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FOREIGN
RELATIONS

April 2011

Isobel Coleman
Gayle Tzemach Lemmon

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and U.S.
Foreign Policy

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Acknowledgments

This report is the product of multiple consultations with a bipartisan group of experts in public health, military, economics, environment, and domestic and international policy communities who, during the past nine months, have reviewed background papers, participated in study group briefings, and shared relevant knowledge and insights from their work on this topic. The goal with this project is not to replicate but rather to build upon the large existing body of work on international family planning and to integrate the vast experiences of the many experts who informed this effort. For a list of study group members, please visit www.cfr.org/family_planning_project.

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Introduction

Global demographic and health trends affect a wide range of vital U.S. foreign policy interests. These interests include the desire to promote healthy, productive families and communities, more prosperous and stable societies, resource and food security, and environmental sustainability. International family planning is one intervention that can advance all these interests in a cost-effective manner. Investments in international family planning can significantly improve maternal, infant, and child health and avert unintended pregnancies and abortions. Studies have shown that meeting the unmet need for family planning could reduce maternal deaths by approximately 35 percent, reduce abortion in developing countries by 70 percent, and reduce infant mortality by 10 to 20 percent.¹

Women today are recognized as critical to reducing poverty, boosting economic growth and agricultural productivity, promoting environmental sustainability, and raising healthy and well-educated children—steps that are imperative to confronting a range of pressing foreign policy challenges around the globe. Investments in international voluntary family planning programs give women the tools to make critical decisions about the size of their families and the spacing of their pregnancies, better enabling them to be linchpins of positive change in their communities. An increased prioritization of family planning has the additional benefit of strengthening critical U.S. foreign policy priorities as they relate to economic development, international security, and environmental sustainability.

Historically, the United States has played a strong role in leading international action on voluntary family planning programs.* That investment

*U.S. assistance for international family planning provides women with a range of options for accessing voluntary family planning programs to prevent unwanted pregnancies. Since 1973, the Helms Amendment has prohibited any U.S. foreign assistance funds from being used to pay for the performance of abortion as a method of family planning or to motivate or coerce any person to practice abortion. Other U.S. statutory

is widely considered a success. In 2007 alone, U.S. international family planning assistance enabled modern contraceptive use by more than 56 million women in the developing world.² Use of modern family planning by women of reproductive age in the developing world (excluding China) increased from less than 10 percent in 1965 to 53 percent in 2005, a growth that represents an increase from 30 million users in 1960 to 430 million in 2008.³ This increased use of modern family planning has led to a global decline in the average number of children being born to each woman, from more than six to just over three children, resulting in more resilient families with healthier mothers. The popularity of such programs has led to local successes: a number of countries that received significant U.S. support for family planning in the past, including such emerging powers as Indonesia, Mexico, South Korea, and Thailand, have achieved domestic sustainability in these programs and, in some cases, have themselves become family planning assistance donors to other nations.⁴

Despite these gains, an estimated 215 million women globally still experience an unmet need for family planning.⁵ With the world's population poised to cross the 7 billion mark later in 2011, and expected to grow by nearly 80 million people annually for several more decades, that unmet need is likely to increase. U.S. funding for family planning has traditionally been strong, averaging approximately \$445 million per year over the past decade.⁶ However, U.S. support peaked in 1995 and declined significantly after that. Although in nominal terms funding has recovered in recent years, it still remains 40 percent below peak funding levels when adjusted for inflation, even as the unmet need continues to grow.⁷ Today in Washington there is serious talk about drastically cutting support for international family planning, even though it is one of the most cost-effective foreign assistance programs the United States funds.

and policy requirements are aimed at ensuring voluntarism in all U.S.-supported family planning programs and prohibit the use of targets, incentives, and coercion of any kind in such programs. In recent years especially, efforts have also been made to integrate family planning into comprehensive primary health-care programs for women, which also offer screening and treatment for sexually transmitted infections, including HIV, as well as education and counseling to address sexual violence and other forms of discrimination against women that may prevent the effective use of contraception. These improved approaches derive from global agreements at the Fourth UN Conference on Population and Development, held in Cairo in 1994, in response to widespread concern over high-profile abuses of women's rights by heavy-handed, numbers-driven population policies, especially in India and China but also elsewhere, which undermined the long-established consensus that family planning is an essential tool of sound health and development practice. For more on these developments, see Carmen Barroso and Steven W. Sinding, "Cairo: The Unfinished Revolution," and Ellen Chesler, "Women at the Center," in *A Pivotal Moment: Population, Justice and the Environmental Challenge*, ed. Laurie Mazur (Washington, DC: Island Press, 2010).

Given its centrality to many pressing foreign policy issues and its demonstrated high return on investment, international family planning is an area of assistance that deserves greater priority. To ensure that U.S. family planning policies are designed for maximum impact, the United States should continue to follow a rights-based approach including a continued strong emphasis on voluntarism and informed consent, access to information and programs, and nondiscrimination. Strengthened U.S. leadership can continue to empower strong and secure families around the globe and simultaneously advance U.S. foreign policy aims in a number of important ways.

BOX 1: SUCCESS STORIES**INDONESIA**

When Indonesia began its national voluntary family planning program in 1967 with technical and financial assistance from the U.S. Agency for International Development (USAID), the country had a fertility rate of nearly six children per woman, and contraceptive prevalence was less than 20 percent. With a strong focus on community participation, the program encouraged participants to consider the number, the timing, and the spacing of their children and fostered new perceptions about the desirability and acceptability of smaller families. The country's fertility rate is now 2.3 children per woman with more than 60 percent of married couples using a modern contraceptive. Indonesia "graduated" from USAID population assistance funding in September 2006.⁸

MEXICO

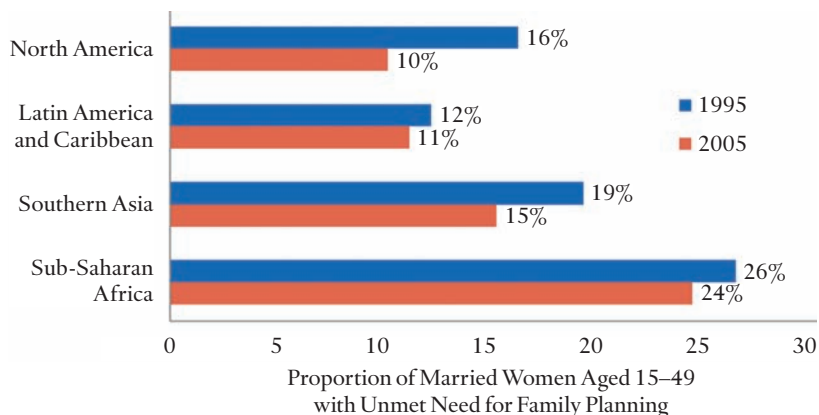
In the early 1970s, before Mexico began its national voluntary family program with assistance from USAID and United National Population Fund (UNFPA), the country had a fertility rate of approximately seven children per couple, and fewer than 25 percent of women used contraceptives. Infant mortality rates were high (69 per 1,000 live births) and the average life expectancy was sixty-two years of age. Mexico graduated from USAID's family program in the late 1990s and today, two-thirds of Mexican women use contraceptives, average fertility rates are 2.2 children per couple, infant mortality rates are 20.5 per 1,000 live births, and average life expectancy is seventy-five years of age.⁹

Family Planning: Healthy Women, Healthy Families

The health of women is an important marker for the health, security, and well-being of a nation's children and families. Advancing the health, rights, and human security of women in developing countries cannot be achieved without increasing access to quality family planning. When women have access to family planning information, programs, and supplies, they are able to space and plan their births as they and their families determine. This generates myriad benefits for the family, the community, and the entire nation. Access to quality family planning programs is associated with a significant decrease in maternal, newborn, and child deaths, and abortions and abortion-related injuries. As of 2008, an estimated 818 million women in the developing world—almost half of the women of reproductive age—want to avoid pregnancy.¹⁰ However, 17 percent of these women (about 140 million) are currently not using any contraceptive method, and 9 percent (75 million) are using less effective traditional methods, either because they have not been counseled about effective modern contraceptive methods or because they do not have access to the health services they want.¹¹ The two regions of the world with the largest unmet need are southern Asia and sub-Saharan Africa (see Figure 1).

