from Lester R. Brown, *Plan B 2.0 Rescuing a Planet Under Stress and a Civilization in Trouble* (NY: W.W. Norton & Co., 2006).
© 2006 Earth Policy Institute. All Rights Reserved.

II

The Response—Plan B

7

Eradicating Poverty, Stabilizing Population

The new century began on an inspiring note when the countries that belong to the United Nations adopted the goal of cutting the number of people living in poverty in half by 2015. And as of 2005, the world is ahead of schedule for reaching this goal. There are two big reasons for this: China and India. China's economic growth of 9 percent a year over the last quarter-century and India's acceleration to close to 6 percent a year over the last decade are together lifting hundreds of millions out of poverty.[1]

In China, the number living in poverty dropped from 648 million in 1981 to 218 million in 2001, the greatest reduction in poverty in history. India is also making impressive progress on the economic front. Under the dynamic new leadership of Prime Minister Manmohan Singh, who took office in 2004, and his skilled team, poverty is being attacked directly by upgrading infrastructure at the village level. Targeted investments are aimed at the poorest of the poor. If the international community actively reinforces this effort in reform-minded India, hundreds of millions more could be lifted out of poverty.[2]

It is time for the international community to make sure that India has the resources needed to maintain the momentum it

has built. With India now on the move economically, the world can then begin to concentrate intensively on the remaining poverty concentrated in sub-Saharan Africa and a scattering of smaller countries in Latin America and Central Asia.

Several countries in Southeast Asia are making impressive gains as well, including Thailand, Viet Nam, and Indonesia. Barring any major economic setbacks, these gains in Asia virtually ensure that the U.N. Millennium Development Goal for reducing poverty by 2015 will be reached.[3]

That is the good news. The bad news is that sub-Saharan Africa—with 750 million people—is sliding deeper into poverty. Hunger, illiteracy, and disease are on the march, offsetting some of the gains in China and India. Africa, selected as a focus of discussion at the G-8 meeting in July 2005, needs special attention.[4]

In an increasingly integrated world, eradicating poverty and stabilizing population are national security issues. Slowing population growth helps eradicate poverty and its distressing symptoms, and, conversely, eradicating poverty helps slow population growth. With time running out, the urgency of moving simultaneously on both fronts is clear.

In addition to the goal of cutting the number of people living in poverty in half by 2015, the other U.N. Millennium Development Goals include cutting the number who are hungry in half, achieving universal primary school education, providing access to safe drinking water for all, 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.[5]

While goals for cutting poverty in half by 2015 appear to be running slightly ahead of schedule, those for halving the number of hungry are not. The number of children with a primary school education appears to be increasing substantially, however, largely on the strength of progress in India. And mortality of children under five fell from 15 million in 1980 to 11 million in 2003 and is expected to continue falling.[6]

Universal Basic Education

One way of narrowing the gap between rich and poor is by ensuring universal education. This means ensuring that 115 million children who do not attend school are able to. Children

without any formal education are starting 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 becomes a source of instability. Nobel Prize–winning economist Amartya Sen focuses the point nicely: "Illiteracy and innumeracy are a greater threat to humanity than terrorism."[7]

Recognizing the central role of education in human progress, the United Nations set universal primary education by 2015 as one of its Millennium Development Goals. 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 financial support. The three principal requirements are that a 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.[8]

The benefits of education are many, particularly for women. The achievement level of children correlates closely with the educational level of their mothers. Children of educated mothers are better nourished not necessarily because the family income is higher but because their mother's better understanding of nutrition leads to a better choice of foods and healthier methods of preparation. Educating women is the key to breaking the poverty cycle.[9]

The education of girls leads to smaller families. In every society for which data are available, fertility falls as female educational levels rise. And mothers with at least five years of school lose fewer infants during childbirth or early illnesses than their less educated peers do. Among other things, these women can read the instructions on medications and they have a better understanding of how to take care of themselves during pregnancy. Economist Gene Sperling concluded in a 2001 study of 72 countries that "the expansion of female secondary education may be the single best lever for achieving substantial reductions in fertility."[10]

Basic education increases agricultural productivity. Agricultural extension services that cannot use printed materials to disseminate information on improved agricultural practices are

severely handicapped. So too are farmers who cannot read the instructions on a bag of fertilizer. The inability to read instructions on a pesticide container can be life-threatening.

