



# AFGHANISTAN, AGAINST THE ODDS: A Demographic Surprise

BY Elizabeth Leahy Madsen



VOL | ISSUE  
14 | 01



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## ECSP REPORT

**Series Editor:** Meaghan Parker and Schuyler Null

**Design and Production:** Lianne Hepler

**Cover Photograph:** Mothers carrying children gather in the corridor of their apartment building in Bagram, Afghanistan. *UN Photo by Eric Kanalstein.*

## SUGGESTED CITATION

Leahy Madsen, Elizabeth. (2012). *Afghanistan, Against the Odds: A Demographic Surprise* (Environmental Change and Security Program Report Vol. 14, Issue 1). Washington, DC: Woodrow Wilson International Center for Scholars.

*This report is made possible by the generous support of the American people through the United States Agency for International Development's (USAID) Office of Population and Reproductive Health. The contents are the responsibility of Woodrow Wilson International Center for Scholars and do not necessarily reflect the views of USAID or the United States Government. Views expressed in this report are not necessarily those of the Center's staff, fellows, trustees, advisory groups, or any individuals or programs that provide assistance to the Center.*

**AFGHANISTAN'S** first-ever nationally representative survey of demographic and health issues finds that Afghan women have an average of five children each, lower than most experts had anticipated. Their rate of modern contraceptive use is just slightly below that of women in neighboring Pakistan, where the fertility rate is 4.1 children per woman. Just as Afghanistan and Pakistan's political circumstances have become more entwined, their demographic paths are more closely parallel than we might have expected. For Afghanistan, given its myriad socioeconomic, political, cultural, and geographic challenges, this is good news. But for Pakistan, where efforts to meet family planning needs have fallen short of capacity, it is not.

School girls talk in Islamabad. Photo by Christian Payne/Documentally.



## First Demographic and Health Survey Reveals Surprises

The *Afghanistan Mortality Survey 2010* (APHI/MoPH et al., 2011) is based on interviews with nearly 48,000 Afghan women, ages 12 to 49, conducted over eight months in 2010. Largely due to conditions of extreme insecurity, 13 percent of the population, mostly living in the southern provinces of Helmand, Kandahar, and Zabul, had to be excluded from the survey. Although officially titled a mortality survey, it includes the topics most commonly addressed in other USAID-sponsored Demographic and Health Surveys (DHS), such as fertility, family planning, and maternal health. The Afghanistan survey's objectives were to provide a knowledge base of health needs as the country continues to rebuild from constant conflict, as well as to demonstrate how international humanitarian and development investments have affected the population's well-being.

Afghanistan's last census was conducted in 1979, the year of the Soviet invasion, which ushered in a decade of war followed by more insecurity. Then, the population was estimated at 15.6 million; by 2010, the UN Population Division estimated it had reached 31.4 million (APHI/MoPH et al., 2011; UNPD, 2011b).

## Contraceptive Use Higher Than Sub-Saharan Africa

Fertility in Afghanistan is estimated at an average of 5.1 children per woman. While still quite high—growing at 2.6 percent per year, the population is on pace to double every 26 years—this rate is significantly lower than previous estimates, which placed Afghanistan among the highest fertility rates in the world. The most recent fertility estimates from the U.S. Census Bureau (2011), UN Population Division (2011b), and Population Reference Bureau (2011) range from 5.8 to 6.6 children per woman. Even these estimates are lower than those for the 1990s, when the UN pegged the fertility rate at eight children per woman.

A few years ago, demographers Richard Cincotta (2009) and Carl Haub (2009) noticed indications of demographic change in Afghanistan, with Haub suggesting that the national Basic Package of Health Services (MoPH, 2005), introduced in 2003, was successfully bringing health care, including family planning, to rural areas. The Mortality Survey itself proposes that fertility rates may be falling due to urbanization and “exposure to modern means of communication,” as well as access to family planning (APHI/MoPH et al., 2011, p. 43).

**ELIZABETH LEAHY MADSEN** is a consultant on political demography for the Wilson Center's Environmental Change and Security Program and senior technical advisor at Futures Group.



