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Eradicating Poverty and Stabilizing Population

The new century began on an inspiring note: the United Nations set a goal of reducing the share of the world's population living in extreme poverty by half by 2015. By early 2007 the world looked to be on track to meet this goal, but as the economic crisis unfolds and the outlook darkens, the world will have to intensify its poverty reduction effort.[1]

Among countries, China is the big success story in reducing poverty. The number of Chinese living in extreme poverty dropped from 685 million in 1990 to 213 million in 2007. With little growth in its population, the share of people living in poverty in China dropped from 60 percent to 16 percent, an amazing achievement by any standard.[2]

India's progress is mixed. Between 1990 and 2007, the number of Indians living in poverty actually increased slightly from 466 million to 489 million while the share living in poverty dropped from 51 percent to 42 percent. Despite its economic growth, averaging 9 percent a year for the last four years, and strong support by Prime Minister Manmohan Singh of a grassroots effort to eradicate poverty, India still has a long way to go.[3]

Brazil, on the other hand, has succeeded in reducing poverty

with its Bolsa Familia program, an effort strongly supported by President Luiz Inácio Lula da Silva. This program is a conditional assistance program that offers poor mothers up to $35 a month if they keep their children in school, have them vaccinated, and make sure they get regular physical checkups. Between 1990 and 2007, the share of the population living in extreme poverty dropped from 15 to 5 percent. Serving 11 million families, nearly one fourth of the country's population, it has in the last five years raised incomes among the poor by 22 percent. By comparison, incomes among the rich rose by only 5 percent. Rosani Cunha, the program's director in Brasilia, observes, "There are very few countries that reduce inequality and poverty at the same time."[4]

Several countries in Southeast Asia have made impressive gains as well, including Thailand, Viet Nam, and Indonesia. Barring any major economic setbacks, these gains in Asia seemed to ensure that the U.N. Millennium Development Goal (MDG) of halving poverty by 2015 would be reached. Indeed, in a 2008 assessment of progress in reaching the MDGs, the World Bank reported that all regions of the developing world with the notable exception of sub-Saharan Africa were on track to cut the proportion of people living in extreme poverty in half by 2015.[5]

This upbeat assessment was soon modified, however. At the beginning of 2009, the World Bank reported that between 2005 and 2008 the incidence of poverty increased in East Asia, the Middle East, South Asia, and sub-Saharan Africa largely because of higher food prices, which hit the poor hard. This was compounded by the global economic crisis that dramatically expanded the ranks of the unemployed at home and reduced the flow of remittances from family members working abroad. The number the Bank classifies as extremely poor—people living on less than $1.25 a day—increased by at least 130 million. The Bank observed that "higher food prices during 2008 may have increased the number of children suffering permanent cognitive and physical injury caused by malnutrition by 44 million."[6]

Sub-Saharan Africa, with 820 million people, is sliding deeper into poverty. Hunger, illiteracy, and disease are on the march, partly offsetting the gains in countries like China and Brazil. The failing states as a group are also backsliding; an interre-

gional tally of the Bank's fragile states is not encouraging since extreme poverty in these countries is over 50 percent—higher than in 1990.[7]

In addition to attacking poverty, other MDGs adopted in 2000 include reducing the share of those who are hungry by half, achieving universal primary school education, halving the share of people without access to safe drinking water, and reversing the spread of infectious diseases, especially HIV and malaria. Closely related to these are the goals of reducing maternal mortality by three fourths and under-five child mortality by two thirds.[8]

On the food front, the number of hungry is climbing. The long-term decline in the number of hungry and malnourished that characterized the last half of the twentieth century was reversed in the mid-1990s—rising from 825 million to roughly 850 million in 2000 and to over 1 billion in 2009. A number of factors contributed to this, but none more important than the massive diversion of grain to fuel ethanol distilleries in the United States. The U.S. grain used to produce fuel for cars in 2009 would feed 340 million people for one year.[9]

The goal of halving the share of hungry by 2015 is not within reach if we continue with business as usual. In contrast, the number of children with a primary school education does appear to be on the rise, but with much of the progress concentrated in a handful of larger countries, including India, Bangladesh, and Brazil.[10]

When the United Nations set the MDGs, it unaccountably omitted any population or family planning goals, even though as a January 2007 report from a U.K. All Party Parliamentary Group pointed out, "the MDGs are difficult or impossible to achieve with current levels of population growth in the least developed countries and regions." Although it came belatedly, the United Nations has since approved a new target that calls for universal access to reproductive health care by 2015.[11]

Countries everywhere have little choice but to strive for an average of two children per couple. There is no feasible alternative. Any population that increases indefinitely will eventually outgrow its natural life support systems. Any that decreases continually over the long term will eventually disappear.

In an increasingly integrated world with a lengthening list of failing states, eradicating poverty and stabilizing population have become national security issues. Slowing population growth helps eradicate poverty and its distressing symptoms, and, conversely, eradicating poverty helps slow population growth. With little time left to arrest the deterioration of the economy's natural support systems, the urgency of moving simultaneously on both fronts is clear.