At a time when HIV is spreading throughout the world, schools provide the institutional means to educate young people about the risks of infection. The time to inform and educate children about the virus and about the lifestyles that foster its spread is when they are young, not when they are already 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 a fixed period of time, say five years, could be a highly profitable investment. It would help ensure that the human resources are available to reach the universal primary education goal, and it would also open the door for an upwelling of talent from the poorest segments of society.

Gene Sperling believes that every plan should provide for getting 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 children in school. Some countries, Brazil and Bangladesh among them, actually provide small scholarships for girls where needed, thus helping girls from poor families get a basic education.[11]

As the world becomes ever more integrated economically, its nearly 800 million illiterate adults are severely handicapped. This deficit can perhaps best be dealt with by launching adult literacy programs, relying heavily on volunteers. The international community could offer 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.[12]

The World Bank estimates that external funding of roughly $12 billion a year would be needed to achieve universal primary education in the more than 80 countries that are unlikely to

reach this goal by 2015. At a time when education gives children access not only to books but also to personal computers and the vast information resources of the Internet, having children who never go to school is no longer acceptable.[13]

Few incentives to get children in school are as effective as a school lunch program, especially in the poorest countries. Since 1946, every child in public school in the United States has had access to a school lunch program, ensuring one good meal each day. There is no denying the benefits of this national program that has continued uninterrupted for so many years. George McGovern and Robert Dole, both former members of the U.S. Senate agricultural committee and former candidates for President, want to provide school lunch programs in all the world's poorest countries.[14]

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 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 attention span increases. Their academic performance goes up. Fewer days are missed, and children spend more years in school.[15]

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. Adopting a school lunch program in the 44 lowest-income countries would cost an estimated $6 billion per year beyond what the United Nations is now spending in its efforts to reduce hunger.[16]

Greater efforts are also needed to improve nutrition before children even get to school age, so they can benefit from school lunches later. 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 25 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 stage in their lives when it could make a huge difference.[17]

These efforts, though costly, are not expensive compared with the annual losses in productivity from hunger. McGovern and Dole think 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 to be going to school hungry.[18]

Stabilizing Population

Some 42 countries now have populations that are either essentially stable or declining slowly. In countries with the lowest fertility rates, including Japan, Russia, Germany, and Italy, populations will likely decline over the next half-century.[19]

A larger group of countries has reduced fertility to the replacement level or just below. They are headed for population stability after large groups of young people move through their reproductive years. Included in this group are China, the world's most populous country, and the United States, the third most populous one. A third group of countries is projected to more than double their populations by 2050, including Ethiopia, the Democratic Republic of the Congo, and the Sudan.[20]

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 9.1 billion by 2050. The high one reaches 10.6 billion. The low projection, which assumes that the world will quickly move below replacement-level fertility to 1.6 children per couple, has population peaking at 7.8 billion in 2041 and then declining. If the goal is to eradicate poverty, hunger, and illiteracy, we have little choice but to strive for the lower projection.[21]

Slowing world population growth means that all women who want to plan their families should have access to the family planning services they need. Unfortunately, at present 201 million couples cannot obtain the services they need to limit the size of their families. Filling the family planning gap may be the most urgent item on the global agenda. The benefits are enormous and the costs are minimal.[22]

The good news is that countries that want to help couples to

reduce the size of their families quickly can do so. My colleague Janet Larsen writes that in just one decade Iran dropped its population growth rate from one of the world's fastest to one of the lowest in the developing world. When Ayatollah Khomeini assumed leadership in Iran in 1979, he immediately dismantled the family planning programs that the Shah had put in place in 1967 and instead advocated large families. At war with Iraq between 1980 and 1988, Khomeini wanted large families to increase soldiers for Islam. His goal was an army of 20 million. In response to his pleas, fertility levels climbed, pushing Iran's population growth up 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.[23]

