymore in the village. Now, they allow girls to study.

When I was 13, three men came to my home to ask to marry me. I refused. My parents wanted me to marry the last one. I explained to my parents, “I’m 13 now, if you marry me, it will be very difficult for me to have a child.” I didn’t want to get married, and I also wanted to learn at school. If you marry very young, you can’t go to school. You have to stay at home. So that’s no good.

I love studying. My favorite subjects are history, geography, French, and science. I want to become a qualified midwife because I’ve seen a lot of difficulties in my community, especially where I live. We don’t have a health center and all that. So that’s what I want to become: a qualified midwife.

It’s important for all girls to have a good education because girls today need to have the same place as boys. Because today, girls who have a good education will be able in the future to get positions to help, to provide services in the community.

Safi Mballo

Safi Mballo, 18, lives in Sare Kante in the Kolda region of Senegal. She persuaded her parents that she should not get married and should be allowed to continue her education for as long as possible.



The village is far away. Every day we come [to school], seven kilometers away. We walk from 6 to 8 a.m. on foot. We don't have bicycles. We have no way of getting there other than on foot.

Before we leave here to go to school, we have to get water from the well, grind the millet, sweep the room or the yard of the house, wash the dishes, and go. The clock won't be waiting for you. Time passes, and when you finish there is no bicycle. You have to walk the seven kilometers. The teacher is already there, and you are very late.

The boys don't have to do that work, just the girls. The boys just take the bucket to the well, wash, and leave. But before the girls can leave, they have to work a bit. Even if you're back at 2 p.m., you still have to grind the millet and prepare. And it's not preparing to learn your lessons—that's not it—or doing your exercises. First, you have to prepare dinner. And by the time you finish that, if it's nighttime, you will get tired, and then you can't take your books to learn. All you can do is wash and go to bed, sleep.

I never asked why it's like that. I don't have a little sister, just a little brother. He's small. He is in the second year of primary. I'm the only girl. I'll go to school. I'll work because I don't come back too late, then, at 2 p.m. I will start again from scratch. It's like that. We do it.

It's important to study because in the world today; if you don't study you will lose out. But if you study you will get a job. For me, I study to be a Spanish teacher, señorita. I want to be a Spanish teacher because of all the subjects—maths, biology, English—it's the Spanish language that I like. I like the Spanish language a lot.



Dieynabah Mballo

Dieynabah Mballo, 18, lives in Sare Kante in the Kolda region of Senegal. Her mother did not want her to have an early marriage and has supported her decision to stay in school.

We are so tired in the village because the women work so hard. The women cook, they draw water from the well, they sweep, they grind the millet, they do everything. Because the women work very hard, that's why I want to learn until I achieve something, until I have something.

My family, they wanted to give me away for an early marriage, but my mother opposed it. She has taught me a lot to make sure I am not married now because I am still a child. You can't give away girls for marriage at 13, 14.



Education taught me to learn, to be something at school, because when you don't go to school, you don't know much in the world. In Senegal you need to learn a lot to have something. Something like being a doctor or a teacher or a midwife. Studying allows me to get something, to help my parents in the future and my friends, my children, and my husband. I want to help my parents to get equipment, buy sheep, a house, to bring a health center here. Education will give me spirit. It will help me, it will give me a lot of things. It will give me spirit for my children. I will help my children. I will help myself. I will know how to give my own children an education.



Born to Lead: Life Skills and Assets for Rural Girls

Rural girls are the key to unlocking progress in low-income countries where critical education, health, and economic indicators refuse to budge. While rural girls are no more important than urban girls or rural boys, they are often left behind because of the *triple* challenges of age, location, and gender. Investing in rural girls—and ensuring their progress—will lead the world forward, thanks to the profound impact girls and women have on their communities and the multiplier effects.



Recommendations by age group



Girls in rural areas are especially deserving of investment because they often have inadequate opportunities to access good health care, education, and security. It is important to note that this deficit of opportunities does not mean that girls are vulnerable actors who require others to empower them. Girls in rural areas are strong and capable, and they have the power within them to direct the courses of their lives and influence the lives of others. Rural girls care for their siblings, tend to animals and crops, cook for their families, and gather water and firewood from long distances. Girls also play sports, win at chess, advocate for their rights and the rights of others, write poetry, tell their stories, and invent new products.

They are already leading, and the global community can support rural girls by removing the barriers that can slow them down and by building up their assets, especially knowledge and skills that can never be taken away. Progress is a shared responsibility. Large-scale change happens when society as a whole participates. As rural girls build their capital—human, social, economic, and cognitive—their natural resilience, brilliance, and diverse capabilities are reinforced. Good health is an asset. Proper nutrition is an asset. Literacy is

an asset. A savings account is an asset. Knowledge of a safe space to report abuse is also an asset. As rural girls gain practical life skills, they are better equipped to chart their own paths and create opportunities for those around them. Two key ways to help rural girls gain these assets is to ensure they receive a quality education and to focus on them as a funding priority.

EMPHASIZING A QUALITY BASIC EDUCATION

Ensuring girls start and *finish* school is the most fundamental commitment that must be made at global, national, regional, and local levels. Doing so changes the course of history. It is estimated that over half of the reduction in deaths of children under the age of five in recent decades can be attributed to the education of girls and women.¹ That translates to 4 million children who survived because their mothers were educated and sought care for them when needed—and had sufficient status in the household to do so.²

There are critical moments at every point in a girl's life where small and large actions can make a huge difference in her trajectory.

So why is this goal so difficult to achieve? What is needed for girls to complete school? The barriers are not only related to financial cost, but also to political will, priorities, and cultural norms. In any case, we cannot afford to *not* educate girls. Human capital is the driving force behind economic competitiveness. As girls and women are left behind, nations that underinvest in girls will sacrifice growth and progress.

- New research from the World Bank estimates that failing to support girls through the completion of their secondary education costs the world US\$30 trillion annually in lost earnings and productivity.³
- A country's GDP increases by an average of 3 percent if 10 percent more adolescent girls attend school.⁴

The benefits of educating girls are great—and the gap between rich and poor, rural and urban so significant—that there is a strong argument to be made for targeting rural girls with interventions that provide support over and above other target groups.

MAKE HER A GLOBAL FUNDING PRIORITY

The evidence that agricultural development is critical to overall development and that the empowerment and inclusion of women are key strategies for increasing prosperity is compelling. Yet a focus on the factors that empower women to lead as educated and productive women has not reached the same level of priority. Despite increasing concerns about stunting and malnutrition globally and the nutrition community's call to rally around the first 1,000 days of a child's life, rural girls are only beginning to be acknowledged as key actors in breaking the intergenerational transfer of undernutrition. If girls are well nourished today, pregnant women tomorrow are more likely to have children that are off to a good start in the 1,000-day window.

The Canadian government's commitment to gender equality and the announcement in June 2018 of US\$2.9 billion⁵ to fund education for the world's poorest girls and women has been celebrated and matched by other governments. Funding for rural girls should also be prioritized by the global community and tracked clearly in global databases.

A lifecycle approach is imperative to identify and address the myriad challenges facing rural girls and young women at various life stages. This approach will help them seize opportunities to lead their families, villages, businesses, and governments. It will also demonstrate the power of their collective potential to influence the sustainable development story being written globally. High-quality education for girls is the top priority, as the direct value and ancillary benefits of staying in school and gaining skills cannot be underestimated. However, there are other critical actions that must be taken right now for rural girls across the age continuum as well as for their mothers, aunts, and sisters. Otherwise, the girls of today will face the same challenges as the current generation of adult women.

Therefore, these recommendations are arranged by age. There are critical moments at every point in a girl's life where small and large actions can make a huge difference. Addressing these issues is the joint responsibility of the global community, governments, civil society (including faith leaders), and the private sector. Actions are required independently and collaboratively to achieve the breadth and scale of change necessary to position rural girls to grow, lead, and contribute to a healthy, peaceful, and prosperous world.





Ages 0-2 INFANCY

RECOMMENDATIONS

- Address the bias that exists for boy-child preference and address negative coping strategies that impact “unwanted” children
- Invest in birth registry technology and capacity
- Educate and empower mothers and fathers to understand the critical importance of the first 1,000 days; acknowledge and address gender bias



ADDRESS THE BIAS THAT EXISTS FOR BOY-CHILD PREFERENCE AND ADDRESS NEGATIVE COPING STRATEGIES THAT IMPACT “UNWANTED” CHILDREN

A preference for boy children over girl children has been a long-standing norm in many regions of the world.⁶ It is estimated that 3.4 million girls are not born or are “missing” each year as the result of sex selection.⁷ With inheritance and legacy often tied to boy children, families have historically gone so far as to abandon or even kill girl children. With access to ultrasound technology, son preference and the abortion of girls is more prevalent. To address this bias, the strongest possible measures must be taken at the government level,

while engaging in community-based approaches focused on the underlying cause of this practice—a lack of value placed on the life of the girl-child. Recommended interventions include:

- Expand care and adoption options for “unwanted” children, who are more frequently girls in many geographies, particularly in South and East Asia.
- Develop innovative and secure reporting procedures that allow the community to report concerns.
- Work with community leaders and community-based organizations to engage in dialogue on persistent, negative norms, particularly around dowry.
- Use media and popular entertainment tools like comic books, television, and radio to address entrenched norms in ways that are approachable to more remote audiences.



INVEST IN BIRTH REGISTRY TECHNOLOGY AND CAPACITY

Around the world, 230 million children's births are not registered, which results in a loss of rights due to lack of official identity.⁸ Emphasizing and counting girls are important parts of the process of reversing norms on child preference. The following approaches can move this process forward:

- Eliminate fees required to register a birth.
- Invest in technology improvements to ease the process.
- Build government capacity to track records and execute registration.
- Work with community leaders to address registration as a norm for all children.



