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A Practical Guide to Population and Development

BY **MAURA GRAFF** AND **JASON BREMNER**

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ABOUT THE AUTHORS

MAURA GRAFF is a policy analyst in International Programs at the Population Reference Bureau. **JASON BREMNER** is associate vice president in International Programs at the Population Reference Bureau.

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POPULATION REFERENCE BUREAU

1875 Connecticut Ave., NW
Suite 520
Washington, DC 20009 USA

202 483 1100 **PHONE**
202 328 3937 **FAX**
popref@prb.org **E-MAIL**

A PRACTICAL GUIDE TO POPULATION AND DEVELOPMENT

BY MAURA GRAFF AND
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INTRODUCTION

Throughout human history, the world’s population had grown slowly and by the beginning of the 20th century was only 1.6 billion people. Today, after only 110 years, the world’s population has surpassed 7.1 billion people.

During this time, the world has witnessed tremendous development—including innovations in health care, education, infrastructure, and technology—but more than 2 billion people still live in poverty and remain left out of this progress. The great challenge leaders of the world face today is to reduce poverty and inequity, and improve people’s lives without compromising the environment and the well-being of future generations.

At the same time, world population continues to increase by more than 80 million people a year, with most of the growth occurring in the world’s least developed countries. By 2050, according to the United Nation’s medium projection, the world’s population will increase to 9.6 billion people and will continue to grow through 2100.¹ This continued growth has strong implications for health, well-being, and economic development. Leaders of nations everywhere must ask themselves: How does population growth affect national development and what must be done to manage the challenges of population growth?

The purpose of this guide is to answer those key questions, explore population growth and its factors and impacts, and identify some important investments policymakers and leaders can prioritize to foster development for their nations. The guide is structured as a series of critical questions about the links between population, fertility, development, economics, health, and the environment. Short illustrative examples of country experiences highlight the connections between population and development and the benefits of slower population growth for development. The guide identifies some of the investments that are needed in family planning; education; and infant, child, and adolescent health to benefit from the demographic transition. Finally, the guide provides information about how to mobilize leaders to prioritize population and family planning for accelerated development. Through better understanding of the population-development connections as well as the right investments, leaders can ensure a better life for people today and future generations.

WHY DO FERTILITY AND THE PACE OF POPULATION GROWTH MATTER FOR DEVELOPMENT?

One important dimension of population dynamics is fertility. Fertility levels declined during the last century in most developed countries, and those countries will experience little or no population growth in the years ahead. As shown in Figure 1, nearly all population growth today and in the coming decades will be in the developing countries where high fertility levels persist, especially in the least developed countries where the average woman continues to have four or more children during her lifetime.²

Today many couples have more children than they desire or have mistimed pregnancies. When given the option to use family planning, couples often start childbearing later, space pregnancies further apart, and have fewer children. In developing countries, however, more than 220 million women want to space their next birth, or stop having children, but are not using a modern method of family planning.³ This “unmet need” for family planning is concentrated in the least developed countries where unintended pregnancies and deaths from pregnancy-related complications remain high.⁴

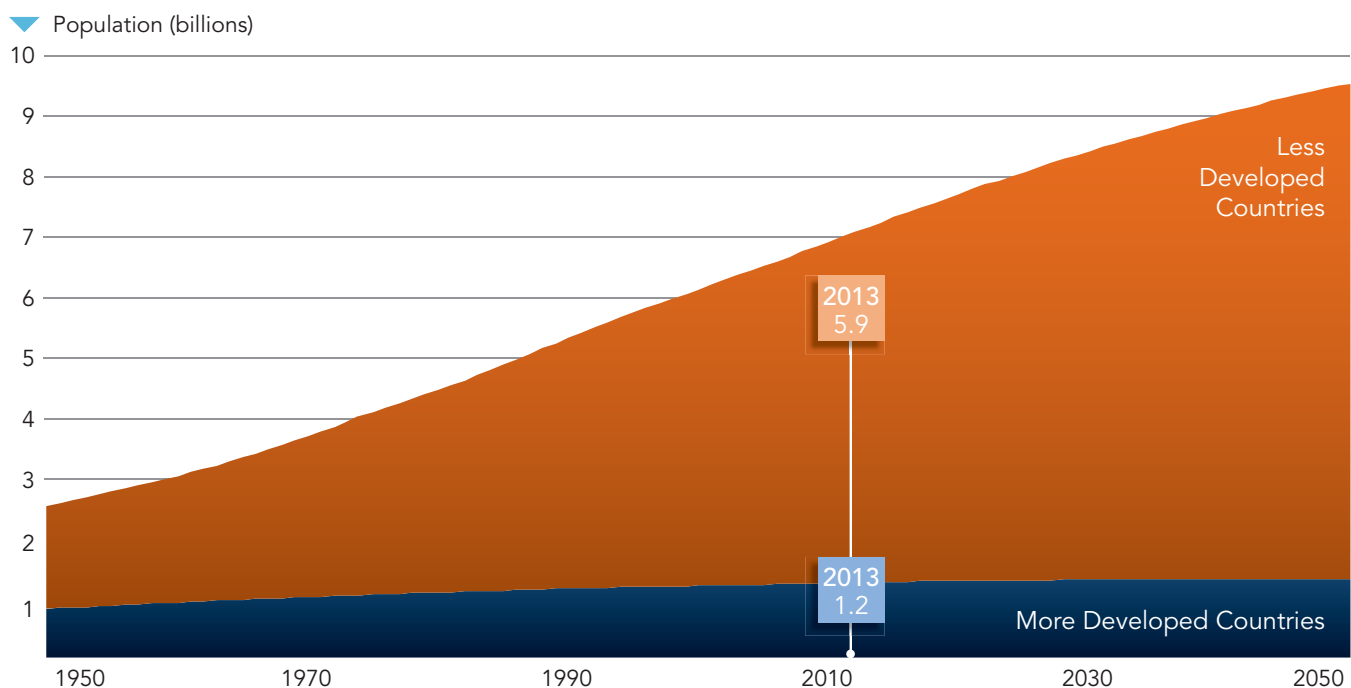
At the same time, unintended pregnancies contribute to high fertility and population growth, which shape the size and age

structure of a nation’s population, and determine the demand for social services and natural resources as well as the size of the labor force. These factors affect the scale of development challenges and the strategies and investments required to manage them.

Most leaders understand that development strategies depend on sustained investments in health care, education, employment, and natural resources. However, rapid population growth in many developing countries threatens to undermine these investments and exacerbate the challenges of poverty, maternal and child health, HIV/AIDS, gender discrimination, and job creation. It also puts pressure on agricultural land, fresh water, and energy resources.

Strong family planning programs—combined with investments in education, health, gender equality, and employment—help couples determine the timing and spacing of pregnancies and achieve their desired family size, which in turn lowers fertility and slows population growth. Together these investments improve the health and well-being of individuals and their families and make it easier for countries to achieve their development goals.

FIGURE 1
Nearly All Global Population Growth Is Occurring in Less Developed Countries.



Source: Carl Haub and Toshiko Kaneda, 2013 *World Population Data Sheet* (Washington, DC: Population Reference Bureau, 2013).

WHAT IS THE DEMOGRAPHIC TRANSITION?

Over the last 200 years, countries around the world have followed similar patterns of change from high to low birth and death rates, leading demographers to develop a model called the demographic transition (see Figure 2). The theory of the demographic transition is that most countries were once characterized by high birth and death rates, and little population growth—Stage 1. During the transition period—Stage 2—a decline in mortality often precedes and is faster than a decline in fertility, resulting in population growth because there are more births than deaths. In Stage 3, birth rates decline until eventually in Stage 4 they reach the same level as death rates and population growth slows.