In 1989 the government did an about-face and Iran 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.[24]

Religious leaders were directly involved in what amounted to a crusade for smaller families. Iran introduced a full panoply of contraceptive measures, including 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.[25]

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—an impressive achievement. 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 the impressive effort launched in 1989, family size in Iran dropped from seven children to fewer than three. From 1987 to 1994, Iran cut its population growth rate by half. Its overall population growth rate of 1.2 percent in 2004 is only slightly higher than that of the United States.[26]

If a country like Iran, with a strong tradition of Islamic fundamentalism, can move quickly toward population stability, other countries can too. 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 or decreases continually over the long term is not sustainable. The time has come for world leaders—including the Secretary-General of the United Nations, the President of the World Bank, and the President of the United States—to publicly recognize that the earth cannot easily support more than two children per family.

The costs of providing reproductive health and family planning services are not that high. At the International Conference on Population and Development held in 1994 in Cairo, it was estimated that a fully funded population and reproductive health program for the next 20 years would cost roughly $17 billion annually by 2000 and $22 billion by 2015. Developing countries agreed to cover two thirds of this, while industrial countries were to cover one third. Although we have passed the 10-year anniversary of the Cairo conference, developing countries have fallen short of their pledge by roughly 20 percent, while donor countries have fallen short by half, leaving a combined gap of roughly $6.6 billion per year.[27]

The United Nations estimated 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. Some 142,000 pregnancy-related deaths could also be prevented. The costs to society of not filling the family planning gap are unacceptably high.[28]

Reinforcing these U.N. calculations are data from the grassroots showing how access to family planning services helps couples achieve their desired family size. Surveys in Honduras, for example, show poor women (often lacking family planning services) having twice as many children as they want, while

women in high socioeconomic groups are quite successful at having the number of children they desire.[29]

Shifting to smaller families brings generous economic dividends. For Bangladesh, 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 leaves more fiscal resources per child for education and health care, thus accelerating the escape from poverty. For donor countries, filling the entire $6.6 billion gap needed to ensure that couples everywhere have access to the services they want and need would yield strong social returns in improved education and health care.[30]

Better Health for All

While heart disease and cancer (largely the diseases of aging), obesity, and smoking dominate health concerns in industrial countries, in developing countries infectious diseases are the overriding health concern. Besides AIDS, the principal diseases of concern are diarrhea, respiratory illnesses, tuberculosis, malaria, and measles.

Many countries can no longer afford the vaccines for childhood diseases, such as measles, and are falling behind in their vaccination programs. Lacking the funds to invest today, they 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.[31]

Along with the eradication of hunger, ensuring access to a safe and reliable supply of water for the estimated 1 billion people who lack it is essential to better health for all. The realistic option in many cities now 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 11.) 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 opportunity.

One of the most impressive health gains has come from a campaign led by UNICEF to treat the symptoms of diarrheal disease with oral rehydration therapy. This remarkably simple

technique, which involves drinking a mild saline solution, has been extremely effective—reducing deaths from diarrhea among children from 4.6 million in 1980 to 1.5 million in 1999. Few investments have saved so many lives at such a low cost. In *Millions Saved,* Ruth Levine describes how Egypt used oral rehydration therapy to cut infant deaths from diarrhea by 82 percent from 1982 to 1989.[32]

Some leading sources of premature death are lifestyle-related. Cigarettes take a particularly heavy toll. The World Health Organization (WHO) estimates that 4.9 million people died in 2000 of tobacco-related illnesses, more than from any infectious disease. Today there are some 25 known diseases that are linked to tobacco use, including heart disease, stroke, respiratory illness, several forms of cancer, and male impotence. Cigarette smoke kills more people each year than all other air pollutants combined—nearly 5 million versus 3 million.[33]

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 from the Framework Convention on Tobacco Control, the first international accord to deal entirely with a health issue, which was adopted unanimously in Geneva in May 2003.[34]