Educating Everyone

One way of narrowing the gap between rich and poor segments of society is through universal education. This means making sure that the 75 million children currently not enrolled in school are able to attend. Children without any formal education start life with a severe handicap, one that almost ensures they will remain in abject poverty and that the gap between the poor and the rich will continue to widen. In an increasingly integrated world, this widening gap itself becomes a source of instability. As Nobel Prize–winning economist Amartya Sen points out: "Illiteracy and innumeracy are a greater threat to humanity than terrorism."[12]

In seeking universal primary education, the World Bank has taken the lead with its Education for All plan, where any country with a well-designed plan to achieve universal primary education is eligible for Bank financial support. The three principal requirements are that the country submit a sensible plan to reach universal basic education, commit a meaningful share of its own resources to the plan, and have transparent budgeting and accounting practices. If fully implemented, all children in poor countries would get a primary school education by 2015, helping them to break out of poverty.[13]

Some progress toward this goal has been made. In 2000, some 78 percent of children in developing countries were completing primary school; by 2006, this figure reached 85 percent. Gains have been strong but uneven, leaving the World Bank to conclude that only 58 of the 128 developing countries for which data are available will reach the goal of universal primary school education by 2015.[14]

The overwhelming majority of those living in poverty today are the children of people who lived in poverty. In effect, poverty is largely inherited. The key to breaking out of the culture of

poverty is education—particularly of girls. As female educational levels rise, fertility falls. And mothers with at least five years of school lose fewer infants during childbirth or to early illnesses than their less well educated peers do. Economist Gene Sperling concluded in a study of 72 countries that "the expansion of female secondary education may be the single best lever for achieving substantial reductions in fertility."[15]

Basic education tends to increase agricultural productivity. Agricultural extension services that can use printed materials to disseminate information have an obvious advantage. So too do farmers who can read the instructions on a bag of fertilizer. The ability to read instructions on a pesticide container can be lifesaving.

At a time when HIV is spreading, schools provide the institutional means to educate young people about the risks of infection. The time to inform and educate children about how the virus is spread is when they are young, not after they are infected. Young people can also be mobilized to conduct educational campaigns among their peers.

One great need in developing countries, particularly those where the ranks of teachers are being decimated by AIDS, is more teacher training. Providing scholarships for promising students from poor families to attend training institutes in exchange for a commitment to teach for, say, five years could be a highly profitable investment. It would help ensure that the teaching resources are available to reach universal primary education, and it would also foster an upwelling of talent from the poorest segments of society.

Gene Sperling believes that every plan should provide a way to get to the hardest-to-reach segments of society, especially poor girls in rural areas. He notes that Ethiopia has pioneered this with Girls Advisory Committees. Representatives of these groups go to the parents who are seeking early marriage for their daughters and encourage them to keep their girls in school. Some countries, Brazil and Bangladesh among them, actually provide small scholarships for girls or stipends to their parents where needed, thus helping those from poor families get a basic education.[16]

An estimated $10 billion in external funding, beyond what is being spent today, is needed for the world to achieve universal primary education. Having children who never go to school is no longer acceptable.[17]

As the world becomes ever more integrated economically, its nearly 800 million illiterate adults are severely handicapped. This deficit can best be overcome by launching adult literacy programs, relying heavily on volunteers. The international community could support this by offering seed money to provide educational materials and outside advisors where needed. Bangladesh and Iran, both of which have successful adult literacy programs, can serve as models. An adult literacy program would add $4 billion per year.[18]

Few incentives to get children in school are as effective as a school lunch program, especially in the poorest countries. Since 1946, every American child in public school has had access to a school lunch program, ensuring at least one good meal each day. There is no denying the benefits of this national program.[19]

Children who are ill or hungry miss many days of school. And even when they can attend, they do not learn as well. Jeffrey Sachs at Columbia University's Earth Institute notes, "Sick children often face a lifetime of diminished productivity because of interruptions in schooling together with cognitive and physical impairment." But when school lunch programs are launched in low-income countries, school enrollment jumps, the children's academic performance goes up, and children spend more years in school.[20]

Girls benefit especially. Drawn to school by the lunch, they stay in school longer, marry later, and have fewer children. This is a win-win-win situation. Launching school lunch programs in the 44 lowest-income countries would cost an estimated $6 billion per year beyond what the United Nations is now spending to reduce hunger.[21]

Greater efforts are also needed to improve nutrition before children even get to school age, so they can benefit from school lunches later. Former Senator George McGovern notes that "a women, infants and children (WIC) program, which offers nutritious food supplements to needy pregnant and nursing mothers," should also be available in the poor countries. Based on 33 years of experience, it is clear that the U.S. WIC program has been enormously successful in improving nutrition, health, and the development of preschool children from low-income

families. If this were expanded to reach pregnant women, nursing mothers, and small children in the 44 poorest countries, it would help eradicate hunger among millions of small children at a time when it could make a huge difference.[22]

These efforts, though costly, are not expensive compared with the annual losses in productivity from hunger. McGovern thinks that this initiative can help "dry up the swamplands of hunger and despair that serve as potential recruiting grounds for terrorists." In a world where vast wealth is accumulating among the rich, it makes little sense for children anywhere to go to school hungry.[23]

Toward a Healthy Future

While heart disease, cancer, obesity, and smoking dominate health concerns in industrial countries, in developing countries infectious diseases are the overriding health threat. The principal diseases of concern are diarrhea, respiratory illnesses, tuberculosis, malaria, measles, and AIDS. Child mortality is high because childhood diseases such as measles, easily prevented by vaccination, take such a heavy toll.