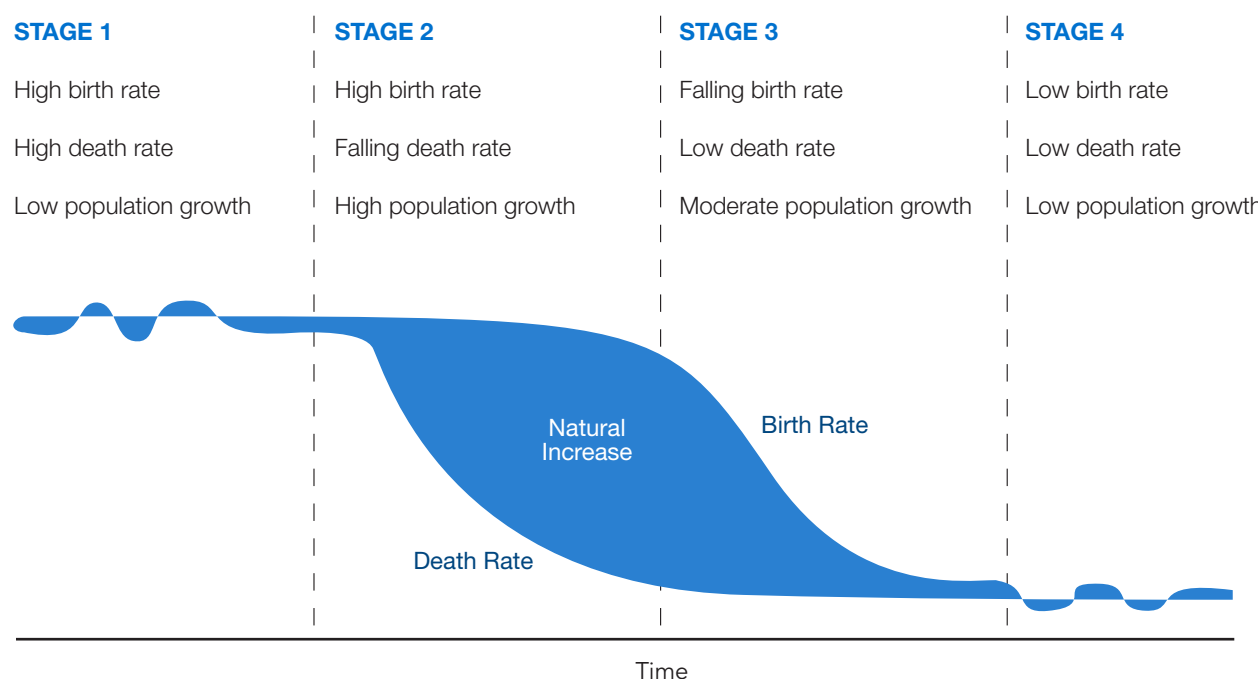
While many countries have followed this pattern of demographic change, the timing of the transition and pace of mortality and fertility declines has varied greatly among countries, resulting in the different rates of population growth seen across countries today. In Europe and North America, this transition took place over several centuries. Death rates and birth rates declined as

health and living conditions improved, age at marriage increased, family planning services became available, desired family size decreased, and women obtained higher levels of education and more employment out of the home.

In many developing countries, the demographic transition began in the middle of the 20th century and changes have taken place over a period of just decades. Today, many developing countries particularly in Asia and Latin America have low mortality and fertility rates and population growth is slowing. At the same time, the world's least developed countries are still in early or intermediate stages of the transition with birth and death rates declining, but high compared to the rest of the world. Experts debate whether these countries will follow the classic demographic transition model. Many of the least developed countries are experiencing slow or stalled fertility declines and will not transition to the next stage until fertility levels decline substantially.

FIGURE 2

The Demographic Transition Model Portrays Demographic Change From High to Low Birth and Death Rates.

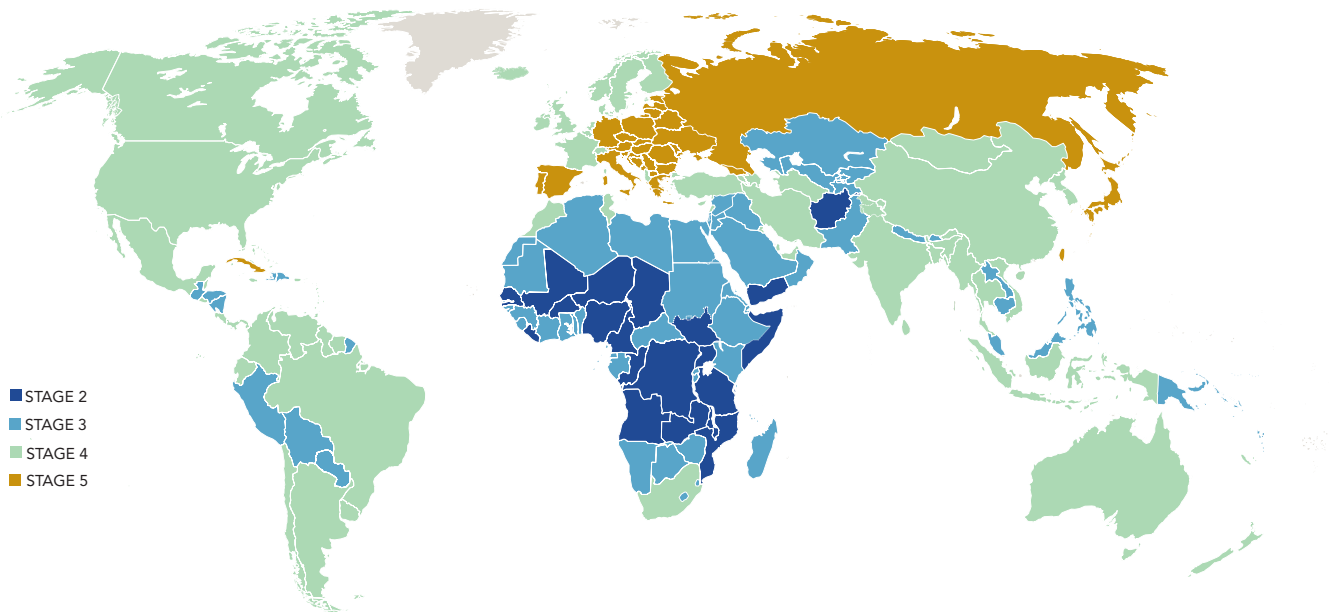


Note: Natural increase or decrease is the difference between the number of births and deaths. The birth rate is the number of live births per 1,000 population in a given year. The death rate is the number of deaths per 1,000 population in a given year.

Sources: Carl Haub and Toshiko Kaneda, *2011 World Population Data Sheet* (Washington, DC: Population Reference Bureau, 2013); and (for burials in 1693 and 1694): E.A. Wrigley, *Population and History* (New York: McGraw Hill, 1969).

FIGURE 3

The World's Least Developed Countries Are Still at Early or Intermediate Stages of the Demographic Transition.



Sources: Carl Haub and Toshiko Kaneda, *2013 World Population Data Sheet* (Washington, DC: Population Reference Bureau, 2013); and Carl Haub and Toshiko Kaneda, *2014 World Population Data Sheet* (Washington, DC: Population Reference Bureau, forthcoming).

Today demographers are also discussing a fifth stage that occurs if a country's slow population growth turns into a period of population decline. In this fifth stage, population size eventually declines after birth rates fall below replacement-level fertility, meaning the average woman has fewer than two children during her lifetime.

It is critical that leaders understand where their countries are in the demographic transition, how to make progress toward

lower birth and death rates, and finally, how to plan effectively for slowed growth, population decline, and eventual stabilization.

Figure 3 portrays the demographic transition stage in each country. No countries are in Stage 1 because all countries have transitioned beyond the very high death and birth rates experienced prior to the 20th century.

