

# Family Planning in Developing Countries

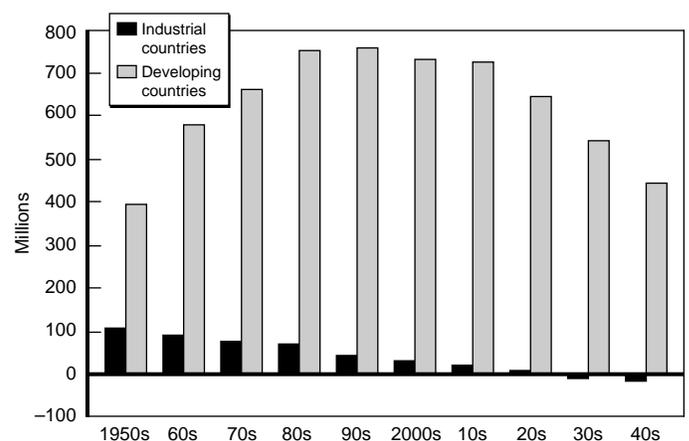
## An Unfinished Success Story<sup>1</sup>

*Julie DaVanzo, David M. Adamson*

Recently, commentators in several prominent U.S. publications have declared that the population explosion is over and concluded that population growth is no longer a serious policy issue. “The population boom is a bust,” declares one.<sup>2</sup> One statistic commonly cited as evidence of this is the global decline in fertility rates (the number of children born per woman). It is true that fertility worldwide has fallen from about six in 1950 to around three in 1998. Furthermore, between the early 1960s and 1998, fertility rates in the developing world have declined from 6.1 to 3.3. The sharpest declines occurred in East Asia—from 5.9 to 1.8—and Latin America—6.0 to 3.0.<sup>3</sup> United Nations projections suggest that the world’s population could begin to decline in about 50 years. If global fertility has declined so sharply, should the United States and other donor countries continue to invest in overseas population assistance programs, particularly family planning? After all, given these trends, isn’t the work of family planning finished?

Not yet. The world’s population is still growing. Although the *rate* of growth has been declining since the 1960s, global population grows each year by approximate-

ly 80 million people, or the equivalent of the population of a country the size of Germany. Nearly all of this growth is concentrated in the developing nations of the world (Figure 1), in many of which fertility rates remain high. High fertility can impose costly burdens on developing nations. It may impede opportunities for economic development, increase health risks for women and children, and erode the quality of life by reducing access to education, nutrition, employment, and scarce resources such as potable water. Furthermore, surveys of women in developing countries suggest that a large percentage—from 10 to 40 percent—want to space or limit childbearing but are not using contraception. This finding indicates a continu-



SOURCES: United Nations, Department for Economic and Social Information and Policy Analysis, Population Division, *World Population Prospects: The 1996 Revision*, New York, 1996, and projections using the model in World Bank, *World Development Indicators*, Washington, D.C., 1997.

**Figure 1—Population Increments by Decade in Industrial and Developing Countries**

<sup>1</sup>This issue paper is based on a longer report by Rodolfo A. Bulatao, *The Value of Family Planning Programs in Developing Countries*, Santa Monica, Calif.: RAND, MR-978-WHFH/RF/UNFPA, 1998. Unless otherwise noted, the longer report is the source of statistical information presented in this issue paper.

<sup>2</sup>Jonathan R. Laing, “Baby Bust Ahead,” *Barron’s*, December 8, 1997. Other examples: Ben J. Wattenberg, “The Population Explosion Is Over,” *The New York Times Magazine*, November 23, 1997, p. 60; Nicholas Eberstadt, “The Population Implosion,” *The Wall Street Journal*, October 16, 1997, sec. A, p. 22.

<sup>3</sup>Figures are from the *1998 World Population Data Sheet*, Population Reference Bureau, Washington, D.C., 1998.

ing, unmet need for contraception. Historically, voluntary family planning programs have been very effective in filling this demand for contraception and by doing so helping developing nations to moderate high fertility rates.