The median contraceptive prevalence for the sixty-eight Millennium Development Goal (MDG)¹² countdown countries—those countries that account for at least 95 percent of maternal and child deaths worldwide—is 29 percent.¹³ However, prevalence among individual countries varies widely. Many of the countries within this group are located in the Middle East, Asia, or sub-Saharan Africa, where the highest rates of child mortality are coupled with some of the lowest rates of contraceptive prevalence. For example, Afghanistan, which has the highest under-five mortality rate in the world (a rate that has remained nearly constant for the past twenty years), has a contraceptive prevalence of only 10 percent.¹⁴ Sub-Saharan Africa, where 22 percent of the world's

FIGURE 1. UNMET NEED FOR FAMILY PLANNING IN MARRIED WOMEN AGED 15–49 BY REGION, 1995 AND 2005¹⁵



children are born yet 49 percent of under-five deaths occur, has an average contraceptive prevalence of only 17 percent.¹⁶

It is estimated that, in the year 2000 alone, if women who wished to postpone or avoid childbearing had access to contraception (meeting their unmet need), approximately 90 percent of global abortion-related and 20 percent of obstetric-related cases of maternal mortality and morbidity could have been averted. In this way, family planning could have prevented 150,000 maternal deaths worldwide (about one-third of maternal deaths globally).¹⁷

In recent years, progress has been made in reducing maternal deaths: In 2005, the World Health Organization (WHO) estimated that 535,900 maternal deaths occurred annually, while current estimates now put the figure at approximately 350,000.¹⁸ This progress is substantial, but there is still much work to be done to reduce maternal mortality and pregnancy-related disability. Nearly one thousand women still die each day from pregnancy-related causes, and for every woman who dies in childbirth, it is estimated that at least another thirty women suffer serious illness or debilitating injuries.¹⁹ The current rate of decline in maternal mortality is less than half of that required to achieve the MDG target of reducing the maternal mortality ratio by 75 percent between 1990 and 2015. For women in the developing world, the lifetime risk of dying from pregnancy—the probability that a fifteen-year-old female will eventually die of maternal causes during her lifetime—is still one of

the greatest threats she will face. In the developed world today, 1 out of 4,300 women will lose her life as a consequence of pregnancy, compared to sub-Saharan Africa, where that figure soars to 1 in 31, and Afghanistan, where 1 out of 7 women risks dying in childbirth.²⁰ Additionally, approximately half of the nearly 120 million women who give birth each year experience some kind of pregnancy complication, and between 15 million and 20 million develop disabilities such as severe anemia, incontinence, damage to reproductive organs or the nervous system, chronic pain, and infertility.²¹

One factor contributing to high maternal death rates is the number of unsafe abortions occurring every year. The most recent reports from the WHO estimate that 21.6 million unsafe abortions occur annually, up from 19.7 million in 2003, an increase that is due to the growing number of women of reproductive age globally.²² As of 2008, reports showed that 47,000 abortion-related maternal deaths occur every year.²³ Complications from induced abortions account for approximately 13 percent of maternal deaths and 20 percent of years of productive life lost among women due to pregnancy-related conditions.²⁴ As of 2007, girls aged fifteen to nineteen accounted for one in four unsafe abortions—an estimated five million each year.²⁵

The majority of these procedures—and their resulting injuries and deaths—could be avoided if women had access to quality family planning programs.²⁶ Filling the unmet need for modern family planning would lead to a reduction in mistimed pregnancies and a significant decline in abortions and abortion-related health complications. Research has shown that, with increased access to family planning, the number of induced abortions in the developing world would decline by 70 percent (from 35 million to 11 million).²⁷

Maternal mortality resulting from all pregnancy-related health issues has a devastating and irreversible effect on children and families. Indeed, countries with the highest maternal mortality ratios also experience the highest ratios of neonatal and childhood mortality.²⁸ Reducing the staggering number of newborn deaths in the developing world is another important reason to prioritize family planning as a main component of maternal and family health. Forty percent of all child deaths under the age of five are newborn deaths (approximately 3.2 million per year).²⁹ When a mother dies, her surviving newborn's risk of death increases to 70 percent. The risk of dying remains significant for children aged one to eleven months, and is disproportionately higher

*BOX 2. FAMILY PLANNING AND REDUCTIONS
IN MATERNAL MORTALITY: ANALYSIS FROM INDIA³⁰*

India has more maternal deaths per year than any other country, with approximately one-fourth of all pregnancy- and delivery-related maternal deaths worldwide occurring within the country. Sue J. Goldie et al. conducted a study that took into account the costs, feasibility, and operational complexity of various health interventions and estimated the benefits associated with those interventions. They found that meeting the unmet need for spacing and limiting births over the next five years would result in the prevention of more than 150,000 maternal deaths and more than \$1 billion saved. (The cost savings derive from fewer pregnancies, more than offsetting increased spending on family planning.)

Their research illustrated that eliminating the unmet need for family planning in rural India would result in:

- A decline in total fertility rate from 2.97 to 2.14.
- A decline in lifetime risk of maternal death from one in sixty-five to one in ninety.
- A lifetime cost savings of between \$111.4 million and \$448.2 million for a single birth cohort of fifteen-year-old girls.

for girls. This same research has shown that there is no impact on child mortality if a father dies.³¹ This is because, in the majority of communities, mothers are the primary caretakers and their loss results in immediate insecurity for the entire family. The risk of child mortality is even higher when considering the case of young mothers. Mothers between the ages of fifteen and twenty are twice as likely to die as women in their twenties.³² This is due to such factors as underdeveloped reproductive tracts, malnutrition, poverty, child marriage, gender inequity, and inexperience with or lack of access to health-care facilities.³³ One study in Burkina Faso has shown that the risk faced by children of mothers younger than eighteen years old was 40 percent higher than that of mothers over the age of eighteen.