WHAT IS THE DEMOGRAPHIC DIVIDEND AND HOW IS IT A WINDOW OF OPPORTUNITY?

The demographic dividend is the accelerated economic growth that may result from a rapid decline in a country's fertility and the subsequent change in the population age structure.⁵

Early in the demographic transition, when a country has experienced high levels of fertility and rapid population growth, there are more people in the younger age group than the adult working-age group. A decline in fertility and fewer births each year means that over time, there will be a decline in the number of children in relation to the working-age adults. This period when there are more workers than young dependents is a window of opportunity for a country to facilitate accelerated economic growth. However, a demographic dividend is not automatic for those countries with large young populations today. Increased investments in family planning, education, and child survival are needed to advance fertility decline and create the conditions for a demographic dividend.

Investments in education, economic policies, and infrastructure, as well as good governance are also needed to convert the opportunity of fertility decline into accelerated economic growth. Key policies and investments are needed to strengthen health care and education systems to ensure a healthy and skilled workforce. At the same time, governments need to carry out reforms and infrastructure investments that attract higher levels of investments, create jobs, ensure a better-educated labor force, and accelerate economic growth.

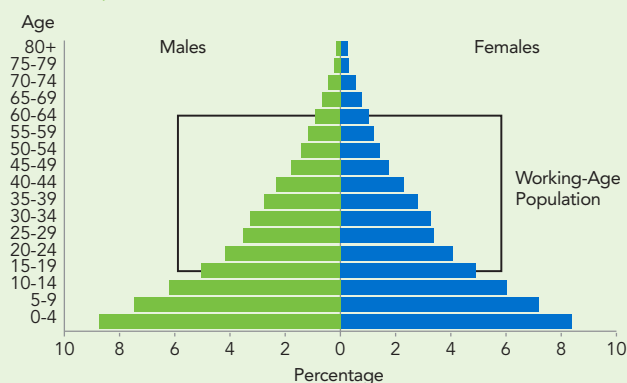
Thailand exemplifies how a country, through the right actions, can capitalize on the window of opportunity for a demographic dividend (see box). Thailand made a series of investments across sectors to ensure that people are healthy, educated, and equipped with skills and opportunities to contribute to the country's economic growth.

Thailand: Taking Advantage of the Window of Opportunity

Over the last 40 years, Thailand has emerged as an economic power in Southeast Asia. After a period of rapid population growth, Thailand increased access to voluntary family planning in the 1970s. Population growth slowed as fertility declined from an average of 5.5 children per woman in 1970 to 2.2 children per woman in 1990. With fewer births, Thailand was able to invest more resources per person in health and social sectors that led to improved health outcomes and more secondary school completion, as well as delayed marriage and delayed childbearing. By

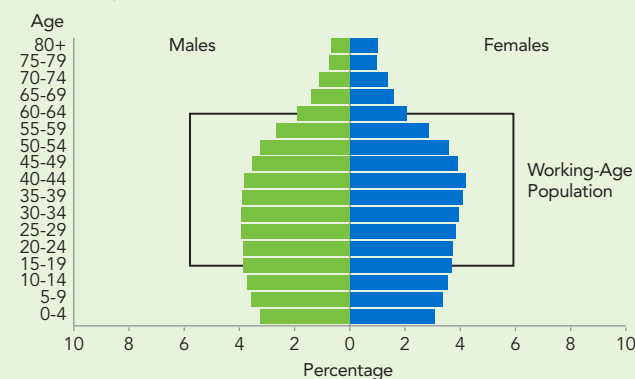
2010, the age structure of the population had evolved with fewer children and a larger productive adult labor force. Today, Thailand has become an economic success story in Southeast Asia, demonstrating how a decline in fertility combined with investments in health and education can help a country transform their demographic prospects. Looking forward, these changes now require new policies to expand opportunities for education and employment, increase work-related migration, and promote savings and social security for the country's older population.

Thailand, 1970



Thailand's population pyramid in the 1970s is typical of many developing countries today. After a period of rapid population growth, the broad base of the pyramid represents the large number of young people relative to the smaller working-age adult population.

Thailand, 2010



By 2010, Thailand's population had become older with higher educational levels and improved health. After declines in fertility, the proportion of the adult labor force in the middle of the pyramid is larger than the proportion of children at the base.

WILL THE LABOR FORCE BECOME TOO SMALL IF POPULATION GROWTH SLOWS DOWN?

People are having fewer children and living longer. The world's total fertility rate fell from an average of 5 children per woman in 1950 to 2.5 children per woman today, and is projected to drop to 2.2 by 2050.⁶ At the same time, the proportion of people ages 65 and older increased from 5 percent in 1950 to 8 percent today, and could increase to 16 percent by 2050.⁷ The timing of these trends varies among countries and affects the development policies needed.

LOW FERTILITY AND INVESTMENTS BOOST THE LABOR FORCE

By lowering fertility and slowing population growth, the working-age population grows in relation to the young and elderly populations. In the short- and medium-term this demographic change sets the stage for a demographic dividend, and lower fertility combined with multisector investments make it easier for countries to improve the health and skills of the labor force and create jobs. Lower fertility also opens opportunities for women to increase their participation in the labor force—on average, each birth reduces a woman's contribution to the labor force by almost two years.⁸ Having fewer children makes it easier for both parents to pursue education and career goals, and contribute to economic development.

AGING POPULATIONS REQUIRE POLICY ADAPTATION

With sustained lower fertility, in the long term the age structure of the population eventually transitions beyond the dividend window and becomes characterized by a growing proportion of elderly people. As people live through their 60s and beyond, they are less likely to participate in the labor force and more likely to need health and social services.

Managing the economic and health needs of aging populations is already a challenge for some countries that have transitioned in Asia, Europe, and in the United States.⁹ Some countries are now or will soon experience a decrease in population size after decades of below replacement-level fertility. In some European countries today, for example, families have an average of 1.2 children and people are living longer.¹⁰ Rather than suffer economically, however, most of these countries have actually found that older populations are continuing to contribute to their economies.¹¹

Policies need to ensure that population aging does not hinder development (see box).¹² To prepare for more people of retirement age, countries must promote greater levels of personal savings and investment, and create and manage social security and pension programs.¹³ Longer and healthier lives are leading to extended work years, enabling older adults to continue contributing to the economy and saving

Lessons From Mexico: Strengthening the Labor Force Through Investments in Family Planning and Education

In recent decades, high levels of political commitment and investments in family planning and education have helped strengthen Mexico's labor force. As Mexico's wealth increased in the 1970s, the government invested in a rural health program that prioritized family planning and maternal and child health. Population growth slowed as the total fertility rate declined from an average of 6.8 children per woman in the late 1960s to an estimated 2.2 children per woman today.

At the same time, the population of young people under age 15 declined from 47 percent in 1970 to about 27 percent today. With this shift in the population age structure, fewer resources were required for young dependents, which made it easier for the larger working-age group to increase overall productivity and contribute to economic growth. Investments in the country's educational system led to a more skilled labor force with nearly two-thirds of workers having at least a secondary education. Over the last three decades, the number of students enrolled in postsecondary programs in Mexico has increased dramatically—tripling to 2.8 million in 2009. Although Mexico faces ongoing economic and development challenges to attaining the demographic dividend, the investments in family planning, health, and education have helped increase the annual income per capita from \$6,390 in 1992 to \$16,450 in 2012.

Sources: James N. Gribble and Jason Bremner, "Achieving a Demographic Dividend," *Population Bulletin* 67, no. 2 (2012); and Aaron Terrazas, Demetrios G. Papademetriou, and Marc R. Rosenblum, *Evolving Demographic and Human-Capital Trends in Mexico and Central America and Their Implications for Regional Migration* (Washington, DC: Migration Policy Institute, 2011).

for retirement. In fact, in most countries older generations are not dependent on their families, but rather are still supporting their working-age children and their families through their accumulated savings.¹⁴

HOW DO LARGE YOUNG POPULATIONS PRESENT OPPORTUNITIES AND CHALLENGES FOR ECONOMIC DEVELOPMENT?