Progress in reaching the MDG of reducing child mortality by two thirds between 1990 and 2015 is lagging badly. As of 2007 only 33 of 142 developing countries were on track to reach this goal. No country in sub-Saharan Africa was on that list; in fact, child mortality rates in seven sub-Saharan African countries have actually increased since 1990. And only 1 of the World Bank's 34 fragile states is likely to meet this goal by 2015.[24]

Along with the eradication of hunger, ensuring access to a safe and reliable supply of water for the estimated 1.1 billion people who lack it is essential to better health for all. The realistic option in many cities may be to bypass efforts to build costly water-based sewage removal and treatment systems and to opt instead for water-free waste disposal systems that do not disperse disease pathogens. (See the description of dry compost toilets in Chapter 6.) This switch would simultaneously help alleviate water scarcity, reduce the dissemination of disease agents in water systems, and help close the nutrient cycle—another win-win-win situation.[25]

One of the most impressive health gains has come from a campaign initiated by a little-heralded nongovernmental group

in Bangladesh, BRAC, that taught every mother in the country how to prepare oral rehydration solution to treat diarrhea at home by simply adding a measured amount of salt and sugar to water. Founded by Fazle Hasan Abed, BRAC succeeded in dramatically reducing infant and child deaths from diarrhea in a country that was densely populated, poverty-stricken, and poorly educated.[26]

Seeing this great success, UNICEF used BRAC's model for its worldwide diarrheal disease treatment program. This global use of a remarkably simple oral rehydration technique has been extremely effective—reducing deaths from diarrhea among children from 4.6 million in 1980 to 1.6 million in 2006. Egypt alone used oral rehydration therapy to cut infant deaths from diarrhea by 82 percent between 1982 and 1989. Few investments have saved so many lives at such a low cost.[27]

Perhaps the leading privately funded life-saving activity in the world today is the childhood immunization program. In an effort to fill a gap in this global program, the Bill and Melinda Gates Foundation has invested more than $1.5 billion to protect children from infectious diseases like measles.[28]

Additional investments can help the many countries that cannot afford vaccines for childhood diseases and are falling behind in their vaccination programs. Lacking the funds to invest today, these countries pay a far higher price tomorrow. There are not many situations where just a few pennies spent per youngster can make as much difference as vaccination programs can.[29]

Similarly with AIDS, an ounce of prevention is worth a pound of cure. More than 25 million people have died from HIV-related causes thus far. Although progress is being made in curbing the spread of HIV, 2.7 million people were newly infected in 2007 and 2 million died of AIDS during that year. Two thirds of those living with HIV are in sub-Saharan Africa.[30]

The key to curbing the AIDS epidemic, which has so disrupted economic and social progress in Africa, is education about prevention. We know how the disease is transmitted; it is not a medical mystery. Where once there was a stigma associated with even mentioning the disease, governments are beginning to design effective prevention education programs. The first goal is to reduce quickly the number of new infections, dropping it

below the number of deaths from the disease and thereby shrinking the number of those who are capable of infecting others.

Concentrating on the groups that are most likely to spread the disease is particularly effective. In Africa, infected truck drivers who travel far from home for extended periods often engage in commercial sex, spreading HIV from one country to another. Sex workers are also centrally involved in spreading the disease. In India, for example, educating the country's 2 million female sex workers, who have an average of two encounters per day, about HIV risks and the life-saving value of using a condom pays huge dividends.[31]

Another target group is the military. After soldiers become infected, usually from engaging in commercial sex, they return to their home communities and spread the virus further. In Nigeria, where the adult HIV infection rate is 3 percent, President Olusegun Obasanjo introduced free distribution of condoms to all military personnel. A fourth target group, intravenous drug users who share needles, figures prominently in the spread of the virus in the former Soviet republics.[32]

At the most fundamental level, dealing with the HIV threat requires roughly 13.5 billion condoms a year in the developing world and Eastern Europe. Including those needed for contraception adds another 4.4 billion. But of the 17.9 billion condoms needed, only 3.2 billion are being distributed, leaving a shortfall of 14.7 billion. At only 3¢ each, or $441 million, the cost of saved lives by supplying condoms is minuscule.[33]

In the excellent study *Condoms Count: Meeting the Need in the Era of HIV/AIDS*, Population Action International notes that "the costs of getting condoms into the hands of users—which involves improving access, logistics and distribution capacity, raising awareness, and promoting use—is many times that of the supplies themselves." If we assume that these costs are six times the price of the condoms, filling this gap would still cost less than $3 billion.[34]

The financial resources and medical personnel currently available to treat people who are already HIV-positive are severely limited compared with the need. For example, of the 7 million people who needed anti-retroviral therapy in sub-Saharan Africa at the end of 2007, just over 2 million were receiving the treatment that is widely available in industrial countries.