Family planning presents an opportunity to curb maternal and under-five deaths not simply by giving women of all ages the option

of determining their family size, but by providing the opportunity for women to delay pregnancies until at least age eighteen and space and plan their births. In this way, modern contraceptive methods help women avoid high-risk pregnancies. There are different methods (natural and modern contraceptive methods) for healthy birth timing and spacing. Women and families should choose the approach that is right for them. This is particularly important when considering the impact of birth timing and spacing on the health of both the mother and her children. Empirical studies suggest that short pregnancy intervals (when

FIGURE 2. MATERNAL RISK OF MORTALITY BY BIRTH INTERVAL³⁴

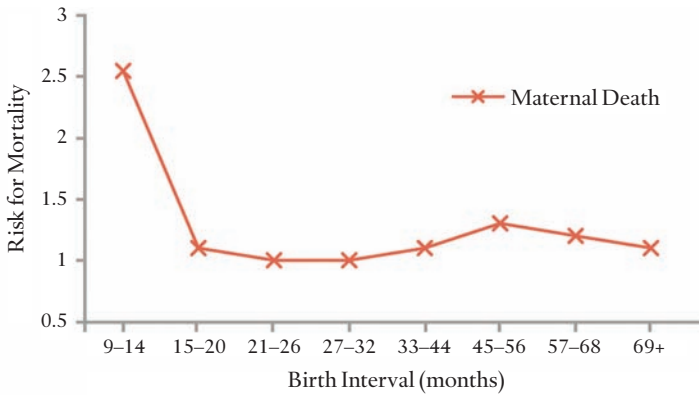
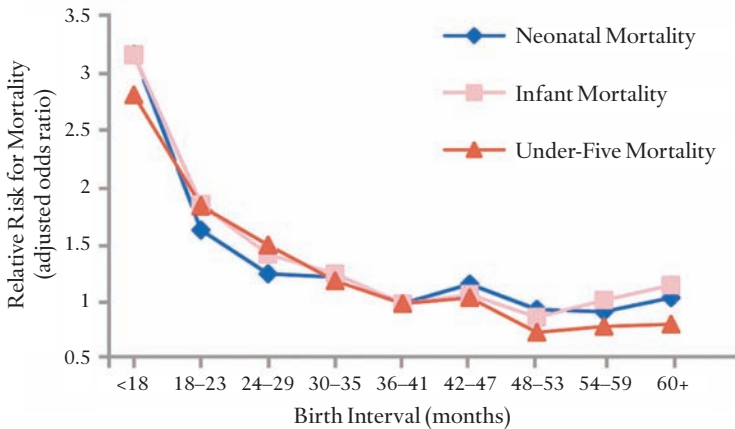


FIGURE 3. BIRTH SPACING SAVES CHILDREN'S LIVES³⁵



the pregnancy occurs less than twenty-four months after a live birth) are associated with an increased risk of under-five mortality, due to conditions such as early rupture of membranes, maternal folate depletion, disease transmission and food competition among siblings, and early termination of breast-feeding due to the next pregnancy (see Figures 2 and 3). Pregnancies occurring less than six months after a preceding live birth are associated with a 150-percent increased risk of maternal death.³⁶ The risk of newborn mortality is also very high for children conceived six months after the birth of the preceding child—this risk is three times that for a child born at least thirty-six months after the preceding birth.³⁷ If all mothers were to wait at least thirty-six months to conceive again, it is estimated that 1.8 million deaths of children under five could be prevented annually, contributing to a reduction of up to 25 percent of under-five deaths.³⁸

Country case studies support this research. In Egypt, it is estimated that an average birth interval increase to thirty-six months would result in a 45 percent decrease in under-five mortality and 109,000 fewer child deaths annually. In India, increasing birth spacing to that same amount would decrease infant mortality by 32 percent and under-five mortality by 31 percent, for a total of 750,000 fewer deaths annually of children under five.³⁹

Increasing access to family planning is not only good policy because it significantly reduces the incidence of abortion and maternal and child mortality; it is also smart policy in that it saves significant investments in other health and social services (see Figure 4). Research has shown that fulfilling today's unmet need for modern family planning would cost an incremental \$3.6 billion. However, this investment would decrease the cost of providing maternal and newborn health services by \$5.1 billion, because roughly 50 million fewer women would become pregnant unintentionally. The result would be a net total savings of \$1.5 billion.⁴⁰

Reducing the number of abortions would also result in a \$140 million savings in health-care services. Currently, approximately 5.5 million women in developing countries receive postabortion care at a cost of \$370 million.* However, if all women at risk of unintended pregnancy used modern contraceptive methods, the resulting declines in

*U.S.-assisted programs support postabortion care. Postabortion care is defined as emergency treatment of complications of induced or spontaneous abortions followed by provision of voluntary family planning services to prevent repeat abortions.

FIGURE 4. COST TO MEET FAMILY PLANNING (FP) NEEDS AND RESULTING SAVINGS⁴¹

	Costs to meet need for FP (in U.S. millions)	Savings incurred by category (in U.S. millions)					Total	Savings per \$ invested in family planning
		Education	Immuni- zation	Water and sanitation	Maternal health	Malaria		
Bolivia	5	21	0.1	10	14	—	45	9.0
Guatemala	19	73	1	25	29	—	128	6.7
Madagascar	26	20	13	11	29	3	76	2.9
Zambia	27	37	17	17	37	4	112	4.1
Bangladesh	50	153	4	68	102	—	327	6.5
Indonesia	67	338	5	78	125	9	555	8.3
Ethiopia	103	23	44	26	105	10	208	2.0

unintended pregnancy and unsafe abortion would reduce the cost of postabortion care to about \$230 million a year.⁴²

Meeting the unmet need for family planning would significantly reduce the number of maternal and child deaths and abortions, resulting in healthier and more secure families throughout the developing world while generating important cost savings (see Figure 4).

Considering Demography

It is important to understand the role of demography as it relates to many foreign policy priorities, including international security, economic development, and environmental sustainability. An expanding population of young people can often be a source of innovation, creativity, and productivity. However, the reality today is that the fastest-growing populations of young people reside in countries least suited for harnessing the opportunity of youth and dealing with the challenges presented by a rapidly expanding population.

The world is currently undergoing an unparalleled imbalance in demographic trends. While much of the developed world is experiencing population stability or even decline, many countries in the developing world continue to experience rapid population growth. Population imbalances have emerged as a serious issue affecting economic opportunity, global security, and environmental stability. The growth rates in Africa and the Middle East are of particular interest, given the multiple geopolitical challenges already facing those regions and the implications these challenges have for the rest of the world.

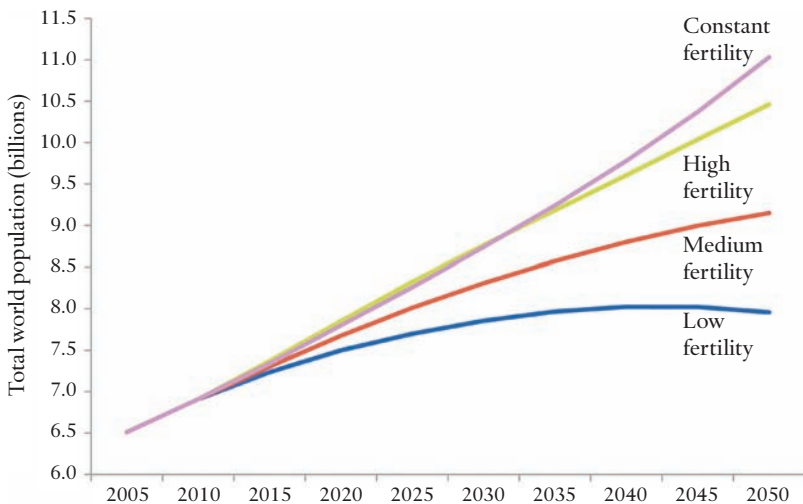
Global population trends play an integral role in the economic growth, geopolitical security, and environmental sustainability of developing countries. Since even the most modest projections for global population growth over the next four decades indicate significant growth in some of the world's most fragile states, policymakers should consider the critical role of family planning and women's health. Developing creative and sustainable solutions to pressing economic, security, and environmental challenges—all of which are interconnected—requires an understanding of the complex and profound ways in which women's health and access to voluntary family planning programs impact demography and these critical policy areas. Fertility is the greatest driver of global demographic trends, with the availability

and quality of family planning programs actively contributing to global fertility rates.⁴³