Today, after decades of rapid population growth, the developing world has the largest generation of young people in history. One-quarter (1.8 billion) of the world's population is between the ages of 10 and 24, and nearly 90 percent of young people live in developing countries.¹⁵ This large, young population can be a great opportunity for economic development, but it also presents challenges because of the demand for social services and employment.¹⁶

DEMANDS FOR HEALTH CARE AND EDUCATION

Health care and education are fundamental for the well-being of young people and for economic development. Many advances in health care have extended life expectancies and lowered death rates, particularly among infants and children. But over the last 50 years, the health of adolescents has improved much less than young children.¹⁷ Many barriers to health care persist for young people in regard to access, affordability, and quality of care, especially in low-resource settings.

In many developing countries, accomplishments in the education sector have led to more primary school completion and more secondary school enrollment; however, challenges remain for ensuring adequate school facilities, staffing, and supplies, quality of education, and attendance. School enrollment is still low in many countries, especially at the secondary and tertiary levels.¹⁸ As presented in Figure 4, in many sub-Saharan African countries, less than 50 percent of boys and less than 38 percent of girls are enrolled in secondary school.¹⁹

In countries with rapid population growth, today's challenges for health care and school systems will be amplified as the number of young people continues to grow and demand for these services increases. Immediate investments in health and education, combined with long-term planning, are important to ensure that health facilities and schools have sufficient resources.

ENSURING EMPLOYMENT

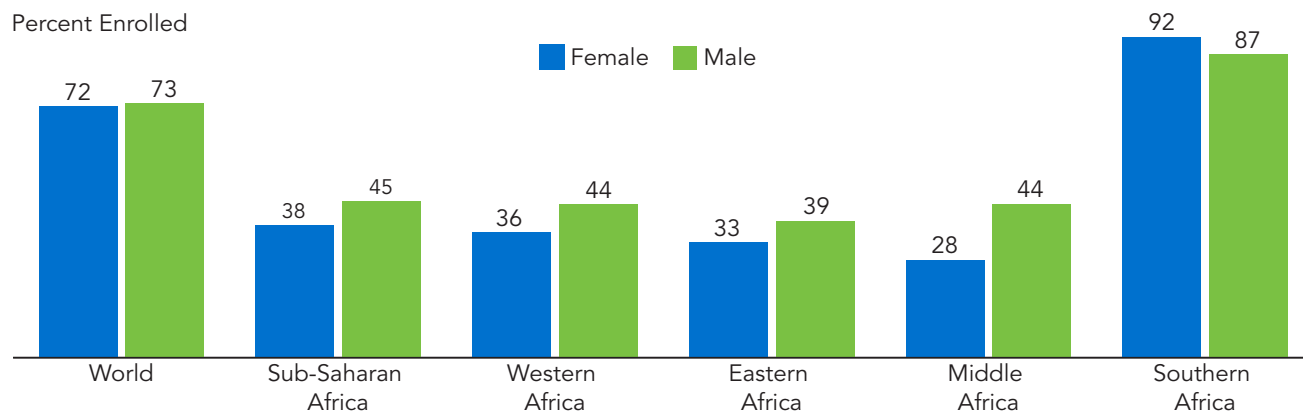
Many developing countries have an unprecedented opportunity to expand their labor force and stimulate economic growth with the help of declining fertility and a large young population. However, leaders will be challenged to ensure that enough jobs will be available as large generations of young people enter the labor force. Worldwide, 75 million young people are currently unemployed, and this number could increase in the coming years without investments in work skills and job creation.²⁰

When young people cannot find employment, a large young population can threaten social and political security. Many countries have demonstrated that large populations of unemployed youth can undermine economic growth and become a source of civil unrest. Between 1970 and 1999, 86 percent of the countries that experienced a new outbreak of civil conflict had 60 percent or more of the population under age 30.²¹

Lowering fertility will enable today's large generation of young people to enter the labor force with fewer children to support. With favorable education, health, and labor policies, a larger proportion of the population can be employed and contribute to economic growth.

FIGURE 4

Secondary School Enrollment Is Low in Western, Eastern, and Middle Africa, Especially Among Girls.



Note: Data from 2005 and 2011.

Source: Donna Clifton and Alexandra Hervish, *The World's Youth 2013 Data Sheet* (Washington, DC: Population Reference Bureau, 2013).

WHAT IS THE RELATIONSHIP BETWEEN POPULATION GROWTH AND CLIMATE CHANGE?

Today, climate change is clearly attributed to current and past human activity.²² Increases in global greenhouse gas emissions during the last 150 years have contributed to rising global temperatures and many other changes in climate, including more frequent and extreme weather patterns such as droughts, tropical storms, and floods.

The relationship between population growth and climate change is complex. While energy consumption in developed countries has been the strongest driver of climate change, global population growth has also contributed to emissions. Population growth over the next 50 years will continue to contribute to emissions, but investments that prevent unintended pregnancies and slow population growth in combination with the commitments needed to reduce energy use could help reduce emissions and mitigate climate change.²³

Even if efforts to reduce emissions improve, the impacts of climate change are already occurring. Though developing countries have contributed little to emissions, they are the most vulnerable to the harmful effects of climate change. People who tend to be more directly dependent on local resources for food and livelihood, especially women, are disproportionately affected by climate change. Women often perform a majority of farm labor, are the primary providers of household water supply, are more likely to live in poverty, and thus are more affected by declining agricultural lands and scarce water resources.²⁴

Many developing countries identify rapid population growth as a factor that undermines climate adaptation strategies by increasing the demand for and reducing the supply of limited natural resources such as agricultural land, fresh water, and energy sources (see box).²⁵ Population growth combined with other demographic changes—such as urbanization and migration trends—influence consumption and availability of natural resources, and can increase vulnerability to environmental changes.²⁶ Furthermore, high fertility and poor reproductive health may limit the ability of households to adapt to climate change by making it more difficult for women in particular to achieve education and career goals, escape poverty, and develop the new skills and technologies they will need.

Climate Change and Population Growth Affect Water Availability

The availability of water is essential for health and development. However, today 1.2 billion people live in areas where there is not enough water to meet demand. Over the last century, water use has grown at more than twice the rate of population increase. Many regions of the world have become water scarce while the available water supply has frequently been wasted, polluted, or unsustainably managed. Many areas with extreme water scarcity are also experiencing the most rapid population growth. Climate change further contributes to water challenges. For example, increased risk of drought, changing precipitation patterns, altered snow and glacial melt, and rising sea levels can all affect the amount and timing of water supply. Strategies that strengthen water quality, distribution, and efficient use and that mitigate climate change can lessen water scarcity, as can slower population growth.

Sources: Supriya Kumar, *The Looming Threat of Water Scarcity* (Washington, DC: Worldwatch Institute, 2013); United Nations, "International Decade for Action 'Water for Life' 2005-2015", accessed at www.un.org/waterforlifedecade/; and Jason Bremner et al., "World Population Highlights: Key Findings From PRB's 2008 World Population Data Sheet," *Population Bulletin* 64, no. 3 (2009).

HOW DOES RAPID POPULATION GROWTH THREATEN FOOD SECURITY?

