

Putting women and girls at the center of development

Melinda French Gates

The development field needs to be more serious about gender inequities and women's empowerment. By ignoring gender inequities, many development projects fail to achieve their objective. And when development organizations do not focus on women's empowerment, they neglect the fact that empowered women have the potential to transform their societies. I also review the Gates Foundation's record on gender and propose some approaches to improve it.

I have formal training in computer science and business—not in international development. But in the decade and a half since my husband and I created the Bill & Melinda Gates Foundation, I have received a practical education in the field. Given our backgrounds in the computer industry, we started with a bias toward technological solutions. Our optimism about technology has not changed, but we have gradually gained a greater appreciation for the social and cultural factors that influence how individuals, communities, and countries develop.

One of the most important, and most complex, of these factors is gender. In recent years, the development field has increasingly focused on gender equality and women's empowerment—and for good reason. No society can achieve its potential with half of its population marginalized and disempowered.

The work our partners have done in this area has influenced me greatly. My goal is to be clear and specific about what it means to me and for our foundation to put women and girls at the center of global development. Put simply, we cannot achieve our goals unless we systematically address gender inequalities and meet the specific needs of women and girls in the countries where we work.

We have not always been as intentional in this area as we might have been (Fig. 1, top) or as we intend to be in the future. As a result, we have lost opportunities to maximize our impact across all of the areas in which we work.

Why gender inequality matters

Research clearly shows that inequality between the sexes limits development for everyone (1). A recent report found that if African smallholder women farmers had equal access to land, labor, information, technology, fertilizer, and water—and equal opportunity to use those resources effectively—agricultural production across the continent would increase by 20% (2). People are going hungry while we try to figure out how to address gender inequality and empower women.

Not that it is easy to figure out. It is hard enough to close gaps in access and make sure

that women are participating in development programs on an equal basis. For example, many women are so busy with household responsibilities that they do not have time to take part, despite the best efforts of development organ-

izations (1, 3). It is even more difficult to fully understand the underlying social and cultural norms that prevent women from realizing the full benefit of that participation and then find ways to shift those norms.

For example, we are partners with the Grameen Foundation on a 4-year-old project in Ghana called MOTECH, which uses mobile phones to provide health information to pregnant women.

Grameen switched their effort from text messages to voice messages, realizing that text messages would not reach women who could not read—a serious problem in communities where girls' educational opportunities are limited.

But even if a household has a cellphone, the women in the household may not have access to it. The husband typically maintains control over the family phone. Grameen started asking women what days and times they were most likely to have access to the phone so that the calls would be more likely to reach them.

