

FEBRUARY 2015

BY ELIZABETH GAY
AND MARLENE LEE

REPRODUCTIVE HEALTH AND ECONOMIC WELL-BEING IN EAST AFRICA

54%

of East African women
who want to avoid
pregnancy are not using
modern contraception.

On average, families
in Tanzania, Uganda,
Rwanda, and Kenya
have 1 or 2 more
children than they want.

In 2011, only
11%

of births in Ethiopia
were delivered
in a health facility.

Women and girls are among the more vulnerable groups in many communities as seen in their lower levels of education and poorer health. Yet the health of women and children is important to the future well-being of any community. The William and Flora Hewlett Foundation's Population and Poverty Research Initiative (PopPov), together with four European research councils, has sponsored research into how investments in women's and children's health contribute to economic development. The research focuses on sub-Saharan Africa with an emphasis on including researchers and institutions from the continent as partners. One of the aims is to generate research findings that could be translated into program and policy recommendations for near-term use.

Results of this initiative and other research show that empowering women with the information and tools necessary to ensure their health contributes to the economic well-being of individual households and the next generation. This brief focuses on the PopPov research conducted in the East Africa region, with relevant information and statistics from other studies included as appropriate. The research from East Africa has examined access to appropriate reproductive health care services that enable safe pregnancy and childbirth, and that provide couples with the best chance of having healthy children and resilient households. The research has also explored women's desired versus actual family size. Women's reproductive health and family size have economic implications for households and ultimately for national economic growth.

Reproductive Health Care Linked to Economic Growth

The links among family planning, reproductive health, and economic development are both direct and indirect. Indirectly, family planning and better reproductive health care enable women to achieve their educational and employment goals. Healthy women are more likely to remain in school and to continue working. Directly, family planning such as modern contraception can aid couples in achieving a smaller family size. Smaller families might ultimately help countries experience a "demographic dividend." The demographic dividend becomes possible when fertility declines and working-age people outnumber dependents. This fertility decline presents a window of opportunity to increase investments in health, education, and gender equity that could boost economic development in the long run. Women's empowerment, smaller families, better health care, and expanded education and employment opportunities can improve a community's quality of life.

Among studies from the East Africa region, at the individual level, research from Madagascar and Kenya shows that early childbearing limits women's educational attainment because women who become pregnant while attending school may drop out.¹ Women with more years of education are more likely to delay marriage, to delay childbearing, and to obtain the skills necessary for gainful employment than women with fewer years of education.² At the national level, an analysis by Tugrul Temel using simulation and data from Rwanda found that investments in family planning can lead to increased productivity accompanied by income gains, especially in rural agricultural settings.³ These results are consistent with findings using data from countries outside of East Africa,

BOX 1

Family Planning Initiatives in East African Countries

As part of a long-term plan to increase economic development by realizing a boost from a demographic dividend, the Government of Uganda launched a plan in 2014 to increase family planning programs and contraceptive services.

After the Government of Rwanda declared family planning a national priority and invested in the scaling up of successful programs, modern contraceptive use quadrupled between 2005 and 2010—rising from 10 percent to 45 percent.

MODERN CONTRACEPTION IMPROVES LIVES

Unmet need for family planning services in East Africa remains high (see Figure 1; see Box 2, page 3). Many women in East Africa do not use modern contraceptive methods, despite their desire to avoid pregnancy. Research suggests that both lack of knowledge and lack of access may play a role in unmet need. In 2012, 54 percent of women in East Africa who wanted to avoid pregnancy were not using a modern contraceptive method.⁵ In East Africa, Rwanda and Uganda have already acted to address provision of contraceptive services (see Box 1).

Researcher Dieudonné Muhoza at the University of Rwanda and colleagues found that nearly 58 percent of women in Rwanda who wanted to avoid pregnancy had an unmet need for contraception.⁶ A 2014 analysis by Muhoza and colleagues also identified a gap in the desired family size and total fertility rate for Tanzania, Uganda, Rwanda, and Kenya where, on average, families had one or two more children than they wanted.⁷ This points to an unmet need for family planning services, which might exist because contraception may not be offered in health centers or be periodically unavailable at health care sites. Additionally, not all health care providers speak to women and couples about family planning, a factor that is linked to greater contraceptive use. The authors assert that improved availability of contraception through community-based service provision and education about family planning could improve access and uptake (see Figure 2, page 3).