TRANSFORMED DEMANDS FOR FOOD

As a result of population growth, the amount of food required to adequately feed people and achieve food security is increasing. Food security exists when all people at all times have physical and economic access to sufficient, safe, and nutritious food that meets their dietary needs for an active and healthy life.²⁷

Despite decades of efforts to reduce hunger, about 1 in 8 people have inadequate food for a healthy and active life. The vast majority of the world's hungry people live in developing regions.²⁸ In many developing countries, the number of people who are food insecure is increasing. As presented in Figure 5, in sub-Saharan Africa, the number of children increased by 50 percent between 1992 and 2010.²⁹ Even though the proportion of underweight children decreased during this time, the number of underweight children increased to about 30 million—5.5 million more than 20 years ago.³⁰

At the same time that population size is increasing, diets and food preferences are changing, urbanization is increasing, and more people are moving into the middle class. Food preferences among wealthier populations are shifting from grains to meats and dairy. Together, population growth and changing food preferences affect the global food trade by increasing the demand for crops and shifting farming techniques toward producing animal feed in developing countries.³¹

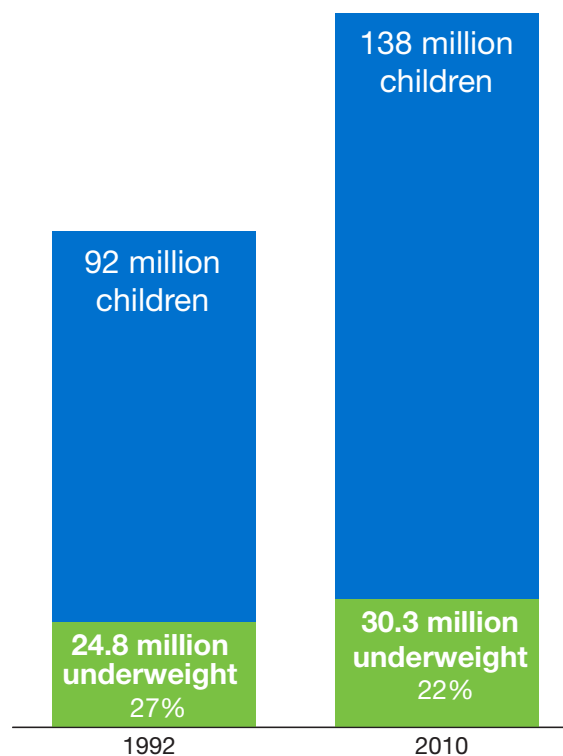
PRESSURE ON FOOD SUPPLY

In addition to influencing the demand for food, rapid population growth can put pressure on food supply and access. In the rural areas of many developing countries, large families are still the norm, access to family planning is limited, and many women lack the decisionmaking power to time and space their pregnancies. As a result, fertility remains high, and farms become smaller as lands are divided among many children. Smaller farm plots combined with rising costs of farming and changing global food preferences make it challenging for the next generation of farmers to grow enough food to feed their families and sustain a livelihood.³²

The global population is becoming increasingly urban, and today more than one-half of the world's population lives in urban areas.³³ The pace of urbanization is expected to increase, especially as competition for land in rural areas becomes stronger and large young generations move to the cities to expand their educational and employment opportunities. Developing countries will have an increasingly urban population that depends on purchased food instead of their own crops, and thus is more vulnerable to changes in food prices. Rapid increases in food prices in 2008 and again

FIGURE 5

The Number of Underweight Children in Sub-Saharan Africa Increased by 5.5 Million Between 1992 and 2010.



Sources: Jason Bremner, *Population and Food Security: Africa's Challenge* (Washington, DC: Population Reference Bureau, 2012); United Nations Population Division, *World Population Prospects: The 2010 Revision* (New York: United Nations, 2011); and Robert E. Black et al., "Maternal and Child Undernutrition: Global and Regional Exposures and Health Consequences," *Lancet* 371, no. 9608 (2008): 243-60.

in 2012 contributed to a less-nutritious diet and increased food insecurity, particularly among those who spent a large proportion of their income on food.³⁴

As the population grows—and demand for water and land increases—it will be difficult to increase food production in a sustainable way.³⁵ Furthermore, climate change will contribute to more erratic and extreme weather patterns, such as unprecedented droughts and floods that reduce available farm land, and will create more challenges for farming.

Agricultural investments are critical for ensuring food security, but achieving food security in developing countries will also depend on the size of the future population.³⁶ Access to family planning will promote food security through smaller families and slower population growth, thus easing demand on agricultural systems and improving nutrition among children.³⁷

WHAT ARE THE CONSEQUENCES OF HIGH FERTILITY ON MATERNAL AND CHILD HEALTH?

Each year, more than 290,000 women die from maternal causes.³⁸ Additionally, more than 6 million children die before their fifth birthday.³⁹ The vast majority of these deaths occur in developing countries, mostly in sub-Saharan Africa and southern Asia, and could be easily prevented through investments in family planning and maternal and child health interventions.⁴⁰

Women who have many births are more likely to have problems during their later pregnancies, and to have pregnancies that are unintended or spaced too closely together, threatening the health of the mother and child.⁴¹ Experts recommend waiting three years after a live birth before attempting to become pregnant again.⁴² Presented in Figure 6, children born less than two years after the previous birth of a sibling have a higher risk of dying before age 5 than children born three years after the previous birth.

In addition to health concerns, families with many children are more likely to live in poverty. Women are often the primary caretakers for children, perform a majority of household labor, and contribute substantially to family income. When a mother dies, her death can have a devastating impact on the well-being of her family.⁴³

In many developing countries, a desire for a large family is decreasing and contraceptive use is increasing.⁴⁴

Couples today want smaller families compared to previous generations. Additionally, when men and women know about the benefits of healthy timing and spacing of pregnancy, they choose to use family planning.⁴⁵ However, in many of these countries, unmet need for family planning remains high and women are having more children than they desire.⁴⁶

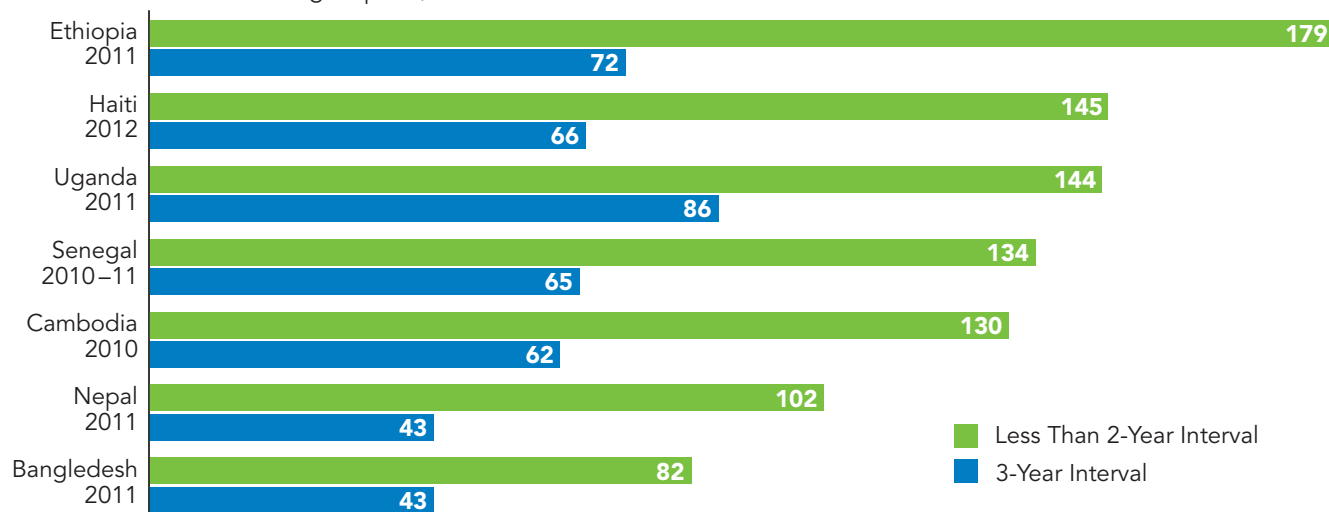
Rapid population growth increases demand for the health services, infrastructure, and financial resources required to prevent maternal and child disability and death. Even modest gains in health care are difficult to achieve when there is already a shortage of health workers and resources and the population is growing rapidly.