Although the number getting treatment was only one third of those who need it, it was still nearly double the number treated during the preceding year.[35]

Treating HIV-infected individuals is costly, but ignoring the need for treatment is a strategic mistake simply because treatment strengthens prevention efforts by giving people a reason to be tested. Africa is paying a heavy cost for its delayed response to the epidemic. It is a window on the future of other countries, such as India and China, if they do not move quickly to contain the virus, already well established within their borders.[36]

One of the United Nations' finest hours came with the eradication of smallpox, an effort led by the World Health Organization (WHO). This successful elimination of a feared disease, which required a worldwide immunization program, saves not only millions of lives each year but also hundreds of millions of dollars in smallpox vaccination programs and billions of dollars in health care expenditures.[37]

In an initiative patterned after the smallpox eradication, a WHO-led international coalition—including Rotary International, UNICEF, the U.S. Centers for Disease Control and Prevention (CDC), Ted Turner's U.N. Foundation, and, more recently, the Bill and Melinda Gates Foundation—has waged a worldwide campaign to wipe out polio, a disease that has crippled millions of children. Since 1988, Rotary International has contributed an extraordinary $800 million to this effort. Under this coalition-sponsored Global Polio Eradication Initiative, the number of polio cases worldwide dropped from some 350,000 per year in 1988 to fewer than 700 in 2003.[38]

By 2003, pockets of polio remained largely in Nigeria, India, Pakistan, Niger, Chad, and Burkina Faso, but then some of the predominantly Muslim states of northern Nigeria stopped vaccination because of a rumor that the vaccine would render people sterile or cause AIDS. By the end of 2004, after the misinformation was corrected, polio vaccinations were resumed in northern Nigeria. But during the interim, polio had become reestablished in several countries, apparently aided by the annual pilgrimage of Nigerian Muslims to Mecca. New infections appeared in the Central African Republic, Côte d'Ivoire, Indonesia, Mali, Saudi Arabia, Somalia, Sudan, and Yemen, which by 2006 allowed the global total of infections to rebound

to nearly 2,000.[39]

By 2007, the number of reported new cases of polio was again shrinking when another roadblock emerged. In early 2007 violent opposition to vaccinations arose in Pakistan's North West Frontier Province, where a doctor and a health worker in the polio eradication program were killed. More recently, the Taliban have refused to let health officials administer polio vaccinations in the province's Swat Valley, further delaying the campaign.[40]

Despite these setbacks, in early 2009 the international community launched another major push to eradicate polio. This $630-million effort is being underwritten by the Gates Foundation, Rotary International, and the U.K. and German governments. But this was not all. In June 2009, President Obama announced in Cairo a new global effort working with the Organisation of the Islamic Conference to eradicate polio. Since so many of the remaining pockets of polio are in Muslim countries, this enhances the prospect of finally eradicating this disease.[41]

One of the more remarkable health success stories is the near eradication of guinea worm disease (dracunculiasis), a campaign led by former U.S. President Jimmy Carter and the Carter Center. These worms, whose larvae are ingested by drinking unfiltered water from lakes and rivers, mature in a person's body, sometimes reaching more than two feet in length. They then exit slowly through the skin in a very painful and debilitating ordeal that can last several weeks.[42]

With no vaccine to prevent infection and no drug for treatment, eradication depends on filtering drinking water to prevent larvae ingestion, thus eradicating the worm, which can survive only in a human host. Six years after the CDC launched a global campaign in 1980, the Carter Center took the reins and has since led the effort with additional support from partners like WHO, UNICEF, and the Gates Foundation. The number of people infected by the worm has been reduced from 3.5 million in 1986 to under 5,000 cases in 2008—an astounding drop of 99 percent. In the three countries where the worm existed outside Africa—India, Pakistan, and Yemen—eradication is complete. The remaining cases are found mainly in Sudan, Ghana, and Mali.[43]

Some leading sources of premature death are lifestyle-related, such as smoking. WHO estimates that 5.4 million people died in 2005 of tobacco-related illnesses, more than from any infectious disease including AIDS. Today there are some 25 known health threats that are linked to tobacco use, including heart disease, stroke, respiratory illness, many forms of cancer, and male impotence. Cigarette smoke kills more people each year than all other air pollutants combined—more than 5 million versus 3 million.[44]

Impressive progress is being made in reducing cigarette smoking. After a century-long buildup of the tobacco habit, the world is turning away from cigarettes, led by WHO's Tobacco Free Initiative. This gained further momentum when the Framework Convention on Tobacco Control, the first international accord to deal entirely with a health issue, was adopted unanimously in Geneva in May 2003. Among other things, the treaty calls for raising taxes on cigarettes, limiting smoking in public places, and strong health warnings on cigarette packages. In addition to WHO's initiative, the Bloomberg Global Initiative to Reduce Tobacco Use, funded by New York City Mayor Michael Bloomberg, is working to reduce smoking in lower- and middle-income countries, including China.[45]