Ironically, the country where tobacco originated is now leading the world away from it. In the United States, the number of cigarettes smoked per person has dropped from its peak of 2,872 in 1976 to 1,374 in 2003—a decline of 52 percent. Worldwide, where the downturn lags that of the United States by roughly a decade, usage has dropped from the historical high of 1,035 cigarettes smoked per person in 1986 to 856 in 2003, a fall of 17 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 the steady decline.[35]

Indeed, smoking is on the decline in nearly all the major cigarette-smoking countries, including such strongholds as France, China, and Japan. The number of cigarettes smoked per person has dropped 22 percent in France since peaking in 1984, 5 percent in China since 1989, and 20 percent in Japan since 1991.[36]

Following approval of the Framework Convention on Tobac-

co Control, 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 banned smoking in bars and restaurants; and Scotland banned smoking in public buildings. Bhutan, a Himalayan country of 1 million sandwiched between India and China, has prohibited tobacco sales entirely.[37]

In 2005, smoking was banned in public places in Bangladesh, in bars and restaurants in New Zealand, and in public places in Italy. In the United States, which already has stiff restrictions on smoking, the Union Pacific Corporation stopped hiring smokers in seven states as an economy measure to cut health care costs. General Mills imposes a $20-a-month surcharge on health insurance premiums for employees who smoke. Each of these measures helps the market to more accurately reflect the cost of smoking.[38]

The war against infectious diseases is being waged on a broad front. Perhaps the leading privately funded life-saving activity in the world today is the childhood immunization program. In an effort to fill the gap in this global program, the Bill and Melinda Gates Foundation has invested $1.5 billion through 2005 to protect children from infectious diseases.[39]

One of the international community's finest moments came with the eradication of smallpox, an effort led by WHO. This successful elimination of a feared disease, which required a worldwide immunization program, saves not only millions of lives but also hundreds of millions of dollars each year in smallpox vaccination programs and billions of dollars in health care expenditures. This achievement alone may justify the existence of the United Nations.[40]

Similarly, a WHO-led international coalition, including Rotary International, UNICEF, the U.S. Centers for Disease Control and Prevention, and Ted Turner's UN Foundation, has led a worldwide campaign to wipe out polio. Since 1988, Rotary International has contributed an extraordinary $500 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 just 800 in 2003.[41]

By mid-2003, pockets of polio remained only in Nigeria, Niger, Egypt, India, Pakistan, and Afghanistan, but then some

of the Muslim-dominated 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, when 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 Saudi Arabia, Yemen, Côte d'Ivoire, Burkina Faso, the Central African Republic, Chad, Mali, Sudan, Indonesia, and Somalia.[42]

These countries, once free of the disease, are scrambling now to contain and eradicate the new outbreak that as of September 2005 had grown to 1,260 cases. With two recently confirmed cases in Somalia, a failed state, the fear is that the virus may spread further not only in this country where there is no government to work with, but to other countries as well, making it extraordinarily difficult to eradicate.[43]

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 estimated that providing basic universal health care in developing countries will require donor grants totaling $27 billion in 2007, scaled up to $38 billion in 2015, or an average of $33 billion per year. In addition to basic services, this $33 billion includes funding for the Global Fund to Fight AIDS, Tuberculosis and Malaria and for universal childhood vaccinations.[44]

Curbing the HIV Epidemic

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. In Africa, 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, thus shrinking the number of those who are capable of infecting others.

Concentrating on the groups in a society who 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. They are thus a target group for reducing infections. Sex workers are also centrally involved in the spread of the disease. In India, for example, the country's 2 million female sex workers have an average of two encounters per day, making them a key group to educate about HIV risks and the life-saving value of using a condom.[45]

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 5 percent, President Olusegun Obasanjo requires 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.[46]

At the most fundamental level, dealing with the HIV threat requires roughly 10 billion condoms a year in the developing world and Eastern Europe. Including those needed for contraception adds another 2 billion. But of the 12 billion condoms needed, only 2.5 billion are being distributed, leaving a shortfall of 9.5 billion. At only 3¢ each, or $285 million, the cost of saved lives by supplying condoms is minuscule.[47]