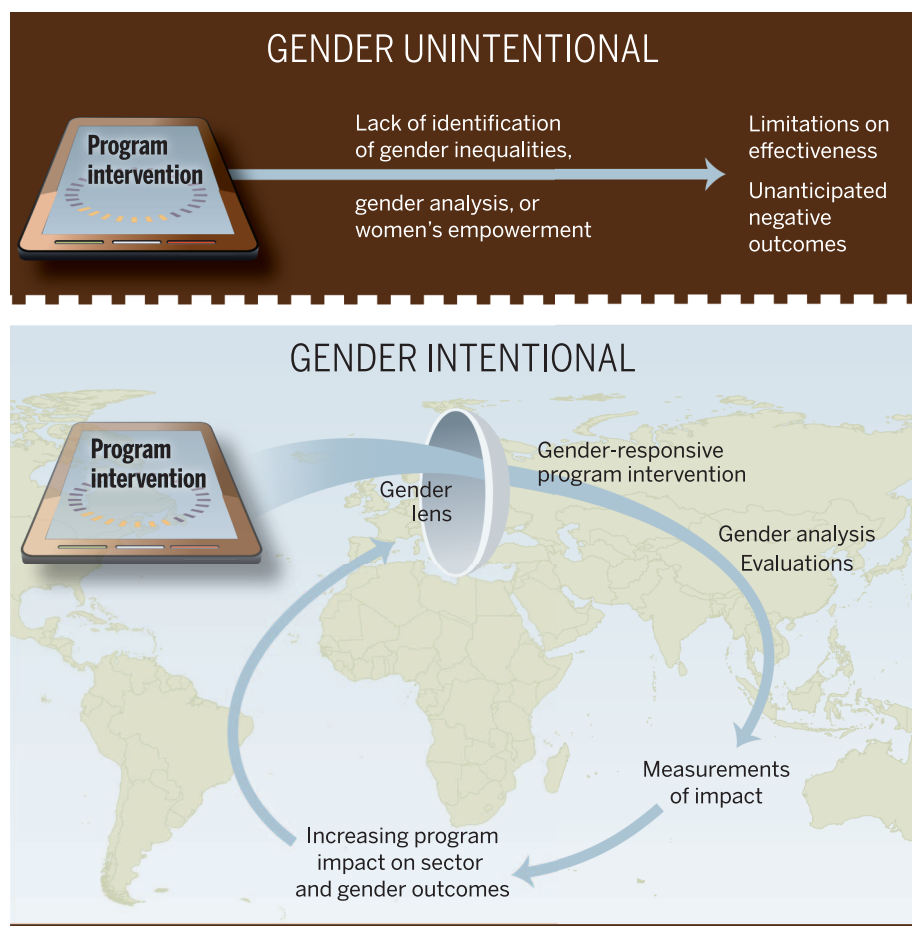


Fig. 1. Gender Unintentional. The upper scenario depicts interventions (for example, a family planning program) to improve outcomes (for example, modern contraceptive prevalence rate) without explicit consideration of gender inequalities. Gender inequality and women's empowerment (GEWE) interventions (for example, formation of self-help groups) are absent, and the impact of programs on GEWE outcomes is not measured. Thus, the impact of gender inequalities on outcomes is unknown, and could limit program effectiveness. Furthermore, there could be unanticipated negative outcomes (for example, women who seek contraceptives may suffer violent reactions by their husbands). **Gender Intentional.** Here, gender inequalities are systematically identified, and context-relevant gender interventions are designed to close gender gaps. Thus, gender inequalities are not exacerbated and the program is more likely to have positive effects.

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Grameen then realized that the effectiveness of their health messages varied a great deal depending on how they were conveyed and who was conveying them. Grameen conducted research to determine which voices would be most persuasive to women (4). They learned that women in rural Ghana preferred getting advice from an older woman, but they sometimes asked that the voice be a man's because they wanted their husbands' support, and men were more likely to listen to advice from another man.

Despite Grameen's fine-tuning of the project, the biggest challenge of all remained: Some women lack the power—the agency and voice—to make important decisions about their own lives and act on them free of retribution or fear (5). Even if a woman receives a message about the benefits of giving birth at the local health facility instead of at home, she might not have the social permission or support to go to the facility or pay for the care.

Grameen has continued to refine its program so that the health messages reach not just pregnant women but also husbands, mothers-in-law, and grandmothers, all of whom exert influence over decisions about the family's health care. Ultimately, even the most ingenious mobile-communications strategies must be accompanied by an approach to helping women surmount obstacles within their own household and community.

In agricultural development, our goal is to help smallholder farmers increase their productivity, which will lead to better nutrition and greater income. However, we have found that one consequence of increasing productivity is that come harvest time, some men simply take the crops that women had been working so hard to cultivate, then spend the profits. When yields are small, women may be free to sell any surplus left over after feeding the family; it is generally seen as a household's "pocket change." But when the surplus is large enough, husbands often take over.

One of the crops we invest in is a legume called pigeon pea, known as the "poor man's meat" in parts of Africa because it is an important source of nutrients. Our partners' work with pigeon pea has been a big success. Yields are going up, and hundreds of thousands of hectares are now planted with an improved variety. However, one partner, Cooperative for Assistance and Relief Everywhere (CARE), estimates that only 3 in 10 women get to keep the proceeds from the high-yielding pigeon pea they tended for months, and this type of effect can be seen in much of our work in agriculture.

