We Can End
Africa is hungry and getting hungrier—as are parts of Asia, Latin America and Eastern Europe. At a time of heightened international tensions, hunger is especially insidious because the societies it afflicts are markedly more vulnerable to disease, political instability, economic paralysis and environmental degradation.

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Every great challenge confronting us, but especially the challenges of hunger and poverty, can be solved because, for the first time in human history, we have the know-how and the resources to do it at modest cost with enormous long-term benefit.

Drought and tick-borne disease in livestock made farming difficult in Zambia (previous page). Oliver Simuonga (in white shirt) was part of a group that received draft animals and training from Heifer, enabling him to improve his crop yields and his livelihood.

Reliable water sources are crucial to subsistence farmers, especially in areas where the rains often fail. Laborers (above) put in an irrigation ditch in Sicuani, Peru.

Indeed, the world now careens from crisis to crisis at such dizzying speeds that there seems to be little time to think about solutions, much less implement them.

Still, in spite of these very real problems, we are optimists. Not naïve optimists, but ones who base our confidence on facts. The truth is that the key problems we face are indeed solvable. Every great challenge confronting us, but especially the challenges of hunger and poverty, can be solved because, for the first time in human history, we have the know-how and the resources to do it at modest cost with enormous long-term benefit.

The world is racked by instability resulting from "failed states," places where hunger, death and disease flourish and where young people face poverty, mass unemployment, lack of education and hopelessness. These conditions arise and persist where societies suffer from the lack of health clinics, a shortage of schools and teachers, lack of rural roads and the like. Struggling countries need major investments in social services and infrastructure but lack the resources to make those investments themselves.

The result is a poverty trap in which solvable poverty worsens because the basic investments needed to overcome it are beyond the means of the countries of the developing world, while the scale of the financial help from rich nations is too limited to make a breakthrough. The United States is spending about $450 billion for the military to defend it against global threats but only about $13 billion to fight the underlying conditions of poverty, disease and despair that provide the breeding grounds for these threats.

It's possible to add up what financial resources would actually be needed from rich countries to help end extreme poverty and set today's unstable societies—Ethiopia, Kenya, Haiti, Bolivia, Afghanistan and dozens like them—on their way to self-sustaining economic growth. By helping these countries work their way out of extreme poverty, we would also enable them to become good neighbors and trading partners instead of havens of terror, disease, unwanted mass migration and drug trafficking.

The Consensus on Health

Just a few years ago, the Commission on Macroeconomics and Health for the World Health Organization brought together a bunch of hardheaded finance types with the softhearted folks of public health to see how best to confront the health disasters of the poor world and how much it would cost. [Editor's Note: Jeffrey Sachs
chaired the commission.] The worlds of finance and public health rarely intersect, much less brainstorm together.

At the beginning, the finance folks were wont to blame the poor for much of their misery: "If only they would stop squandering money through corruption and mismanagement, they'd have better health care." The public health people tended to look at the problem from the opposite point of view: "If only the poor weren't so sick all of the time, they'd have the energy and wherewithal to earn their way out of poverty."

After much hard work, the commission reached a consensus. It found that the health crisis in Africa and other impoverished regions was indeed causing a poverty trap. Massive proportions of the poor are sick and dying, and sick people are unable to generate income and pay taxes. Without household incomes and with bankrupt governments, health systems have collapsed and epidemics are running unchecked. To break this vicious cycle, rich countries would have to help.

But the question remained: Could the rich countries afford it? The answer was both surprising and welcome. The commission found that the rich world, at a tiny cost to itself, could save about 8 million people each year in the poorest countries, many of whom are children dying before their fifth birthday. Moreover, saving these lives would actually slow the world's population growth as poor families choose to have many fewer children in response to higher survival rates.

So how much would it cost? About $25 billion annually from the rich world could pay for a massive attack on AIDS, tuberculosis, malaria, vaccine-preventable diseases and unsafe childbirth, among other killer conditions.

We could save the lives of the world's poorest people at the cost of just 10 cents for every $100 of income.

That $25 billion seems like a lot until one realizes that the rich world—the United States, Canada, Western Europe, Japan, Australia and New Zealand—has an annual income of about $25 trillion, so we are talking about one one-thousandth of our annual income.

This means that we could save the lives of the world's poorest people at the cost of just 10 cents for every $100 of income. Since we can obviously afford it, how can we in good conscience refuse to accept this duty, especially given that the misery afflicting...
To lift Africa and the other troubled regions out of their misery, rich countries must help them make major investments in schools, roads, power, water, sanitation and more.

the poor is now washing up on our own shores in so many ways?

A Green Revolution

It is important to acknowledge that improved health care for impoverished people is not enough for the kind of world-wide breakthrough that we should seek. To help Africa, our poorest continent, and all the other tortured regions of the developing world escape from their economic and social misery, rich countries must assist them in tackling a whole range of development issues. As in the case of health, developing countries must make detailed plans to scale up investments in agriculture, and request that the donor countries fulfill their promise to finance well-designed programs.