An farmer surveys his land at mid-day in southern Afghanistan.  
*U.S. Air Force photo by Senior Airman Kenny Holston.*

Although women in Afghanistan are often restricted in their mobility outside the home, knowledge of effective family planning methods is, as in most countries, almost universal (World Bank, 2010; Sedgh et al., 2007). However, the Mortality Survey finds that current use of contraception remains relatively low: One-fifth of married women of reproductive age are using a modern contraceptive method, most commonly injectables or the pill. As is typical elsewhere, contraceptive prevalence is higher among women who are educated, wealthier, and urban. Still, rural women have more than tripled their use of family planning since 2003, and the overall rate for rural women in Afghanistan is four points higher than the average for sub-Saharan Africa (UNPD, 2011a).

### Poverty and Inequality— Especially for Women

Afghanistan is a very poor country. Per capita GDP is estimated at less than \$600 annually (IMF, 2010). More than one-third of the population is unemployed, and agriculture remains the primary industry and source of income, even though most of the country's land is not arable (APHI/MoPH et al., 2011).

According to the Mortality Survey, households are large, averaging eight people each, and only five percent of homes have their own flush toilet. About 40 percent of Afghans get their water from unprotected wells, surface water, and other non-improved sources. Nearly 60 percent of the population lives without electricity and in homes with mud or earthen floors. Although only eight percent of the population has a refrigerator, three-quarters have a mobile phone.

Women in Afghanistan face conditions of widespread inequity. The median age of marriage is 18, and half of women surveyed gave birth while still teenagers. Two-thirds of births occur at home, the vast majority of these without the assistance of a skilled provider. Seventy-six percent of women surveyed have never been to school, making education for girls and women a clear priority for government intervention. Just 16 percent of women are active in the labor force, compared to 80 percent of men (ILO, 2011).

But there are some hopeful signs: The age at marriage is rising among younger women, and the survey estimates that 327 of every 100,000 live births result in a maternal death—much lower than the 1,400 out of every 100,000 estimated by the World Health Organization et al. (2010).

Afghanistan is not as much of a demographic outlier as many observers had assumed. While the sustainability of these improvements cannot be taken for granted in such fragile conditions, the public health system in Afghanistan is making strides against the odds and coming closer to parity with neighboring Pakistan.

Afghanistan's constitution promised in 2004 that the government will provide women with education, and there are promising signs of increased schooling among girls and young women. While less than 20 percent of women in their twenties have ever been to school, one-third of older teenagers and more than 40 percent of adolescent girls have attended at least some primary school. And despite the widespread poverty, the health system has clearly succeeded in improving health care access among some Afghan women, given the rapid rise in contraceptive use.

Moving forward, the question is whether rapid jumps in contraceptive use will continue. Several developing countries have experienced an initial decline in fertility that has subsequently stalled (Bongaarts, 2008). These stalls have been linked to slower improvements in female education, infant and child mortality, and contraceptive prevalence, compared to countries that are experiencing steadier fertility declines (Shapiro et al., 2011).

### Afghanistan and Pakistan: Demographic Siblings?

Afghanistan is not as much of a demographic outlier as many observers had assumed. While the sustainability of these improvements cannot be taken for granted in such fragile conditions, the public health system in Afghanistan is making strides

against the odds and coming closer to parity with neighboring Pakistan.

The political future of the two countries depends largely on the other. With Afghanistan making progress on reproductive health issues that remain stalled in Pakistan, their demographic trajectories are heading toward closer synchronization as well. In one key measure—use of contraception among married women—Afghanistan is almost identical to Pakistan. The modern contraceptive prevalence rate is 19.9 percent, slightly lower than the rate of 21.7 percent in Pakistan (APHI/MoPH et al., 2011; NIPS & Micro International, 2008).

While Pakistan faces its own serious political instability, it is widely regarded as more developed than its neighbor. Afghanistan is included in the UN's grouping of least developed countries, and Pakistan is not (UN-OHRLLS, 2012). Pakistan's GDP per capita is almost twice as high (IMF, 2010). On the surface, this should suggest lower fertility, as in general, there is a negative relationship between economic development and fertility. But demographers like Nancy Birdsall et al. (2003) have been quick to point out its complexities, and David Shapiro and colleagues (2011) have found that countries with larger increases in GDP actually experience slower fertility declines.

Pakistan's fertility rate of 4.1 children per woman is currently 20 percent lower than Afghanistan's, but

the similarities in contraceptive use, which is one of the direct determinants of fertility, suggest that this gap could be shrinking.<sup>1</sup> If Afghanistan's median age at marriage (18, compared to 20 in Pakistan) was higher, and more Afghan women were educated (76 percent of women have never been to school compared to 65 percent in Pakistan), the two fertility rates might be closer (APHI/MoPH, 2011; NIPS & Macro International, 2008).