To ensure that women can control the profits from their labor (and therefore stay motivated to grow pigeon pea and other crops), our partners are developing complementary interventions to help address these additional challenges. For example, engaging husbands and wives in structured conversations about household expenditures and responsibilities seems to lead to more collaborative ways of splitting up the proceeds

from women's labor, ultimately benefiting all members of the household.

There is no easy way to remake social norms so that they are more equitable. Change requires innovative thinking to help women and girls overcome the structural barriers to equality. This work will necessarily include engaging men and boys because their attitudes about the role of their mothers, daughters, sisters, and wives will have an enormous impact on improving opportunities for both sexes.

Women and girls as engines of development

Targeting women and girls as beneficiaries of development programs is only one part of putting them at the center of development. The other part is recognizing their role as agents of change.

"we cannot achieve our goals unless we systematically address gender inequalities and meet the specific needs of women and girls in the countries where we work"

Women tend to invest more of their earnings than men do in their family's well-being—as much as 10 times more (1, 6–8). This fact is critical to the way our foundation thinks about the role of women and girls in development. The upshot is that a woman or a girl with some measure of power is busy improving her community in myriad ways. So, it makes sense to invest in development outcomes by investing in the women who are driving them every day.

Empowerment is not tangible in the same way as the choice to deliver a baby at a facility or in the home. Therefore, it is not always clear how to invest in empowerment, or how to measure it. However, the research in this area identifies some key elements of empowerment, including education, control over resources, decision-making authority, and physical safety. Girls' access to education, the most studied variable, is especially powerful. Each extra year of education is associated with a 10 to 20% increase in income (9, 10).

There are strong associations between women's empowerment and specific health and development outcomes (Fig. 1, bottom). For example, women's control over resources is associated with better outcomes in family planning; maternal, newborn, and child health; nutrition; and agricultural development (1, 8, 11–13).

To cite one instance, a recent review of a CARE program in Bangladesh shows that health and

nutrition programs were substantially more effective at reducing stunting in children when households also participated in activities that contributed to women's empowerment (14). CARE created self-help groups of women and adolescent girls in order to help increase their decision-making power; reduce gender-based violence; raise awareness of their educational entitlements; and build their leadership, advocacy, and literacy skills.

The evidence also suggests that the process may work in the other direction, too—that investing in key health and development outcomes can contribute to women's empowerment (1, 8). Unfortunately, the evidence needs to be strengthened. It could be improved if donors were more willing to fund evaluations of these complex models, something our foundation will increasingly take on.

The Gates Foundation and gender

At our foundation, we will not use the complexity of resolving gender inequality as an excuse for failing to think and act more intentionally about putting women and girls at the center of what we do.

We will systematically increase our focus on women's specific needs and preferences and on addressing gender inequalities and empowering women as a way to help our partners succeed and us achieve our mission of helping all people to lead healthy, productive lives.

Part of this focus will involve analyzing many of our grants and strategies through a gender lens, to make sure that gender inequalities are not getting in the way of the results we hope to achieve. Another part will involve greater accountability for how our strategies and grants contribute to women's empowerment over the long term. If we believe that women themselves are agents of development, then we must invest in their agency and evaluate the results.

Our foundation can do more to support our grantees to gather and use the right data and perform rigorous evaluations. Currently, many of our grants do not measure gender inequalities or women's empowerment or disaggregate data by sex. If we gathered this information more systematically, we would understand more about how to design programs to benefit both women and men, enabling us to maximize our impact (Fig. 1, feedback loop).

It may take additional financial investments to help our teams make these adjustments and to support our partners in their work in this area. We are prepared to make the investments necessary to improve our approach to thinking about gender issues because we believe the payoff greatly outweighs the increase in expenditures.