Ironically, the country where tobacco originated is now the leader in moving away from cigarettes. In the United States, the average number of cigarettes smoked per person has dropped from its peak of 2,814 in 1976 to 1,225 in 2006—a decline of 56 percent. Worldwide, where the downturn lags that of the United States by roughly a dozen years, usage has dropped from the historical high of 1,027 cigarettes smoked per person in 1988 to 859 in 2004, a fall of 16 percent. Media coverage of the health effects of smoking, mandatory health warnings on cigarette packs, and sharp increases in cigarette sales taxes have all contributed to this encouraging development.[46]

The prospect of further reducing smoking in the United States got a major boost in April 2009 when the federal tax per pack of cigarettes was increased from 39¢ to $1.01 to reduce the fiscal deficit. Many states were contemplating a raise in state cigarette taxes for the same reason.[47]

Indeed, smoking is on the decline in nearly all the major countries where it is found, including such strongholds as France, China, and Japan. By 2007, the number of cigarettes

smoked per person had dropped 20 percent in France after peaking in 1991, 5 percent in China since its peak in 1990, and 20 percent in Japan since 1992.[48]

Following approval of the Framework Convention, a number of countries took strong steps in 2004 to reduce smoking. Ireland imposed a nationwide ban on smoking in workplaces, bars, and restaurants; India banned smoking in public places; Norway and New Zealand banned smoking in bars and restaurants; and Scotland banned smoking in public buildings. Bhutan, a small Himalayan country, has prohibited tobacco sales entirely.[49]

In 2005, smoking was banned in public places in Bangladesh, and Italy banned it in all enclosed public spaces, including bars and restaurants. More recently, England has forbidden it in workplaces and enclosed public spaces, and France imposed a similar ban in 2008. Both Bulgaria and Croatia have since followed.[50]

Another disease that is often lifestyle-related, diabetes, is on the rise, reaching near epidemic levels in, for example, the United States and cities in India. Reversing the rising incidence of diabetes, an illness that appears to enhance the likelihood of Alzheimer's disease, depends heavily on lifestyle adjustments—fewer calories and more exercise.[51]

Effective responses to many emerging health problems often lie outside the purview of the Ministry of Health. For example, in China deaths from cancer have reached epidemic levels. Birth defects jumped by 40 percent between 2001 and 2006, with the biggest jumps coming in coal-producing provinces such as Shanxi and Inner Mongolia. The ability to reverse these trends lies not in the Ministry of Health but in altering the country's energy and environmental policies. On their own, doctors cannot halt the fast-rising number of deaths from cancer, now the leading cause of death in China.[52]

More broadly, a 2001 WHO study analyzing the economics of health care in developing countries concluded that providing the most basic health care services, the sort that could be supplied by a village-level clinic, would yield enormous economic benefits for developing countries and for the world as a whole. The authors estimate that providing basic universal health care in developing countries will require donor grants totaling on

average $33 billion a year through 2015. In addition to basic services, this figure includes funding for the Global Fund to Fight AIDS, Tuberculosis and Malaria and for universal childhood vaccinations.[53]

Stabilizing Population

There are now two groups of countries where populations are projected to shrink, one because of falling fertility and the other because of rising mortality. In the first group, some 33 countries with roughly 674 million people have populations that are either essentially stable or declining slowly as a result of declining fertility. In countries with the lowest fertility rates—including Japan, Russia, and Germany—populations will likely decline measurably over the next half-century.[54]

The second group—countries with population declining due to a rising death rate—is a new one. Projections by the Washington-based Population Reference Bureau in 2008 show two countries in this group—Lesotho and Swaziland—both with high HIV infection rates and widespread hunger. Unfortunately, the number of countries in this group could expand in the years ahead as populations in low-income countries outgrow their land and water resources.[55]

In addition to 33 countries with essentially stable or declining populations, another group of countries, including China and the United States, have reduced fertility to replacement level or just below. But because of inordinately large numbers of young people moving into their reproductive years, their populations are still expanding. Once this group of young people moves through their high-fertility years, however, these countries too will be reaching population stability. The 29 countries in this category contain some 2.5 billion people.[56]

In stark contrast to these situations, a large group of countries are projected to continue expanding their populations in the years ahead—with some of them, including Ethiopia, the Democratic Republic of the Congo, and Uganda, projected to more than double in size by 2050.[57]

U.N. projections show world population growth under three different assumptions about fertility levels. The medium projection, the one most commonly used, has world population reaching 9.2 billion by 2050. The high one reaches 10.5 billion. The

low projection, which assumes that the world will quickly move below replacement-level fertility, reaching 1.5 children per couple by 2050, has population peaking at just over 8 billion in 2042 and then declining. If the goal is to eradicate poverty, hunger, and illiteracy, then we have little choice but to strive for the lower projection.[58]

Slowing world population growth means that all women who want to plan their families should have access to the family planning services they need to do so. Unfortunately, this is currently not the case for 201 million women. Former U.S. Agency for International Development official J. Joseph Speidel notes that "if you ask anthropologists who live and work with poor people at the village level...they often say that women live in fear of their next pregnancy. They just do not want to get pregnant."[59]