The condom gap is huge, but the costs of filling it are small. 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 themselves, filling this gap would still cost only $2 billion.[48]

Sadly, even though condoms are the only technology available to prevent the spread of HIV, the U.S. government is de-emphasizing their use, insisting that abstinence be given top priority. While encouraging abstinence is important, an effective campaign to curb the HIV epidemic cannot function without condoms.[49]

One of the few African countries to successfully lower the HIV infection rate after the epidemic became well established is

Uganda. Under the strong personal leadership of President Yoweri Museveni, the share of adults infected has dropped from a peak of 13 percent in the early 1990s to 4 percent in 2003. More recently, Zambia also appears to be making progress in reducing infection rates among young people as a result of a concerted national campaign led by church groups. Senegal, which acted early and decisively to check the spread of the virus, has an infection rate among adults of less than 1 percent today. It is a model for other African countries.[50]

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 4.7 million people who exhibited symptoms of AIDS in sub-Saharan Africa in June of 2005, only 500,000 were receiving the antiretroviral drug treatment that is widely available in industrial countries. However, this was up threefold from a year earlier. The increase is part of a worldwide effort by the World Health Organization to reach 3 million people in low- and middle-income countries by the end of 2005, known as the 3 by 5 Initiative.[51]

There is a growing body of evidence that the prospect of treatment encourages people to get tested for HIV. It also raises awareness and understanding of the disease and how it is transmitted. And if people know they are infected, they may try to avoid infecting others. To the extent that treatment extends life, and the average extension in the United States is about 15 years, it is not only the humanitarian thing to do, it also makes economic sense. Once society has invested in the rearing, education, and on-job training of an individual, the value of extending the working lifetime is high.[52]

Treating those with HIV infections is costly, but ignoring the need for treatment is a strategic mistake simply because treatment strengthens prevention efforts. 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 that is already well established within their borders.[53]

Reducing Farm Subsidies and Debt

Eradicating poverty involves much more than international aid programs. For many developing countries, farm subsidies in

aid-giving countries and debt relief may be even more important. A successful export-oriented farm sector—taking advantage of low-cost labor and natural endowments of land, water, and climate to boost rural incomes and to earn foreign exchange—often offers a path out of poverty. Sadly, for many developing countries this path is blocked by the self-serving farm subsidies of affluent countries. Overall, the farm subsidies in the affluent countries at $279 billion are roughly four times the development assistance flows from these governments.[54]

The size of the agricultural budget of the European Union (EU) is staggering, accounting for over half of its total annual budget. It also looms large internationally. As the *Financial Times* points out, the cash subsidy to a dairy cow in the EU exceeds the EU development assistance per person in sub-Saharan Africa.[55]

Within affluent countries, the EU-25 in 2004 accounted for $133 billion of the $279 billion spent by affluent countries on farm subsidies. The United States spent $46 billion on farm subsidies. These encourage overproduction of 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, the two commodities where developing countries have the most to lose.[56]

Although the European Union accounts for more than half of the $78 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 in the world market. This is one farm commodity where developing countries have a strong comparative advantage and should be permitted to capitalize on it. Fortunately, in 2005 the EU announced that it would reduce its sugar support price to farmers by 40 percent, thus discouraging the excess production that depressed the world market price when it was exported. The affluent world can no longer afford farm policies that permanently trap millions in poverty by cutting off a main avenue of escape.[57]

Help in raising world sugar prices may come from an unexpected quarter. Although it is too early to say for sure, rising oil prices may boost sugar prices as more and more sugarcane-based ethanol refineries are built. In effect, the price of sugar may track the price of oil upward, providing a strong economic

boost for those developing-world economies where nearly all the world's sugarcane is produced.[58]

Recent developments may also lift world cotton prices. Although the U.S. government does not have explicit export subsidies, production subsidies provided to farmers enable them to export cotton at low prices. These subsidies to just 25,000 cotton farmers exceed U.S. financial aid to all of sub-Saharan Africa's 750 million people. And since the United States is the world's leading cotton exporter, its subsidies depress prices for all cotton exporters.[59]