Family planning already prevents more than 270,000 maternal deaths each year.⁴⁷ Increasing investments in family planning could prevent an additional 100,000 maternal deaths each year.⁴⁸ Furthermore, 1.8 million child deaths could be prevented each year if all birth-to-pregnancy intervals were three years.⁴⁹

Combined investments in family planning and maternal and child health care will save lives and money, and maximize limited resources.⁵⁰ By addressing the barriers that limit the use of family planning and maternal and child health care, governments and health care systems can respond to the increased demand for services, improve the lives of mothers and children, and slow population growth.

FIGURE 6
Birth Spacing Is Critical for Child Survival.

Deaths to Children Under Age 5 per 1,000 Live Births



Source: Demographic and Health Surveys, various years.

IS A DECLINE IN POPULATION SIZE A CONCERN IN COUNTRIES WHERE MANY PEOPLE DIE FROM HIV/AIDS?

Even after 30 years, the HIV/AIDS epidemic continues to be a devastating global health crisis. More than 35 million people are living with HIV, and more than 2 million additional people are infected each year, mostly in sub-Saharan Africa.⁵¹ In the countries hardest hit by the HIV/AIDS epidemic, deaths due to AIDS have resulted in declines in life expectancy and a slower pace of population growth. No country is experiencing a decline in population size due to HIV/AIDS mortality.⁵²

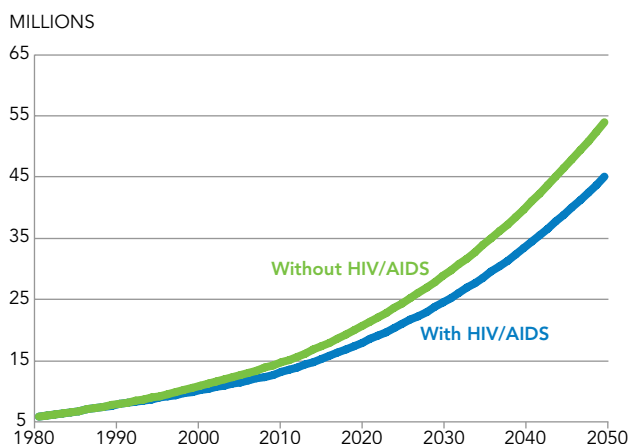
In fact, many developing countries with high HIV/AIDS prevalence will continue to experience a fast pace of population growth, mainly because of persistent high fertility and a large young population.⁵³ In the southern African countries most affected by HIV/AIDS, although population growth has slowed, the pace of population growth will continue to exceed other world regions. For example, Figure 7 compares how the population of Zambia would continue to grow with or without HIV/AIDS. Even with higher death rates due to HIV/AIDS, the total population of Zambia is expected to triple in size to 45 million people between 2010 and 2050.⁵⁴

While in some places the HIV/AIDS epidemic continues to grow, in most countries the epidemic has stabilized, and HIV incidence and prevalence rates are declining.⁵⁵ Impressive advancements in treatment and prevention over the last decade have slowed the spread of HIV and the long-term impact of HIV/AIDS will be less severe than previously thought.⁵⁶

Nevertheless, the combined consequences of continued population growth and HIV/AIDS will present challenges for many developing countries. The population of sub-Saharan Africa is projected to grow by more than 1 billion between

FIGURE 7

The Population of Zambia Is Expected to Triple in Size Between 2010 and 2050.



Source: United Nations Population Division, *World Population Prospects: The 2010 Revision* (New York: United Nations, 2011).

2010 and 2050.⁵⁷ In this region, slow declines in the spread of HIV are expected to be offset by rapid increases in population size.⁵⁸ New infections combined with the fact that people with HIV/AIDS will live longer and healthier lives adds to the financial burden of treatment services for people living with HIV/AIDS (see box).

The Demographic Impact of HIV/AIDS in Southern Africa

Southern Africa has been most heavily affected by the HIV/AIDS epidemic, and the age structure of the population is changing. Life expectancy has dropped from 61 years to 52 years in just the last two decades. In some countries in the region, child mortality declines achieved before the epidemic have been reversed as AIDS-related deaths among children increased. Young and middle-age adults have experienced large increases in mortality. From 1985 to 1990, only 21 percent of deaths occurred between the ages of 20 and 49, but by 2005 to 2010, 50 percent of all deaths occurred among this age group. Increased deaths among working-age adults and parents deplete the labor force and affect both the wealth and well-being of families and countries.

Although population growth is slower than it would be without the epidemic, large cohorts of young people and high birth rates in the region indicate that population growth will continue for decades. By 2050, the total population in southern Africa is projected to be 74.6 million people. Sustained investments in HIV/AIDS treatment and prevention, and family planning, will be critical to address the increased need for health and social services.

Sources: United Nations Population Division, *World Population Prospects: The 2012 Revision, Volume 1, Comprehensive Table* (New York: United Nations, 2013); and United Nations Population Division, *World Population Prospects: The 2010 Revision, Volume 1, Comprehensive Tables* (New York: United Nations, 2011).

WHY IS FAMILY PLANNING ESSENTIAL FOR DEVELOPMENT?

In developing countries, more than 220 million women have an unmet need for family planning—they say they want to space their next birth, or not have any more children, but they are not using a modern method of family planning. This unmet need leads to millions of unintended pregnancies each year, posing health risks to mothers and their children, especially when the pregnancies are categorized as:

- **Too early.** Girls under age 18 and their babies have a higher risk of death or disability resulting from pregnancy or childbirth.
- **Too many.** Women who have many births are more likely to have problems during later pregnancies and their risk of dying during childbirth is increased.
- **Too late.** Women over age 35 and their babies have a higher risk of death or disability resulting from pregnancy or childbirth.
- **Too soon.** Pregnancies spaced too closely increase the risk of illness and death for women and their children. Women should wait at least three years after a live birth before trying to become pregnant again.⁵⁹

Family planning enables women and their families to avoid unintended pregnancies, delay childbearing, space births, and achieve desired family size.⁶⁰ Integrating family planning into HIV/AIDS services helps avoid unintended pregnancies, resulting in fewer HIV-positive babies and fewer orphans. Encouraging the use of condoms can help protect against HIV/AIDS and other sexually transmitted infections. By preventing unintended pregnancies, family planning also reduces the number of abortions.⁶¹

The number of lives that could be saved through improved family planning programs is enormous. Providing contraceptives to women in developing countries who have an unmet need for family planning would prevent each year:

- 54 million unintended pregnancies, including 21 million unplanned births.
- 26 million abortions and 7 million miscarriages.
- 79,000 maternal deaths.
- 1.1 million infant deaths.⁶²

Considered a “best buy” among health investments, family planning is one of the most cost-effective, high-yield interventions that exists today.⁶³ In developing countries, the average annual cost of providing modern contraceptives per user is US\$6.15.⁶⁴ Avoiding unintended pregnancies, improving health, and slowing population growth all result in savings across many sectors.⁶⁵ The United Nations estimates that every dollar spent on family planning results in savings of \$2 to \$6 in other sectors. When women and couples can

Lessons From Bangladesh: Family Planning Contributes to Healthier and Wealthier Families and Communities

Evidence from Bangladesh highlights how an integrated family planning program contributes to poverty alleviation and economic security for women, families, and communities. In 1977, the integrated Family Planning and Maternal Child Health (FPMCH) program was implemented in Matlab, Bangladesh. Community health workers were trained to provide home delivery of family planning services and maternal and child health care to married women of reproductive age.