The good news is that countries that want to help couples reduce family size can do so quickly. My colleague Janet Larsen writes that in just one decade Iran dropped its near-record population growth rate to one of the lowest in the developing world. When Ayatollah Khomeini assumed leadership in Iran in 1979, he immediately dismantled the well-established family planning programs and instead advocated large families. At war with Iraq between 1980 and 1988, Khomeini wanted large families to increase the ranks of soldiers for Islam. His goal was an army of 20 million.[60]

In response to his pleas, fertility levels climbed, pushing Iran's annual population growth to a peak of 4.2 percent in the early 1980s, a level approaching the biological maximum. As this enormous growth began to burden the economy and the environment, the country's leaders realized that overcrowding, environmental degradation, and unemployment were undermining Iran's future.[61]

In 1989 the government did an about-face and restored its family planning program. In May 1993, a national family planning law was passed. The resources of several government ministries, including education, culture, and health, were mobilized to encourage smaller families. Iran Broadcasting was given responsibility for raising awareness of population issues and of the availability of family planning services. Some 15,000 "health houses" or clinics were established to provide rural populations

with health and family planning services.[62]

Religious leaders were directly involved in what amounted to a crusade for smaller families. Iran introduced a full panoply of contraceptive measures, including the option of male sterilization—a first among Muslim countries. All forms of birth control, including contraceptives such as the pill and sterilization, were free of charge. In fact, Iran became a pioneer—the only country to require couples to take a class on modern contraception before receiving a marriage license.[63]

In addition to the direct health care interventions, a broad-based effort was launched to raise female literacy, boosting it from 25 percent in 1970 to more than 70 percent in 2000. Female school enrollment increased from 60 to 90 percent. Television was used to disseminate information on family planning throughout the country, taking advantage of the 70 percent of rural households with TV sets. As a result of this initiative, family size in Iran dropped from seven children to fewer than three. From 1987 to 1994, Iran cut its population growth rate by half—an impressive achievement.[64]

While the attention of researchers has focused on the role of formal education in reducing fertility, soap operas on radio and television can even more quickly change people's attitudes about reproductive health, gender equity, family size, and environmental protection. A well-written soap opera can have a profound near-term effect on population growth. It costs relatively little and can proceed even while formal educational systems are being expanded.

The power of this approach was pioneered by Miguel Sabido, a vice president of Televisa, Mexico's national television network, when he did a series of soap opera segments on illiteracy. The day after one of the characters in his soap opera visited a literacy office wanting to learn how to read and write, a quarter-million people showed up at these offices in Mexico City. Eventually 840,000 Mexicans enrolled in literacy courses after watching the series.[65]

Sabido dealt with contraception in a soap opera entitled *Acompáñame*, which translates as *Come With Me*. Over the span of a decade this drama series helped reduce Mexico's birth rate by 34 percent.[66]

Other groups outside Mexico quickly picked up this

approach. The U.S.-based Population Media Center (PMC), headed by William Ryerson, has initiated projects in some 15 countries and is planning launches in several others. The PMC's work in Ethiopia over the last several years provides a telling example. Their radio serial dramas broadcast in Amharic and Oromiffa have addressed issues of reproductive health and gender equity, such as HIV/AIDS, family planning, and the education of girls. A survey two years after the broadcasts began in 2002 found that 63 percent of new clients seeking reproductive health care at Ethiopia's 48 service centers had listened to one of PMC's dramas.[67]

Among married women in the Amhara region of Ethiopia who listened to the dramas, there was a 55-percent increase in those using family planning. Male listeners sought HIV tests at a rate four times that of non-listeners, while female listeners were tested at three times the rate of female non-listeners. The average number of children per woman in the region dropped from 5.4 to 4.3. And demand for contraceptives increased 157 percent.[68]

The costs of providing reproductive health and family planning services are small compared with the benefits. Joseph Speidel estimates that expanding these services to reach all women in developing countries would take close to $17 billion in additional funding from industrial and developing countries.[69]

The United Nations estimates that meeting the needs of the 201 million women who do not have access to effective contraception could each year prevent 52 million unwanted pregnancies, 22 million induced abortions, and 1.4 million infant deaths. Put simply, filling the family planning gap may be the most urgent item on the global agenda. The costs to society of not doing so may be greater than we can afford.[70]

Shifting to smaller families brings generous economic dividends. In Bangladesh, for example, analysts concluded that $62 spent by the government to prevent an unwanted birth saved $615 in expenditures on other social services. Investing in reproductive health and family planning services leaves more fiscal resources per child for education and health care, thus accelerating the escape from poverty. For donor countries, ensuring that couples everywhere have access to the services they need would yield strong social returns in improved education and health care.[71]

Helping countries that want to slow their population growth brings with it what economists call the demographic bonus. When countries move quickly to smaller families, growth in the number of young dependents—those who need nurturing and educating—declines relative to the number of working adults. In this situation, productivity surges, savings and investment climb, and economic growth accelerates.[72]

Japan, which cut its population growth in half between 1951 and 1958, was one of the first countries to benefit from the demographic bonus. South Korea and Taiwan followed, and more recently China, Thailand, and Viet Nam have benefited from earlier sharp reductions in birth rates. This effect lasts for only a few decades, but it is usually enough to launch a country into the modern era. Indeed, except for a few oil-rich countries, no developing country has successfully modernized without slowing population growth.[73]

Rescuing Failing States

One of the leading challenges facing the international community is how to rescue failing states. Continuing with business as usual in international assistance programs is not working. The stakes could not be higher. If the number of failing states continues to increase, at some point this trend will translate into a failing global civilization. Somehow we must turn the tide of state decline.