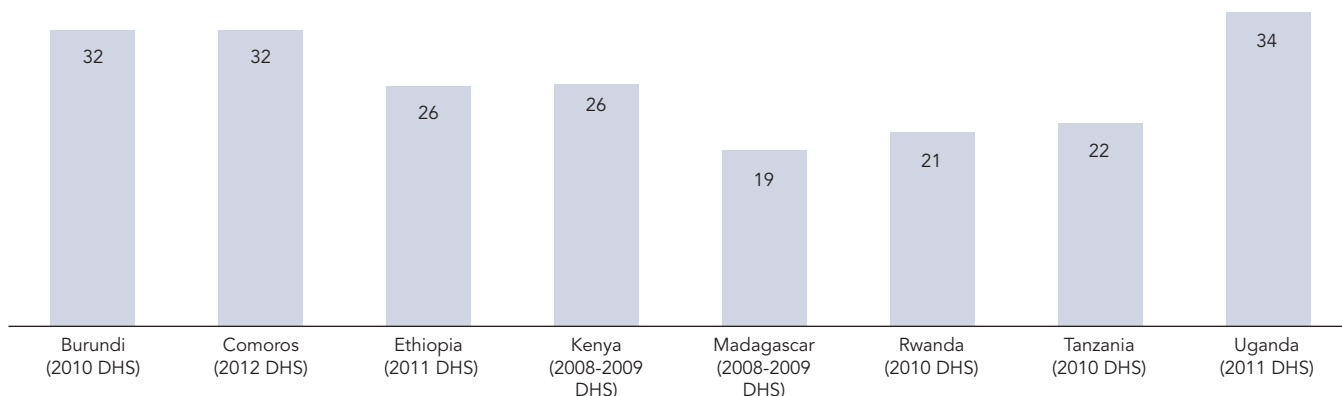
Researcher Deodatus Kakoko at Muhimbili University of Health and Allied Sciences and colleagues report that public facilities in Tanzania were more likely than private

including South Africa and Nigeria, and from cross-national analysis showing that lower fertility is associated with higher labor force participation among women.⁴

Even without a rise in income, families that have fewer children have the option to spend more on each child's nutrition, health care, and education. Those women who work outside the home or engage in agricultural production may be able to increase their family's economic resources by spending more time in the labor force.

FIGURE 1

Percent of Married Women Ages 15-49 With an Unmet Need for Family Planning Services



Source: ICF International, STATcompiler, 2012, accessed at www.statcompiler.com, on Jan. 15, 2015.

facilities to offer modern contraceptives and to have a wider range of methods available.⁸ More than one-half of private health facilities surveyed throughout Tanzania did not offer family planning services. In Rwanda, the government has built public facilities close to private clinics to serve all members of the community. Still, people without access to public health facilities may be limited in their choice of contraception or not be able to access it at all.

Availability of a wide range of modern contraception (barrier, hormonal, short-acting, and long-lasting methods) is an important factor in reducing unmet need, in increasing contraceptive uptake, and in helping women and couples achieve their reproductive goals. Joseph Babigumira and his colleagues' research in Uganda shows providing universal access to modern contraceptives may be both cost effective and, to the extent that it prevents unsafe abortions, could contribute to improving women's quality of life.⁹ In Uganda, two-thirds of women wanting to avoid pregnancy have an unmet need. Universal access to contraception would help women and couples avoid unplanned pregnancy, reducing direct medical costs and costs related to increased family size. Helping couples avoid unplanned pregnancy would help lower rates of neonatal, infant, and child mortality; miscarriages and stillbirths; and maternal death and illness—negative health outcomes associated with direct medical and social costs.¹⁰

The greatest need for improved access to modern contraception is among poor women. A strong association exists between socioeconomic status or household income and contraceptive use. Women who have more financial

BOX 2

Unmet Need for Family Planning

The Demographic and Health Surveys Program (DHS) defines unmet need as the percentage of women who do not want to become pregnant but are not using contraception.

