Still Hungry

One Eighth of the World's People Do Not Have Enough to Eat

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During the 30 minutes it will take you to read this article, 360 preschool children will die of hunger and malnutrition. Twelve a minute, around the clock; more than six million a year. But that is only the tip of the proverbial and ugly iceberg. One in four preschoolers in developing countries suffers from hunger and nutritional deficiencies. These children do not grow to their full potential, they have little resistance to disease, they learn less in school and they earn less as adults. Because of low birth weight, they are handicapped from the moment they enter the world.

More than 800 million people—two and a half times the population of the U.S.—live every day with hunger, or "food insecurity," as it is often called, as their constant companion. Many more have micronutrient deficiencies: they do not get essential vitamins or minerals in their diets. Insufficient iron, and the anemia that comes with it, is the most widespread of these maladies.

The problem does not stem, as some might think, from insufficient production. The world is awash in food, and more and more people are overeating. The so-called nutrition transition, in which diets change from basic grains and tubers to meat, dairy products and processed foods high in sugar and fat, is in full force in developing countries, bringing with it a dual nutritional problem of deficiencies and hunger in some households and obesity and related diseases in others. Technological advances in agriculture mean more food is grown at lower cost than ever before. Globalization, improved communication and efficient transport have facilitated the movement of food over long distances at reasonable rates. In fact, enough food is now being produced to meet the energy and protein needs of every person on the planet. Knowledge about nutrition is widely available, and the large humanitarian and economic costs of hunger and malnutrition are well documented—as are the benefits of eliminating these afflictions.

The main reason hunger and nutritional deficiencies persist is poverty; many millions of households simply cannot afford to buy nutritious food or the farming supplies they need to grow enough of their own. And this poverty is sustained by poor access to family planning and reproductive health care and by diseases that spread because of poor sanitation and dirty drinking water, among other factors.

Effective action to reduce hunger must be based on a thorough understanding of who the hungry are, where they are, and exactly why they are malnourished. In the pages that follow, we lay out the best current knowledge on these questions and on the steps that need to be taken to feed the world.

Who Are the Hungry?

Hunger may be long-term, or it may be transitory. Long-term hunger is pervasive among people caught in the trap of poverty. Although not all poor people are hungry, almost all hungry people are poor. The great majority—75 percent—of the chronically underfed live in rural areas of developing countries. They are landless, frequently unemployed or employed at very low wages. Or they are farmers with small land holdings and limited access to other assets, credit and agricultural necessities such as fertilizers and crop protection. They live in households headed by women with little wage-earning capacity or in households in which the adults suffer from illnesses such as HIV/AIDS. They are orphans and other individuals without families. They are usually invisible to decision makers in the societies where they reside, and the term "silent hunger" describes their condition poignantly.

Transitory hunger caused by natural or human-made disasters such as droughts, floods, earthquakes, conflicts or bad policies tends not to be silent. Most of us have seen haunting images of the starvation that occurs during such famines. And the world has demonstrated its generosity in helping the victims of transitory hunger, although they represent only a small part—roughly 10 percent—of the world's hungry. Like the chronically hungry, they are usually found in rural areas, primarily in Africa and Asia. These rural populations depend almost exclusively on agriculture; they have very few alternative sources of income, and they are therefore very vulnerable to shocks of nature. Although natural disasters continue to undermine people's food security in various regions of the world, hunger hot spots in recent years have switched to areas affected by human-induced devastation. Between 1992 and 2003, armed conflicts and economic problems accounted for more than 35 percent of food emergencies, compared with around 15 percent between 1986 and 1991.

Hunger and malnutrition affect two groups of people disproportionately. The first is preschool children: some 146 million are underweight because of chronic or acute hunger. This means that 18 percent of all hungry people are children younger than five years. Child hunger is frequently passed on from mothers who themselves are malnourished; about 20 million children are born underweight annually. Undernourished youngsters are less motivated to play and study, and many fail to get even the most rudimentary education. Millions leave school prematurely. Chronic hunger also delays or stops physical and mental growth. Most tragically, infectious diseases such as measles or whooping cough can kill undernourished children more readily than well-fed ones.

Hunger, Unbalanced energy intake and vitamin and mineral deficiency account for more than half the world's disease burden.