Thus far the process of state failure has largely been a one-way street with few countries reversing the process. Among the few who have turned the tide are Liberia and Colombia.

Foreign Policy's annual ranking of failing states showed Liberia ranking ninth on the list in 2005, with number one being the worst case. But after 14 years of cruel civil war that took 200,000 lives, things began to turn around in 2005 with the election of Ellen Johnson-Sirleaf, a graduate of Harvard's Kennedy School of Government and an official at the World Bank, as president. A fierce effort to root out corruption and a multinational U.N. Peacekeeping Force of 15,000 troops who maintain the peace, repair roads, schools, and hospitals, and train police have brought progress to this war-torn country. In 2009, Liberia had dropped to thirty-third on the list of failing states.[74]

In Colombia, an improving economy—partly because of

strong coffee prices and partly because the government is steadily gaining in legitimacy—has helped turn things around. Ranked fourteenth in 2005, Colombia in 2009 was forty-first on the *Foreign Policy* list. Neither Liberia nor Colombia are out of the woods yet, but both are moving in the right direction.[75]

Failing states are a relatively new phenomenon, and they require a new response. The traditional project-based assistance program is no longer adequate. State failure is a systemic failure that requires a systemic response.

The United Kingdom and Norway have recognized that failing states need special attention and have each set up interagency funds to provide a response mechanism. Whether they are adequately addressing systemic state failure is not yet clear, but they do at least recognize the need to devise a specific institutional response.[76]

In contrast, U.S. efforts to deal with weak and failing states are fragmented. Several U.S. government departments are involved, including State, Treasury, and Agriculture, to name a few. And within the State Department, several different offices are concerned with this issue. This lack of focus was recognized by the Hart-Rudman U.S. Commission on National Security in the Twenty-first Century: "Responsibility today for crisis prevention and response is dispersed in multiple AID [U.S. Agency for International Development] and State bureaus, and among State's Under Secretaries and the AID Administrator. In practice, therefore, no one is in charge."[77]

What is needed now is a new cabinet-level agency—a Department of Global Security (DGS)—that would fashion a coherent policy toward each weak and failing state. This recommendation, initially set forth in a report of the Commission on Weak States and U.S. National Security, recognizes that the threats to security are now coming less from military power and more from the trends that undermine states, such as rapid population growth, poverty, deteriorating environmental support systems, and spreading water shortages. The new agency would incorporate AID (now part of the State Department) and all the various foreign assistance programs that are currently in other government departments, thereby assuming responsibility for U.S. development assistance across the board. The State Department would provide diplomatic support for this new agency, helping in the overall effort to reverse the process of state failure.[78]

The new Department of Global Security would be funded by shifting fiscal resources from the Department of Defense. In effect, the DGS budget would be the new defense budget. It would focus on the central sources of state failure by helping to stabilize population, restore environmental support systems, eradicate poverty, provide universal primary school education, and strengthen the rule of law through bolstering police forces, court systems, and, where needed, the military.

The DGS would deal with the production of and international trafficking in drugs. It would make such issues as debt relief and market access an integral part of U.S. policy. It would also provide a forum to coordinate domestic and foreign policy, ensuring that domestic policies, such as cotton export subsidies or subsidies to convert grain into fuel for cars, do not contribute to the failure of other countries. The department would provide a focus for the United States to help lead a growing international effort to reduce the number of failing states. This agency would also encourage private investment in failing states by providing loan guarantees to spur development.

As part of this effort the United States could rejuvenate the Peace Corps to assist with grassroots programs, including teaching in schools and helping to organize family planning, tree planting, and micro-lending programs. This program would involve young people while developing their sense of civic pride and social responsibility.

At a more senior level, the United States has a fast-growing reservoir of retired people who are highly skilled in such fields as management, accounting, law, education, and medicine and who are eager to be of use. Their talents could be mobilized through a voluntary Senior Service Corps. The enormous reservoir of management skills in this age group could be tapped to augment the skills so lacking in failing-state governments.

There are already, of course, a number of volunteer organizations that rely on the talents, energy, and enthusiasm of both U.S. young people and seniors, including the Peace Corps, Teach for America, and the Senior Corps. But conditions now require a more ambitious, systematic effort to tap this talent pool.

The world has quietly entered a new era, one where there is

no national security without global security. We need to recognize this and to restructure and refocus our efforts to respond to this new reality.