Over the past fifty years, the United States, other donor countries, and many local governments have funded programs that enable women to decide the timing of pregnancy, space their births, and choose the best family size for them. This expanded access to family planning has contributed to declining fertility rates in many countries. In 2009, the United Nations Development Program estimated that the total fertility rate (average number of children born to each woman) was 2.7 for the period between 2000 and 2005—a marked decline from 3.6 children per woman in the early 1980s.⁴⁴

This historic downward trajectory serves as the foundation for population projections that assume fertility rates will continue to decline in the future. Widely used UN projections that estimate global population growth rising from 6.9 billion in 2010 to 9.1 billion by 2050 are built upon the “medium-fertility variant” (see Figure 5).⁴⁵ That projection assumes an additional 24 percent decline in the global fertility rate, bringing the global rate down to two children per woman.⁴⁶ The term “demographic divide” is often used to describe the varying degrees of a country’s progress through the demographic transition. This transition is characterized by a decades-long shift from high fertility and

FIGURE 5. WORLD POPULATION 2005–2050 UNDER VARYING FERTILITY SCENARIOS⁴⁷



high mortality rates to a period of lower mortality and rapid population growth, followed by an eventual decline in fertility rates. In the final stages of the demographic transition, populations experience longer life expectancies and smaller family sizes.⁴⁸ The availability of family planning services is a critical factor in the evolution of this demographic transition.

While many countries have witnessed a significant decline in fertility over the past three decades, fertility rates in countries with the lowest levels of human development remain quite high. If global fertility rates remained constant at current levels, rather than declining as the UN model predicts, it is estimated that the world's population would reach 11 billion by 2050 (see Figure 5). The differences in these demographic projections have critical implications for developing countries' economic, geopolitical, and environmental security. The higher global population growth trajectory has the potential to jeopardize international poverty reduction measures, exacerbate security threats already present, and threaten the sustainable use of the world's natural resources.

DEMOGRAPHIC TRENDS AND ECONOMIC GROWTH

Economic growth is an important factor in human development and political stability; it is also deeply connected to global demographic trends. Young populations can be sources of dynamism and productive labor that lead to economic growth. Indeed, the East Asian "miracle" occurred between 1965 and 1990 partly because its working-age population grew at a more rapid pace than its dependent population. The result was an expansion of the per capita productive capacity of economies in East Asia. The "miracle" was able to occur because "East Asian countries had social, economic, and political institutions and policies that allowed them to realize the growth potential created by the transition."⁴⁹ Unfortunately, many countries experiencing fast population growth today do not have the capacity to harness the potential of their young populations in the same way, and the socioeconomic result is starkly different.

Research has shown that rapid population growth can counteract the benefits of economic growth and pose a serious threat to poverty reduction.⁵⁰ Population growth in many parts of the world is blamed for

BOX 3: A GROWING POPULATION⁵¹

UN projections of global population growth from 6.9 billion in 2010 to 9.1 billion by 2050 are based on the widely cited “medium-fertility variant,” which assumes that the global fertility rate will decline by 24 percent to two children per woman. If fertility rates do not drop from current levels, however, the world’s population would reach 11 billion by 2050.⁵²

Almost 60 percent of the world’s people live in countries with fertility rates above replacement level, ensuring sustained and long-term population growth. One billion people, including most of the population of sub-Saharan Africa, live in countries where women have an average of four or more children. At this fertility rate, the population would double approximately every thirty-five years.⁵³

Many population projections assume that fertility rates in the developing world will decline as they have in the developed world, leading to an overall decline in the total fertility rate. However, trends in some countries indicate this may not be the case overall. Afghanistan and Uganda, two of the ten fastest-growing countries in the world in demographic terms with populations of similar size, illustrate clearly the challenges of population growth. Both countries’ demographic profiles are driven by persistently high fertility rates, over seven children per woman in Afghanistan and 6.7 children per woman in Uganda.⁵⁴ Since 1965, each country’s fertility rate has declined by less than 5 percent. However, the medium-fertility variant of the UN population projections—the same scenario that results in a total world population of just over nine billion in 2050—assumes that the fertility rate would fall to 3.1 children per woman in Afghanistan and 2.6 in Uganda by 2050.⁵⁵ These declines of 57 percent and 61 percent, respectively, are highly unlikely given demographic trajectories over the past several decades.

The constant-fertility variant, which assumes that fertility rates remain unchanged, may be a more realistic future scenario for some of the highest-fertility countries like Afghanistan and Uganda, or at least a possibility that is important for policymakers to keep in mind. In such a projection, Afghanistan’s population would more than double between 2005 and 2030, from 25 to 56 million, and reach over 110 million by 2050.⁵⁶ The population of

BOX 3 continued

Uganda would rise from 29 million in 2005 to 70 million in 2030 and over 150 million by 2050.⁵⁷ Even if the rapid fertility declines assumed within the medium-fertility variant are achieved, which is virtually impossible without dramatic changes in health care and behavior, demographic momentum will still drive high population growth.

Source: Elizabeth Leahy Madsen, *Family Planning as a Strategic Focus of U.S. Foreign Policy* (New York: Council on Foreign Relations Press, 2011), <http://www.cfr.org/women/family-planning-strategic-focus-us-foreign-policy/p24652>.

continued poverty, despite record economic growth in developing countries during the ten years prior to the recent global recession. This is especially the case in Africa, which enjoyed robust economic growth during the past decade yet continues to suffer from alarming levels of poverty due in part to an annual population growth that outpaces economic growth.

For years researchers have debated the causal pathway between lower fertility rates and economic growth. Recent research indicates that the level of gross domestic product (GDP) per capita does not have a significant effect on the total fertility rate.⁵⁸ What makes the difference is expanded access to family planning, including birth spacing. Statistical research examining data from seventy-eight countries during the past two decades illustrates that \$1 of per capita expenditure in donor population assistance is associated with a decrease of one child per woman in the national fertility rate. This model indicates that the average total fertility rate for seventy-five developing countries was 10 percent lower in 1994 than it would have been had no family planning programs existed.⁵⁹

High fertility rates can lead to a vicious cycle of poverty at the community, regional, and national levels.⁶⁰ The quality and availability of family planning services is instrumental in interrupting this cycle and creating stronger, more stable families and communities. Increased access to modern family planning allows men and women to lead healthier lives and has a positive domino effect on their socioeconomic environment, including a decrease in the high costs of social services (such as health services, education, and social safety nets), a decline in the burden of unemployment, and reductions in stresses on infrastructure