—Food and Agriculture Organization (FAO) of the United Nations

Women and girls are also more likely to be victims of hunger: more than 60 percent of the world's hungry are female. Although women are by and large the main producers of food throughout the world, social structures and traditions often mean that they get less to eat than men do. For example, whereas around 25 percent of men in developing countries have anemia caused by a lack of iron, 45 percent of women in the same regions are affected. Every day 300 women die during childbirth because of iron deficiency.

Where Are They?

The Food and Agriculture Organization (FAO) of the United Nations estimates that an annual average of 854 million people were undernourished over the period from 2001 through 2003: 820 million in developing countries, 25 million in transition countries (such as the former members of the Soviet Union) and nine million in industrial countries. A disproportionate share of the poorest and most food-insecure people live in Africa, although the Asia-Pacific region has the largest absolute number of chronically undernourished residents. The developing countries as a group did see declines between the periods of 1990–1992 and 2001–2003, but the numbers rose by eight million in South Asia (which includes India) and by 37 million in sub-Saharan Africa.

Recent statistics show that in developing countries, 27 percent of children younger than five are underweight and 31 percent are stunted. In several large South Asian countries (India and Bangladesh among them), both underweight and stunting rates are well above those in the region as a whole and much higher than those in Africa. Undernutrition in children is the worst in Asia in terms of absolute numbers, but because the Asian region is doing well at an aggregate level, chances are that these high undernutrition rates will escape the attention of governments and relief organizations unless special efforts are made to highlight this issue.

Why Are They Hungry?

Hunger can have many causes. As noted, insufficient food production on the global scale is not one of them. The world as a whole produces more than enough food to feed all the hungry it is the unequal distribution of food among and within countries that has led to the world hunger problem.

Unequal distribution has its deep root in poverty: in times of food shortages, the poor country simply cannot buy enough food in the world markets, and even when food is available inside the country, the poorest of its citizens are often unable to pay for it. Poverty also limits the production of food in impoverished areas, because the destitute lack the resources to invest in agriculture.

The natural disasters such as floods, storms and drought that are the primary causes of transitory or acute hunger have increased over the past decade, and the consequences for poor countries have been severe. Drought is now the leading cause of famine throughout the world. Episodes of drought in 2004 led to heavy losses of livestock and crops in parts of Kenya, Uganda, Somalia, Eritrea and Ethiopia. In many countries, deforestation, salinization, and poor farming practices such as overcropping and overgrazing are exacerbating the natural disasters.

Food crises that can be attributed to human-induced causes have also increased in recent years. Armed conflicts in Asia, Africa and Latin America uproot millions of people and precipitate some of the world's most serious hunger emergencies. Escalating conflict in the Darfur region of Sudan in 2004 drove a million people from their homes and led to a major food crisis, despite the fact that the area had enjoyed relatively good growing conditions. In the 1990s, as fighting swept through Central Africa, the prevalence of hungry people rose from 36 to 56 percent, whereas the termination of armed conflict in Mozambique brought rapid economic growth and reduced poverty. More peaceful parts of Africa, such as Ghana, have seen decreasing levels of malnutrition.

HIV/AIDS exacerbates the plague of hunger. At the household level, the disease has caused food insecurity by leaving millions of children without providers, depleting assets, increasing medical expenses, and diverting resources from sustainable investments. At the national level, it has reduced the ability of countries to prevent and mitigate food emergencies by taking the lives of crucial producers and professionals in different sectors of the economy. The negative effects of the pandemic are reinforced by other crises—poverty, fighting, misuse of resources, and climate stress, which together create a vicious cycle of malnutrition and disease.

What Can Be Done?

The nations of the world have not ignored hunger, but despite nice rhetoric and promises, their efforts have fallen short. At the 1996 World Food Summit political leaders from virtually

Where Are the Underweight Children?

Total (in millions)	146
India	57
Bangladesh	8
Pakistan	8
China	7
Nigeria	6
Ethiopia	6
Indonesia	6
Rest of world	48

Where Are the Low-Birth-Weight Babies Born?

Total (in millions)	20.3
South Asia	11.4
Sub-Saharan Africa	4.0
Asia	2.0
West Asia/North Africa	1.4
Latin America/Caribbean	1.1
Eastern Europe/former U.S.S.R.	0.4

The Perils of Childhood Malnutrition

- Malnutrition plays a role in more than half the annual 12 million deaths of children younger than five.
- Every year up to 500,000 children become partially or totally blind because of vitamin A deficiency.
- Iodine deficiency is the single most important cause of preventable brain damage in children.