These conclusions emerged from an examination of research on family planning in developing countries by RAND's *Population Matters* project, a program for communicating the policy-relevant findings of demographic research. The work used existing research to look at issues surrounding world population growth and to determine whether there is evidence of a continuing need for family planning programs in developing nations. The work focused on three questions:

- What are current fertility trends in the developing world and what are their consequences?
- How effective are family planning programs in helping to reduce fertility?
- What role have donor nations, especially the United States, played historically in family planning programs?

## POPULATION GROWTH AND THE NEED FOR CONTRACEPTION ARE STILL MAJOR CONCERNS IN THE DEVELOPING WORLD

Proclaiming the end of the population explosion is premature. Likewise, it is mistaken to conclude from aggregate trends and projections that population growth is no longer a serious problem anywhere in the world or that family planning programs are no longer needed. There are several reasons why:

**1. Fertility rates are still high in many developing nations.** Most of the world's population growth occurs in poor, developing nations, which are least able to support rapid population growth and whose socioeconomic development is most likely to be hindered by high fertility. In most of these nations, fertility rates remain high. Sub-Saharan Africa in particular has experienced less change than Asia or Latin America: Its total fertility rate is 6.0, notwithstanding a downtrend in a few countries such as Kenya, Zimbabwe, Ghana, and Zambia. In Nigeria, the continent's most populous nation, the average woman will give birth to 6.5 children in her lifetime.

**2. Population momentum is strong and will produce large population increases over the next 25 to 50 years.** The total population continues to grow for some time after fertility stabilizes at replacement level, or the number of births required for couples to replace themselves, which is 2.1 births per woman. This phenomenon, known as "population momentum," occurs when a large share of the population is young. If a large proportion of women are

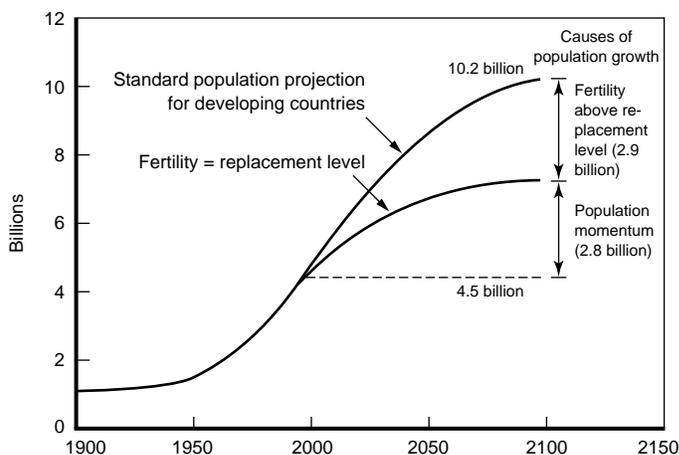
in their childbearing years, the total number of births can remain the same or even increase although the *rate* of childbearing per woman falls. Momentum is a powerful demographic force and will account for about half of the world's population growth over the next 100 years (see Figure 2).

**3. A sizable population group is about to reach childbearing age.** By the year 2000, nearly half a billion women—mostly in developing countries—will be in their young adult years, age 15 to 24. This means that more women will be of childbearing age than at any other time in history. This number will increase before it gets smaller. If women delay childbirth and increase spacing between their children, however, the resulting rate of population growth will be much lower.

The populations of developing countries are much younger on average and have a much greater proportion of their population in the reproductive years than those in industrial countries (see Figure 3). Even if couples in this age group have only two children each, for a number of decades births will outnumber deaths among the relatively small number of older people, and the population will continue to grow.