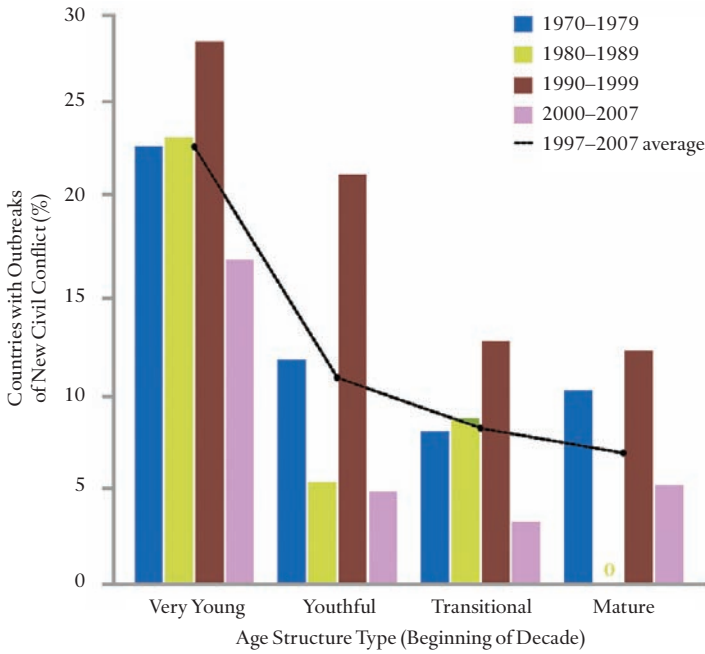
needs (such as water, sanitation, energy, transportation, and housing).⁶¹ In addition, research has shown that slowing population growth is an effective strategy for reducing greenhouse gas emissions. One recent paper states: “Using an energy-economic growth model that accounts for a range of demographic dynamics, we show that slowing population growth could provide 16 to 29 percent of the emissions reductions suggested to be necessary by 2050 to avoid dangerous climate change.”⁶²

FERTILITY, FAMILY PLANNING, AND SECURITY

Demographic trends—particularly as they relate to economic growth and environmental stability—have significant ramifications for international security.⁶³ Research has shown that trends in population growth affect a country’s vulnerability and weaken its resilience in the face of potential or actual conflict. The connection between demography and political instability is not linear, and there is certainly no demographic threshold that when met “dooms a state to upheaval or tyranny.”⁶⁴ However, rapidly growing populations are more prone to outbreaks of civil conflict and undemocratic governance.

The age structure of a country is a particularly useful indicator for analyzing the risk of conflict in a certain country.⁶⁵ A population age structure refers to the relative proportion of different age groups within a country’s total population and reflects a country’s progression through the demographic transition. Countries characterized by a very young or youthful age structure—where at least 60 percent of the total population is under the age of thirty—are more likely to experience civil conflict or undemocratic governance than those with a more balanced age structure.⁶⁶ Eighty percent of all outbreaks of civil conflict between 1970 and 2007 occurred in countries with a youthful age structure (see Figure 6). Between 1950 and 2000, countries in which more than 35 percent of the adult population was composed of people aged fifteen to twenty-four were 150 percent more likely to experience an outbreak of civil conflict compared to those with a more balanced age structure. The correlation is strongest in the case of countries with ongoing high fertility rates.⁶⁷ Demographers have shown that the statistical likelihood of civil conflict consistently decreases as countries’ birth rates decline.⁶⁸

FIGURE 6. RISK OF CIVIL CONFLICT BY AGE STRUCTURE TYPE, 1970–2007⁶⁹



BOX 4. A CASE STUDY: YEMEN AND PAKISTAN

By most measures, Yemen and Pakistan are fragile states. Ongoing civil conflicts, radicalism, weak governance, and corruption are endemic problems. Both countries suffer from low levels of human development. High fertility rates are not the cause of their problems, but they complicate the challenges these countries face as they strive to reduce poverty, achieve growth, and address increasing shortages of natural resources, particularly water. Improving access to family planning for these countries is not a short-term solution but would help improve their long term prospects for achieving per capita economic growth and stability. Conversely, continued high fertility will only deepen their current human crises.

YEMEN

With a fertility rate of six children per woman, Yemen's population has doubled in fewer than twenty years, and it has the second-youngest age structure in the world, with 75 percent of the population younger than thirty. This growth taxes Yemen's infrastructure, education, health system, and economy. Yemen has the highest rate of unmet need for family planning in the world, with 51 percent of married women wishing to prevent or delay pregnancy but not using contraception. Only 13 percent of married women are currently using a modern contraceptive method, and only 30 percent of the population has access to family planning and reproductive health care.⁷⁰

At the current fertility rate, nearly 500,000 new teachers and 16,000 new doctors would be required by 2050 to meet the needs of the growing population (at current levels of service). Even if Yemen's fertility rate declined by nearly half, population momentum ensures that its population will still double in fewer than thirty years.⁷¹ The labor force is growing at a pace much faster than the growth of available jobs, resulting in high youth unemployment. With a quickly growing population and stagnant educational and professional opportunities, it will be difficult for Yemen to realize the potential shown by its young population. While Yemen's very young age structure will continue to pose

BOX 4 continued

challenges, the potential and attitudes of its young people show promise. Yemeni youth have higher literacy rates than previous generations: Only 9 percent of those aged fifteen to twenty-nine are illiterate, compared to 47 percent of all adults. Research has also shown that Yemeni youth are open to contraceptive use, with more than 70 percent of young people supporting the unconditional use of contraception.⁷² It remains to be seen whether political, economic, and security conditions in Yemen will enable this promise to transform into progress for its large youth generation.

PAKISTAN

Pakistan's voluntary family planning program started more than fifty years ago, but it has been stalled for the past decade, and many women have discontinued family planning use. A number of reasons are cited for this plateau, including development, security, and cultural challenges—nearly two-thirds of reproductive age women in Pakistan have little or no education. Lack of access is also a major factor. Women's limited mobility prevents them from accessing local clinics, and, despite effective community health-care workers, implementation of family planning remains a challenge.⁷³ The Pakistan Demographic and Health Survey (DHS) found that family planning services are out of reach for many Pakistanis. A quarter of married women who want to end childbearing, or space their births, do not use contraception, although 96 percent are aware of at least one modern method of contraception. Pakistan's modern contraceptive prevalence rate was only 22 percent as of 2007.⁷⁴ One-fourth of recent births in Pakistan were unintended or mistimed.⁷⁵

Environmental Stability

For more than a century, Malthusian warnings of population growth and the looming “population bomb” have proven false. It is important to avoid such problematic characterizations of current population trends while also acknowledging the real resource constraints, particularly arable land and clean water, which vulnerable populations currently face, and which are sure to become increasing challenges in the coming years. Countries with the highest levels of population growth are also areas with rapid environmental degradation. These areas include sub-Saharan Africa, northern India, and various parts of the Middle East and Asia.

In most of these regions, women are responsible for the majority of food production: they produce 80 percent of the staple crops in Africa and 90 percent of the rice crops in Southeast Asia.⁷⁶ Large family sizes combined with diminishing amounts of arable land force women to produce more food on smaller and less fertile plots. The inevitable ensuing land overuse and environmental degradation, coupled with women’s decreased economic productivity, leads to food insecurity, which then drives many families to migrate from rural to urban areas.