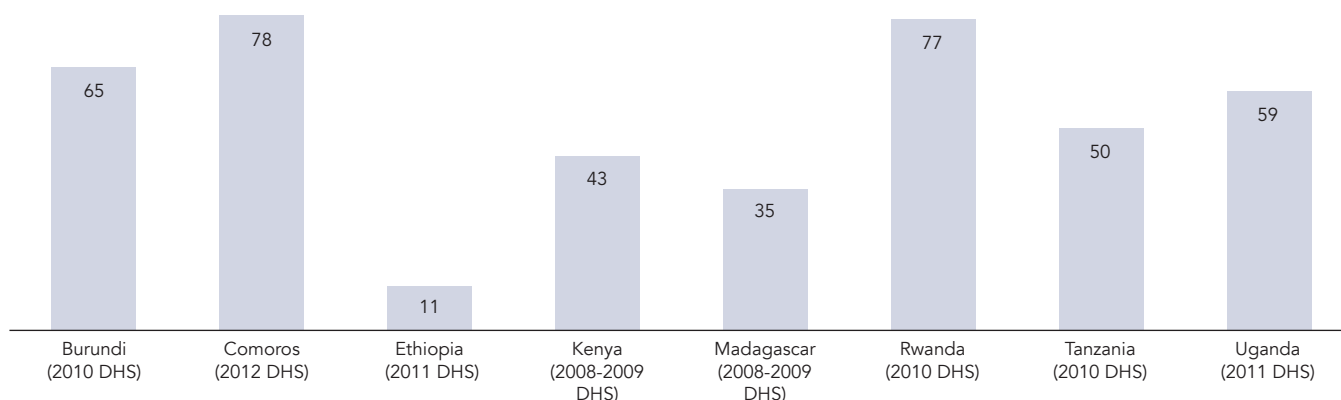
Source: Sarah Bradley et al., *Revising Unmet Need for Family Planning*, DHS Analytical Studies No. 25 (Calverton, Maryland: ICF International, 2012).

resources to afford contraception are more likely to use contraception and therefore are less likely to have unmet need. While unmet need affects women of all economic statuses in East Africa, analyses of data from Kenya, Rwanda, Tanzania, and Uganda show that unmet need is highest among the least wealthy women.¹¹ When Muhoza and colleagues compared desired number of children with average family size in these same countries, they found that the poorest women in Kenya, Tanzania, and Uganda were more likely to want more children than wealthy women.¹² The exception is Rwanda where women of varying economic statuses have similar fertility preferences. Although the poorest women tend to want more children than the wealthiest women, poor women still have more children than they actually desire—likely a result of lack of information about and access to family planning.

FIGURE 2
Percent of Married Women Ages 15-49 Currently Using Modern Contraception



Source: ICF International, STATcompiler, 2012, accessed at www.statcompiler.com, on Jan. 15, 2015.

FIGURE 3**Percent of Births Delivered at a Health Facility**

Source: ICF International, STATcompiler, 2012, accessed at www.statcompiler.com, on Jan. 15, 2015.

Consistent with other research to date, Idda Moshia at Muhimbili University of Health and Allied Sciences in Tanzania and Ruerd Ruben at the University of Radboud report that knowledge of contraception is strongly associated with contraceptive use.¹³ In general, research shows that women with higher levels of education are more likely to use contraception than women with lower education levels.¹⁴ In Kenya, researchers Moses Omwago and Anne Khasakhala at the University of Nairobi noted that unmet need for contraception declined as education levels rose.¹⁵ Researchers suggest that women with more education are more likely to be aware of the benefits of a smaller family size and of planning and spacing pregnancies, and more likely to overcome sociocultural and economic barriers.

In addition to raising awareness and sharing information about contraception at the clinical level, increasing knowledge at the community level might be important as well. David Bloom and colleagues at Harvard University find that social interactions specifically influence fertility—an individual’s fertility ideas, experiences, and decisions can affect the fertility decisionmaking of others.¹⁶ Similarly, research from Tanzania finds that approval from other women in the community is more strongly associated with contraceptive use than perceived partner approval.¹⁷ Information about family size, family formation, and contraception travels through social networks to influence social norms and decisions. Thus, increasing knowledge about the benefits of family planning could create new, positive community norms that encourage contraceptive uptake.

THE COST OF UNSAFE ABORTION

In most East African countries, abortion is illegal or restricted to instances where it is necessary to save the mother’s life or protect her physical health. Women with unplanned pregnancies must either give birth or seek out illegal abortion care, which is largely provided in unsanitary conditions by unskilled practitioners. While abortion provided in sanitary conditions by a trained practitioner is safe, unsafe abortion puts women at risk for infection, unchecked bleeding, and other health concerns that require costly medical care.