### Pakistan's Entrenched Challenge

Why are these indicators closer than might be expected? Relative to the other countries in South Asia, Pakistan has had considerably less success in promoting family planning use. Bangladesh has a per capita income about half that of India and one-quarter that of Sri Lanka, yet the three countries' fertility rates are identical at 2.7 children per woman (IMF, 2010; MEASURE DHS, 2012). Nepal has the lowest income in the region, yet its fertility rate is three children per woman. Forty to

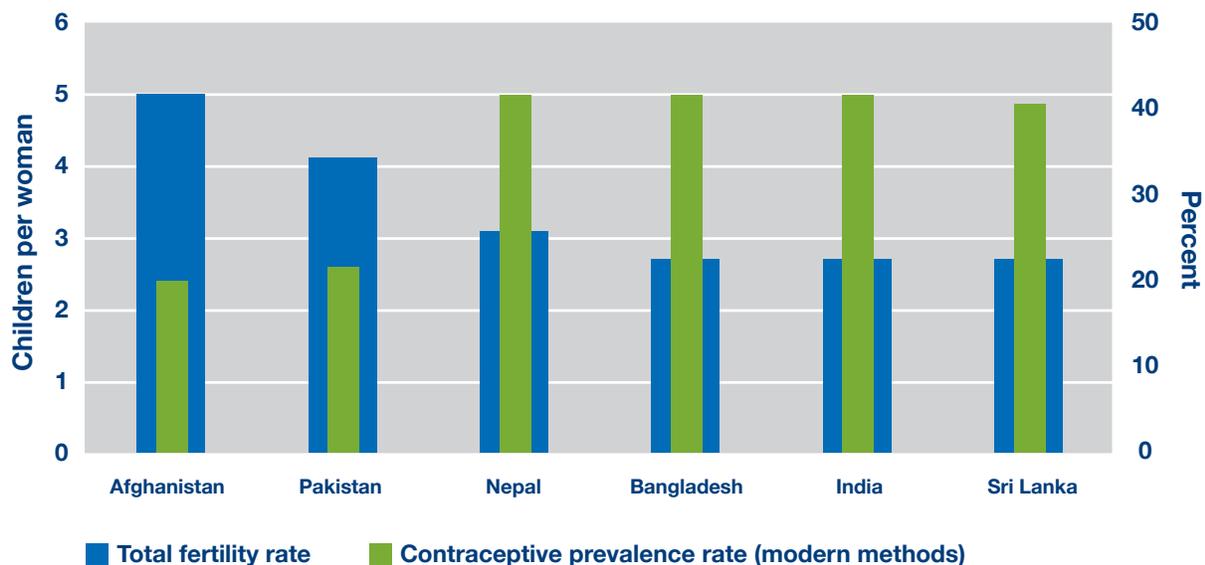
fifty percent of women in these South Asian countries use modern methods of contraception.

And then there is Pakistan. Despite a per capita income 90 percent that of India, only 22 percent of married women use modern contraception and fertility remains persistently high at over four children per woman (IMF, 2010; NIPS & Macro International, 2008).

The weaknesses of Pakistan's family planning program have been well-documented (Brulliard, 2011; Hardee & Leahy, 2008; Kugelman & Hathaway, 2011). Government commitment has been lacking and cultural expectations and gender inequities promote large family size. The country's most recent DHS cited disengagement with the program among local agencies, low levels of outreach into communities, and weak health sector support as likely causes for the stagnation of contraceptive use (NIPS & Macro International, 2008).

In 2011, the Pakistani government abolished the federal Ministry of Health and empowered

### Demographic Differences in South Asia



*Credit:* Chart by Elizabeth Leahy Madsen with data from MEASURE DHS (2012).



Girls in the Maslakh Internally Displaced Persons (IDPs) camp near the western Afghan city of Herat.  
*UN Photo by Eskinder Debebe.*

provincial governments with all responsibilities for health services. This transfer of authority could increase local ownership of health care, but some in and outside Pakistan have raised concerns about the loss of regulatory oversight and information sharing entailed in this total decentralization (Savedoff, 2011; Nishtar, 2011).