EDUCATE AND EMPOWER MOTHERS AND FATHERS TO UNDERSTAND THE CRITICAL IMPORTANCE OF THE FIRST 1,000 DAYS; ACKNOWLEDGE AND ADDRESS GENDER BIAS

Investing in the first 1,000 days—the time from conception to the child’s second birthday—is critical. Proper nutrition during the 1,000 days is vital for the long-term success of the child, and the benefits extend to the entirety of society. Rural children are at a disadvantage during the 1,000-day window, as they are 1.5 times more likely to be stunted than their urban counterparts in low-income countries.⁹ Many factors contribute to this, including the poor nutritional status of mothers in rural economies due to lack of access to a quality diet or clean water. Further, because girls marry earlier than boys, many mothers are adolescent girls or young women and are therefore often not targeted by nutrition programming.¹⁰ Water and Sanitation for Health (WASH) in homes and schools is also key to ensure that women and girls are healthy and that girls remain in school. Being able to access clean water close to home helps girls remain healthy and reduces the amount of time spent gathering water, giving them more time to engage in other productive activities.¹¹



Expectant mothers need appropriate nutritional care for themselves, antenatal care, and awareness of how to address the nutritional needs of their babies. Rural women may also be more inclined to take on difficult physical labor, which may complicate their pregnancies and lead to preterm births and low birth weight. By eliminating child marriage and delaying the age of first marriage, rural women are more likely to receive the proper care and nutrition they would need when expecting their first child. Agricultural actors in the public, private, and nonprofit sectors have an opportunity to promote knowledge of this issue among rural families and advocate for changes in work responsibilities. In addition, 1,000-day messaging should focus on the importance of maintaining the same best practices for boy and girl children, as differences that favor and disfavor girls are visible around the world. Actions recommended in this area include:

- Support prenatal and antenatal visits and education programs for both women and men, emphasizing key risks and care practices unique to rural life.
- Invest in basic literacy education for rural women, which has multiple benefits and correlates with better nutrition and health outcomes for their children, and for girl children in particular.
- Ensure authority figures like community leaders, doctors, and grandmothers emphasize the importance of gender parity in care and feeding practices, particularly related to water and sanitation in homes, exclusive breastfeeding, and seeking medical care.

- Clearly communicate the risks of physical labor on the farm in advanced stages of pregnancy and directly following delivery to both women and their partners. Encourage labor sharing that can lighten women’s workload and permit them the time they need to care for infants.
- Consider educating older children alongside mothers on prenatal nutrition and health practices, particularly for in-home visits. This could help girls gain critical knowledge before the age of pregnancy.





Ages 2-5

EARLY CHILDHOOD

RECOMMENDATIONS

- Focus on preventing mortality
- Consider early development programming in rural areas



FOCUS ON PREVENTING MORTALITY

Gender gaps persist in child mortality in South and West Asia. In these regions, significantly more girls die than boys even though the gender gap has been shrinking over time. India remains one of the most important geographies to focus on for this gender gap. Women's education and empowerment have been shown to have a positive impact on care-seeking behaviors and girl-child survival.¹² For example, daughters of literate mothers are less likely to be malnourished than daughters of illiterate mothers.¹³

Incentivize adherence to the pre- and post-natal visits using economic tools, particularly linked to agriculture, to ensure mothers are empowered with education.

- Focus on the fundamentals of child health, including regular immunizations and treatment for common health conditions like diarrhea, which can lead to death when untreated.



CONSIDER EARLY CHILD DEVELOPMENT PROGRAMMING IN RURAL AREAS

Globally, only 44 percent of children are enrolled in preprimary education. Programs that enable children to get a head start will support success in primary school, cognitively and nutritionally. But these programs are not just about supporting children. Childcare is a burden for older girls and a key constraint on women’s participation in agricultural training and in farmers groups. Caregiving can also be a challenge for rural families in more developed countries like the United States. According to recent research, 55 percent of rural children live in “childcare deserts” in the United States, where limited or no childcare options exist, a rate much higher than the national average or among urban residents.¹⁴

- Consider preprimary education, feeding programs, and/or daycare programs in rural areas, which can support nutrition, health, and cognitive development and relieve the work burden on older girls.
- Introduce daycare-like support as part of agricultural training for smallholder farmers. Use such care programs to educate parents about the value of group play and socialization, while also introducing age-appropriate educational opportunities and simple hygiene practices.



REUTERS/Andres Stapff



Ages 6-10

CHILDHOOD AND PRIMARY SCHOOL AGE

RECOMMENDATIONS

- Get her started in school on time
- Teach life skills alongside academic priorities that consider how school shapes long-term norms and beliefs
- Design and equip schools to be healthy and safe for girls
- Address sexual and physical abuse in schools and teach girls how to deal with it



GET HER STARTED IN SCHOOL ON TIME

Twice as many girls as boys never start school, and rural children around the world generally have a higher risk of being out of school.¹⁵ In one study across several African countries, children in rural regions were found to be 43 percent more likely to be out of school than their urban counterparts.¹⁶ The gender differences are highest in Arab states, Sub-Saharan Africa, and South and West Asia. If she never starts school, the likelihood that she will learn to read goes down considerably, which significantly inhibits her outcomes throughout life.

- Launch school enrollment campaigns at the national, local, and community levels that engage faith leaders and other community leaders.
- Use conditional cash transfers to incent particularly vulnerable families or regions.
- Invest in remedial programs for those who are not school-ready at school age.



TEACH LIFE SKILLS ALONGSIDE ACADEMIC PRIORITIES THAT CONSIDER HOW SCHOOL SHAPES LONG-TERM NORMS AND BELIEFS

We learn many things in school beyond the curriculum. There are age-appropriate skills and knowledge that can protect girls and enable them to succeed that teachers and school workers can impart or simple posters can explain. At this age, things like hand-washing, basic nutrition and health, and basic information about menstruation are critical assets she can retain even if she drops out of school. Knowing about the materials (soap, water, and feminine products) and facilities (toilets, trash disposal, etc.) needed to help them remain clean and free from infections helps ensure girls' health and their families' health at home and at school.¹⁷

Basic facts (like knowing how many years of schooling she is guaranteed by law) or skills (such as knowing how to make a simple budget) are pivotal. Even practicing how to express a desire, like wanting to stay in school, can help her be prepared should she need to express why it's important to her parents. But as the future of work becomes more and more technology-enabled and the technology gap grows between urban and rural settings, getting rural girls basic exposure to technology will give them an enormous advantage for future economic opportunity.



REUTERS/Khaled Abdullah



- Develop and disseminate cultural-, age-, and role-appropriate materials for teaching very basic financial principles (e.g., money denominations, earning, saving, borrowing, lending, accounting).
- Develop and disseminate cultural-, age-, and gender-appropriate materials for teaching the basics regarding bodies, reproduction, and respecting one another.
- Consider the influence of curricula on gender norms and status; adopt a gender-sensitive curriculum to create new ways of thinking and a better learning environment for girls and boys.
- Consider investing in rural access to low-cost computing technology like those offered by BRCK or Endless Mobile, which are designed to reach low- and middle-income areas that may primarily be disconnected. Some technologies bring students online while others simulate an online environment.



DESIGN AND EQUIP SCHOOLS TO BE HEALTHY AND SAFE FOR GIRLS

Help her build her social and support networks early with quality teachers, mentors, and time to form friendships

- Invest in ongoing teacher training, reasonable salaries, and incentives for rural teachers to stay in rural communities.
- Encourage girls to build friendships with peers, and create unstructured time at school that enables socializing since girls may not get it at home.
- Provide mentorship programs and examples of girls and women who have succeeded.

- Use gender-positive posters, reading materials, in-class examples, site visits, role models, and other opportunities for students to see the full range of their potential.
- Create girls' clubs, 4-H, scouting, or similar environments for nonschool learning, socializing, and practical life skill development. Invite out-of-school children to participate.
- If girls live near a body of water, offer swim classes. As climate change worsens and floods and typhoons increase, especially in South Asia, the risk of drowning increases.¹⁸



ADDRESS SEXUAL AND PHYSICAL ABUSE IN SCHOOLS AND TEACH GIRLS HOW TO DEAL WITH IT

Unfortunately, girls often face physical and sexual abuse at home, on the way to school, and while attending school. School-based, gender-based violence, which can be physical, sexual, or psychological, is now known to be a significant problem across the globe, affecting an estimated 246 million children.¹⁹ Although comprehensive data is not available, individual studies illuminate the problem. One study in Botswana found that 67 percent of girls had been sexually harassed by teachers, with 20 percent reporting that teachers asked for sex.

The overwhelming majority, 68 percent, reported this behavior in lower secondary school.²⁰ In Peru girls living far from school were found to have elevated risk of sexual assault. The conclusion was that sexual abuse in and around schools is prevalent in every geography. Fortunately, there are ways to reduce the risks:

- Ensure teachers are vetted, supervised, and trained in how to create and maintain safe environments.
- Teach children—girls and boys—to be peer mentors. Basic information such as what constitutes abuse, how to speak up, and how to report abuse are critical steps to creating a safe environment.
- Activate parent-teacher associations and school staff to better identify and resist sexual abuse within the school.
- Discourage exploitative, sexually explicit, and/or body-shaming images, lyrics, and other public (media) depictions of girls and young women.
- Teach girls self-defense in an age-appropriate way, as taught in India by Indian police or in Jordan by Lina Khalifeh of SheFighter.



Ages 11-13

EARLY ADOLESCENCE AND LOWER SECONDARY SCHOOL

RECOMMENDATIONS

- Focus on preventing girls from dropping out of school
- Design and equip schools to be healthy and safe for girls
- Holistically address the onset of menstruation
- Address sexual and physical abuse as a risk and teach girls how to deal with it
- Use multiple strategies to reduce the risk of child marriage, especially during school holidays and breaks
- Help her build life skills, friendships, and a supportive social network through activities with peers
- Invest in programs and continued research to address mental health with a focus on suicide and rural pre-adolescents and adolescents
- Provide regular access to and immersion in science, technology, and computer coding



FOCUS ON PREVENTING GIRLS FROM DROPPING OUT OF SCHOOL

There is a sharp and well-documented decline in attendance for girls at lower secondary schools that coincides with the onset of menstruation.²¹ A multidimensional strategy is necessary to address the increasing challenges to girls staying in school. Access to lavatories becomes critical by this age, as are accessible menstrual products. However, it is not just menstruation that makes this age a risky life stage for girls. Early marriage often becomes a threat, as does sexual violence. This is also the age at which depression appears to set in, particularly in rural areas. Included in this trend are wealthy countries like the United States, which has seen a dramatic increase in adolescent depression and suicide among girls.²²



DESIGN AND EQUIP SCHOOLS TO BE HEALTHY AND SAFE FOR GIRLS

The fundamentals of a girl-friendly school were described in the 6 to 10 age group, and they are still critical for this age. In fact, the importance of these issues increases in early adolescence. Often, girls from rural areas leave their home areas to attend school because secondary schools may not exist in more remote areas. This can alter costs, distance from home, and the family's cost-benefit ratio as they consider allowing girls to leave home and their caretaking and agricultural responsibilities. Keeping girls in school is the most important priority at this age, but it should be a continuing conversation with them and their communities at a moment of special attention. The following actions can help schools become better equipped for girls:

- Reduce distance to school by building smaller rural schools, including multi-grade schools.
- Invest in safe transport systems like bikes or buses when schools are not easily accessible by foot, including supervision by vetted adults along school routes.
- Ensure the presence of safe, well-designed, gendered latrines in close proximity to the school.
- Provide bikes or buses, school meals, which have a particularly beneficial effect on girl-child attendance, and introduce deworming and handwashing to ensure the nutrition is absorbed and not undermined.
- Ensure that feminine hygiene products are available and understood.