The ultimate cost of unsafe abortion is women’s lives. The Kenyan Ministry of Health reports that unsafe abortion is a major contributor to maternal death, illness, and injury in the country.¹⁸ Unsafe abortion is also a significant contributor to maternal death in Tanzania and Uganda.¹⁹ Additionally, data from Uganda show that unsafe abortion and resulting medical complications are associated with poor health.

Maternal mortality and medical and societal costs are lower with improved access to contraception. Universal access to contraception could help meet women’s family planning needs and generate cost savings for households and health care systems. Having safe and legal abortion options also lowers health risks, reducing mortality and medical costs.²⁰

QUALITY CARE HELPS PREVENT MATERNAL DEATH AND INJURY

In East Africa, the share of babies delivered at health facilities varies widely among countries (see Figure 3).

Quality health care facilities, skilled providers, and individuals' willingness to visit these facilities and providers are essential in order to avert illness and ultimately promote household economic stability. Access to quality facilities and skilled providers is important in both antenatal and postnatal care.

In Uganda and Zambia, delivery with skilled health professionals was associated with better health outcomes and reductions in maternal mortality, illness, and injury.²¹ In Kenya, women who receive antenatal care are more likely to deliver with the help of a skilled health professional.²²

A number of factors influence where women give birth. In countries like Kenya and Tanzania, a woman's age, religion, marital status, education level, and economic status all influence her place of delivery. In particular, women with more education and with greater access to financial resources are more likely to give birth in a health facility than women with lower levels of education and income.²³ Researchers suggest that women with a greater level of education are more aware of the benefits of antenatal care and delivering in a health facility.

Cost and distance are also barriers to antenatal care and giving birth in a health facility. Research results from Tanzania show that wealthier women have more means to pay for health care services and obtain transportation to a health care facility, or may be more empowered to access care than poor women.²⁴ Women from wealthier households may be better able than poor women to avoid health facilities where they are mistreated or disrespected. Research from Kenya shows that poor urban women prefer facilities where they are treated respectfully even if that facility is under-resourced or unable to offer certain health care services.²⁵

Economically, how women access maternal health care can make all the difference. Maternal mortality takes a significant toll on households and communities. Families lose loved ones, caregivers, and income earners while communities lose human and social capital. Furthermore, for every woman who dies from pregnancy-related causes, as many as 20 women experience disease or disability.²⁶

Maternal illness or injury results in direct medical costs to households and governments and indirect costs in the form of reduced or lost productivity, labor and employment, and human capital. As one study in Burkina Faso found, some women who survive a maternal-related health crisis might be faced with an unresolved physical injury that negatively impacts their quality of life and productivity; debt from medical expenses related to the crisis and ongoing expenses; and shortages of resources like food that could also negatively impact other members of the household.²⁷

Conclusion

Empowering the most vulnerable women with access to reproductive health care is an important part of improving their health, quality of life, and economic status. Increased availability of safe, quality reproductive health care will especially help the most vulnerable women avoid unplanned pregnancy, achieve their desired family size, and protect their health. These women are then better able to achieve higher levels of education, engage in the labor force, earn income, and invest in their families. Government prioritization of efforts that reach the poorest and least-educated women could initiate a cycle that promotes health and economic well-being among these women and their families.

Recommendations for Action

Make family planning a national priority and invest in the scaling up of successful programs in order to:

- Help young women delay childbearing.
- Help married couples plan the timing and spacing of births.
- Realize changes in the population age structure required for opportunities associated with a demographic dividend.

Make counseling services more widely available in order to:

- Increase knowledge of family planning benefits among the most vulnerable women.
- Increase knowledge of antenatal care requirements and services among the most vulnerable women.

Provide reproductive health care and a wide range of modern contraceptive methods in all public health clinics, in order to reduce unmet need, particularly for the poorest women.

Provide public information programs to reduce stigma or myths about services in order to better serve the least-educated women.

Support the training of health care professionals to enhance their ability to provide respectful, safe, quality care.

Lower costs of or increase access to financial assistance for reproductive health services, including antenatal care, in order to better serve the poorest women.

Lower barriers to access through provision of transportation to better serve women who would otherwise go without care.