The Pakistan DHS provides more detail on women's motivations and preferences regarding fertility and family planning. Overall, 55 percent of married women in Pakistan have a "demand" for family planning; that is, they wish to avoid pregnancy or report that their most recent pregnancy or birth was mistimed or unwanted. More than half of these women are using family planning, while the remaining 25 percent of married women have an unmet need for contraception.

Unintended pregnancies and births play a major role in shaping Pakistan's demographic trajectory. The Pakistan DHS survey finds that 24 percent of births occur earlier than women would like or were not wanted at all. If unwanted births were prevented, Pakistan's fertility rate would be 3.1 children per woman rather than 4.1. Yet 30 percent of married women are using no contraceptive method and do not intend to in the future. The most common reasons cited for not intending to use family planning are that fertility is "up to God" and that the woman or her husband is opposed to it. While the recent Afghanistan survey does not include comparable data on fertility preferences, given the cultural and socioeconomic commonalities between the two countries, it is reasonable to assume that these results would be similar to Pakistan's.

## Linked Destinies: Youth and Insurgency

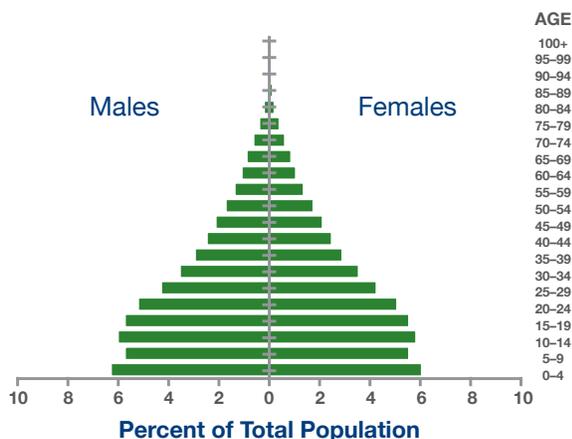
Neither of these “demographic siblings” has yet developed an age structure that can help promote socio-economic development or political stability. While Afghanistan’s significant progress in public health means it should no longer be considered a demographic outlier, the country still has a very young age structure and a rapidly growing population. Nearly half of the population is under the age of 15; even if the fertility rate continues to decline steadily, the size of this age group is projected to grow by five million over the next 15 years.

Meanwhile, Pakistan has missed the opportunity to develop a more balanced age structure. Although less dramatically youthful than Afghanistan, Pakistan also has a pyramid-shaped age structure with more than 60 percent of its population younger than 30. For both countries, this demographic profile further exacerbates the conditions promoting ongoing conflict.

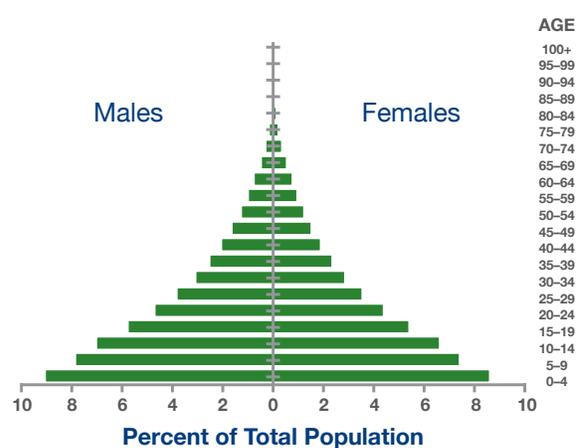
Political demographers have shown that countries with such youthful age structures are much more likely to experience outbreaks of civil conflict, especially in the context of sustained high fertility rates (Urdal, 2006). When ever-growing cohorts of young people reach adulthood with limited economic and social opportunities, it can both inspire a motive and create an opportunity for their recruitment into insurgency.

In Afghanistan and Pakistan, such insurgencies are well-established on both sides of the porous border. Analyzing the prospects for Pakistan’s development, scholar Stephen Cohen (2011, p. 22) has noted that the combination of low education rates, stalled economic growth, and high unemployment contribute to extremist groups having “displaced the army as the largest recruiter of young Pakistani males.” In Afghanistan, the government’s ability to provide basic services and expand job opportunities is even weaker.

Pakistan’s Age Structure, 2010



Afghanistan’s Age Structure, 2010



Credit: Charts by Schuyler Null with data from UNPD (2011b).