HOLISTICALLY ADDRESS THE ONSET OF MENSTRUATION

The degree to which girls miss school or drop out because of menstruation has had variable observations across countries and regions within countries. UNESCO estimates that 1 in every 10 girls in Sub-Saharan African girls misses school during her period and it might be as much as 20 percent of the school year.²³ A recent nationally representative study of Bangladesh found that 42 percent of rural girls missed school as compared to 38 percent of their urban peers. Girls reported missing school because they felt discomfort sitting next to boys (59%), they felt embarrassed to be at school during menstruation (31%), they didn't have a place to change (5%), or their parents forbade them to go (4%).²⁴ While only one example, this highlights many of the issues affecting attitudes and outcomes for girls regarding menstruation, and it requires a holistic approach to address.

- Ensure the presence of safe, well-designed, gendered latrines near the school.
- Invest in low-cost, girl-centered menstrual supply development and distribution; consider partnerships with the many innovators working to improve what is available.
- Help girls, boys, and the broader public understand puberty and menstruation and act to destigmatize it through in-school messaging, community-based dialogue, and inclusion in popular media like radio or television programming.
- Increase access to sexual education in early adolescence.
- Educate girls on the increased risk of anemia at menstruation and the foods that can help them get more iron; offer a school meals program designed for adolescents.



ADDRESS SEXUAL AND PHYSICAL ABUSE AS A RISK AND TEACH GIRLS HOW TO DEAL WITH IT

Unfortunately, girls often face physical and sexual abuse at home, on the way to school, and while attending school. School-based, gender-based violence, which can be physical, sexual, or psychological, is now known to be a significant problem across the globe, affecting an estimated 246 million children.²⁵ Although comprehensive data is not available, individual studies illuminate the problem. One study in Botswana found that 67 percent of girls had been sexually harassed by teachers, with 20 percent reporting that teachers asked for sex. The overwhelming majority, 68 percent, reported this behavior in lower secondary school.²⁶ In Peru girls living far from school were found to have elevated risk of sexual assault. The conclusion was that sexual abuse in and around schools is prevalent in every geography. Fortunately, there are ways to reduce the risks:

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- Teach girls self-defense in an age-appropriate way, as taught in India by Indian police or in Jordan by Lina Khalifeh of SheFighter.





USE MULTIPLE STRATEGIES TO REDUCE THE RISK OF CHILD MARRIAGE, ESPECIALLY DURING SCHOOL HOLIDAYS AND BREAKS

Across the world, girls are more likely to be married before 18 if they live in a rural area than an urban area. The poorest girls are more at risk for early marriage. Despite progress to reduce child marriages in the past decade, 12 million girls are still married annually before the age of 18, roughly 20 percent of girls worldwide.²⁷ Child marriage not only reduces independence and economic opportunity, it also puts girls at greater risk of sexually transmitted infections as well as early childbearing and complications such as fistula and death in childbirth for her or her baby.²⁸ Changing this cultural norm requires addressing the legal issues and the attitudes and beliefs underpinning it. Discussions with girls themselves, who may or may not be fully aware of the consequences of marrying early, must be included. A review of interventions for reducing child marriage by the [Population Council](#) found that empowerment-based strategies were the most consistently effective.²⁹

- Talk to girls about early marriage, when and how marriages happen, and what has happened to older girls that were married young. Help them understand how they can voice their preference to stay in school.
- Support activities that build self-esteem and confidence more generally. One study in Ethiopia that focused on this found lower rates of child marriage as girls reported higher aspirations and a desire to complete school.³⁰
- Have a strategy in place to talk to girls about child marriage as holidays and school breaks approach. Consider special programs that address this break in areas known to be at high risk.
- Work with traditional influencers and those on [social media](#) platforms to explain the health and economic risks of child marriage; include men, boys, teachers, grandmothers, and traditional leaders.



HELP HER BUILD LIFE SKILLS, FRIENDSHIPS, AND A SUPPORTIVE SOCIAL NETWORK THROUGH ACTIVITIES WITH PEERS

Friendships are an important part of school and can help girls cope with challenges at school and home. Group-based activities can help facilitate friendships and build social networks. Group-based activities like scouting and sports have been shown to have important short- and long-term positive effects for girls and boys. First, their activities aid skill development. Second, scouting and guiding programs have powerful mental health benefits. One large-scale, long-term study of scouting programs found that participants had an 18 percent reduction in anxiety and mood disorders at the age of 50 compared to peers who had not taken part.³¹ The study noted that while poorer people tend to have higher mental illness levels than those of higher wealth levels, the effect was not observed for those who participated in scouting. Third, participating in peer groups outside of school may hold specific benefits for girls. In the women’s empowerment space, self-help groups and women’s groups can have powerful economic development benefits.³²

- Invest in girl youth programs like scouting, girl guides, 4-H, and similar programs that build skills, leadership, and confidence.
- Support girls’ participation in sports to boost their health and encourage confidence and friendships with peers.
- As part of curricula, “clubs” or “bootcamps” outside of classes provide regular access to or immersion experiences with science, technology, and computer coding, which will prepare girls for future job opportunities.





INVEST IN PROGRAMS AND CONTINUED RESEARCH TO ADDRESS MENTAL HEALTH WITH A FOCUS ON SUICIDE AND RURAL PRE-ADOLESCENTS AND ADOLESCENTS

Mental health challenges and the risk of suicide increase significantly as girls approach this age as stated in the [Progress Report](#). Many of the interventions suggested to build skills will also have benefits for mental health. But the drivers of suicide are not well understood, and rates are increasing in many regions, including wealthier countries. More research is needed, including understanding differences between rural and urban girls, where differing access to technology may play a part in outcomes.

- Raise awareness regarding depression and mental illness, and act to reduce the stigma attached to both.
- Given low levels of skilled professionals, consider opportunities to use technology to offer mental health treatment and education.
- Encourage community-based mental healthcare.
- Encourage unstructured time at school where girls can discuss challenges with friends, and encourage group activities as described in the previous section.
- Discourage exposure to exploitative, sexually explicit, and/or body-shaming images, lyrics, and other public/media depictions of girls and young women.



PROVIDE REGULAR ACCESS TO AND IMMERSION IN SCIENCE, TECHNOLOGY, AND COMPUTER CODING

Coding is becoming a mandatory skill for young people facing a daunting future of work. Learning to code is compulsory in schools in many nations. Moreover, adult professionals are entering coding “boot camps” because of its importance to employment across categories.³³ There are many different ways to teach rural girls to code; many of them are fun and low in cost, but the main thing is exposure. Otherwise, the world of work may leave them behind or sentence them to a life of manual labor. Given the permeation of mobile phones around the world and their increasing capacity to do complex tasks, hardware should soon cease to be the primary barrier to gaining access.



Ages 14-18

LATE ADOLESCENCE AND UPPER SECONDARY SCHOOL

RECOMMENDATIONS

- Ensure girls get an official ID and advocate to change laws that make the process more difficult for girls than for boys
- Support vocational education opportunities and other employment on-ramps
- Support her safe sexual health and access to family planning tools



ENSURE GIRLS GET AN OFFICIAL ID AND ADVOCATE TO CHANGE LAWS THAT MAKE THE PROCESS MORE DIFFICULT FOR GIRLS THAN FOR BOYS

Even though birth registries are the first step to ensuring an identity and rights for girls, many countries grant official identification cards around this age period. This card gives access to government services and to voting, but it can also be important for getting a bank account. According to the World Bank, close to 40 percent of eligible populations in low-income countries do not have an ID. In middle-income countries that number is just below 10 percent.³⁴ In low-income countries there is also a significant gender gap. On average, over 45 percent of eligible women do not have an ID compared to 30 percent of

eligible men.³⁵ Obtaining an ID becomes harder in some countries if women are married at the time they apply due to laws that impede their ability to act independently. For more resources on this topic, visit the [World Bank's Identification for Development Program \(ID4D\)](#). The lack of an ID often means that girls are unable to secure assets such as land and a bank account, highlighting the importance of girls securing IDs.

- Eliminate unnecessary barriers to obtaining an ID, including requiring a man to be present or requiring a fee. Have alternative processes in place for girls without birth records.
- Consider programs, technologies, or policies that would make registration facilities accessible to rural areas without travel.
- Link IDs to financial services like a mobile money account to help increase economic opportunity. Privacy considerations, however, should be paramount as new programs are rolled out, as in the case of [Aadhar biometric ID program in India](#).
- Ensure that girls have secure rights to assets such as a bank account and land.



SUPPORT VOCATIONAL EDUCATION OPPORTUNITIES AND OTHER EMPLOYMENT ON-RAMPS

Women enter the workforce in a less favorable position, and they gain their first job more slowly than men. Helping to support young women to transition more easily into the world of work is a key step to their long-term success. Businesses have a particular role to play as providers of internships and apprenticeships. However, in many areas a large number of employment opportunities is in the informal sector. For these opportunities, technology access and mentoring will be critical to help young people start their own enterprises.



- Support technical and vocational education opportunities and target rural girls for enrollment. Opportunities in the agrifood supply chain, including food processing, aggregation, or packaging and retail may be particularly opportune in rural areas as the middle class grows.
- Strengthen rural hubs with technology access, mentorship, and financing and ensure they are friendly to adolescent girl's participation.
- Within the private sector, increase paid internship and apprenticeship programs that are accessible to girls, particularly in fields related to science and technology.
- Help girls identify and apply for scholarship programs like those offered by the Visiola Foundation.
- Aggressively expand mobile phone towers and coverage to rural areas.
- Support high school graduation and college enrollment support services.