One of the chief causes of Africa’s troubles can be found in the fact that it was bypassed by the Green Revolution of the 1970s and 1980s. The big push in agriculture that allowed India, China and other parts of the developing world to escape the trap of extreme poverty, disease and famine for the most part did not happen in Africa.

Three numbers tell the story. First, food production per person in Africa in 2000 was down by 7 percent compared with 1980. This is in contrast with India, where food production increased by 28 percent over this period, and China, where it was 82 percent higher. Second, fertilizer use in Africa averaged about 23 kilograms per hectare in 2002, compared with 100 kilograms in India and 278 kilograms in China.

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Third, as a result, grain yields last year averaged 1.6 tons of maize per hectare in Africa, compared with 3.8 tons in Asia.

This situation can be remedied, but only if African governments and the donors that support them wake up to basic agricultural facts of life. Instead of shipping food aid to Africa, donors should be helping African farmers achieve their own Green Revolution. Last July, at the time of the African Union Summit in Addis Ababa, Ethiopia, U.N. Secretary-General Kofi Annan called for a 21st Century African Green Revolution. He is absolutely right. It can be done, and indeed it must be done if Africa is to get out of its poverty trap. The key interventions are modern, ecologically sound agricultural science, backed by investments in Africa’s rural infrastructure.

An African Green Revolution for the 21st century requires five science-based components, all of which are missing in much of Africa today. First, African farmers need soil nutrients, whether by mineral fertilizers or “green fertilizers” in the form of manure, nitrogen-fixing trees and cover crops.

Second, African farmers need reliable water sources, especially in places where the rains often fail. This must be accomplished through small-scale irrigation and water-harvesting schemes.

Third, African farmers need improved germplasm—seeds of crop and tree varieties and livestock breeds—all highly productive and well adapted to local climate and pest constraints.

Fourth, African farmers need much more effective agricultural extension services, to help farmers adopt state-of-the-art technologies generated by partnerships between farming communities and a stronger agricultural research system.

Fifth, the most vulnerable groups—pregnant and nursing mothers, children younger than 2 years old and those in schools—should receive supplementary feeding. This must be done with locally purchased foods, thereby increasing market demand while providing balanced diets with foods that villagers like to eat. Shipments
of food aid should be limited to emergency starvation situations where local procurement is not feasible.

A 21st Century Green Revolution also requires basic rural infrastructure. To lift Africa and the other troubled regions out of their misery, rich countries must help them make major investments in schools, roads, power, water, sanitation and more. One might imagine that such a full panoply of help really would be too expensive for the United States and other wealthy nations. But that guess, surprisingly, is wrong.

**Spreading Prosperity**

The U.N. Millennium Project [which Sachs directs] is exploring the broad range of policies and investments that would be necessary to help free about 1 billion people from poverty. The Millennium Project's work won't be completed until next year, but the preliminary findings are as heartening as the conclusions of the WHO commission.

Specifically, the end of abject poverty is within reach. It's not a crazy dream but a hardheaded financial concept. If poor countries exercise responsible leadership and the rich world pitches in to help finance clinics, schools, roads, soil improvements and all the rest, not only could Africa survive, it could thrive. Not only would today's hot spots cease to be terror havens, but they could become respectable players in a world economy that would be much more effective at spreading prosperity.

As a first approximation, the Millennium Project has found that in addition to $25 billion or so for investments in health, we would probably need another $50 billion or so from rich countries to address the interconnected challenges of education, social services and infrastructure, for a total of about $75 billion per year. Perhaps half that, roughly $35 billion, would come from the United States. To put it in context, $35 billion amounts to 35 cents for every $100 of U.S. Gross National Product.

The most important point is that the rich world's money would not go up in smoke but would be put toward specific, identifiable and measurable investments, such as anti-malaria drugs and bed nets; antiretroviral medicines for Africa's dying AIDS patients; new wells and pit latrines in the countryside; and feeder roads to carry farm goods to the cities, thereby enriching both impoverished farmers and struggling slum dwellers.

Farmers in Africa and the rest of the developing world also will need training in ecologically sensitive technologies that are resilient to weather and price fluctuations, and that enhance ecosystem functions while drastically increasing crop yields.

These new techniques include agroforestry to replenish depleted soil nutrients and provide livestock fodder, fuel wood and timber; low-till or no-till agriculture to fend off soil erosion; small-scale irrigation to avoid disrupting ecosystems by giant dam projects; and integrated pest management to cut down on herbicide and pesticide use. After soil and water problems are overcome, breakthroughs in biotechnology can help by fortifying crops against droughts and local pests and by increasing the nutritional content of staple foods.