A Poverty Eradication Agenda and Budget

As indicated earlier, eradicating poverty involves much more than international aid programs. It also includes the debt relief that the poorest countries need in order to escape from poverty. For many developing countries, the reform of farm subsidies in aid-giving industrial countries and debt relief may be equally important. A successful export-oriented farm sector often offers a path out of poverty for a poor country. Sadly, for many developing countries this path is blocked by the self-serving farm subsidies of affluent countries. Overall, industrial-country farm subsidies of $258 billion are roughly double the development assistance from these governments.[79]

These subsidies encourage overproduction of some farm commodities, which then are sent abroad with another boost from export subsidies. The result is depressed world market prices, particularly for sugar and cotton, commodities where developing countries have the most to lose.[80]

Although the European Union (EU) accounts for more than half of the $120 billion in development assistance from all countries, much of the economic gain from this assistance in the past was offset by the EU's annual dumping of some 6 million tons of sugar on the world market. Fortunately, in 2005 the EU announced that it would reduce its sugar support price to farmers by 40 percent, thus reducing the amount of sugar exports to 1.3 million tons in 2008.[81]

Similarly, subsidies to U.S. farmers have historically enabled them to export cotton at low prices. And since the United States is the world's leading cotton exporter, its subsidies depress prices for all cotton exporters. As a result, U.S. cotton subsidies have faced a spirited challenge from four cotton-producing countries in Central Africa: Benin, Burkina Faso, Chad, and Mali. In addition, Brazil challenged U.S. cotton subsidies within the framework of the World Trade Organization (WTO), convincing a WTO panel that U.S. cotton subsidies were depressing world prices and harming their cotton producers.[82]

After the WTO ruled in Brazil's favor in 2004, the United States made some token efforts to comply, but the WTO again ruled in Brazil's favor in December 2007, concluding that U.S. cotton subsidies were still depressing the world market price for cotton. The affluent world can no longer afford farm policies that permanently trap millions in poverty in aid-recipient countries by cutting off their main avenue of escape.[83]

Whereas most U.S. farm subsidies depress prices of exports from developing countries, the subsidy for converting grain into ethanol raises the price of grain, which most low-income countries import. In effect, U.S. taxpayers are subsidizing an increase in world hunger.[84]

Debt forgiveness is another essential component of the broader effort to eradicate poverty. A few years ago, for example, when sub-Saharan Africa was spending four times as much on debt servicing as it spent on health care, debt forgiveness was the key to boosting living standards in this last major bastion of poverty.[85]

In July 2005, heads of the G-8 industrial countries, meeting in Gleneagles, Scotland, agreed to cancel the multilateral debt that a number of the poorest countries owed to the World Bank, the International Monetary Fund (IMF), and the African Development Bank. Among other things, this initiative was intended to help the poorest countries reach the Millennium Development Goals. It immediately affected 18 of the poorest debt-ridden countries (14 in Africa and 4 in Latin America), offering these countries a new lease on life.[86]

The year after the Gleneagles meeting, Oxfam International reported that the IMF had eliminated the debts owed by 19 countries, the first major step toward the debt relief goal set at the G-8 meeting. For Zambia, the $6 billion of debt relief enabled President Levy Mwanawasa to announce that basic health care would be now free. In Oxfam's words, "the privilege of the few became the right of all." In East Africa, Burundi announced it would cancel school fees, permitting 300,000 children from poor families to enroll in school. In Nigeria, debt relief has been used to set up a poverty action fund, part of which will go to training thousands of new teachers.[87]

Even as debt was being reduced, development aid as a percentage of gross national income from donor countries decreased in 2006 and 2007. Although it rose in 2008, aid is still

$29 billion a year short of meeting the 2010 target of $130 billion that governments agreed on in 2005. The bad news is that many of these same countries burdened by foreign debt were being hit hard when the global economic crisis brought falling prices for their mineral exports, falling remittances from abroad, and rising prices for their grain imports.[88]

As noted earlier, the Bank estimates that increases in fuel and food prices have pushed 130 million people below the poverty line. And the Bank projected that another 53 million would be pushed below the line in 2009. In referring to the difficulty many developing countries were already experiencing in trying to reach the MDGs, Bank president Robert Zoellick said in March 2009, "These targets now look even more distant."[89]

The steps needed to eradicate poverty and accelerate the shift to smaller families are clear. They include filling several funding gaps, including those needed to reach universal primary education, to fight childhood and other infectious diseases, to provide reproductive health care and family planning services, and to contain the HIV epidemic. Collectively, the initiatives discussed in this chapter are estimated to cost another $77 billion a year. (See Table 7–1.)[90]

Table 7–1. *Plan B Budget: Additional Annual Funding Needed to Reach Basic Social Goals*

Goal	Funding
	(billion dollars)
Universal primary education	10
Eradication of adult illiteracy	4
School lunch programs for 44 poorest countries	6
Assistance to preschool children and pregnant women in 44 poorest countries	4
Reproductive health and family planning	17
Universal basic health care	33
Closing the condom gap	3
Total	77

Source: See endnote 90.

The heaviest investments in this effort center on education and health, which are the cornerstones of both human capital development and population stabilization. Education includes universal primary education and a global campaign to eradicate adult illiteracy. Health care includes the basic interventions to control infectious diseases, beginning with childhood vaccinations.[91]

As Columbia University economist Jeffrey Sachs regularly reminds us, for the first time in history we have the technologies and financial resources to eradicate poverty. Industrial-country investments in education, health, and school lunches are in a sense a humanitarian response to the plight of the world's poorest countries. But more fundamentally, they are investments that will help reverse the demographic and environmental trends that are undermining civilization.[92]