SUPPORT HER SAFE SEXUAL HEALTH AND ACCESS TO FAMILY PLANNING TOOLS

Access to contraception is important for women to time pregnancy and prevent STIs. Girls are often denied this opportunity despite often having sex before the age of legal adulthood. The World Health Organization reports that 16 million adolescents aged 15 to 19 give birth around the world each year, and 23 million adolescents report wanting contraception but not being able to access it.³⁶ Increasing access to information for adolescent girls as well as care and tools to protect herself is important for protecting her and her community. In some low-income regions like Southern Africa, rates of HIV infection are increasing among teenage girls despite declines in most other regions.³⁷ In order to address this, men and boys must be actively engaged in the conversation about appropriate sexual behavior, risk of STDs, and pregnancy.

- Reduce barriers to adolescent girls accessing contraception, including supporting health workers and pharmacies to provide youth-friendly care and information and reducing legal barriers that may prevent youth from obtaining contraception.
- Develop educational programs that are inclusive and encouraging of pregnant girls to finish school.



Ages 0-18

ALL LIFE STAGES

RECOMMENDATIONS

- Across sectors, invest in data collection that will enable geography, gender, and wealth to be seen together so rural girls are easily visible in important data sets
- Use every tool to dismantle norms around female genital mutilation, the dowry, and child marriage
- Design and equip schools to be healthy and safe for girls
- Address sexual and physical abuse as a risk, and teach girls how to deal with it
- Teach life skills alongside academic priorities that consider how school shapes long-term norms and beliefs
- Create programs to reach out-of-school girls
- Address the policy norms that impact their mothers and will impact them
- Invest in agricultural development



ACROSS SECTORS, INVEST IN DATA COLLECTION THAT WILL ENABLE GEOGRAPHY, GENDER, AND WEALTH TO BE SEEN TOGETHER SO RURAL GIRLS ARE EASILY VISIBLE IN IMPORTANT DATA SETS

As noted in *Girl's Grow*, it is still far too difficult to “see” rural girls in critical health, education, and rural development data sets. Isolating rural girls means pulling out data on geography, gender, and, ideally, poverty level, as these three factors put girls most at risk across a range of indicators. Efforts like the 2016 commitment made by the Bill & Melinda Gates Foundation to invest US\$80 million to close gender data gaps are an important starting point that can improve methodologies and shed light on missing data. But more needs to be done, especially to see if progress on the Sustainable Development Goals is truly being made. The following actions are important ways to move forward:

- Support implementation and funding for the recommendations highlighted within the “Ready to Measure” study such as sustainable funding and national capacity building.
- Invest in activities like EqualMeasure2030, which not only make available data easy to use, but also support activities like qualitative and story-based evidence development and applications of the data such as supporting women’s movements to advocate for their rights.





USE EVERY TOOL TO DISMANTLE NORMS AROUND FEMALE GENITAL MUTILATION, THE DOWRY, AND CHILD MARRIAGE

The process of changing social norms is perhaps far less understood than many of the other interventions described above. However, developing robust strategies for changing the damaging beliefs and practices that harm girls must be a priority. Among the most destructive are female genital mutilation (FGM), child marriage, and the use of dowry systems, which are often tied to early marriage. FGM can occur across a wide range of ages, but generally happens by age 15. An estimated 200 million girls are cut each year, often with the full support of their families, who believe they are preparing her for a successful marriage and life.³⁸ The continued use of the dowry system is also a root cause of child marriage and represents an underlying conviction that girls are not as valuable as boys. Educating girls and supporting them to become more confident and economically empowered is one strategy for increasing their perceived value, but addressing these norms requires a holistic approach, many of which are discussed throughout the various age-specific sections.³⁹ Examples of strategies that should be employed are:

- Work with traditional leaders and community groups to discuss and confront destructive norms directly, as discussed here.
- Discuss norms and fully engage with girls, their mothers, and grandmothers to create new norms and expectations.
- Use radio, television, and social media to tell stories that help communities question norms and their consequences.
- Empower girls to express their preferences. Fully engage men and boys in important discussions of norms like dowry and child marriage.





DESIGN AND EQUIP SCHOOLS TO BE HEALTHY AND SAFE FOR GIRLS

To be girl-friendly, schools need to be built and equipped with girls in mind, and the staff and community need to prepare the people around them to support a safe and healthy environment for girls while they are there. For rural girls it starts with the distance to school. In rural areas the safety of girls is a concern on their long walks. This is particularly challenging in Sub-Saharan Africa, where one in four primary school-

age children lives more than two kilometers away from school. Studies have shown that when schools were more than five kilometers away, enrollment was only 41 percent; when the distance was reduced to one to two kilometers, enrollment increased to 66 percent.⁴⁰

Second, latrines for both girls and boys must be available, safe, and clean. This becomes even more important when girls reach the age of menstruation. To make schools healthy, safe, and more likely to attract girls, schools can offer school meals, which have been shown to increase enrollment for girls in many parts of the world. Alongside school meals, girls can be taught about health and nutritional needs as well as the importance of hand-washing, which can lay the groundwork for good health beyond the classroom. The following actions can help schools become better equipped for girls:

- Reduce distance to school by building smaller rural schools, including multi-grade schools.
- Invest in safe transport systems like bikes or buses when schools are not easily accessible by foot, including supervision by vetted adults along school routes.
- Ensure the presence of safe, well-designed, gendered latrines in close proximity to the school.
- Provide bikes or buses, school meals, which have a particularly beneficial effect on girl-child attendance, and introduce deworming and handwashing to ensure the nutrition is absorbed and not undermined.
- Ensure that feminine hygiene products are available and understood.



ADDRESS SEXUAL AND PHYSICAL ABUSE AS A RISK, AND TEACH GIRLS HOW TO DEAL WITH IT (SAME AS FOR AGES 6 TO 10 AND 11 TO 14)

Unfortunately, girls often face physical and sexual abuse at home, on the way to school, and while attending school. School-based, gender-based violence, which can be physical, sexual, or psychological, is now known to be a significant problem across the globe, affecting an estimated 246 million children.⁴¹ Although comprehensive data is not available, individual studies illuminate the problem. One study in Botswana found that 67 percent of girls had been sexually harassed by teachers, with 20 percent reporting that teachers asked for sex. The overwhelming majority, 68 percent, reported this behavior in lower secondary school.⁴² In Peru girls living far from school were found to have elevated risk of sexual assault. The conclusion was that sexual abuse in and around schools is prevalent in every geography. Fortunately, there are ways to reduce the risks:

- Ensure teachers are vetted, supervised, and trained in how to create and maintain safe environments.
- Teach children—girls and boys—to be peer mentors. Basic information such as what constitutes abuse, how to speak up, and how to report abuse are critical steps to creating a safe environment.
- Activate parent-teacher associations and school staff to better identify and resist sexual abuse within the school.
- Discourage exploitative, sexually explicit, and/or body-shaming images, lyrics, and other public (media) depictions of girls and young women.
- Teach girls self-defense in an age-appropriate way, as taught in India by Indian police or in Jordan by Lina Khalifeh of SheFighter.





TEACH LIFE SKILLS ALONGSIDE ACADEMIC PRIORITIES THAT CONSIDER HOW SCHOOL SHAPES LONG-TERM NORMS AND BELIEFS

Many things beyond the curriculum are learned in school. Age-appropriate skills and knowledge can be imparted by teachers and school workers or explained through simple posters to protect girls and enable them to succeed. Handwashing, basic nutrition and health, and basic information about menstruation are critical lessons girls can retain even if they drop out of school. Basic facts (like knowing how many years of schooling is guaranteed by law) or skills (such as knowing how to make a simple budget) can prove vital. Even practicing how to express a desire, like wanting to stay in school, can help a girl be prepared should she need to explain why it's important to her parents. But as the future of work becomes more and more technology-driven and the technology gap grows between urban and rural settings, exposing rural girls to technology will greatly enhance their future economic opportunities, whether they stay in their rural communities or migrate to the city. Actions to support these needs include:

- Develop and disseminate cultural-, age-, and role-appropriate materials for teaching very basic financial principles such as money denominations, earning, saving, borrowing, lending, and accounting.
- Develop and disseminate cultural-, age-, and gender-appropriate materials for teaching the basics regarding bodies and reproduction.
- Consider the influence of curricula on gender norms and status; adopt a gender-sensitive curriculum to create new ways of thinking and a better learning environment for girls and boys.
- Consider investing in rural access to low cost computing technology like those offered by BRCK or Endless Mobile, which are designed to reach low- and middle-income areas that may primarily be disconnected. Some technologies bring students online while others simulate an online environment.



CREATE PROGRAMS TO REACH OUT-OF-SCHOOL GIRLS

While every effort should be made to invest in getting rural girls into school and keeping them there, there will be children who are not enrolled. In this case, catch-up centers of education are an important vehicle for getting children back on track. Often referred to as alternative basic education, these educational offerings ensure that basic skills such as literacy are imparted to children. They are often offered at flexible times, in recognition of the various domestic burdens placed on rural girls and adolescents in particular.

- Understand and address the issues that are preventing girls from attending school. Investments in agricultural resilience or labor-saving tools may improve opportunities for girls in households who are kept home to help with work, for example.
- Invest in out-of-school education models like night schools and radio programs designed for out-of-school children that take into account the issues inhibiting attendance such as heavy caretaking responsibilities.
- Include out-of-school children in clubs and nonschool group activities like sports.
- Ensure both quantitative and qualitative data is captured on out-of-school children to better illuminate their situation and support policymakers to design more responsive programs.





ADDRESS THE POLICY NORMS THAT IMPACT THEIR MOTHERS AND WILL IMPACT THEM

Policy barriers that affect mothers, aunts, sisters, and grandmothers today will affect rural girls if they go unchallenged and unchanged. These barriers include unequal, gendered inheritance laws, land tenure laws, the inability to obtain a national ID without a male sponsor, and lack of access to voter registration. The Commission on the Status of Women focused on rural women and girls in their [2018 annual meeting](#) and concluded there were three main categories for future action.

- Strengthen normative, legal, and policy frameworks.
- Implement economic and social policies for the empowerment of all rural women and girls.
- Strengthen the collective voice, leadership, and decision making of all rural women and girls.⁴³



INVEST IN AGRICULTURAL DEVELOPMENT

Investment in agricultural development is one of the most powerful drivers of poverty reduction, rural development, and food and nutrition security. Improving agriculture will improve the lives of everyone in rural communities, including girls. Making it less burdensome and more productive will reduce the workload on girls and make [careers in agriculture](#) and [agribusiness](#) more attractive for them as youth populations boom in Africa and South Asia, which still have large populations of smallholder farmers. To learn more about the drivers of agricultural development and the opportunity it can hold for youth, read our most recent report [Youth for Growth: Transforming Economies through Agriculture](#).

