

The Population-Climate Connection:

Why Family Planning is a Win-Win for Women and the Planet



he great challenge of the 21st century is to lift billions from poverty, while reducing greenhouse gas emissions and coping with a changing climate. That challenge will be easier to meet with slower population growth.

Moreover, the means to slow growth—including family planning and other reproductive health services—are important ends in themselves. Family planning empowers women, improves public health, reduces greenhouse gas emissions and builds resilience to a changing climate.

The bottom line: family planning is a win-win for women and the planet.



Photo: Reuters

The challenge: growing numbers, a changing climate, persistent poverty

World population: 7 billion and growing. In 2011, world population soared past 7 billion. While the rate of growth has slowed in most parts of the world, human numbers still grow by 83 million every year. That is the equivalent of adding a city the size of San Francisco every month; another Germany every year; another India every 15 years.¹

The climate is changing. The message from the Intergovernmental Panel on Climate Change (IPCC) is clear: as a result of human activity, the climate is changing. The buildup of greenhouse gases in the atmosphere warmed the Earth's surface by more than one degree Fahrenheit over the last century, and the IPCC predicts another 3.1 to 7.2 degrees of warming by 2100.² The impacts are increasingly severe: widespread crop failures and drought, more violent storms, and the spread of deadly diseases.³

More people, more emissions. The relationship between human numbers and greenhouse gas emissions is not straightforward, in part because per capita emissions vary greatly between (and within) countries. For example, the average American emits nearly 20 tons of CO₂ per year; the average Ugandan emits a tenth of one ton. Nonetheless, in all parts of the world, population growth is associated with a proportionate increase in emissions: a 10% increase in population generally yields a 10% increase in emissions.

Population is growing most rapidly in the least developed countries. Most growth is taking place in the world's poorest countries: fully half of the least developed countries expect their populations to double by 2050.6 In Africa, human numbers could more than triple by the end of the century, from one billion today to 3.6 billion in 2100.7 The least developed countries are already struggling to lift billions from poverty, and many will also bear the brunt of climate change. Rapid population growth makes those problems more difficult to solve.8

Rapid population growth makes it more difficult for poor countries to cope with a changing climate. Among low-income countries that have drafted National Adaptation Programmes of Action, more than 90 percent have expressed concern that rapid population growth increases vulnerability to climate change impacts, or reduces resilience.9

Elements of a solution: slow growth, empower women

Slower population growth can help the world's nations prevent—and cope with--dangerous climate change. Leading researchers at the National Center for Atmospheric Research and the International Institute for Applied Systems Analysis used sophisticated modeling to calculate the impact of different population growth trajectories on emissions. They found that slowing population growth would:

• Provide 16-29% of the emissions reductions needed by 2050 to avoid dangerous climate change.10

Slower population growth could reduce fossil fuel emissions by an extra 1.1 billion tons of carbon per year by 2050—an impact equivalent to completely eliminating deforestation.

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Other research has found that slower growth can help societies adapt to climate change. And the means to slow growth—including family planning/ reproductive health services and girls' education—have been shown to improve public health, economic wellbeing and women's empowerment, which are crucial building blocks of resilience.12

Of course, slowing population growth is not all we must do. Prudent climate policy encompasses a range of strategies, including conservation, technological innovation, and a transfer of resources from wealthier to poorer countries. But slower growth is an important element of the solution.

The good news: we know how to slow population growth. A half-century of experience has shown that the best way to slow growth is to ensure that all people can make their own decisions about childbearing. That means providing voluntary access to contraception and other reproductive health services, not coercive "population control." It also means education and employment opportunities, especially for women. And it means tackling gender and economic inequities that are associated with rapid population growth.

There is already a global agreement on population. The world's nations are struggling for consensus on climate change, but we already have a U.N. agreement on population, endorsed by 179 developed and developing nations in 1994 in Cairo. Countries at that time agreed on a plan to slow population growth through universal access to reproductive health services, empowering girls and women, and combating poverty. These goals were reaffirmed in the U.N. Millennium Development Goals earlier this decade.

We are at a pivotal moment for world population. Tomorrow's population size depends on today's childbearing choices. Right now, the largest generation in history is coming of age. Nearly half the world's population—three billion people—are under the age of 25.

The choices those young people make—and the choices available to them—will determine whether world population declines to 6 billion, or grows to 16 billion by the end of this century.¹³

But too many lack the means to make meaningful choices about childbearing. Around the world, some 215 million women do not want to get pregnant but are not using contraception. ¹⁴ Addressing that "unmet need" for family planning would have many benefits for women and families—and it is key to slowing population growth. New research by the Futures Group confirms that addressing unmet need for contraception would substantially slow population growth worldwide. ¹⁵

Family planning and reproductive health services are cost-effective.