This migration to urban areas has a distinct impact on the environment, shaping where and how populations support themselves. One recent study noted that urbanization can lead to higher emissions levels because urban centers are far more energy intensive than rural areas.⁷⁷ According to the United Nations Department of Economic and Social Affairs, between 1950 and 2010, the global urban population grew from 736 million to almost 3.5 billion, meaning about half of humanity now lives in cities. The UN projects that by 2030 the global urban population will rise to five billion. That urban growth, however, will not be experienced evenly across the world.⁷⁸

Environmental experts have illustrated how these multiple overlapping vulnerabilities and stresses exacerbate food insecurity and the depletion of water and other natural resources, which are already

occurring in many countries.⁷⁹ As of 2010, 40 percent of the population in more than thirty-five countries has insufficient access to food, with the largest concentration in central and eastern sub-Saharan Africa.⁸⁰ Given that many of these food-insecure countries will continue to experience significant population growth in the decade ahead, we will see an increasing number of people without access to sufficient food. These resource shortages will pose a distinct challenge to food security efforts such as the U.S. government's "Feed the Future" initiative.⁸¹ Between 2010 and 2020, the U.S. Department of Agriculture estimates that the number of food-insecure people across sub-Saharan Africa will swell from 390 million to 513 million people, despite the fact that the global level of food security will in fact marginally decline during that time, from 882 million to 874 million people.⁸² Recent reports from the United Nations Food and Agriculture Organization warn of rising food prices as a result of droughts and flooding in various parts of the world that have affected supplies of critical foodstuffs.⁸³ Resource insecurity is seen as a driver of security challenges. Research has shown that during the 1990s countries with a high rate of urban population growth were approximately twice as likely as other nations to experience an outbreak of civil conflict.⁸⁴ The spread of civil unrest across the Middle East today is also partly attributable to a high percentage of urban youth in the population.

Urban growth and the youth bulge are connected. In countries where agriculture is declining, many young adults migrate to urban centers in search of education, employment, and opportunities for immigration.⁸⁵ Urban centers, which are fertile grounds for the expression of political protest, tend to have unusually high proportions of young adults in their working-age populations.⁸⁶ This same research has shown that growing trends of urbanization, along with a growing youth bulge in many countries, are exacerbated by low levels of per capita cropland and/or fresh water. Taken independently, these two factors are not seen to be a risk factor in civil conflict, but paired with the known risks of urbanization and a youthful population, they can become destabilizing. In the 1990s, approximately half of all countries with high proportions of young adults and low levels of one or both of the critical resources of crops and fresh water experienced an outbreak of civil conflict.⁸⁷

Other researchers have argued that scarcities of critical natural resources undermine the ability of agricultural economies to absorb the available labor pool, which promotes landless poverty and accelerates

the growth of urban slums.⁸⁸ When jobs are scarce, a large and growing youth bulge can lead to increased discontent, crime, political unrest, and radicalism. High rates of urbanization can also produce slum housing and inadequate services, increasing the risk of crime and civil unrest.

Moving Forward

The United States should expand its leadership role in creating healthy, resilient families in some of the most vulnerable parts of the world as a core objective of U.S. foreign policy. While there are many important components of that vision, international family planning should receive increased emphasis. The following recommendations would advance the health and rights of women and their families around the globe while supporting other important U.S. foreign policy objectives.

1. Prioritize family planning in U.S. foreign policy

Increased prioritization of international voluntary family planning will directly result in improved maternal and newborn health, avert millions of abortions annually, and enable families to make informed decisions about the number and spacing of their births. It will have the additional benefit of cost-effectively supporting other foreign policy objectives, including the creation of more stable communities globally.

2. Increase U.S. family planning funding

While the global need for international voluntary family planning has grown substantially over the past two decades, U.S. support has not kept pace. A number of nongovernmental organizations advocate for an increase in U.S. support of international family planning programming to \$1 billion annually (from \$615 million in the current budget). This number has been determined by a series of analyses that incorporate the estimated unmet need for contraceptives and previous donor commitments. We do not advocate for a specific funding target, but instead argue for a sustained focus on and funding for family planning as a foreign policy priority. Such a commitment would not only support an increase in voluntary family planning programming, but would

also facilitate access to a range of methods allowing women to use the family planning method most desirable and appropriate for them and their families. Technology also has a role to play: newer family planning methods currently being introduced to the market can now be offered more cost-effectively and with the potential of increased consumer satisfaction to the millions of women who want but do not have access to modern contraceptives. Given current budgetary constraints in Washington, all development assistance must be evaluated for efficiency and effectiveness. Family planning's demonstrated high returns make it smart policy.

3. Increase access to family planning

Family planning information and programs should be available wherever U.S. programs reach women and girls. Sexually active women seeking family planning are at high risk of acquiring HIV, in particular in sub-Saharan Africa, and women living with HIV should have access to voluntary family planning programs. Providing HIV testing and prevention programs at family planning clinics and ensuring that all women living with HIV who want family planning have easy access to it will promote the health and save the lives of women. Enabling women to access a full range of health programs under one roof, even if the funding sources for those programs and the organizations providing them are different, would greatly improve the health of women and their families in developing countries.

4. Encourage political support for women's health within countries receiving aid

The U.S. government should continue to work closely with partner governments to encourage support for and prioritization of the health of women and families at the national level, including public- and private-sector financial support for family planning. The United States can help extend programs that promote the health of women and families to the most underserved communities by encouraging national governments to create laws that enable an expanded role for community health-care workers. In countries with weak health systems, community health-care workers can be trained to provide many of the services that are usually provided in traditional health facilities. In the case of family planning,

new versions of contraceptives are increasingly less complicated to use and can be more easily administered by community health workers. More “task shifting” to community health workers has the potential to increase access to family planning in a cost-effective way.

5. Expand resources into countries with highest unmet need

U.S. funding for international voluntary family planning programs should be strategically allocated to countries with the highest unmet need for modern family planning services and programs. Many of these countries require increased prioritization and funding if the MDGs are to be met. Over the past decade, USAID family planning funding to sub-Saharan Africa and South Asia has increased, enabling an expansion of modern contraceptive methods in two regions with the greatest need of health improvements in family planning and reproductive health.⁸⁹ While increases to sub-Saharan Africa and South Asia represent a positive trend, additional funds are still required to meet the need for family planning desired by women in those regions and around the world.

Endnotes

1. The unmet need for family planning is defined as the number of women with unmet need for contraception expressed as a percentage of women of reproductive age who are married or in union. Women with unmet need are those who are fecund and sexually active but are not using any method of contraception and report not wanting any more children or wanting to delay the birth of their next child. United Nations Population Division, *World Contraceptive Use* (New York: Department of Economic and Social Affairs, 2009), <http://www.un.org/esa/population/publications/WCU2009/Metadata/UMN.html>; sources for statistics: J. Cleland et al., “Family Planning: The Unfinished Agenda,” *Lancet Special Series* no. 368 (2006), pp. 1810–27; K. Gill et al., *Women Deliver for Development* (Washington, DC: International Center for Research on Women, 2007), pp. 37–41; Susheela Singh et al., *Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal Newborn Health*, Guttmacher Institute and UNFPA, 2010, <http://www.guttmacher.org/pubs/AddingItUp2009.pdf>.
2. Population Action International, “Meeting the Development and Health Needs of 215 Million Women: U.S. International Family Planning Investments,” Policy and Issue Brief, February 2011, http://www.populationaction.org/Publications/Fact_Sheets/Meeting_the_Development_and_Health_Needs_of_215_Million_Women/meeting_needs_2011.pdf.
3. J. Speidel et al., *Making the Case for U.S. International Family Planning Assistance* (Washington, DC: Population Reference Bureau, 2009), <http://www.prb.org/pdf09/makingthecase.pdf>.
4. J. Bongaarts, “A Framework for Analyzing the Proximate Determinants of Fertility,” *Population and Development Review*, vol. 4, no. 1 (1978), pp. 105–32.
5. Population Action International, “Meeting the Development and Health Needs of 215 Million Women: U.S. International Family Planning Goals Summary,” April 1, 2010, http://www.populationaction.org/Publications/Fact_Sheets/FS39/Summary.shtml.
6. Population Action International, “Trends in U.S. Population Assistance,” 2007, http://www.populationaction.org/Issues/U.S._Policies_and_Funding/Trends_in_U.S._Population_Assistance.shtml.
7. Ibid.
8. World Health Organization, “Indonesia and Family Planning: An Overview,” http://www.searo.who.int/LinkFiles/Family_Planning_Fact_Sheets_indonesia.pdf; U.S. Agency for International Development (USAID), “Birth Spacing Empowers Indonesians,” May 2008, http://www.usaid.gov/stories/indonesia/ss_idn_spacing.html.
9. Tod Preston, “Success South of the Border: Family Planning in Mexico,” Population Action International (PAI Blog), June 12, 2008, <http://www.populationaction.org/blog/2008/06/success-south-of-the-border-fa.htm>.
10. Susheela Singh et al., *Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal Newborn Health*.