## Conclusion

Both countries are at an important juncture. With very young age structures and the attendant pressures on employment and government stability, each government must develop policies to:

1. Provide opportunities for their current youthful population; and,
2. Promote demographic changes in the years ahead (Leahy Madsen et al., 2010).

In the short term, economic prospects will be best

served by increasing educational attainment for both women and men, checking corruption and stabilizing the financial system, and expanding the reach of non-agricultural employment. Looking to the future, both countries must reduce unmet need for family planning to ensure that couples are able to have the number of children they desire.

Despite the immensely challenging environment, Afghanistan is making great progress with education and health services, and maintaining this momentum offers a hopeful scenario for the future. Pakistan would be well served to make a similar commitment.

## Notes

- <sup>1</sup> The most recent Pakistan DHS, conducted in 2006–2007, found a fertility rate of 4.1 children per woman. A more recent estimate by UNPD (2011b), derived from multiple possible sources,

uses a lower figure of 3.6. In order to most accurately compare fertility rates, this brief uses the figures from the comparable household surveys in Afghanistan and Pakistan.

## References

- Afghan Public Health Institute, Ministry of Public Health (APHI/MoPH), Afghan Central Statistics Organization [Afghanistan] (CSO), ICF Macro, Indian Institute of Health Management Research (IIHMR), & the World Health Organization Regional Office for the Eastern Mediterranean (WHO/EMRO). (2011). *Afghanistan Mortality Survey 2010*. Calverton, MD: APHI/MoPH, CSO, ICF Macro, IIHMR, & WHO/EMRO. Available online at <http://measuredhs.com/pubs/pdf/FR248/FR248.pdf>
- Birdsall, Nancy, Allen Kelley, & Steven Sindig. (2003). *Population Matters: Demographic Change, Economic Growth, and Poverty in the Developing World*. New York: Oxford University Press.
- Bongaarts, John. (2008). *Fertility Transitions in Developing Countries: Progress or Stagnation?* (Working Paper No.7). New York: Population Council. Available online at <http://www.popcouncil.org/pdfs/wp/pgy/007.pdf>
- Bruillard, Karin. (2011, December 14). "As Pakistan's population soars, contraceptives remain a hard sell." *The Washington Post*. Available online at [http://www.washingtonpost.com/world/asia\\_pacific/family-planning-is-a-hard-sell-in-pakistan/2011/11/08/gIQANeGcuO\\_story.html](http://www.washingtonpost.com/world/asia_pacific/family-planning-is-a-hard-sell-in-pakistan/2011/11/08/gIQANeGcuO_story.html)
- Cincotta, Richard. (2009, November). "Could Demography Save Afghanistan?" *Foreign Policy*. Available online at [http://www.foreignpolicy.com/articles/2009/11/16/could\\_demography\\_save\\_afghanistan](http://www.foreignpolicy.com/articles/2009/11/16/could_demography_save_afghanistan)
- Cohen, Stephen. (2011, January). *The Future of Pakistan*. Washington, DC: The Brookings Institute. Available online at [http://www.brookings.edu/~media/Files/rc/papers/2011/01\\_pakistan\\_cohen/01\\_pakistan\\_cohen.pdf](http://www.brookings.edu/~media/Files/rc/papers/2011/01_pakistan_cohen/01_pakistan_cohen.pdf)
- Hardee, Karen, & Elizabeth Leahy. (2008, October). *Population, Fertility and Family Planning in Pakistan: A Program in Stagnation*. Washington, DC: Population Action International. Available online at <http://www.populationaction.org/oldmedia/pakistan.pdf>
- Haub, Carl. (2009). *Winds of Demographic Change in Afghanistan?* Washington, DC: Population Reference Bureau. Available online at <http://www.prb.org/Articles/2009/afghanistan.aspx>
- International Labour Organization (ILO). (2011, October). *Economically Active Population, Estimates and Projections (6th Edition)*. Available online at [http://laborsta.ilo.org/applv8/data/EAPEP/eapep\\_E.html](http://laborsta.ilo.org/applv8/data/EAPEP/eapep_E.html)