In 2015, our foundation will focus on asking key questions and considering evidence about gender inequality and women's empowerment, with an eye toward increasing our impact. Toward that end, we will be launching this fall a multimillion-dollar Grand Challenge on putting women and girls at the center of development. Our Grand

Challenges program, which started in 2004, poses big, open-ended challenges in health and development and provides funding for innovators from multiple fields and all over the world to develop creative solutions. This will be our first Grand Challenge on gender inequity and women's empowerment, and it is intended to mark the beginning of our concerted push in putting women and girls at the center of our work.

I come to work every day because I believe that our foundation has a role to play, along with our thousands of partners, in making the world a more equitable place. A necessary element of that role is helping women and girls realize their own power to advance the well-being of their families, their communities, and their societies.

REFERENCES

1. World Bank, *World Development Report 2012: Gender Equality and Development* (World Bank, Washington, DC, 2011); <http://elibrary.worldbank.org/doi/book/10.1596/978-0-8213-8810-5>.
2. Food and Agriculture Organization of the United Nations, *The State of Food and Agriculture 2010-2011: Women in Agriculture: Closing the Gender Gap for Development*. (FAO, Rome, 2011); available at www.fao.org/docrep/013/i2050e/i2050e00.htm.
3. C. M. Blackden, Q. Wodon, Eds., *Gender, Time Use, and Poverty in Sub-Saharan Africa*, working paper (World Bank, Washington, DC, 2006).
4. Grameen Foundation, *Women, Mobile Phones, and Savings: A Grameen Foundation Case Study* (Grameen Foundation USA, Washington, DC, 2012).
5. World Bank, *Voice and Agency: Empowering Women and Girls for Shared Prosperity* (World Bank, Washington, DC, 2014).
6. D. Thomas, in *Intrahousehold Resource Allocation in Developing Countries: Models, Methods and Policy*, L. Haddad, J. Hoddinott, H. Alderman, Eds. (Johns Hopkins Univ. Press, Baltimore, MD, 1997), pp. 142-164.
7. R. L. Blumberg, Ed., *Engendering Wealth and Well-Being: Empowerment for Global Change (Latin America in Global Perspective)* (Westview Press, Boulder, CO, 1995).
8. E. Duflo, "Women's empowerment and economic development," working paper 17702 (National Bureau of Economic Research, Cambridge, MA, 2011); available at www.nber.org/papers/w17702.
9. B. K. Herz, G. B. Sperling, *What Works in Girls' Education: Evidence and Policies from the Developing World* (Council on Foreign Relations, New York, 2004); available at http://books.google.com/books?hl=en&lr=&id=7a0W_bqvzA0C&oi=fnd&pg=PR5&dq=%22girls+may+seem+overwhelming,+a+strategic+mix+of+proven+policies%22+%22the+Carnegie+Corporation+for+their+EF%AC%8Inancial+support+of+this%22+of+the%22+Center+for+Research+on+Women.+For+providing+extensive+materials,%22+lots=UddRvUjITe&sig=yPRBzWhCFGrNZSkWtqJ2gD0nyk8.
10. R. Levine, Center for Global Development, *Girls Count: A Global Investment & Action Agenda* (Center for Global Development, Washington, DC, 2009); available at www.coalitionforadolescentgirls.org/sites/default/files/Girls_Count_2009.pdf.
11. M. O'Sullivan, A. Rao, R. Banerjee, K. Gulati, M. Vinez, "Levelling the Field: Improving Opportunities for Women Farmers in Africa," working paper 86039 (World Bank, Washington, DC, 2014); available at <http://documents.worldbank.org/curated/en/2014/01/19243625/levelling-field-improving-opportunities-women-farmers-africa>.
12. M. Corroon et al., *Matern. Child Health J.* **18**, 307-315 (2014).
13. M. R. Shroff et al., *Soc. Sci. Med.* **73**, 447-455 (2011).
14. L. C. Smith, F. Kahn, T. R. Frankenberger, A. Wadud, *Admissible Evidence in the Court of Development Evaluation? The Impact of Care's Shouhardo Project on Child Stunting in Bangladesh* (Institute of Development Studies, Brighton, UK, 2011).