Acknowledgments

This brief was prepared in conjunction with presentations for the UNESCO MOST Forum for Ministers of Social Development for the Eastern Africa Region in February 2015. The authors are Elizabeth Gay, policy analyst in International Programs at the Population Reference Bureau (PRB), and Marlene Lee, program director, Academic Research and Relations at PRB. This publication is made possible by the generous support of the William and Flora Hewlett Foundation as part of the foundation's Population and Poverty Research Initiative (PopPov). The PopPov Research Network is a group of academic researchers and funders from around the globe studying the ways that population dynamics (population growth, decline, aging, etc.) impacts economic outcomes. PRB serves as the secretariat for the PopPov Research Network.

The authors wish to thank Anne Khasakhala, Dieudonné Muhoza, Joseph Babigumira, Thomas Merrick, Monica Das Gupta, and Jan Monteverde Haakonsen for their review of this brief.

© 2015 Population Reference Bureau. All rights reserved.

References

- 1 Catalina Herrera and David Sahn, "The Impact of Early Childbearing on Schooling and Cognitive Skills Among Young Women in Madagascar," *CERDI Etudes et Documents Working Paper* 28 (2014); and Esther Duflo, Pascaline Dupas, and Michael Kremer, "Education, HIV and Early Fertility: Experimental Evidence From Kenya," *National Bureau of Economic Research Working Paper* 20784 (2014).
- 2 David Canning and T. Paul Schultz, "The Economic Consequences of Reproductive Health and Family Planning," *Lancet* 380, no. 9837 (2012): 165-71; David Bloom et al., "Fertility, Female Labor Force Participation, and the Demographic Dividend," *Journal of Economic Growth* 14, no. 2 (2009): 79-101; Francesca Marchetta and David Sahn, "The Role of Education and Family Background in Marriage, Childbearing and Labor Market Participation in Senegal," *Cornell Food and Nutrition Policy Program Working Paper* 243 (2012); and Øystein Kravdal, "Further Evidence of Community Education Effects on Fertility in Sub-Saharan Africa," *Demographic Research* 27, no. 22 (2012): 645-80.
- 3 Tugrul Temel, "Family Planning, Growth, Income Distribution: Graph Theoretic Path Analysis of Rwanda," *Journal of Economic Development* 39, no. 1 (2014): 1-45.
- 4 Bloom et al., "Fertility, Female Labor Force Participation, and the Demographic Dividend"; Vimal Ranchhod et al., "Estimating the Effect of Adolescent Fertility on Educational Attainment in Cape Town Using a Propensity Score Weighted Regression," *Southern Africa Labour and Development Research Unit Working Paper* 59 (2011); and Quamrul H. Ashraf, David N. Weil, and Joshua Wilde, "The Effect of Fertility Reduction on Economic Growth," *Population and Development Review* 39, no. 1 (2013): 97-130.
- 5 Jacqueline Darroch and Susheela Singh, "Trends in Contraceptive Need and Use in Developing Countries in 2003, 2008, and 2012: An Analysis of National Surveys," *Lancet* 381, no. 9879 (2013): 1956-62.
- 6 Dieudonné Ndaruhuye Muhoza, Annelet Broekhuis, and Pieter Hooimeijer, "Demand and Unmet Need for Means of Family Limitation in Rwanda," *International Perspectives on Sexual and Reproductive Health* 35, no. 3 (2009): 122-30.
- 7 Dieudonné Ndaruhuye Muhoza, Annelet Broekhuis, and Pieter Hooimeijer, "Variations in Desired Family Size and Excess Fertility in East Africa," *International Journal of Population Research* (2014) Article ID 486079.
- 8 Deodatus C. Kakoko et al., "Provision of Family Planning Services in Tanzania: A Comparative Analysis of Public and Private Facilities," *African Journal of Reproductive Health* 16, no. 4 (2012): 140-48.
- 9 Joseph B. Babigumira et al., "Potential Cost-Effectiveness of Universal Access to Modern Contraceptives in Uganda," *PLoS One* 7 (2012); Solomon J. Lubinga et al., "Health-Related Quality of Life and Social Support Among Women Treated for Abortion Complications in Western Uganda," *Health and Quality of Life Outcomes* 11, no. 118 (2013).
- 10 Babigumira et al., "Potential Cost-Effectiveness of Universal Access to Modern Contraceptives in Uganda."