Endnotes

- 1 Aristide Romaric Bado and A. Sathiya Susuman, “Women’s Education and Health Inequalities in Under-Five Mortality in Selected Sub-Saharan African Countries, 1990-2015,” *PLoS ONE* 111, no. 7 (July 21, 2016), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4956109>; Ann M. Veneman, “Education Is Key to Reducing Child Mortality: The Link Between Maternal Health and Education,” *UN Chronicle* XLIV, no. 4 (December 2007), <https://unchronicle.un.org/article/education-key-reducing-child-mortality-link-between-maternal-health-and-education>.
- 2 Emmanuela Gakidou et al., “Increased Educational Attainment and Its Effect on Child Mortality in 174 countries Between 1979 and 2009: A Systematic Analysis,” *The Lancet* 376 (September 18, 2010): 970, [https://doi.org/10.1016/S0140-6736\(10\)61257-3](https://doi.org/10.1016/S0140-6736(10)61257-3).
- 3 Quentin Wodon et al., *Missed Opportunities: The High Cost of Not Educating Girls* (Washington DC: World Bank, July 2018), 5, <https://openknowledge.worldbank.org/bitstream/handle/10986/29956/HighCostOfNotEducatingGirls.pdf?sequence=6&isAllowed=y>.
- 4 SAID, *Girls’ Equality and Education* (Washington DC: USAID, January 2018), https://www.usaid.gov/sites/default/files/documents/1865/USAID_Girls_Education-Fact-Sheet_11118.pdf.
- 5 “G7 Summit: \$3bn Pledge for Girls’ Education,” *BBC News*, US & Canada, June 9, 2018, <https://www.bbc.com/news/world-us-canada-44427548>.
- 6 United Nations Population Fund, “Gender-Biased Sex Selection,” United Nations Population Fund, updated July 23, 2018, accessed November 20, 2018, <https://www.unfpa.org/gender-biased-sex-selection>.
- 7 John Bongaarts and Christopher Z. Guilmoto, “How Many More Missing Women? Excess Female Mortality and Prenatal Sex Selection, 1970-2050,” *Population and Development Review* 41, no. 2 (June 2015).
- 8 PLAN International, “Count Every Child - Birth Registration Initiative,” accessed November 20, 2018, <https://plan-international.org/early-childhood/birth-registration>.
- 9 UNICEF, “1.5: In Developing Countries, Rural Children Are 1.5 Times More Likely to Be Stunted than Urban Children,” October 29, 2010, https://web.archive.org/web/20110406113340/http://www.unicef.org/factoftheweek/index_56676.html.
- 10 Agnes Quisumbing and Crossley Pinkstaff, “Keeping Doors Open Through Investments in Adolescent Schooling and Nutrition: Lessons from IFPRI’s Impact Evaluations,” CGIAR: Research Program on Agriculture for Nutrition and Health, October 5, 2016, <http://a4nh.cgiar.org/2016/10/05/keeping-doors-open-through-investments-in-adolescent-schooling-and-nutrition-lessons-from-ifpris-impact-evaluations>.
- 11 Plan International, “Why Water and Sanitation Matter for Women and Girls,” *Plan International* (blog), May 6, 2016, <https://www.planusa.org/why-water-and-sanitation-matter-for-women-and-girls>.
- 12 Christiaan W.S. Monden and Jeroen Smits, “Maternal Education Is Associated with Reduced Female Disadvantages in Under-Five Mortality in Sub-Saharan Africa and Southern Asia,” *International Journal of Epidemiology* 42, no. 1 (February 2013), <https://academic.oup.com/ije/article/42/1/211/696104>.
- 13 Nilanjan Patra, “Patterns and Determinants of Child Health in India,” https://www.iussp.org/sites/default/files/event_call_for_papers/ARP-Nilanjan%20Patra-Full%20Paper.pdf.
- 14 Rasheed Mallick et al., “Childcare Deserts: An Analysis of Childcare Centers in Eight States by Zip Code,” Center for American Progress, October 27, 2018, <https://www.americanprogress.org/issues/early-childhood/reports/2016/10/27/225703/child-care-deserts>.
- 15 UNESCO, “Twice as Many Girls as Boys Will Never Start School Says New UNESCO Gender eAtlas,” UNESCO, March 1, 2016, <https://en.unesco.org/news/twice-many-girls-boys-will-never-start-school-says-new-unesco-gender-eatlas>; Kirsten Maajgard and Alain Mingat, *Education in Sub-Saharan Africa: A Comparative Analysis* (Washington, DC: World Bank, 2012), 63–64, <https://openknowledge.worldbank.org/bitstream/handle/10986/13143/9780821388891.pdf>.
- 16 Maajgard and Mingat, *Education in Sub-Saharan Africa*.

- 17 Plan International, “Why Water and Sanitation Matter for Women and Girls,” *Plan International* (blog), May 6, 2016, <https://www.planusa.org/why-water-and-sanitation-matter-for-women-and-girls>.
- 18 Margie Peden et al., eds., *World Report on Child Injury Prevention* (Geneva: World Health Organization, 2008), http://www.who.int/violence_injury_prevention/child/injury/world_report/Drowning.pdf.
- 19 Social Development Direct, *School-Related Gender-Based Violence* (New York: UN Women and UNESCO, 2016), http://www.ungei.org/srgbv/files/Global_Guidance_SRGBV.pdf.
- 20 Development & Training Services and Wellesley Centers for Research on Women, *Unsafe Schools: A Literature Review of School-Related Gender-Based Violence in Developing Countries* (Washington, DC: United States Agency of International Development), 21, http://www.endvawnow.org/uploads/browser/files/Unsafe_schools_lit_review_USAID_2008.pdf.pdf.
- 21 G. Miiro et al., “Menstrual Health and School Absenteeism Among Adolescent Girls in Uganda (MENISCUS): A Feasibility Study,” *BMC Womens Health* 18, no. 4 (January 2018), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5753466>.
- 22 Rachel Lewis, “Suicide Rate for Teen Girls Hits 40-Year High,” *TIME*, August 4, 2017, <http://time.com/4887282/teen-suicide-rate-cdc>.
- 23 UNESCO, *Puberty Education and Menstrual Hygiene Management* (Paris: UNESCO, 2014), <http://unesdoc.unesco.org/images/0022/002267/226792e.pdf>.
- 24 Mahbub-UI Alam et al., “Menstrual Hygiene Management Among Bangladeshi Adolescent Schoolgirls and Risk Factors Affecting School Absence: Results from a Cross-Sectional Survey,” *BMJ Open* 7, no. 7 (2017): e015508, <https://bmjopen.bmj.com/content/7/7/e015508>.
- 25 Social Development Direct, *School-Related Gender-Based Violence* (New York: UN Women and UNESCO, 2016), http://www.ungei.org/srgbv/files/Global_Guidance_SRGBV.pdf.
- 26 Development & Training Services and Wellesley Centers for Research on Women, *Unsafe Schools: A Literature Review of School-Related Gender-Based Violence in Developing Countries* (Washington, DC: USAID), 21, http://www.endvawnow.org/uploads/browser/files/Unsafe_schools_lit_review_USAID_2008.pdf.pdf.
- 27 UNICEF, *Child Marriage: Latest Trends and Future Prospects* (New York: United Nations Children’s Fund, 2018), 3, <https://data.unicef.org/wp-content/uploads/2018/07/Child-Marriage-Data-Brief.pdf>.
- 28 Nawal M. Nour, “Health Consequences of Child Marriage in Africa,” *Emerging Infectious Diseases* 12, no. 11 (2006): 1644–49, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3372345>.
- 29 Sophia Chae and Thoai D. Ngo, “The Global State of Evidence on Interventions to Prevent Child Marriage,” *GIRL Center Research Brief*, no. 1 (October 2017): 1, https://www.popcouncil.org/uploads/pdfs/2017PGY_GIRLCenterResearchBrief_01.pdf.
- 30 Girls’ Education Challenge, *Thematic Review Girls’ Self-Esteem* (London: UK AID, 2018), 13, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/730864/TR-Girls-Self-Esteem.pdf.
- 31 Chris Dibbens, Chris Playford, and Richard Mitchell, “(Be)ing Prepared: Guide and Scout Participation, Childhood Social Position and Mental Health at Age 50—A Prospective Birth Cohort Study,” *Journal of Epidemiology and Community Health* 71, no. 3 (2017): 275–81.
- 32 Mohapatra Gopabandhu, Rabi N. Patra, and Mahendra P. Agasty, “Economic Contribution for Women in Self Help Groups: Village Level Evidence from Odisha,” *IOSR Journal of Economics and Finance* 6 no. 2 (2015): 1–8, <http://www.iosrjournals.org/iosr-jef/papers/Vol6-Issue2/Version-3/A06230108.pdf>.
- 33 Robert Duffner, “The Rise of the Coding Boot Camp,” *Wired*, August 2014, <https://www.wired.com/insights/2014/08/rise-coding-boot-camp>.
- 34 Identification for Development, *Global ID Coverage by the Numbers: Insights from the ID4D-Findex Survey* (Washington, DC: World Bank Group), 1, <http://documents.worldbank.org/curated/en/953621531854471275/Global-ID-Coverage-by-the-Numbers-Insights-from-the-ID4D-Findex-Survey.pdf>.