Families in communities where the FPMCH program was implemented became healthier and wealthier than families who lived in similar communities but received only the routine Ministry of Health services, and these benefits lasted for decades. After 20 years of the FPMCH program, women who received services were more likely to use family planning and have fewer children than similar women in the comparison area. Women in the program area had better nutritional status, more-frequent use of antenatal care, longer spacing between births, and a lower risk of dying from pregnancy-related complications. Their children weighed more and were more likely to be immunized. Child mortality before age 5 decreased by at least 20 percent in the program area compared with the nonprogram area.

Families in the program area were also more likely than the comparison group to have higher incomes, increased home value, greater savings and assets, and higher educational achievement. Over time, some benefits of the program extended into neighboring villages.

Sources: James N. Gribble and Maj-Lis Voss, *Family Planning and Economic Well-Being: New Evidence From Bangladesh* (Washington, DC: Population Reference Bureau, 2009); and Shareen Joshi and T. Paul Schultz, “Family Planning and Women’s and Children’s Health: Long-Term Consequences of an Outreach Program in Matlab, Bangladesh,” *Demography* 50, no. 1 (2013): 149-80.

avoid unintended pregnancies and achieve lower levels of fertility, families, communities, and national governments can allocate more resources per child and decrease poverty (see box).

WHY ARE GENDER EQUALITY AND WOMEN'S AND GIRLS' EMPOWERMENT CRITICAL FOR POPULATION AND DEVELOPMENT?

Gender equality is the equal treatment of all individuals, regardless of sex. Countries and families benefit when women and men have an equal balance of power, privileges, responsibilities, and resources. Gender equality includes equal access to opportunities, such as education, employment, and representation in leadership. Gender equality can be achieved when women and men have the ability to make family decisions together, such as when to marry and have children. Empowering women and men through policy, law, and culture contributes to national development. Many societies impose strict gender roles that deprive women and girls of their rights, resources, and decisionmaking power. While gender equality has improved, progress has been uneven and slow in many countries.⁶⁶

EDUCATION IMPROVES EQUALITY

Even though educational attainment among girls has improved, girls still lag in literacy, primary school completion, and secondary school enrollment. Girls who complete secondary education are more likely to use family planning, be healthier, and have healthier and more educated children.⁶⁷ Secondary school completion increases women's employment opportunities and participation in the labor force. Just one year of secondary education boosts a woman's wages later in life by 15 percent to 25 percent.⁶⁸

GENDER-BASED VIOLENCE IMPEDES EQUALITY

Harmful traditional practices and gender-based violence impede gender equality and health. Practices such as child marriage and female genital mutilation/cutting are still common. In the last decade, 1 in 3 young women in developing countries was married before age 18 and 1 in 9 girls between the ages of 10 and 14 was forced into marriage, posing serious consequences to their health and well-being.⁶⁹ When marriage is delayed until adulthood, women and girls are more likely to finish school and find employment.

Gender-based violence is a barrier to women's empowerment in many countries. Abused women or girls are at risk of serious social and mental health problems.⁷⁰ Some societies still consider violence against women acceptable and women are often targets for violence during conflict or war.

WOMEN'S EMPLOYMENT STIMULATES THE ECONOMY

Men's participation in the labor force is higher than women's in all regions of the world.⁷¹ Compared to men, women are more likely to work in the informal sectors where labor is unpaid, unregulated, and unsafe; and when women do join the labor force, they face many forms of discrimination.⁷²

Lessons From Indonesia: Empowering Girls and Women for National Development

Evidence from Indonesia shows how government investments in gender equality and family planning translate into improvements in education and development. In 1980, only about 21 percent of girls were enrolled in secondary school and the average woman had 4.1 children during her lifetime. The government supported family planning through an extensive community-based distribution program with social marketing. In 1990, Islamic religious leaders declared that family planning had a direct benefit to families. The government expanded educational opportunities and in 1994 issued a policy to increase compulsory education to nine years. Today, more than 3 out of 4 girls are enrolled in secondary school. Although the fertility decline has stalled in recent years, fertility levels have dropped to an average of 2.6 children per woman.

Sources: World Bank, "Secondary School Enrollment," World Development Indicators Database, accessed at <http://data.worldbank.org/data-catalog/world-development-indicators>, on May 14, 2014; United Nations Population Division, *World Population Prospects, The 2012 Revision, Highlights and Advance Tables* (New York: United Nations, 2013); Donna Clifton and Alexandra Hervish, *The World's Youth 2013 Data Sheet* (Washington, DC: Population Reference Bureau, 2013); and Carl Haub and Toshiko Kaneda, 2013.

In many countries, eliminating barriers that discriminate against women working in certain sectors or occupations can increase labor productivity by as much as 3 percent to 25 percent.⁷³ When their status improves, women are more likely to participate in the labor force and accelerate national development.

FAMILY PLANNING AND GENDER EQUALITY

Family planning and gender equality are mutually reinforcing. Family planning empowers women and men to benefit from healthy timing and spacing of pregnancies. At the same time, gender equality contributes to increased family planning use. The combined benefits of family planning and gender equality make it possible for women to be healthy, pursue educational and career goals, and contribute to national development (see Box 6). Gender equality benefits all members of society. Although most initiatives that promote gender equality focus on empowering women and girls, engaging men and boys is critical, both for their own well-being and that of their partners and families.



CONCLUSION

When couples cannot determine the timing and spacing of their pregnancies and achieve their desired family size, they have unintended pregnancies and many births, resulting in rapid population growth. High fertility and rapid population growth are consequences of not meeting the health, education, and gender equality rights of women and their families, and can undermine development. These challenges disproportionately affect people living in developing countries where health and social-sector investments remain low and where high fertility persists.

The future of population growth, however, is not set in stone. Even small changes in fertility levels today can have major long-term effects on population size and structure. If today's fertility levels remained constant, world population by 2050 would increase to 10.9 billion people and would still be growing rapidly. But if all countries accelerate investments in health and education, and meet all unmet need for family planning, fertility could decline much more rapidly than currently projected. Under a lower fertility projection, world population would peak in 2050 at 8.3 billion people, allowing for more equitable development and a better chance at sustainability.

Today's leaders can help to lower fertility and lift billions of people out of poverty. Countries around the world have demonstrated that when investments in family planning are prioritized—and combined with policies that improve health, gender equality, education, and the labor force—the pace of population growth can be slowed. A manageable pace of population growth combined with improved well-being makes it easier for leaders to invest more in each family and community and accelerate growth for the nation.

APPENDIX: HOW CAN WE MOBILIZE LEADERS TO PRIORITIZE FAMILY PLANNING AND POPULATION FOR NATIONAL DEVELOPMENT?

Advocates can provide leaders with evidence-based information about the health, social, and economic benefits of slow population growth and family planning (see box, page 14). The June 2012 London Summit on Family Planning reinvigorated family planning advocates and engaged high-level country officials, but transforming that energy into a sustained and visible movement calls for concerted efforts among donors, partners, and leaders. At the national level, strengthening family planning programs will mean finding ways to reach leaders across sectors to engage new champions, increase political commitment, and mobilize additional resources.

To engage leaders in family planning, it is important to have a group of diverse and committed individuals who can develop an advocacy strategy. The members of such a coalition or partnership would come from multiple sectors such as health, finance, gender, and youth, ensuring diverse perspectives and identifying messages that are relevant to target audiences. The strategy should include clear objectives, anticipated results, priority target audiences, key messages, and an action plan.

Target audiences could include high-level policymakers, such as government officials and parliamentarians, as well as those who have the potential to influence policymakers and society (nongovernmental organizations; religious, traditional, and community leaders; educators; the media; and other influentials).

Advocacy efforts to reach these audiences would benefit from:

- Developing family planning messages and informational materials that are clear, brief, evidence-based, and culturally sensitive and relevant.
- Communicating the messages through respected individuals at conferences, workshops, seminars, community forums, and other events.
- Identifying and supporting “champions” who will act as leaders to advance family planning and serve as spokespersons.
- Working closely with a range of media to expand family planning coverage and to keep family planning high on national and international agendas.