- International Monetary Fund (IMF). (2010, October). *World Economic Outlook Database*. Available online at <http://www.imf.org/external/pubs/ft/weo/2010/02/weodata/index.aspx>
- Kugelman, Michael, & Robert Hathaway (Eds). (2011). *Reaping the Dividend: Overcoming Pakistan's Demographic Challenges*. Washington, DC: Woodrow Wilson Center. Available online at <http://www.wilsoncenter.org/sites/default/files/ReapingtheDividendFINAL.pdf>
- Leahy Madsen, Elizabeth, Beatrice Daumerie, & Karen Hardee. (2010). *The Effects of Age Structure on Development*. Washington, DC: Population Action International. Available online at [http://populationaction.org/oldmedia/SOTC\\_PIB.pdf](http://populationaction.org/oldmedia/SOTC_PIB.pdf)
- MEASURE DHS. (2012). *Demographic and Health Surveys (DHS) Data*. Calverton, MD: ICF International. Available online at <http://www.measuredhs.com/>
- Ministry of Public Health [Afghanistan] (MoPH). (2005). *A Basic Package of Health Services for Afghanistan, 2005/I384*. Kabul: MoPH. Available online at [http://www.msh.org/afghanistan/pdf/Afghanistan\\_BPMS\\_2005\\_1384.pdf](http://www.msh.org/afghanistan/pdf/Afghanistan_BPMS_2005_1384.pdf)
- National Institute of Population Studies [Pakistan] (NIPS), & Macro International Inc. (2008). *Pakistan Demographic and Health Survey 2006-07*. Islamabad: NIPS & Macro International Inc. Available online at <http://measuredhs.com/pubs/pdf/FR200/FR200.pdf>
- Nishtar, Sania. (2011, September 3). "Devolving health-Part II." *The News International*. Available online at <http://www.thenews.com.pk/TodaysPrintDetail.aspx?ID=65635&Cat=9>
- Population Reference Bureau. (2011). *2011 World Population Data Sheet*. Washington, DC: Population Reference Bureau. Available online at <http://www.prb.org/Publications/Datasheets/2011/world-population-data-sheet/data-sheet.aspx>
- Savedoff, William. (2011, April 6). "Pakistan's Health Ministry to Be Abolished. Then What?" *Global Health Policy*. Available online at <http://blogs.cgdev.org/globalhealth/2011/04/pakistan%E2%80%99s-health-ministry-to-be-abolished-then-what.php>
- Sedgh, Gilda, Rubina Hussain, Akinrinola Bankole, & Susheela Singh. (2007, June). *Women with an Unmet Need for Contraception in Developing Countries and Their Reasons for Not Using a Method*. Washington, DC: Guttmacher Institute. Available online at <http://www.guttmacher.org/pubs/2007/07/09/or37.pdf>
- Shapiro, David, Amanda Kreider, Catherine Varner, & Malika Sinha. (2011, August). *Stalling of Fertility Transitions and Socioeconomic Change in the Developing World: Evidence from the Demographic and Health Surveys* (Department of Economics Working Paper). University Park, PA: Pennsylvania State University. Available online at <http://econ.la.psu.edu/papers/Shapiro%20et%20al.%20Chaire%20Quetelet%20Paper%20-%20Aug.pdf>
- United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLS). (2012). *List of Least Developed Countries*. Available online at <http://www.unohrlls.org/en/ldc/25/>
- United Nations Population Division (UNPD). (2011a). *World Contraceptive Use 2011*. New York: UNPD. Available online at <http://www.un.org/esa/population/publications/contraceptive2011/contraceptive2011.htm>
- United Nations Population Division (UNPD). (2011b). *World Population Prospects: The 2010 Revision*. New York: UNPD. Available online at [http://esa.un.org/wpp/unpp/panel\\_indicators.htm](http://esa.un.org/wpp/unpp/panel_indicators.htm)
- United States Census Bureau. (2011, June). *International Data Base*. Available online at <http://www.census.gov/population/international/data/idb/country.php>
- Urdal, Henrik. (2006). "A Clash of Generations? Youth Bulges and Political Violence." *International Studies Quarterly* 50(3), 607-629.
- World Bank. (2010). "Study on Rural Access and Mobility in Afghanistan." *2007-2010 Gender Action Plan Database*. Washington, DC: The World Bank. Available online at <http://www-esd.worldbank.org/gapdatabase/index.cfm?Page=Search&RecordID=322&sr=1>
- World Health Organization (WHO), United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA) & The World Bank. (2010). *Trends in Maternal Mortality: 1990 to 2008*. Available online at <http://www.who.int/reproductivehealth/publications/monitoring/9789241500265/en/index.html>



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1300 Pennsylvania Ave NW  
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