11. Ibid.
12. World Health Organization, *Women and Health: Today's Evidence, Tomorrow's Agenda* (Geneva: World Health Organization, 2009) as cited in Koki Agarwal, *Family Planning and Reproductive Health: Why the United States Should Care* (New York: Council on Foreign Relations Press, 2011), <http://www.cfr.org/women/family-planning-reproductive-health-why-united-states-should-care/p24651>, p. 4.
13. The eight Millennium Development Goals (MDGs)—which range from halving extreme poverty to halting the spread of HIV/AIDS and providing universal primary education, all by the target date of 2015—form a blueprint agreed to by all the world's countries and all the world's leading development institutions.
14. Jennifer Bryce and Jennifer Harris Requejo, *Tracking Progress in Maternal Newborn and Child Survival: The 2008 Report* (New York: UNICEF, 2008), http://www.countdown2015mch.org/documents/2008report/2008Countdown2015FullReport_2ndEdition_1x1.pdf.
15. Jennifer Bryce and Jennifer Harris Requejo, *Countdown to 2015 Decade Report (2000–2010): Taking Stock of Maternal, Newborn, and Child Survival* (New York: World Health Organization and UNICEF, 2010); UNICEF, “Afghanistan Statistics,” March 2, 2009, http://www.unicef.org/infobycountry/afghanistan_statistics.html.
16. Susheela Singh et al., *Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal Newborn Health*.
17. J. Cleland et al., “Family Planning: The Unfinished Agenda”; World Health Organization, “Trends in Maternal Mortality: 1990–2008” (2010), <http://www.who.int/reproductivehealth/publications/monitoring/9789241500265/en/index.html>.
18. World Health Organization, “Maternal Deaths Worldwide Drop by Third,” September 15, 2010, http://www.who.int/mediacentre/news/releases/2010/maternal_mortality_20100915/en/index.html.
19. Lori Ashford, *Hidden Suffering: Disabilities From Pregnancy and Childbirth in Less Developed Countries* (Washington, DC: Population Reference Bureau, 2002).
20. World Health Organization, “Trends in Maternal Mortality”; USAID, “Women Making a Difference: Prevention of Postpartum Hemorrhage Program Reduces Maternal Death,” http://www.usaid.gov/our_work/global_health/home/News/women/mch_bjamal.html.
21. Lori Ashford, *Hidden Suffering: Disabilities From Pregnancy and Childbirth in Less Developed Countries*.
22. Iqbal Shah and Elisabeth Ahman, “Unsafe Abortion in 2008: Global and Regional Levels and Trends,” *Reproductive Health Matters*, vol. 18, no. 6 (2010), pp. 90–101.
23. Ibid.
24. Koki Agarwal, *Family Planning and Reproductive Health: Why the United States Should Care*; World Health Organization, “Making Pregnancy Safer,” http://www.who.int/making_pregnancy_safer/topics/maternal_mortality/en/index.html.
25. World Health Organization, “WHO Leads Systematic Review on Adolescent Pregnancy,” http://www.who.int/child_adolescent_health/news/archive/2010/4_11_2010/en/index.html.
26. J. Cleland et al., “Family Planning: The Unfinished Agenda.”
27. K. Gill et al., *Women Deliver for Development*; Susheela Singh et al., *Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal Newborn Health*.
28. Koki Agarwal, *Family Planning and Reproductive Health: Why the United States Should Care*, p. 1.
29. J. K. Rajaratnam, “Neonatal, postneonatal, childhood, and under-5 mortality for 187 countries, 1970–2010: A systematic analysis of progress towards Millennium Development Goal 4,” *Lancet*, vol. 375, no. 9730 (2010), pp. 1988–2008.

30. M. S. Takroui, "Reproductive Health: The Issues of Maternal Morbidity and Mortality," *Internet Journal of Health*, vol. 3, no. 2 (2004).
31. United Nations, "Goal 5: Improve Maternal Health," September 25, 2008, <http://www.un.org/millenniumgoals/2008highlevel/pdf/newsroom/Goal%205%20FINAL.pdf>.
32. Peter McIntyre, *Pregnant Adolescents: Delivering on Global Promises of Hope* (Geneva: World Health Organization, 2006).
33. Sue J. Goldie et al., "Alternative Strategies to Reduce Maternal Mortality in India: A Cost-Effectiveness Analysis," *Public Library of Science Medicine*, vol. 7, no. 4 (2010).
34. A. Conde-Agudelo and J. Belizan, "Maternal Mortality and Morbidity Associated with Interpregnancy Interval: A Cross-Sectional Study," *British Medical Journal* no. 321 (2000), pp. 1255–1259, as quoted in Catalyst Consortium, "Optimal Birth Spacing," http://www.coregroup.org/storage/documents/Workingpapers/smrh_OBSI_Overview.pdf.
35. Shea O. Rutstein, "Further Evidence of the Effects of Preceding Birth Intervals on Neonatal, Infant, and Under-Five-Years Mortality and Nutritional Status in Developing Countries: Evidence from the Demographic and Health Surveys," DHS Working Paper no. 41, Macro International Inc., 2008.
36. Ibid.
37. A. Conde-Agudelo and J. Belizan, "Maternal Mortality and Morbidity Associated with Interpregnancy Interval: A Cross-Sectional Study."
38. Shea O. Rutstein, *Birth Spacing: The Link Between Maternal and Child Health* (Washington, DC: Catalyst Consortium, 2003).
39. Ibid.
40. Susheela Singh et al., *Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal Newborn Health*.
41. Ibid, p. 6.
42. Data gathered from Constella Futures, POLICY Project, and Health Policy Initiative, 2005–2007, as cited in Rhonda Smith et al., *Family Planning Saves Lives*, 4th ed. (Washington, DC: Population Reference Bureau, 2009), p. 16.
43. Elizabeth Leahy Madsen, *Family Planning as a Strategic Focus of U.S. Foreign Policy* (New York: Council on Foreign Relations Press, 2011), <http://www.cfr.org/women/family-planning-strategic-focus-us-foreign-policy/p24652>.
44. United Nations Population Division, *World Population Prospects: The 2008 Revision*; Population Action International, "Behind the Math: \$1 Billion for International Family Planning Programs," February 2008, http://www.populationaction.org/Issues/U.S._Policies_and_Funding/1billion_justification1.pdf; J. Speidel et al., *Making the Case for U.S. International Family Planning Assistance*, as cited in Elizabeth Leahy Madsen, *Family Planning as a Strategic Focus of U.S. Foreign Policy*.
45. Ibid.
46. Ibid.
47. Elizabeth Leahy Madsen, *Family Planning as a Strategic Focus of U.S. Foreign Policy*, p. 2.
48. United Nations Population Division, *World Population Prospects: The 2008 Revision* (New York: United Nations, 2009), http://www.un.org/esa/population/publications/wpp2008/wpp2008_highlights.pdf, as cited in Elizabeth Leahy Madsen, *Family Planning as a Strategic Focus of U.S. Foreign Policy*.
49. United Nations Population Division, *World Population Prospects: The 2008 Revision*; Population Action International, "Behind the Math: \$1 Billion for International Family Planning Programs"; J. Speidel et al., *Making the Case for U.S. International Family Planning Assistance*, as cited in Elizabeth Leahy Madsen, *Family Planning as a Strategic Focus of U.S. Foreign Policy*.