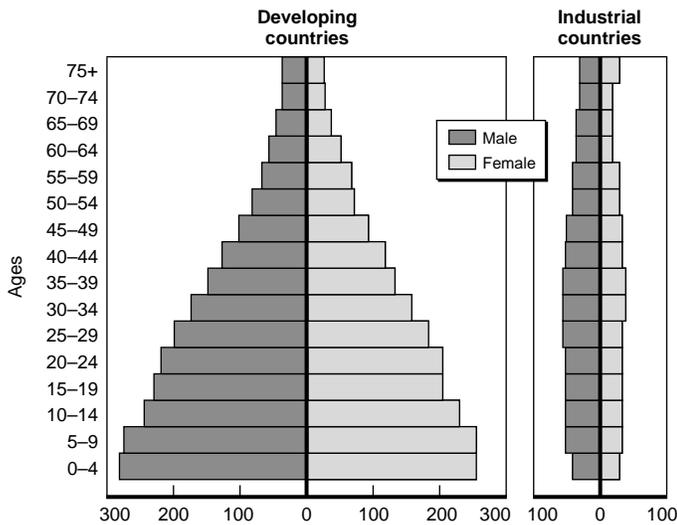
**4. A weakening of family planning programs could slow further fertility declines.** Declining global fertility is in large measure a testimony to the success of family planning and related efforts to improve the education of women. Most projections of future fertility decline assume the continuation of these programs. These declines could slow if support for these programs is not maintained.

**5. There is a widespread preference in developing countries for smaller families.** High fertility runs counter



SOURCE: John Bongaarts, "Population Policy Options in the Developing World," *Science*, Vol. 263, No. 5148, 1994, pp. 771-776.

**Figure 2—Causes of Population Growth in Developing Countries**



SOURCES: World Bank, *World Development Indicators*, Washington, D.C., 1997; World Bank, *World Development Report 1997*, Washington, D.C., 1997.

**Figure 3—Age Structure of Population in Developing and Industrial Countries, 1995 (in millions)**

to the preferences of over 100 million women in developing countries, who would prefer to limit family size or increase spacing between births. This gap between stated preference and actual behavior is a measure of what demographers label the “unmet need for contraception.” This concept refers to the attitude of women who want no more children or want to delay their next pregnancy but face barriers to the use of contraception. The two barriers women most commonly cite are (1) lack of knowledge about contraceptive methods and availability and (2) concern about health effects. By increasing access to contraception and to a wider variety of methods as well as promoting wider knowledge about proper contraceptive use and low health risks, family planning programs have helped address these barriers. Reducing unmet need can also help to reduce the number of unintended pregnancies. Since these pregnancies are more likely to end in abortion, they increase health risks for women.

**6. Even in some countries where fertility is low, increased access to contraception is needed to reduce the heavy reliance on abortion.** The fertility rate in Russia, for example, is currently about 1.2 children per woman. One way that Russian women achieve such a low fertility rate is by having one of the highest rates of abortion in the world. Russian women have an average of 2.5 abortions in their lifetime, a figure that has actually dropped from 4.5 in the last 20 years.<sup>4</sup>

<sup>4</sup>Sergei V. Zakharov and Elena I. Ivanova, “Fertility Decline and Recent Changes in Russia: On the Threshold of the Second Demographic Transition,” in Julie DaVanzo, ed., *Russia’s Demographic “Crisis,”* Santa Monica, Calif.: RAND, CF-124-CRES, 1996.

Increased access to contraception can help reduce the costly and often risky reliance on abortion by preventing unintended pregnancies, which have a higher likelihood of ending in abortion. For instance, 30-year trend data from Hungary show that abortion declined with increased contraceptive use, as do data from other settings, such as South Korea. Evidence from Russia and Kazakhstan also shows declines in abortion in the 1990s as contraceptive services have expanded. A more recent study from Bangladesh that compared two districts’ experiences with family planning showed that the one with a more effective family planning program also had a lower rate of abortion.<sup>5</sup>

## **FAMILY PLANNING PROGRAMS YIELD BENEFITS ON SEVERAL LEVELS**

Family planning programs, which offer a range of contraceptive choices to couples, have led to sharp increases in the use of contraceptives in the developing world. This trend in turn has had a marked effect on fertility rates since the mid-1960s. Controlling for economic growth, which tends to reduce fertility in and of itself, it has been estimated that family planning programs have been responsible for approximately 43 percent of the decline in world fertility during the period 1965–1990. Moreover, effective family planning and economic growth together have a synergistic effect in helping to raise contraceptive prevalence and reduce fertility.