Key leaders to engage in family planning advocacy efforts include:

POLICYMAKERS AND GOVERNMENT OFFICIALS.

Policymakers and government officials have an essential role to play in promoting family planning because of their direct influence on policies and programs. By regularly issuing statements supportive of family planning at conferences and

events, they can help shape public opinion and mobilize political support. It is important for policymakers and government officials to understand and convey not only the health benefits of family planning, but also the social and economic gains at the national level.

FAITH-BASED LEADERS. Faith-based leaders can ensure that family planning advocacy is aligned with religious values. They are well-positioned to influence positive behavior change at the community level and can provide networks of support for family planning care, which is especially important in impoverished areas where social or health services are weak. Family planning messages among religious leaders should be aligned with faith-based goals.⁷⁴

HEALTH-SECTOR LEADERS. Health-sector leaders are well-positioned to make the case for the health benefits of family planning and the health risks associated with poorly timed and unintended pregnancies. They are among the most credible advocates for strengthening family planning programs. They have the ability to identify barriers to quality care and mobilize support to overcome them.

CIVIL SOCIETY LEADERS. Civil society plays an important role in expanding family planning services. Civil society organizations are often rooted in communities and provide an important link between communities and reproductive health services. Civil society has a pivotal role in fostering community dialogue and holding leaders accountable for making family planning accessible, affordable, and acceptable.⁷⁵

PRIVATE-SECTOR LEADERS. The private sector can offer supportive workplace policies, including family planning medical coverage; provide information and services in health programs; and support social marketing approaches to expand the distribution of services. The government can engage the private sector by modifying policies and regulations that promote private-sector entities to provide family planning services, build the capacity of regulatory boards to enforce quality standards, and build public-private partnerships.⁷⁶

COMMUNITY LEADERS AND ADVOCATES. Community leaders and advocates champion interventions that provide health, social, and economic benefits for families and the community. Traditional and civic leaders, educators, and youth advocates, for example, are role models with a strong influence on cultural practices and community norms, and they are well-positioned to promote family planning. They often have a prominent role in community forums and events and can influence the priorities of local government representatives.

Family Planning Advocacy Messages

Advocacy messages should be clear, brief, evidence-based, and culturally sensitive and relevant. The following list is adapted from *Repositioning Family Planning: Guidelines for Advocacy Action*, and includes examples of advocacy messages that help make the case for family planning among leaders in various sectors.

Family planning saves lives. Although pregnancy and childbirth are natural phenomena, a pregnancy can pose serious health risks for mothers and their children, especially when the pregnancy is:

- **Too early.** Girls under age 18 and their babies have a higher risk of death or disability resulting from pregnancy or childbirth.
- **Too many.** Women who have many births are more likely to have problems during later pregnancies and their risk of dying during childbirth is increased.
- **Too late.** Women over age 35 and their babies have a higher risk of death or disability resulting from pregnancy or childbirth.
- **Too soon.** Pregnancies spaced too closely increase the risk of illness and death for women and their children. Women should wait at least three years after a live birth before trying to become pregnant again.

Family planning prevents health complications and saves lives by enabling women and their families to delay childbearing, avoid unintended pregnancies, space births, and achieve desired family size.

Family planning saves money. Family planning is recognized as one of the most cost-effective health interventions, because each dollar invested in family planning yields several benefits. Family planning can help individuals and families escape poverty through healthy timing and spacing of pregnancies, by reducing family expenditures and increasing savings, and by enabling more resources to be spent on each child. Family planning can help reduce poverty and increase economic growth by enabling governments and leaders to attain a level of development not undermined by rapid population growth.

Governments and leaders of developing countries have endorsed international treaties, conventions, and declarations that include family planning. The 1994 UN International Conference on Population and Development (ICPD) called for expanded access to high-quality family planning services to meet individual needs, and the Universal Declaration of Human Rights accorded families the right to choose the number and spacing of their children. Other international treaties that incorporate support for family planning services include the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW); the Beijing Declaration; and most recently, the African Union Maputo Plan of Action for the Operationalisation of the Continental Policy Framework for

Sexual and Reproductive Health and Rights (2007-2015). By actively promoting the expansion and improvement of family planning, national leaders will honor their commitment to these international agreements.

Family planning is an essential tool to accomplish the Millennium Development Goals. Family planning can contribute directly or indirectly to achieving nearly all of the Millennium Development Goals (MDGs), by reducing household poverty, improving the health of mothers and children, reducing the transmission of HIV/AIDS, and giving women more opportunities to contribute fully to development. Leaders of many nations have endorsed the MDGs.

Family planning is safe. Contraception is one of the most evidence-based medical interventions in history, and while some methods may not be safe for all potential users, they are safe for the vast majority. The World Health Organization issues guidelines on the safe use of contraceptives.

Women want to regulate their fertility. Around the world, more than 220 million women have an unmet need for family planning, meaning they want to space their next birth, or not have any more children, but are not using any modern method of family planning. Most of the unmet need for family planning is in developing countries where death from pregnancy-related complications remains high.

Family planning reduces abortions. Family planning reduces the number of unintended pregnancies that may lead to abortion. Women in developing countries, especially in sub-Saharan Africa, have the highest risk of death resulting from unsafe abortion. By promoting family planning, policymakers will help to save women's lives.

Family planning prevents HIV/AIDS. Integrating family planning into HIV/AIDS services will result in fewer orphans and HIV-positive babies. In addition, one family planning method—condoms—provides dual protection against both unintended pregnancies and transmission of HIV/AIDS and other sexually transmitted infections.

Family planning improves children's nutrition, health, and education. Closely spaced, frequent births are linked to poverty and overburdened families. Other outcomes include poor school performance owing to the children's poor nutrition, contagious childhood diseases, and parents' inability to provide individual attention to each child's needs. Large, poor families often cannot afford schooling for all children. Increasing the spacing of births and having smaller families will help leaders achieve their country's health, economic, and educational goals.

Family planning improves adolescent health and well-being. Adolescent pregnancy increases the risk of serious health complications for both young mothers and their newborns, and limits young people's educational and

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employment opportunities. Family planning helps young people to be healthy, avoid pregnancy and sexually transmitted infections, stay in school, find employment, and invest in their future. By supporting comprehensive sexuality education—including messages supporting abstinence and condom use—and family planning services and supplies for adolescents who need them, policymakers can promote the health and well-being of young people.

Family planning empowers girls and women. Cultural and social norms may limit women's decisionmaking ability in relationships and in the home, contributing to women's lower status. As a result, many women have limited control over their sexual lives and have a high number of unintended pregnancies and births. Early childbirth often results in girls dropping out of school, seriously limiting their future options. As the main caregivers, women with large numbers of children are less able to participate in community activities or contribute to the community's economic growth. By embracing efforts to make family planning education and services available to all women of childbearing age, leaders will contribute to raising the status of women, fostering an upward path for the women, their households, and communities.

Family planning helps preserve the environment. Family planning slows population growth and the environmental pressures associated with it, such as deforestation, pollution, water scarcity, and food insecurity.

Family planning promotes equity in the community.

Research shows that the poorest populations often do not have access to or are not encouraged to take advantage of family planning services. Leaders who help improve family planning access for these groups help contribute to equity in health and other social and economic benefits among all community members.

Promoting family planning helps religious leaders achieve their goal of promoting parental responsibility among their congregations. By encouraging their members to time and space births at healthy intervals, religious leaders contribute to the well-being of both the family and the country.

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POPULATION REFERENCE BUREAU

1875 Connecticut Avenue., NW 202 483 1100 PHONE
Suite 520 202 328 3937 FAX
Washington, DC 20009 popref@prb.org EMAIL