- 11 Guttmacher Institute, *Contraception and Unintended Pregnancy in Uganda* (New York: Guttmacher Institute, 2013); Muhoza, Broekhuis, and Hooimeijer, "Demand and Unmet Need for Means of Family Limitation in Rwanda"; Rubina Hussain, *Abortion and Unintended Pregnancy in Kenya* (New York: Guttmacher Institute, 2012); and Vanessa Woog and Andrea B. Pembe, *Unsafe Abortion in Tanzania: A Review of the Evidence* (New York: Guttmacher Institute, 2013).
- 12 Muhoza, Broekhuis, and Hooimeijer, "Variations in Desired Family Size and Excess Fertility in East Africa."
- 13 Idda Mosha and Ruerd Ruben, "Communication, Knowledge, Social Network and Family Planning Utilization Among Couples in Mwanza, Tanzania," *African Journal of Reproductive Health* 17, no. 3 (2013): 57-69.
- 14 Rob Stephenson et al., "Contextual Influences on Modern Contraceptive Use in Sub-Saharan Africa," *American Journal of Public Health* 97, no. 7 (2007): 1233-40; and John Cleland, Robert Ndugwa, and Eliya Zulu, "Family Planning in Sub-Saharan Africa: Progress or Stagnation?" *Bulletin of the World Health Organization* 89 (2011): 137-43.
- 15 Moses Omwago and Anne Khasakhala, "Factors Influencing Couples' Unmet Need for Contraception in Kenya," *African Population Studies* 21, no. 2 (2006): 75-94.
- 16 David Bloom et al., "Social Interactions and Fertility in Developing Countries," *Program on the Global Demography of Aging Working Paper* 34 (2008): 1-48.
- 17 Stephenson et al., "Contextual Influences on Modern Contraceptive Use in Sub-Saharan Africa."
- 18 Hussain, *Abortion and Unintended Pregnancy in Kenya*.
- 19 Woog and Pembe, *Unsafe Abortion in Tanzania: A Review of the Evidence*; and Joseph B. Babigumira et al., "Estimating the Costs of Induced Abortion in Uganda: A Model-Based Analysis," *BMC Public Health* 11 no. 94 (2011).
- 20 Lubinga et al., "Health-Related Quality of Life and Social Support Among Women Treated for Abortion Complications in Western Uganda."
- 21 Centers for Disease Control and Prevention, *Saving Mothers, Giving Life: Maternal and Perinatal Outcomes in Health Facilities-Phase 1 Monitoring and Evaluation Report* (Atlanta, GA: Centers for Disease Control and Prevention, U.S. Department of Health and Human Services, 2014).
- 22 Rhoun Ochako et al., "Utilization of Maternal Health Services Among Young Women in Kenya: Insights From the Kenya Demographic and Health Survey, 2003," *BMC Pregnancy and Childbirth* 11 (2011).
- 23 Rob Stephenson et al., "Contextual Influences on the Use of Health Facilities for Childbirth in Africa," *American Journal of Public Health* 96, no. 1 (2006): 84-93.
- 24 Bart Van Rijsbergen and Ben D'Exelle, "Delivery Care in Tanzania: A Comparative Analysis of Use and Preferences," *World Development* 43 (2013): 276-87; Ochako et al., "Utilization of Maternal Health Services Among Young Women in Kenya: Insights From the Kenya Demographic and Health Survey, 2003"; and Stephenson et al., "Contextual Influences on Modern Contraceptive Use in Sub-Saharan Africa."
- 25 Jean Christophe Fotso and Carol Mukiira, "Perceived Quality of and Access to Care Among Poor Urban Women in Kenya and Their Utilization of Delivery Care: Harnessing the Potential of Private Clinics?" *Health Policy and Planning* 27 (2011): 1-11.
- 26 UNICEF, *The State of the World's Children 2009: Maternal and Newborn Health* (Geneva: United Nations, 2008).
- 27 Patrick G. C. Ilboudo, Steve Russell, and Ben D'Exelle, "The Long Term Economic Impact of Severe Obstetric Complications for Women and Their Children in Burkina Faso," *PLoS One* 8, no. 11 (2013).



POPULATION REFERENCE BUREAU

The Population Reference Bureau **INFORMS** people around the world about population, health, and the environment, and **EMPOWERS** them to use that information to **ADVANCE** the well-being of current and future generations.

www.prb.org

POPULATION REFERENCE BUREAU

1875 Connecticut Ave., NW 202 483 1100 **PHONE**
Suite 520 202 328 3937 **FAX**
Washington, DC 20009 USA popref@prb.org **E-MAIL**