Granted, the success of family planning programs has not been uniform in all locales. It has depended on several factors, including strong political support, well-designed and implemented programs, the availability of quality services and a wide range of methods, flexibility and responsiveness in adapting to local conditions, and adequate funding sources. There are success stories on all continents and in all cultural settings. Much has been learned, in good part through research supported by the U.S. government, about how to design and operate successful programs, even in what would appear to be unfavorable social and cultural environments.

Reductions in fertility from increased use of contraception have in turn been associated with a range of positive outcomes, both for developing countries and for donors. These outcomes are explored in more detail below.

## **Health and Quality-of-Life Benefits**

**Reduced Risk of Maternal Mortality.** Family planning can reduce the risk of mortality associated with child-

<sup>5</sup>K. Ahmed, M. Rahman, and J. van Ginneken, “Induced Abortion in Matlab, Bangladesh,” *International Family Planning Perspectives*, 1998, in press.

birth. Death in childbirth is almost 20 times as likely for each birth in developing countries as in developed countries. Many successive pregnancies magnify this risk. At the total fertility rate in sub-Saharan Africa of about 6.0 children, the average woman has a 1 in 18 lifetime risk of dying in childbirth. Reducing fertility by half would also reduce this risk by about half.

Effective use of contraception can also reduce maternal mortality by enabling women to delay first births until age 20 or later, space births at least two years apart, and reduce the number of unwanted pregnancies that might otherwise end in abortion. Studies in Canada and Scandinavia showed that access to contraception, combined with effective sex education, decreased pregnancies and abortions among young women. Where safe abortions are not available, effective family planning is even more important as a means of reducing mortality associated with unwanted births.<sup>6</sup>

**Improved Health for Children.** Lower fertility also produces healthier children. Closely spaced children (less than two years apart), children with many siblings, and children born to younger and older mothers are all more common at higher levels of fertility, and all face higher mortality risks. For example, data show that children born less than two years apart are twice as likely to die in the first year of life as those born after an interval of at least two years. Furthermore, closely spaced pregnancies are more likely to result in low-birthweight babies. Finally, close spacing also interferes with breast-feeding, which has a vital role in child nutrition and in building the child's resistance against infectious disease. Family planning can help women achieve optimum spacing between births.<sup>7</sup>

**Improved Life Options for Women.** Allowing women more control over their fertility can enhance their status and choices in settings where educational and economic opportunities are expanding. High levels of fertility generally mean that women become pregnant in their teen years. In some developing countries, this pattern of early pregnancy is associated with more than a quarter of female school dropouts, beginning as early as primary school. Furthermore, over their lifetimes, women in these countries may spend the equivalent of 6 continuous years being pregnant and 23 years caring for children younger than six years old.

**Easing the Burden on Schools.** Reducing the proportion of school-age children reduces the burden on schools. Reducing child dependency also allows families and nations to invest more in education, improving the quality of the future labor force. During the period between 1970 and 1990, fertility levels in South Korea fell from over four children per family to less than two. At the same time, net secondary enrollment increased from 38 percent to 84 percent, while per pupil expenditures more than tripled.

**Reduced Pressures on the Environment and Public Services.** Lower fertility can also reduce pressures on the environment and provide a grace period for dealing with other kinds of pressures, such as the needs for housing and employment, for public services such as health care, and for managing typically limited resources such as water.