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 successfully challenged U.S. cotton subsidies within the framework of the World Trade Organization (WTO). To make its case, the Brazilian government hired a leading U.S. agricultural economist. Using U.S. Department of Agriculture data, Brazil convinced the WTO panel that U.S. cotton subsidies were depressing world prices and harming their cotton producers. In response, the panel ruled that the United States had to eliminate the subsidies.[60]

Along with eliminating harmful agricultural subsidies, debt forgiveness is another essential component of the broader effort to eradicate poverty. For example, with sub-Saharan Africa spending four times as much on debt servicing as it spends on health care, debt forgiveness can help boost living standards in this last major bastion of poverty.[61]

In July of 2005, heads of the G-8 group of industrial countries, meeting in Gleneagles, Scotland, agreed to the cancellation of the multilateral debt that a number of the poorest countries owed to the World Bank, the International Monetary Fund, and the African Development Bank. This initiative, immediately affecting 18 of the poorest debt-ridden countries (14 in Africa and 4 in Latin America), offers these countries a new lease on life. Up to another 20 of the poorest countries could benefit from this initiative if they can complete the qualification. A combination of public pressure by nongovernmental groups campaigning for debt relief in recent years and strong leadership from the U.K. government were the keys to this poverty reduction breakthrough.[62]

Although this was a giant step in the right direction, it elim-

inated only a minor share of the total debt of the poorest countries to international lending institutions. In addition to the 18 countries granted relief so far, there are at least 40 more countries with low incomes that desperately need help. The groups that are lobbying for debt relief, such as Oxfam International, believe it is inhumane to force those with incomes of scarcely a dollar per day to use part of that dollar to service debt. They pledge to keep the pressure on until all the debt of these poorest countries is cancelled.[63]

A Poverty-Eradication Budget

Many countries that have experienced rapid population growth for several decades are showing signs of demographic fatigue. Countries struggling with the simultaneous challenge of educating growing numbers of children, creating jobs for swelling ranks of young job seekers, and dealing with the environmental effects of population growth are stretched to the limit. When a major new threat arises—such as the HIV epidemic—governments often cannot cope.

Problems routinely managed in industrial societies are becoming full-scale humanitarian crises in developing ones. The rise in deaths in many African countries marks a tragic new development in world demography. In the absence of a concerted effort by national governments and the international community to accelerate the shift to smaller families, events in many countries could spiral out of control, leading to more death and to spreading political instability and economic decline.

There is an alternative to this bleak prospect, and that is to help countries that want to slow their population growth to do so quickly. This 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 rises, savings and investment climb, and economic growth accelerates.[64]

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, Viet Nam, and Sri Lanka 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.[65]

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 infectious diseases, such as AIDS, tuberculosis, and malaria; to provide reproductive health care; and to contain the HIV epidemic. Collectively, the initiatives discussed in this chapter are estimated to cost another $68 billion a year. (See Table 7–1.)[66]

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 both universal primary education and a global campaign to eradicate adult illiteracy. Health care includes the basic interventions involved in controlling infectious diseases, beginning with childhood vaccinations. Adopting the basic health care program outlined in the 2001 *Report of the Commission on Macroeconomics and Health* to the World Health Organization would save an estimated 8 million lives per year by 2010. These are the keys to breaking out of the poverty trap.[67]

Table 7–1. *Additional Annual Funding Needed to Reach Basic Social Goals*

Goal	Funding (billion dollars)
Universal primary education	12
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	7
Universal basic health care	33
Closing the condom gap	2
Total	68

Source: See endnote 66.

As Jeffrey Sachs regularly reminds us, for the first time in history we have the technologies and financial resources to eradicate poverty. As noted earlier, the last 15 years have seen some impressive gains. For example, China has not only dramatically reduced the number living in poverty within its borders, but, with its trade and investment initiatives, it is helping poorer countries develop. China is investing substantial sums in Africa, investments often related to helping African countries develop their numerous mineral and energy resources, something that China needs.[68]

Helping low-income countries break out of the demographic trap is a highly profitable investment for the world's affluent nations. 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 shape the world in which our children will live.