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PERSPECTIVE

The state of global health in 2014

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The global health landscape looks more promising than ever, although progress has been uneven. Here, we describe the current global burden of disease throughout the life cycle, highlighting regional differences in the unfinished agenda of communicable diseases and reproductive, maternal, and child health and the additive burden of emerging noncommunicable diseases and injuries. Understanding this changing landscape is an essential starting point for effective allocation of both domestic and international resources for health.

The turn of this century coincided with a reinvigorated energy to improve the state of global health. New institutions (such as the GAVI Alliance and the Global Fund to Fight AIDS, Tuberculosis, and Malaria), more and better funding (such as the Bill and Melinda Gates Foundation), and renovated political will [such as United Nations Millennium Development Goals (MDGs)] have already made an impact by reducing mortality among children and mothers and accelerating declines in HIV/AIDS, tuberculosis, and malaria in low-income countries. Despite the welcome news about rapid declines in childhood mortality almost everywhere, there are persisting health inequalities, emerging conditions, and important regional variations in causes of death that require closer scrutiny.

This paper focuses on the state of global health from the perspective of the population and not of the governance or financial architecture. We use the results of the annual assessment of the Global Burden of Disease (GBD) Study (1), which provides a methodologically consistent assessment of levels and trends in prevalence and mortality by cause for 188 countries since 1990. The recent GBD 2013 Study is based on the work of a scientific collaborative with more than 1050 investigators from 106 countries (2). Our intention is to present data in a high-level descriptive way. In short, we illustrate the following:

1) There is an unfinished agenda regarding communicable diseases and reproductive, maternal, and child health, mostly concentrated in sub-Saharan Africa and South and Southeast Asia.

2) The well-recognized epidemiological transition (from high burden of communicable diseases to noncommunicable diseases, injuries, and violence) is well under way in low- and middle-income countries, with increasing probability of death from these factors in some age groups.

3) There is a mismatch between needs and development assistance for health (DAH), which warrants a broader discussion, especially in geographical areas where resources can be most catalytic.

The burden of disease across the life cycle

As context, it is important to remember current population dynamics. The world has reached a population of 7.2 billion, with 138.8 million births and 54.9 million deaths taking place in 2013. Fertility rates are declining steadily almost everywhere, with the exception of sub-Saharan Africa, where rates are high and declining more slowly. By 2030, it is estimated that there will be 8.3 billion people on this planet, with 13% over the age of 65 years—the fastest-growing age group (3). Life expectancies at birth in 2013 show great inequalities, from 45.6 for males born in Lesotho to 86.4 years for females born in Japan (1).

The probability of dying is not constant in life; it has variations in the human life cycle, with higher risks in the extremes of the age spectrum: the first few days after birth and after 70 years of age (4). In addition to age, there are huge disparities in the probability of dying because of differences in sex, country, and cause (Fig. 1). Risk factors—such as high blood pressure, smoking, alcohol abuse, inadequate nutrition, and poor diet—are associated with specific causes of death and exhibit regional variation (5). It is critical not only to understand when and where important health outcomes occur but also to identify the underlying risk factors.

Newborns and children under the age of 5

MDG 4 aims to reduce by two-thirds the under-5 mortality rate (U5MR) between 1990 and 2015. By 2013, global U5MR had decreased by 48%; only 27 of 138 developing countries are likely to achieve the MDG target. Last year, 6.3 million children died before their fifth birthday; 41.6% (2.6 million) of those deaths occurred within the first 28 days of life (6).

Today, the 10 countries with the highest child mortality are all in sub-Saharan Africa. This region not only has the highest burden of

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