—FAO

every country agreed to reduce the number of hungry people by half, from roughly 800 million to about 400 million, over the 25-year period from 1990 to 2015. The same countries met five years later to take stock of progress. Although some, such as China, had made strides toward achieving the target, over half the countries, mainly in sub-Saharan Africa, had *more* hungry people, and at the global level the total number had not changed significantly. The leaders renewed their promise to halve the number of hungry people, but developments since then indicate that they have taken very little new action.

A different group, the Millennium Summit, reaffirmed the target in 2000, albeit as the easier goal of halving the *proportion*, rather than the absolute number, of people who are hungry. Although East and Southeast Asia and Latin America are likely to reach this goal, it will not be attained globally. Between 800 million and 900 million of the world's citizens will still be hungry in 2015.

Implementing rapid economic growth for poor people is the backbone of any strategy to eliminate hunger and malnutrition. The specific policies that will be most fruitful will vary according to local and national circumstances. But, as we will demonstrate below, they definitely include programs supporting rural development, with an emphasis on agriculture, as well as basic education and health services, and good governance.

Because 75 percent of the world's poor live in rural areas, the most crucial component may well be agricultural and rural development. According to the FAO, in all the countries on track to reach the Millennium Development Goal, increases in income in the agricultural sector are significantly better than average. Yet many developing countries ignore this observation and continue to give priority to urban development. The bias against agriculture deters investment in infrastructure such as roads, warehouses and irrigation that would benefit farmers.

The promise of agricultural development was demonstrated many years ago in South Korea, Taiwan, India and several other Asian countries during the so-called green revolution. In the 1960s and 1970s innovations put in place by the Consultative Group on International Agricultural Research and collaborating national institutions culminated in dramatic increases in rice and wheat yields, decreased costs of production, lower food prices, higher incomes for small farmers and, ultimately, avoidance of an impending hunger catastrophe.

Among the policies directed at agriculture that are needed to pull the farmers of developing countries out of poverty are ones ensuring secure access to land and to technologies such as fertilizers, improved seed and better protection of plants against pests. Investments in rural infrastructure—roads, electrification, storage facilities and irrigation—are also essential. So are the availability of credit and savings institutions. Because well-functioning markets for selling produce and buying consumer goods will be crucial, governments must ensure that markets are not biased against small farmers, less favored areas (those with irregular rainfall and fragile soils, for example) and poor consumers. Brazil's efforts under President Luiz Inácio Lula da Silva to give land to poor rural people is an illustration of a successful, albeit limited program. In China, promotion of small-scale rural enterprises providing goods and services for farm families, as well as rural-based agro-industries (such as food processing), which create employment and add value to agricultural produce, have played a major role in reducing poverty and hunger.

Many antipoverty policies—particularly those promoting health and education—will benefit both the urban as well as the rural poor, which is important because urban destitution is on the rise. Past experience indicates that the most successful measures focus on fighting widespread micronutrient deficiencies, reducing food contamination and food-borne illnesses, and providing universal primary education for girls and boys.

What's Working in Bangladesh Fighting Hunger on Several Fronts

Once oppressed by famine and dependent on food imports, Bangladesh now not only produces almost all its own rice but also exports agricultural products, and its gross domestic product is growing. As Gordon West, formerly of the United States Agency for International Development, has pointed out, this turnaround resulted from several smart interventions.

The ability to grow rice during the dry season drove much of this transition. At one time, most rice production in the nation depended on monsoon rains. Then public research institutions developed and released rice varieties that grow abundantly in cooler weather and that require fewer daily hours of sunlight. By 2002, about half of the country's rice crop was being produced in the dry months.

Another important prod to change was government institution of a more flexible import policy. As a result, private traders began bringing food in at times when the nation did not produce enough for itself. The government also gave more attention to targeting food distribution to the impoverished. For example, a food-for-education program was begun that gives food to poor families when their children attend school instead of working. In addition to improving nutrition, this program has allowed youngsters to reach higher levels in school.

Foreign development agencies helped as well: they financed the construction and repair of roads, creating jobs and improving year-round access not only to markets but to basic services. Other agencies—notably CARE and World Vision—gave jobs to men and women in the most food-insecure areas of the country. In addition to building environmentally sound, all-season roads, participants plant trees to prevent soil erosion, and poor women find further employment in caring for the trees. In a similar vein, the United Nation's World Food Program paid people with food when they worked to restore important community resources such as roads, ponds supporting fish, and embankments that provided protection from floods.