- 35 Identification for Development, *Global ID Coverage by the Numbers*.
- 36 WHO, "Adolescent Pregnancy," World Health Organization, February 23, 2018, <http://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy>; Guttmacher Institute, "In Developing Regions, 23 Million Adolescents at Risk of Unintended Pregnancy, Not Using Modern Contraceptives," Guttmacher Institute, May 17, 2016, <https://www.guttmacher.org/news-release/2016-developing-regions-23-million-adolescents-risk-unintended-pregnancy-not-using>.
- 37 UNAIDS, *HIV Prevention Among Adolescent Girls and Young Women* (Geneva: Joint United Nations Programme on HIV/AIDS, 2016), 16, http://www.unaids.org/sites/default/files/media_asset/UNAIDS_HIV_prevention_among_adolescent_girls_and_young_women.pdf.
- 38 WHO, "Female Genital Mutilation," World Health Organization, accessed November 20, 2018, <http://www.who.int/reproductivehealth/topics/fgm/prevalence/en>.
- 39 Sarah Baird and Berk Özler, "Sustained Effects on Economic Empowerment of Interventions for Adolescent Girls: Existing Evidence and Knowledge Gaps" (CGD Background Paper, 2016), <http://www.womeneconroadmap.org/sites/default/files/Sustained-Effects-Economic-Empowerment.pdf>.
- 40 Allen Kenneth Schaidle, "Where's the School? Making Sense of Home to School Distance Issues within African Countries," *International Policy Digest*, September 21, 2016, <https://intpolicydigest.org/2016/09/21/where-s-school-making-sense-home-school-distance-is-issues-within-african-countries>.
- 41 Social Development Direct, *School-Related Gender-Based Violence* (New York: UN Women and UNESCO, 2016), http://www.ungei.org/srgbv/files/Global_Guidance_SRGBV.pdf.
- 42 Development & Training Services and Wellesley Centers for Research on Women, *Unsafe Schools: A Literature Review of School-Related Gender-Based Violence in Developing Countries* (Washington, DC: United States Agency of International Development), 21, http://www.endvawnow.org/uploads/browser/files/Unsafe_schools_lit_review_USAID_2008.pdf.
- 43 UN Women, *Challenges and Opportunities in Achieving Gender Equality and the Empowerment of Rural Women and Girls* (New York: United Nations Women, 2018), 18, <http://www.unwomen.org/-/media/headquarters/attachments/sections/csw/62/csw-conclusions-62-en.pdf?la=en&vs=4713>.



What a wonderful world it will be



By Arlene Mitchell, *Executive Director of the Global Child Nutrition Foundation* and
Carol Bellamy, *Chair of the Board, Global Community Engagement and Resilience Fund*

When delving into a topic, it's important to look at what has been and what is. We should learn lessons from the past and build on those lessons to move forward. The Rural Girls project is no exception.

Working on the project, we spent a lot of time in flashbacks. We looked at the good work that has come before, and we pulled in personal experiences. Arlene referred to her own rural girl experience in thinking about the implications of growing up on a farm, in a rural community, far from public schools and other urban-based resources. We both reflected on what we learned about life for girls in rural communities through our Peace Corps experiences in rural areas of Guatemala (Carol) and Niger (Arlene) and our other work. We considered the data we have seen and what we have learned in our academic and professional pursuits. We discussed and debated what has worked and not worked in our experiences and in the experiences of others whose knowledge we've tapped.

One thing that we know, however, is that if we can't visualize a different or better future (for ourselves or for others), we cannot aspire to it, cannot do our part to make it happen. Girls who can't imagine they will ever be able to go to school, have a career, or have control over the money they earn are stunted by the inability to see themselves doing those things. Conversely, girls who are provided a safe and supportive environment and can see themselves becoming strong, educated, productive adults will thrive and achieve.

So we turn now to that future, the world that will be when the recommendations in this report are implemented, when rural girls are given the opportunity to maximize their potential. Here are just a few things that our experience and research have told us about what a wonderful world it will be.

As newborns: Because their parents are “child ready,” educated, nourished, and productive adults engaged in work where they earn more than enough to cover their daily needs, rural girls of the future will be born healthy to healthy, educated, and nurturing parents and cared for in economically viable rural households.

As children: Rural girls of the future will be safe and able to learn and thrive at school, help their families, and play without fear, guilt, or payment (through heavy work burdens, sexual favors, or another price). They will have role models and understanding parents and teachers who support their dreams, introduce them to earning and saving, teach them to resolve conflicts without violence or subjugation, and help them build the foundations they need to achieve their dreams and their potential.

As young adults: Rural girls in the future will continue to be safe; attend secondary school; find mentors; delay marriage until they are physically, mentally, and economically ready; understand finances; and begin to manage money. They will be able to engage with the outside world through affordable and responsive technology.

As secondary school graduates: They will have affordable choices for further education or skill development in fields of direct interest to them and find paid work that matches their interests. If they so choose, they will be able to find paid employment paths within their rural communities. They will be able to plan for marriage and having families.

As adults and parents: They will contribute to society as productive, healthy citizens who participate proactively in the economy, understand and expand political choices, and engage in charitable activities. They will continue to innovate and shape a positive and peaceful future. If they choose to become parents themselves, they will give birth to healthy children, nourish them, and support them to learn and to thrive.

With the next generations of rural girls and women thriving, the world will be at least 4 percent more agriculturally productive, GDP growth rates could be nearly 5 percent higher, and health indicators for girls, women, and their entire communities would improve. Birth rates will drop to sustainable levels, rural-to-urban migration will slow (or even reverse), and unemployment rates among youth and women will plunge. The welfare of men and boys will improve as well, as they reap the benefits of shared responsibilities and earnings, better health and social systems, and successful means of resolving conflict without violence or subjugation.

In this environment, all citizens will be able to aspire to a healthy and positive cycle of life, living into old age where they choose to live, comfortable in the knowledge that their contributions to society are recognized and repaid through the very support systems in which they have invested over their lifetimes.

What a wonderful world this will be.

About the Authors

PROJECT CHAIR

Catherine Bertini

Girls Leading Project Chair

Distinguished Fellow, Global Food and Agriculture

The Chicago Council on Global Affairs

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An accomplished leader in international organization reform, Catherine Bertini has a distinguished career improving the efficiency and operations of organizations serving poor and hungry people in the United States and around the world.

She was named the 2003 World Food Prize Laureate for her transformational leadership at the World Food Programme (WFP), which she led for ten years, and for the positive impact she had on the lives of women. While in the US government, she expanded the electronic benefit transfer options for food stamp beneficiaries, created the food package for breast feeding mothers, presented the first effort to picture healthy diets, and expanded education and training opportunities for poor women.

More recently, she co-chaired a successful effort to impact American policy supporting poor farmers in the developing world. As a United Nations Under Secretary General, she initiated efforts to reform the global system for security of staff and for the recognition of all staff marriages.

More recently, she co-chaired a successful effort to impact American policy supporting poor farmers in the developing world. As a United Nations Under Secretary General, she initiated efforts to reform the global system for security of staff and for the recognition of all staff marriages. She interacted with all UN agencies and their leadership through a variety of UN bodies in humanitarian, development, nutrition, security and management roles, and led UN humanitarian missions to the Horn of Africa and to Gaza, the West Bank, and Israel. With her World Food Prize, she created the Catherine Bertini Trust Fund for Girls' Education to support programs to increase opportunities for girls and women to attend school. Bertini's career includes over twenty years in the private sector; thirteen years as a university professor; three major foundations and a think tank; service in local, state and national governments; board membership in a variety of organizations.

At the Maxwell School of Citizenship and Public Affairs at Syracuse University, she taught graduate courses in humanitarian action, post conflict reconstruction, girls' education, UN management, food security, international organizations, and leadership. She has been honored by twelve universities in four countries with honorary degrees and by the Republics of Italy and Ireland. She has received multiple awards for her work to improve the lives of children, for her management of internal reform processes, and for her advocacy for women and girls. She was appointed to senior positions by three UN secretaries general and five US presidents.

Bertini is a Distinguished Fellow at the Chicago Council on Global Affairs and a former Rockefeller Foundation Fellow. She is a professor emerita at Syracuse University. She serves as a board member of the Tupperware Brands Corporation, the Stuart Family Foundation, and the Global FoodBanking Network. She is an affiliated expert at the Lugar Center, a patron of Gender in Agricultural Partnership (GAP), an honorary advisor to the Global Child Nutrition Foundation, an advisory board member of the Scowcroft Institute of International Affairs at the Bush School of Public Service at Texas A&M University, and a member of the Leadership Council of Compact 2025 of the International Food Policy Research Institute. She is a fellow in the American Academy of Arts and Sciences, the National Academy of Public Administration, and the International Union of Food Science and Technology. She is a member of the Council on Foreign Relations and the Trilateral Commission.

AUTHORS

Sir Fazle Hasan Abed

Founder and Chairman

BRAC

@BRACworld

Fazle Hasan Abed was a founder of Action Bangladesh and HELP Bangladesh, launched in London to support his country's 1971 Liberation War. He returned to the newly independent Bangladesh in 1972, finding the economy in ruins and 10 million returning refugees needing urgent relief and rehabilitation. Sir Fazle established BRAC to support refugees in a remote area of northeastern Bangladesh, guided by a desire to help the poor develop their own capacity to better manage their lives. Today, BRAC is one of the largest NGOs in the world, operating across 11 countries in Africa and Asia. Its primary objectives are to

alleviate poverty and empower the poor. In 2018, for the third consecutive year, BRAC was ranked first among the world's top 500 NGOs by the Geneva-based NGO Advisor in terms of impact, innovation, and sustainability.

Sir Fazle has been honored with numerous national and international awards for his achievements in leading BRAC, including the LEGO Prize (2018); Laudato Si' Award (2017); Jose Edgardo Campos Collaborative Leadership Award, South Asia Region (2016); Thomas Francis, Jr. Medal in Global Public Health (2016); World Food Prize (2015); Trust Women Hero Award (2014); Spanish Order of Civil Merit (2014); Leo Tolstoy International Gold Medal (2014); CEU Open Society Prize (2013); Inaugural WISE Prize for Education (2011); Entrepreneur for the World Award (2009); David Rockefeller Bridging Leadership Award (2008); Inaugural Clinton Global Citizen Award (2007); Henry R. Kravis Prize in Leadership (2007); Palli Karma Shahayak Foundation (PKSF) Award for lifetime achievement in social development and poverty alleviation (2007); UNDP Mahbubul Haq Award for Outstanding Contribution to Human Development (2004); Gates Award for Global Health (2004); Gleitsman Foundation International Activist Award (2003); Schwab Foundation's Social Entrepreneurship Award (2003); Olof Palme Prize (2001); InterAction Humanitarian Award (1998); and the Ramon Magsaysay Award for Community Leadership (1980).

Recognized by Ashoka as one of the "global greats," Sir Fazle is a founding member of its prestigious Global Academy for Social Entrepreneurship. In 2009, he was appointed Knight Commander of the Most Distinguished Order of St. Michael and St. George by the British Crown in recognition of his services to reducing poverty in Bangladesh and internationally. Sir Fazle was a member of the Group of Eminent Persons appointed by the UN Secretary General in 2010 to advise on support for the least developed countries. In both 2014 and 2017, he was named in *Fortune* magazine's List of the World's 50 Greatest Leaders.

Sir Fazle has been awarded numerous honorary degrees including those from Princeton University (2014), the University of Oxford (2009), Columbia University (2008), and Yale University (2007).