### **Economic Benefits**

At the macroeconomic level, reduced fertility has helped create favorable conditions for socioeconomic development in some countries. A prime example of this connection has been the so-called Asian Economic Miracle. From 1960 to 1990, the five fastest-growing economies in the world were in East Asia: South Korea, Singapore, Hong Kong, Taiwan, and Japan. Two other Southeast Asian nations, Indonesia and Thailand, were not far behind. During this 30-year span, women in East Asia reduced their childbearing from an average of six children or more to two or fewer in the span of a single generation. Analysis of the experience of East Asian countries suggests that the reductions in fertility in the past decades relieved not only dependency burdens but also dependence on foreign capital by contributing to high saving rates.

One way in which lower fertility can promote socioeconomic development is by reducing the proportion of dependent children in the population. A lower ratio of children to adults can create a "demographic bonus": With fewer children, families have more disposable income to save or invest. Furthermore, a smaller proportion of children means that a greater percentage of the population is in the working age groups. If good jobs are available, this situation can contribute to economic growth.

However, some caution is in order when drawing connections between lower fertility and socioeconomic development. The "demographic bonus" is not automatic but dependent on appropriate policy in other areas. Furthermore, savings from the "bonus" must be wisely spent or the effects may be negative. For example, the liquidity created by savings in the East Asian countries may

<sup>6</sup>National Research Council, *Contraception and Reproduction: Health Consequences for Women and Children in the Developing World*, Washington, D.C.: National Academy Press, 1989, Chapter 3.

<sup>7</sup>*Family Planning Saves Lives*, Third Edition, Washington, D.C.: Population Reference Bureau, 1997.

actually have contributed to the financial excesses that led to the recent Asian economic crisis.

## Benefits for Donor Countries

Developing countries are not the only beneficiaries of family planning programs. Donor countries, which provide approximately one-fourth of the funds for international family planning programs, also benefit in at least three ways.

**Boosting the Economic Strength of Potential Trading Partners.** Family planning is not directly equivalent to foreign aid designed to promote exports, but its effects may be wider and last longer. If developing countries can achieve lower population growth and improved economies, donor countries stand to benefit considerably from growing markets and expanding export and investment opportunities. In the United States, a third of economic growth in the past decade has been generated by exports. Strong economies overseas have figured prominently in this trend. For example, two Asian countries that benefited substantially from U.S.-supported family planning programs—South Korea and Taiwan—have become major U.S. trading partners.

**Improving Stability and Cooperation.** In addition, strong economies in developing countries promote political stability and facilitate cooperation on international issues, ranging from security to crime to global warming to uncontrolled migration.<sup>8</sup>

**Achieving Humanitarian Goals.** Since the recipient nations tend to be among the world's most impoverished, support for family planning helps reduce human misery and improve the quality of life for many of the world's poorest people. It is worth noting that developing countries have affirmed their support for family planning at three global conferences since 1974. And as noted above, many women have expressed a desire for limiting or postponing births. Thus, these programs provide services that are actively sought by the countries themselves and many of their residents.

## DONOR NATIONS STILL HAVE A VITAL ROLE TO PLAY

Donor nations have played a critical role in the success of family planning. In addition to providing about a fourth of all funding for family planning programs worldwide, donor nations have provided vital expertise in all the skill areas that are essential to successful family plan-

<sup>8</sup>The *Population Matters* project is currently synthesizing research on the security implications of demographic factors.

ning programs: medicine, public health, communications, management, demography, and social services.

The primary donor countries are the United States, Germany, the United Kingdom, Japan, and nine other members of the Organisation for Economic Co-Operation and Development. Historically, the United States has been the largest contributor to population programs around the world and the most significant provider of technical assistance. However, there are signs that the United States has started to relinquish its role as world leader. In 1996, Congress reduced funds for bilateral international family planning by 35 percent and imposed burdensome legislative restrictions that exacerbated these cuts. Although some of this funding was restored the following year, the 1997 U.S. Agency for International Development (USAID) funding of \$385 million was well below its 1995 peak of \$542 million.<sup>9</sup> Furthermore, U.S. support for the United Nations Population Fund and other multilateral instruments has been eroding in recent years.