Meeting existing demand for family planning services, while requiring a substantial investment, is well within reach for existing aid flows and incountry health spending. An additional \$3.7 billion per year would provide services for all who need them. The total cost to provide both family planning and maternal and newborn health services to meet existing needs would be \$24.6 billion, an increase of \$12.8 billion annually.

These services have numerous benefits for women, families and societies. According to the Guttmacher Institute and the United Nations Population Fund, the benefits of meeting unmet need for both family planning and maternal and newborn health services would be dramatic:

- Unintended pregnancies would drop by more than two thirds;
- Seventy percent of maternal deaths would be averted:
- Forty-four percent of newborn deaths would be averted; and
- Unsafe abortions would decline by seventy-three percent.¹⁸

Universal access to family planning and reproductive health services: the time is now. The challenges of the 21st century—providing for an evergrowing population against a backdrop of climate change—are daunting. Those challenges will be easier to surmount if human numbers are growing more slowly. Moreover, the means to slow growth, including family planning and other reproductive health services, are good for women, families and the planet.

Family planning has numerous benefits for women, families and the planet.

Photo: Shehzad Noorani

Notes

- 1. UN, 2011, Department of Economic and Social Affairs, Population Division, World Population Prospects: The 2010 Revision, http://www.un.org/esa/population/unpop.htm; Population Reference Bureau, 2011 World Population Data Sheet (Washington, DC: PRB) http://www.prb.org/pdf11/2011population-data-sheet_eng.pdf
- 2. Intergovernmental Panel on Climate Change (IPCC), 2007, Projections of future changes in climate, http://www.ipcc.ch/publications and data/ar4/wg1/en/spmsspm-projections-of.html">http://www.ipcc.ch/publications and data/ar4/wg1/en/spmsspm-projections-of.html
- IPCC, 2007, Fourth Assessment Report, Climate Change 2007: Synthesis Report, Summary for Policymakers.
- 4. United Nations Statistics Division, 2010, Environmental Indicators: greenhouse gas emissions, http://unstats.un.org/unsd/environment/air co2 emissions.htm
- 5. Dietz, T. and Rosa, E.A., 1997, "Effects of population and affluence on CO2 emissions," *Proceedings of the National Academy of Sciences USA* 94, 175-179; Shi, A., 2003, "The impact of population pressure on global carbon dioxide emissions, 1975-1996: evidence from pooled cross-country data," *Ecological Economics* 44, 29-42; Cole, M.A. and Neumayer, E., 2004, "Examining the impact of demographic factors on air pollution," *Population & Environment* 26(1), 5-21, cited in O'Neill, B., "Climate change and population growth," in Mazur, L., ed., 2009, *A Pivotal Moment: Population, Justice and the Environmental Challenge* (Washington, DC: Island Press).
- 6. UN, World Population Prospects, op. cit.
- 7. UN, World Population Prospects, op. cit.
- 8. United Nations, 2009, "World population monitoring, focusing on the contribution of the Programme of Action of the International Conference on Population and Development to the internationally agreed development goals, including the Millennium Development Goals," (E/CN9/2009/3). New York, NY: Population Division, Department of Economic and Social Affairs, United Nations.
- 9. Mutunga, C., and Hardee, K., "Population and Reproductive Health in National Adaptation Programmes of Action (NAPAs) for Climate Change," in Guzman, et. al., eds., 2009, *Population Dynamics and Climate Change* (New York/London: UNFPA and IIED.
- 10. O'Neill, B et al. 2010. "Global Demographic Trends and Future Carbon Emissions." *Proceedings of the National Academy of Sciences* 107 (41)
- 11. Ibid.
- 12. Hoepf Young, M. et. al., 2009, "Adapting to Climate Change: The Role of Reproductive Health," in Laurie Mazur, ed. *A Pivotal Moment: Population, Justice and the Environmental Challenge* (Washington, DC: Island Press).
- 13. UN, 2011, op. cit.
- 14. Guttmacher Institute/United Nations Population Fund, 2009, *Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal and Newborn Health*, Washington, DC: Guttmacher Institute, http://www.guttmacher.org/pubs/AddingItUp2009.pdf
- 15. S. Moreland, E. Smith, and S. Sharma, 2010, *World Population Prospects and Unmet Need for Family Planning*, Washington, D.C.: http://www.futuresgroup.com/publications/world-population-prospects -and-unmet-need-for-family-planning/
- 16. Adding It Up, op. cit.
- 17. Adding It Up, op. cit.
- 18. Adding It Up, op. cit.



Published December, 2011 by Aspen Global Health and Development A program of The Aspen Institute

Cover photo: Elise Mann