Anoka Primrose Abeyrathne

Asian Pacific Representative
UN Habitat Youth Advisory Board,
Women Deliver Young Leader
@WomenDeliver

Anoka Primrose Abeyrathne is a Sri Lankan advocate working for women and youth to become powerful, impactful agents of change and equality. As the Asian Pacific representative to the UN Habitat Youth Advisory Board, Abeyrathne is responsible for engaging young people in the AsiaPacific region in youth-led initiatives for better standards of living and urban development. Abeyrathne has received many awards, including the Climate Champion of the British Council, the Commonwealth Youth Award, and the Zonta Woman of Achievement. She is also a recipient of the New Champion Award of the World Economic Forum, the first Sri Lankan woman to be so recognized. Abeyrathne was inspired to become an advocate by Oprah Winfrey because of her kindness, benevolence, and unending commitment to helping the people who need it most.

Gary Barker

President and CEO

Promundo

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Gary Barker is president and CEO of Promundo. He has conducted extensive global research and program development around engaging men and boys in gender equality and violence prevention. He is a leading voice for the worldwide effort to establish positive and healthy dynamics between men and women. Barker is the cofounder of MenCare, a global campaign to promote men's involvement as equitable, nonviolent caregivers, and cofounder of MenEngage, a global alliance of more than 700 NGOs and UN agencies working toward gender equality. He coordinates IMAGES (the International Men and Gender Equality Survey), a pioneering multicountry survey of men's attitudes and behaviors related to violence, fatherhood, and gender equality, among other themes. A member of the UN Secretary General's Men's Leaders Network, he has been honored with an Ashoka fellowship, a fellowship from the Open Society Institute, and the Vital Voices Solidarity Award. Barker earned a PhD in child and adolescent development from Loyola University Chicago and a master's degree in public policy from Duke University.

Carol Bellamy

Chair of the Board

Global Community Engagement and

Resilience Fund

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Carol Bellamy is the chair of the Governing Board of the Global Community Engagement and Resilience Fund (GCERF). Bellamy was previously a member of the New York State Senate, President of the New York City Council, Director of the United States Peace Corps, Executive Director of the United Nations Children's Fund (UNICEF), and Chair of the Board of Directors of the Global Partnership for Education.

Bellamy has worked in the private sector at Morgan Stanley and Cravath, Swaine & Moore. She is also a member of the American University of Beirut Board of Trustees and is a former fellow of the Harvard Institute of Politics. She has been awarded the Medal of Distinction by Barnard College, the Légion d'Honneur by the Government of France, and the Order of the Rising Sun in Japan.

Ambassador Delphine Borione

Permanent Representative of France

United Nations organizations in Rome

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Delphine Borione is a French diplomat who has held numerous high-level multilateral and bilateral positions in the sustainable development, economic, cultural, and educational fields. In August 2017, Borione was appointed ambassador and permanent representative of France to the UN Agencies for Food and Agriculture in Rome.

Borione served as deputy secretary general in the Secretariat of the Union for the Mediterranean from 2013 to 2017. Previously, she worked on environmental, developmental, and global issues in the French Ministry of Foreign Affairs and the Office of the President of the French Republic. She joined the World Food Programme and the United Nations mission in Kosovo. She has served as ambassador of France in Kosovo, cultural counselor in the Embassy of France in Italy, and director of cultural policy and French language in the French Ministry of Foreign Affairs.

Borione studied at the French National School of Public Administration and holds a master's degree from the Institute of Political Studies, a post-graduate certificate in contemporary history, and a bachelor's degree in business law.

Bárbara Jéssica Da Silva Paes

Founder

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A cofounder of the Minas Programa in 2015, Da Silva Paes is responsible for project management, communications, partnerships, and media engagement for the advancement of girls and women in Brazil's digital technology sector. To equip women for successful participation in computing technology, she recruited professors to teach coding courses to women students so they could access more and better professional opportunities. Da Silva Paes holds a bachelor's degree in international relations from the University of Sao Paulo and is pursuing a master's degree in gender and development at the University of Sussex. She was inspired to become an advocate by Lélia Gonzalez, whose activism and academic work highlighted the importance of black Brazilian women's rights.

Shenggen Fan

Director General

International Food Policy Research Institute

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Shenggen Fan (樊胜根) has been director general of the International Food Policy Research Institute (IFPRI) since 2009. He joined IFPRI in 1995 as a research fellow, conducting extensive studies on pro-poor development strategies in Africa, Asia, and the Middle East. He led IFPRI's program on public investment before becoming the director of its Development Strategy and Governance Division in 2005.

Fan is one of the Champions of Target 12.3 of the Sustainable Development Goals, dedicated to inspiring ambition, mobilizing action, and accelerating progress toward cutting global food loss and waste. He was appointed by former UN Secretary General Ban Ki Moon as a member of the lead group for the Scaling Up Nutrition (SUN) Movement. He serves as advisor to many national governments (including China and Vietnam) on agriculture, food security, and nutrition.

Fan received the 2017 Fudan Management Excellence Award, referred to in China as the "Nobel Prize for Management." The award recognizes individuals who have made out-

standing contributions to the field of management. In 2014, Fan received the Hunger Hero Award from the World Food Programme in recognition of his commitment to and leadership in fighting hunger worldwide.

Fan received a PhD in applied economics from the University of Minnesota and bachelor's and master's degrees from Nanjing Agricultural University in China.

Willy Foote

Founder and CEO

Root Capital

@RootcapitalCEO

@Rootcapital

Willy Foote is founder and CEO of Root Capital, a nonprofit impact investor that offers farmers around the world a path to prosperity by investing in the agricultural businesses that serve as engines of impact in their communities. Root Capital provides these businesses with the capital, training, and access to markets they need in order to grow, thrive, and create opportunities for thousands of farmers at a time. Since its founding in 1999, Root Capital has provided more than \$1 billion in loans to 630 agricultural businesses in Africa, Asia, and Latin America. Together, these businesses have generated more than \$6 billion in revenue, 80 percent of which has been paid directly to the 1.2 million smallholder farmers whose crops they collect and market.

Foote is a Skoll Entrepreneur and an Ashoka Global Fellow. He was named a Young Global Leader by the World Economic Forum in 2008, was selected for the *Forbes* Impact 30 List in 2011, and was a 2012 Henry Crown Fellow of the Aspen Institute. He served for nearly a decade on the Executive Committee of the Aspen Network for Development Entrepreneurs (ANDE), and is a member of the Council on Foreign Relations and Young Presidents' Organization (YPO). Foote holds an MS in development economics from the London School of Economics and a BA from Yale University.

Renée Giovarelli

Senior Attorney and Advisor

Resource Equity

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Renée Giovarelli is an expert on women's and girls' land rights. She has over 20 years of experience in intrahousehold and gender issues related to land tenure and customary and legal property rights. She has designed and conducted fieldwork on women and their access and rights to land in the Kyrgyz Republic, Uzbekistan, Tajikistan, Turkmenistan, Azerbaijan, Bulgaria, Russia, India, China, Burkina Faso, Ethiopia, Ghana, Madagascar, and Uganda. Her experience includes policy-oriented research and writing on land rights, pasture rights, rural development, and gender issues related to these issues.

She has provided extensive training, research, advocacy, publishing, and consulting services on women's and girls' land rights. She designed and helped implement the Girls Project in West Bengal, India, which involved forming girls' groups to participate in a state-sponsored nutrition program that included a focus on the legal and customary rights to land for women and girls and land-based agricultural skills. She earned her JD with

honors from Seattle University and an LLM with honors in sustainable international development from the University of Washington.

Valerie M. Hudson

Professor and George H.W. Bush Chair in the Department of International Affairs

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Valerie M. Hudson is a professor and George H.W. Bush Chair in the Department of International Affairs at the Bush School of Government and Public Service at Texas A&M University, where she directs the program on women, peace, and security. She has previously taught at Brigham Young, Northwestern, and Rutgers universities. Her research foci include foreign policy analysis, security studies, gender and international relations, and methodology. Hudson's articles have appeared in *International Security*, *American Political Science Review*, *Population and Development Review*, *Journal of Peace Research*, *Political Psychology*, and *Foreign Policy Analysis*, as well as policy journals such as *Foreign Policy* and *Politico*. She is the author or editor of several books, including (with Andrea Den Boer) *Bare Branches: The Security Implications of Asia's Surplus Male Population* (MIT Press, 2004), which won the American Association of Publishers Award for the Best Book in Political Science and the Otis Dudley Duncan Award for Best Book in Social Demography, resulting in feature stories in the *New York Times*, *The Economist*, *60 Minutes*, and other news publications.

Hudson was named to the list of *Foreign Policy* magazine's Top 100 Global Thinkers for 2009 and, in 2015, was recognized as Distinguished Scholar of Foreign Policy Analysis (FPA/ISA). She was awarded an inaugural Andrew Carnegie Fellowship as well as an inaugural Fulbright Distinguished Chair in the Arts, Humanities, and Social Sciences at Australian National University (2017). Winner of numerous teaching awards and recipient of a National Science Foundation research grant and a Minerva Initiative grant, she served as the director of graduate studies for the David M. Kennedy Center for International and Area Studies for eight years and as vice president of the International Studies Association for 2011-12. Hudson is one of the principal investigators of The WomanStats Project (<http://womanstats.org>), which includes the largest compilation of data on the status of women in the world today. She is also a founding editorial board member of *Foreign Policy Analysis*, and a current or former editorial board member of *Politics and Gender*, *American Political Science Review*, and *International Studies Review*. She has testified three times before the US House Foreign Affairs Committee, assisted the National Intelligence Council in preparing its 2017 Global Trends: Paradox of Progress report, and served as a member of the Expert Group on the Data 2X Initiative. Her book *Sex and World Peace*, coauthored with Bonnie Ballif-Spanvill, Mary Caprioli, and Chad Emmett (Columbia University Press), was listed by Gloria Steinem in 2014 as one of the top three books on her "Reading Our Way to the Revolution" list. Hudson's most recent book, with Patricia Leidl, also from Columbia University Press, is entitled *The Hillary Doctrine: Sex and American Foreign Policy* (2015). Her latest book project is *The First Political Order: Sex, Governance, and National Security*.

Purity Kagwiria

Executive Director

Akili Dada

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@AkiliDada

Purity Kagwiria is the executive director of Akili Dada. A journalist by profession, Kagwiria has worked for the rights of women since 2004. She has expertise in leadership development, policy engagement, and girls and young women’s empowerment. As an advocate in the feminist/women’s rights movement, Kagwiria is committed to developing strategies that lead to the emancipation of girls and women and their access to leadership opportunities. Kagwiria believes that education and hope for a better tomorrow are the keys to transformational empowerment.