**Empowering Women**

A rise in crop yields will be revolutionary even beyond ending hunger. Raising the productivity of villages in Africa and the rest of the developing world will raise the status of women. Today, Africa's women in particular are forced to farm almost without tools or modern technologies. They fetch water and fuel wood from long distances and engage in back-breaking labor on small farm plots that are too nutrient-depleted to produce a decent crop even when the rains are good.

By investing in soils, water, improved seeds and other basic rural infrastructure, we will help make it possible for more
Investing in basic infrastructure will ease the lives of women like these in Nepal, who, like many women in the developing world, work without the most basic of technologies.

Girls to attend school. Women’s lives will be enriched and empowered, and women will be able to seek off-farm employment opportunities as well. History has shown that women’s empowerment in turn leads to lower population growth and more investment in children’s health and education.

After farmers double their basic food crop production and are no longer hungry, they often put part of their farm to grow higher value crops and trees. Many are beginning to have dairy cows for the first time, generating cash income and taking the first steps out of absolute poverty.

By investing in soils, water, improved seeds and other basic rural infrastructure, we will help make it possible for more girls to attend school.

But when farmers have products to sell, they often encounter no functioning markets. Rural markets must be strengthened so they work for the poor. This means storage facilities, market information systems, guaranteed floor prices and credit programs so prices do not collapse during good harvests, and the means to transport surplus grain to deficit areas.

Making rural markets work involves a large role of the private sector in partnership with governments. Value-added processing facilities for high-value products, including fruits and medicines from newly domesticated plants, can go a long way in reducing the hunger of the rural landless and the urban poor by generating off-farm employment. Removal of perverse agricultural subsidies and other barriers to trade will help the transition from subsistence to commercial farming.

**Life and Death**

The Millennium Project’s preliminary cost estimates are striking. They translate a bit of dry macroeconomic accounting into the stuff of life and death. Suppose that the United States must decide whether to spend another $35 billion per year on foreign assistance to the world’s poor countries. Can we afford it? Well, it’s about one-seventh of President Bush’s tax cuts. It’s about half of our annual Iraq spending. It’s about one-fourth of the recent increase in U.S. military spending, and just one-twelfth of our total military budget.

In short, the answer is yes, we can afford it, though it will require us to rethink our priorities.

The surprising fact, unknown to most Americans, is that the U.S. contribution to development aid, when measured as a percentage of GNP, is actually the lowest of any of the 22 donor countries. Sweden, for example, gives 0.87 percent of its GNP, while the U.S. currently gives just 0.13 percent of its own. In other words, we are currently giving 18 cents per $100 of income, while we might need to give another 35 to 50 cents to get the job done.

The United States cannot ignore its obligations to the world any longer. Set aside, for the moment, the American value of altruism. Speaking strictly from self-interest, we must bear these small costs to assure a peaceful century. And we must consider them an investment that will ultimately save us untold treasure while sparing us untold pain.
We've seen this approach work before. From the 1950s till 1980, South Korea was a leading recipient of U.S. aid, including considerable agricultural assistance. Today, South Korea receives no U.S. aid but is the fifth largest importer of U.S. agricultural products. In the 1970s, some U.S. farm groups complained that agricultural aid was making Brazil a competitor in global markets. But by 1997, Brazil was importing $500 million in U.S. agricultural products. Africa, with a population approaching 1 billion people, can become a major trading partner with rich countries, if we act to help its people escape poverty.

There’s no question: Science and technology, mobilized by an ethic of shared responsibility, can fight disease and hunger. But we can do it only if we try. We are surely the first generation in human history that could actually bring about an end to extreme poverty on the planet. Whether or not we will seize this glorious opportunity, this historic chance to fundamentally transform the human condition, depends on the strength of our human will, and on our willingness to do the right things.

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**Things You Can Do Right Now—to End Hunger**

1. **Pick Up a Pen**—Write your state and national lawmakers to let them know that world hunger is one of your top priorities.

2. **Bring It Home**—Shop at your local farmers market to support small farmers. The food is fresher, and your dollars stay in your community.

3. **Buy Fair**—Fair Trade programs ensure that farmers in developing countries are paid a price that exceeds their production costs, which helps them support their families.

4. **Feed Your Mind**—The more you know, the more you can make a difference in the world by sharing your knowledge with others and making better-informed consumer choices.

5. **Go Organic**—Organic farming is environmentally friendly and provides a sound agricultural alternative.

6. **Get Busy**—Volunteer for local or national organizations that work to end world hunger and poverty.

7. **Ante Up**—Charitable, alternative gift giving can directly support anti-hunger efforts.

8. **Go and See**—Join a Heifer Study Tour so you can interact with indigenous people and learn about their lives and their struggles. You will return home reinvigorated in your commitment to end hunger.

9. **Recruit the Masses**—Persuade your church, social group, family or civic club to help in your fight against hunger. Grassroots efforts make dramatic differences in the lives of hungry families.

10. **Pass It On**—Share your knowledge with your children and encourage them to get involved in the quest to end hunger. This ensures that your commitment to ending hunger will be passed on from generation to generation.