Although the changes that occurred in Bangladesh are impressive, huge challenges remain. Rates of malnutrition continue to be among the highest in the world. Because the diets of many Bangladeshis are deficient in essential fats, minerals and vitamins, an important next step for the country will be making products such as wheat, fruit, milk, legumes and meat more widely available.

—The Editors

What's Working in Mexico Paying People to Attend Schools and Clinics

Two decades ago rising poverty in Mexico meant that almost one out of three people did not have enough to eat. Poor nutrition leads to bad health, which slows down learning capacity, which breeds poverty, which leads back to poor nutrition. So, in an example of a program that has worked well, the government introduced an innovative plan. Instead of subsidizing tortillas—which it had been doing and which provided only temporary relief from hunger—the government began paying women directly if they took certain actions.

Called PROGRESA (renamed Oportunidades), the program gives monthly cash payments—of up to about U.S. $61—for each child in grades three through nine who attends school, and awards higher amounts for those in higher grades and for girls. Each family also receives monthly food transfers worth roughly $14 if family members, especially mothers and children, make a specified number of clinic visits annually.

Perhaps the most unusual feature of the program is its channeling of funds to women. This economic power could give women a larger voice in decision making within households, which could potentially focus more of the family's resources on nutrition and education.

The plan's achievements already reflect improvements in both these areas. Participating families saw a 16 percent increase in the annual growth rate of children one to three years old and an almost 25 percent reduction in illness among children younger than five. Secondary school enrollment rose from 67 to 75 percent for girls and from 73 to 78 percent for boys, forecasting hope for even greater improvements as a better educated generation starts its own families.

—The Editors

Policies and behavioral changes that encourage gender equality in decision making and in sharing resources are extremely valuable because women are a critical link in the well-being of households. Family-planning counseling and reproductive health care in forms compatible with local cultures are also key pieces of the solution. Examples of successful programs include PROGRESA, which has improved access to education, health care, clean water, safe sanitation and child care in Mexico, and the Food for Education Program, which has increased school attendance and reduced hunger among children in Bangladesh *[see boxes above]*.

Technological developments in the biological sciences, energy and communications offer new opportunities that could benefit poor people and thus ease hunger. For instance, in China and India, government approval of the genetically modified cottonseed Bt cotton, whose plants are resistant to the attack of certain insects such as the cotton bollworm, has resulted in major economic gains for millions of small farmers. Public investment in research and technology is needed to develop other innovations, and farmers and consumers should participate in setting priorities for this research.

Good governance, including the rule of law, transparency, absence of corruption, conflict prevention and resolution, sound public administration, and respect and protection for human rights, is of critical importance to assure sustainable food security. Zimbabwe, which over a short period moved from being a food-secure country to one with widespread hunger, demonstrates what can happen in the absence of good governance. Although national governments bear the primary responsibility, civil society, as represented by local community-based groups and NGOs (nongovernmental organizations), can also assist low-income people.

Internationally, policies and institutions need to do more to guide globalization for the benefit of the poor. Industrial countries should accelerate opening their markets, and the World Trade Organization should work closely with civil society and national governments to remove barriers that hinder the movement of laborers across borders, distort prices, impose unfair intellectual-property rights, and choke competition. The U.S., the European Union and Japan have erected trade barriers against imports of food and agricultural commodities produced by poor farmers in developing countries. At the same time, they pressure developing countries to open up their markets for the products of industrial nations, including highly subsidized agricultural commodities. These practices are worse than hypocritical; they actively hinder efforts to reduce hunger.

Development assistance should be increased from the current 0.3 percent of national incomes of donor countries to the 0.7 percent the rich countries have repeatedly pledged to giv since first adopting this commitment in a U.N. resolution i 1970. Ongoing negotiations for debt relief for low-incom developing countries should be accelerated.

Winning the fight against hunger would not only benefi those who are hungry. We would all gain. Hungry peopl make poor trading partners, and they contribute to instabil ity across nations. Even in a hypothetical world governed b purely selfish people who have plenty to eat, eradicating hun ger would be a good idea. The world has the resources and th knowledge to win the fight. We have not yet shown that w have the will.

For Further Information

Consultative Group on International Agricultural Research, an alliance of agricultural centers and other organizations that mobilize science to help the poor: www.cgiar.org

Food and Agriculture Organization of the United Nations: www.fao.org

International Food Policy Research Institute: www.ifpri.org

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