Kagwiria holds a degree in gender and development from the University of Nairobi and a diploma in journalism from the Kenya Institute of Mass Communication. She holds various certificates in the fields of gender, human rights, and leadership. She is currently an advisory committee member of the FRIDA/The Young Feminist Fund and a HOW Fund Fellow.

Agnes Kalibata

President

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As president of the Alliance for a Green Revolution in Africa (AGRA), Agnes Kalibata leads the organization’s efforts with public and private partners to ensure a food-secure and prosperous Africa through rapid, sustainable agricultural growth and the improved productivity and livelihoods of millions of smallholder farmers. Prior to joining AGRA in September 2014, Kalibata was Rwanda’s Minister of Agriculture and Animal Resources. Kalibata has held several other leadership positions, including permanent secretary of the Ministry of Agriculture and deputy vice chancellor of the University of Rwanda. She worked for the International Institute of Tropical Agriculture in Uganda and other agricultural development organizations. She sits on various boards including the International Fertilizer Development Corporation, Bioversity International, Africa Risk Capacity, the Malabo-Montpellier Panel, and the Global Agenda Council of the World Economic Forum. Kalibata has a distinguished track record as an agricultural scientist, policymaker, and thought leader. She holds a PhD in entomology from the University of Massachusetts.

Leah Lamon

Communications Director

Land O’Lakes

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Leah Lamon is director of communications for the Land O’Lakes international development team. Lamon previously served three years as director of integrated marketing communications of the agricultural cooperative’s dairy foods branch. She was a member of the team

that developed new brand frameworks and campaigns for the Land O'Lakes and Kozy Shack brands. With the Land O'Lakes Foundation, she developed the "Pin a Meal. Give a Meal." marketing campaign, which donated \$900,000 to Feeding America. Previously, Lamon worked in marketing and communications at General Mills, CNS, Minnesota Public Radio, and Airborne. She has a BS in food science and an MBA in marketing from the University of Minnesota.

Roya Mahboob

CEO

Digital Citizen Fund

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Roya Mahboob is a serial entrepreneur and president of the Digital Citizen Fund, Bright Citizen (Coffee & Tea), and EdyEdy. The Digital Citizen Fund aims to increase women's technological literacy and provide employment and educational opportunities for girls and children in developing countries like Afghanistan. Mahboob built #Digital Literacy with the goal of bridging the gap between education and job markets for women and youth by offering practical skills through her foundation. She sits on the advisory boards of the Forbes School of Business and Technology at Ashford University, the Resolution Project, and the Global Thinkers Forum. She is also part of the NewNow organization board.

Mahboob was named to *TIME* magazine's 100 Most Influential People in the World in 2013 for her work in building internet classrooms in high schools in Afghanistan. Mahboob is the recipient of a 2014 Tribeca Disruptive Innovation Award, Wonder Women, and the Advancement of Gender Equality through Education Award. She was named a Young Global Leader by the World Economic Forum in 2015. She received an honorary doctor of science degree in engineering from McMaster University in 2018.

Arlene Mitchell

Executive Director

Global Child Nutrition Foundation

Arlene Mitchell was appointed executive director by the Board of Directors of Global Child Nutrition Foundation in April 2014. Prior to that, Mitchell served for nearly six years at the Bill & Melinda Gates Foundation, where she was deputy director for Access and Markets in the Agricultural Development Program.

Earlier in her career, she served as an executive in the United Nations World Food Programme (WFP) where she led the global school feeding effort; managed international technical assistance and training activities for the US Department of Agriculture; and was both a volunteer and staff member with the US Peace Corps. Mitchell's varied experience also includes running a restaurant and a snack machine business, invalid care, and a variety of other gambits.

Alaa Murabit

High-Level Commissioner

SDG Global Advocate

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Alaa Murabit, a medical doctor, is one of 17 Global Sustainable Development Goal Advocates appointed by the UN Secretary General and the youngest UN High-Level Commissioner on health, employment, and economic growth. She is executive director of the global strategic security firm Phase Minus 1, the founder of a global mentorship program for emerging leaders, and cofounder of the Omnis Institute, an organization committed to challenging critical global issues through the empowerment of emerging local leaders.

Murabit champions women's participation in peace processes and conflict mediation. At 21, she founded The Voice of Libyan Women to improve the political participation and economic empowerment of women in Libya. She has been recognized as the International TrustWoman Hero by the *New York Times*, a *Forbes* "30 Under 30," and a Canadian 30x30. She was the youngest of the Women Inspiring Change selected by the Harvard Women's Law Association and one of the youngest recipients of both the Canadian Meritorious Service Cross and the Nelson Mandela International Change-maker Award in 2018.

Murabit serves as a trustee for the Malala Fund, International Alert, Malaria No More, and Women's March Global. She is a respected thought leader on how female empowerment and inclusion lie at the heart of the solutions for a sustainable and prosperous world. Murabit's 2015 TED Talk, "What my religion really says about women," was selected as the TED Talk of the Day and cited by the *New York Times* as "one of four moving TED Talks you should watch right now."

Alyse Nelson

President and CEO

Vital Voices Global Partnership

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Alyse Nelson is president and CEO of Vital Voices Global Partnership. A cofounder of Vital Voices, Nelson has worked for the organization for over 20 years, serving as vice president and senior director of programs before assuming her current role in 2009. Under her leadership, Vital Voices has expanded its reach to serve over 15,000 women leaders in more than 180 countries.

Previously, Nelson served as deputy director of the US State Department's Vital Voices Global Democracy Initiative and worked with the President's Interagency Council on Women at the White House. Nelson is a member of the Council on Foreign Relations, the Expert Group for the B Team, and the Advisory Board of Chime for Change. *Fortune* magazine named Nelson one of the 55 Most Influential Women on Twitter.

Nelson is the author of the best-selling book *Vital Voices: The Power of Women Leading Change Around the World* and has been featured in various international and national media.

Namanga Ngongi

Chair of the Boards

International Institute of Tropical Agriculture (IITA), African Fertilizer and Agribusiness Partnership (AFAP), and International Center for Evaluation and Development (ICED)

Namanga Ngongi, a national of Cameroon, has wide experience in development and humanitarian operations. Ngongi started his career in the extension service of the Ministry of Agriculture and later represented his country at the Rome-based Agencies for Food and Agriculture. He joined the World Food Programme in 1984 and served as deputy executive director from 1994 to 2001, when he was appointed UN Special Representative and head of the peace-keeping mission in Democratic Republic of Congo, where he succeeded in bringing the rebel leaders to join the transitional government. After retirement from the UN, he served as the first president of the Alliance for a Green Revolution in Africa, championing efforts to improve Africa's food and nutrition security.

Ngongi is currently chair of the boards of the International Institute of Tropical Agriculture, the Africa Fertilizer and Agribusiness Partnership, and the International Center for Evaluation and Development. He is a member of the program committee of the African Economic Research Consortium. He is chair of several community-based organizations and a member of the municipal council of his native town, Buea. Ngongi obtained a BS in agriculture at California Polytechnic State University and his MS and PhD in agronomy from Cornell University.

Esther Ngumbi

Distinguished Post-Doctoral Researcher
University of Illinois at Urbana-Champaign
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Esther Ngumbi is a distinguished post-doctoral researcher in entomology and African American studies at the University of Illinois at Urbana-Champaign. A national of Kenya, Ngumbi pursues issues surrounding agriculture, food security, gender, science, soil science innovations, education, hunger, and sustainability. She is the author of over 80 opinion pieces in outlets ranging from *Scientific American* and *TIME* magazines, CNN, NPR, Reuters, AllAfrica.com, World Policy Blog, The Conversation, and the *Los Angeles Times*. She is a senior fellow with the World Policy Institute and a food security fellow and Alumni Council member of Aspen Institute New Voices. She is a commitment mentor for agriculture and alumni ambassador for the Clinton Global Initiative University.

Ngumbi is the recipient of numerous national and International awards including the 2018 Society of Experimental Biology President's Medal and, in 2017, the first Emerging Sustainability Leader Award. She is a board member of the Virginia Gildersleeve International Fund and the Entomological Society of America Science Policy Committee. She was a finalist for the President Clinton Global Hunger Leadership Award and was named by One World Action as one of the 100 Powerful Women Who Change the World.

Deneka Thomas

Project Manager
Girl Be Heard Trinidad and Tobago,
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Deneka Thomas is a revolutionary arts educator and advocate for the empowerment of young women in Trinidad and Tobago. As a project manager of Girl Be Heard Trinidad and Tobago, she oversees the organization's Girl Empowerment After-School Program and runs teaching artist workshops on issues such as human rights. She was crowned the 2018 National Poetry Grand Slam Champion for her poem sensitive to LGBT issues. She is also a spoken word poet and teaching artist for the 2 Cents Movement, a youth-led NGO that uses performance art to foster social responsibility in young people. In addition to leading one of the most innovative female-led service organizations in her country, Thomas works for four major publications and acts as codirector of three major productions. Thomas studied biology at the country's College of Science, Technology, and Applied Arts.

Michael Tiboris

Fellow, Global Water
Chicago Council on Global Affairs
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Michael Tiboris is global water fellow at the Chicago Council on Global Affairs and public fellow for the American Council of Learned Societies. His research concerns primary resource stability as a foreign policy objective and is particularly focused on water resource policy, cooperative resource governance, and global justice. He holds a PhD in ethics and political philosophy from the University of California, San Diego, and has previously held fellowships supported by the Spencer Foundation and San Diego State University's Institute for Ethics and Public Affairs. His written work is published in a number of academic sources (including *Social Theory and Practice*, the *Georgetown Journal of International Affairs*, and *The Journal of Applied Philosophy*), popular media sources (including *The National Interest*, *Foreign Policy*, and the *Chicago Tribune*), and has been recognized by the University of Pennsylvania's Global Go To Think Tank Index as among the best work produced in 2016.

Joachim von Braun

Director
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Joachim von Braun is director of the Center for Development Research (ZEF) and professor of economic and technological change at Bonn University. He is president of the Pontifical Academy of Sciences in the Vatican; cochair of the Bio-economy Council of the Federal German Government; member of the board of the Alliance for a Green Revolution in Africa; and vice chair of the board of Global Alliance for Improved Nutrition (GAIN). He has served as director general of the International Food Policy Research Institute and president of the International Association of Agricultural Economists.