50. Ibid.
51. Ibid.
52. Ibid.
53. Ibid.
54. Ibid.
55. Ibid.
56. David Bloom and Jeffrey Williamson, "Demographic Transitions and Economic Miracles in Emerging Asia," National Bureau of Economic Research, November 1997, <http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN027109.pdf>.
57. All Party Parliamentary Group on Population, Development, and Reproductive Health, "Return of the Population Growth Factor: Its Impact upon the Millennium Development Goals," January 2007, http://www.populationconnection.org/site/DocServer/Return_of_the_Population_Growth_Factor.pdf?docID=224.
58. J. Bongaarts, "The Causes of Stalling Fertility Transitions," *Studies in Family Planning*, vol. 37, no. 1 (2006), pp. 1–16.
59. A. O. Tsui, "Population Policies, Family Planning Programs, and Fertility: The Record," *Population and Development Review* no. 27 (2001), pp. 184–204.
60. Population Justice Project, "Population Growth, Inequality and Poverty," October 2009, <http://popjustice.org/2009/10/population-growth-poverty/>.
61. Susheela Singh et al., *Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal Newborn Health*.
62. Brian O'Neill et al., "Global Demographic Trends and Future Carbon Emissions," *Proceedings of the National Academy of Sciences*, vol. 107, no. 41 (2010), pp. 17521–27.
63. Ibid.
64. Ibid.
65. Elizabeth Leahy Madsen, *The Effects of a Very Young Age Structure in Yemen* (Washington, DC: Population Action International, 2010).
66. World Bank, *Yemen Economic Update* (Sana'a, Yemen: World Bank, 2007).
67. Elizabeth Leahy Madsen, *The Effects of a Very Young Age Structure in Yemen*.
68. Ministry of Population Welfare, "What We Do," government of Pakistan, 2002, <http://www.mopw.gov.pk/Mission.html>.
69. Karen Hardee and Elizabeth Leahy, *Population, Fertility and Family Planning in Pakistan: A Program in Stagnation* (Washington, DC: Population Action International, 2008).
70. Elizabeth Leahy Madsen, Beatrice Daumerie, and Karen Hardee, "The Effects of Age Structure on Development," Policy and Issue Brief, Population Action International, 2010, http://www.populationaction.org/Publications/Reports/The_Effects_of_Age_Structure_on_Development/SOTC_PIB.pdf.
71. J. Goldstone, "Population and Security: How Demographic Change Can Lead to Violent Conflict," *Columbia Journal of International Affairs* no. 56 (2002), pp. 245–63; Nazli Choucri and R. North, "Dynamics of International Conflict: Some Policy Implications of Population, Resources, and Technology," *World Politics* no. 24 (1972), pp. 80–122; M. Greene and T. Merrick, *Poverty Reduction: Does Reproductive Health Matter?* (Washington, DC: World Bank, 2005).
72. Elizabeth Leahy Madsen, *Family Planning as a Strategic Focus of U.S. Foreign Policy*, p. 13.
73. H. Urdal, "A Clash of Generations? Youth Bulges and Political Violence," *International Studies Quarterly*, vol. 50, no. 3 (2006), pp. 607–29.
74. Richard P. Cincotta, "Demographic Security Comes of Age," *ECSP Report*, Issue 10 (2004), www.wilsoncenter.org/topics/pubs/ecsprio_C-cincotta.pdf, p. 25.
75. Madsen et al., "The Effects of Age Structure on Development."
76. Rania Antonopoulos, "The Current Economic and Financial Crisis: A Gender

- Perspective.” Levy Economics Institute Working Paper no. 562, United Nations Development Program Bureau for Development Policy, 2009, http://www.boeckler.de/pdf/v_2009_10_30_antonopoulos1.pdf.
77. O’Neill et al., “Global Demographic Trends and Future Carbon Emissions.”
 78. UN Department of Economic and Social Affairs, *An Overview of Urbanization, Internal Migration, Population Distribution, and Development in the World* (New York: United Nations Population Division, 2008), http://www.un.org/esa/population/meetings/EGM_PopDist/PoI_UNPopDiv.pdf; United Nations Department of Economic and Social Affairs, “Population Challenges and Development Goals,” 2005.
 79. Shahla Shapouri et al., *Food Security Assessment 2000–2010* (Washington, DC: U.S. Department of Agriculture and the Economic Research Service, 2010), <http://www.ers.usda.gov/Publications/GFA21/GFA21.pdf>.
 80. Ibid.
 81. Ibid.
 82. Ibid.
 83. Caroline Henshaw, “U.N. Says World Vulnerable to Food Crises,” *Wall Street Journal*, March 7, 2011, <http://online.wsj.com/article/SB10001424052748703386704576185944194748916.html>.
 84. Richard P. Cincotta, “Demographic Security Comes of Age,” p. 25.
 85. Ibid.
 86. Gary Fuller and Forrest R. Pitts, “Youth Cohorts and Political Unrest in South Korea,” *Political Geography Quarterly*, vol. 9, no. 1 (1990), pp. 9–22, as quoted in Richard P. Cincotta, “Demographic Security Comes of Age,” p. 25.
 87. Richard P. Cincotta, “Demographic Security Comes of Age,” p. 25.
 88. Leif Ohlsson, “Livelihood Conflicts: Linking Poverty and Environment as Causes of Conflict” (Stockholm: SIDA Environmental Policy Unit, 2000), as quoted in Richard P. Cincotta, “Demographic Security Comes of Age,” p. 25.
 89. The largest increase has been in funding to sub-Saharan Africa (a region where nearly 35 million women have an unmet need for family planning), which received \$86 million in FY 2002 and \$163 million in FY 2007. The Asia/Near East region received a 17 percent increase from \$120 million in FY 2002 to \$140 million in FY 2007, fueled primarily by funding to Afghanistan, which received \$32 million in FY 2007. Barbara O’Hanlon, “USAID’s Funding Decisions on Reproductive Health and Family Planning,” USAID, April 2008, <http://www.scribd.com/doc/35165686/USAID%E2%80%99s-Funding-Decisions-on-Reproductive-Health-and-Family-Planning-2009>.

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Cover Photo: A mother brings her children to receive their polio vaccine near Doda in the northern Indian state of Jammu and Kashmir (Amit Gupta/Courtesy of Reuters).

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