The effect of these declines on the global funding environment is uncertain. It is not clear whether other donor nations are willing or able to make up the difference. Reduced support for family planning risks eroding decades of progress enabled by U.S. support for family planning. According to one set of estimates, the effects of reduced funding worldwide for family planning during 1996–1997 could have dramatic implications:

- More women will die in pregnancy and childbirth.
- Thousands of infants will die as the result of increases in high-risk births.
- Several million couples in developing countries will lose access to modern contraceptives, resulting in millions of unwanted pregnancies.
- A substantial fraction of those pregnancies will end in abortion.<sup>10</sup>

## CHALLENGES LIE AHEAD

Family planning programs have enjoyed success in a wide range of political, economic, and cultural contexts and have contributed substantially to welfare in developing countries at a surprisingly small cost: Americans spend about \$1.44 per capita per year on USAID support of family planning.<sup>11</sup> However, family planning still has

<sup>9</sup>USAID's *International Population and Family Planning Assistance: Answers to 10 Frequently Asked Questions*, USAID Web site, [http://www.info.usaid.gov/pop\\_health/](http://www.info.usaid.gov/pop_health/).

<sup>10</sup>*Families in Focus: New Perspectives on Mothers, Fathers, and Children*, New York: The Population Council, 1995.

<sup>11</sup>USAID's *International Population and Family Planning Assistance: Answers to 10 Frequently Asked Questions*, USAID Web site, [http://www.info.usaid.gov/pop\\_health/](http://www.info.usaid.gov/pop_health/).

much to accomplish. Programs must continue to adapt to changes in their client populations. As fertility declines, it becomes concentrated among younger adults. Many pregnancies for women in their teens and early 20s are unintended and could be postponed if contraception were available. Unmet need for contraception is higher among young adults relative to its levels among older women, and therefore, as the younger cohort increases, unmet need will grow.

Much of the need for contraception among this younger population is for delaying or spacing births. Because delaying births can help reduce population momentum, programs need to revamp their goals and approaches accordingly. Further challenges lie ahead in improving services and quality of care and dealing with sexually transmitted disease, especially HIV/AIDS.

Another critical need is research to promote advances in contraceptive development and delivery. These advances can increase contraceptive use and reduce unintended pregnancies and abortions, which are sometimes a consequence of contraceptive failure.

Sustainability is another key challenge. As the fiscal environment becomes more constrained, programs may need to develop more diverse sources of financing, possibly including fees from consumers who can afford to pay for services.

Helping developing countries meet these challenges could prove extremely difficult without donor nation engagement and especially without American expertise. Now is not the time to curtail support for family planning programs in developing countries.



---

This paper was written as part of the *Population Matters* project in RAND's Labor and Population program. Publications and other project information are available on the project's Web site: <http://www.rand.org/popmatters/>. This paper was supported by funding from The William and Flora Hewlett Foundation, The Rockefeller Foundation, and the United Nations Population Fund. The authors wish to acknowledge the valuable comments and suggestions from our technical reviewers. RAND is a nonprofit institution that helps improve policy and decisionmaking through research and analysis. Results of specific studies are documented in other RAND publications and in professional journal articles and books. To obtain information about RAND studies or to order documents, contact Distribution Services (Telephone: 310-451-7002; FAX: 310-451-6915; or Internet: [order@rand.org](mailto:order@rand.org)). Abstracts of all RAND documents may be viewed on the World Wide Web (<http://www.rand.org>). Publications are distributed to the trade by National Book Network.

---

**RAND**

1700 Main Street, P.O. Box 2138, Santa Monica, California 90407-2138 • Telephone 310-393-0411 • FAX 310-393-4818  
1333 H St., N.W., Washington, D.C. 20005-4707 • Telephone 202-296-5000 • FAX 202-296-7960  
TU Delft, Landbergstraat 6, 2628 CE Delft, The Netherlands