

# PAINFUL PARADOX

*About one out of six people in the world goes hungry on any given day. That awful fact would be somewhat understandable, though no less painful, if the cause of the hunger was simply not enough food to go around. But the world actually produces more than enough to feed all six billion of us, and has all along. The problem, say specialists who study the issue, stems largely from a combination of factors, many of which have to do with the faults of government and social policies. Natural catastrophes take their share of the blame, but the chronic villains, one leading expert says, are a lack of international solidarity when it comes to transferring agricultural technology coupled with corruption, war and a dearth of democratic institutions. With the world's population expected to reach nine billion by 2050, a 50 percent increase, the ranks of the hungry are certain to grow unless the international community does a much better job making sure that food is available for everyone's table.*

Up to a billion people will go to bed hungry tonight. Why? The easiest explanation would be that there are too many people and not enough food. In fact, the truth is much more complex – and has nothing to do with either the number of people or the amount of food.

The world produces about 2,800 calories per person, per day globally – more than enough for all to eat, [according to recent estimates](#) of the Organisation for Economic Co-operation and Development (OECD).

“There is enough food in the world for everyone, but it would appear that the willingness to do what is needed to end hunger is just not there,” says Rafael Pampillon, a professor of economics at the IE Business School in Madrid, who studies development issues.

Although productivity increases have slowed down slightly in recent years, development experts say that over the past six decades, the supply of food has generally grown faster than the population. The long-term trend in agricultural prices also suggests the same growth in supply. Spikes in prices for some foods in some places may last for years or even decades, but the overall average price of agricultural commodities continues to decline as farm productivity improves: the price of wheat, for instance, has fallen steadily for the last two centuries.

As Amartya Sen, perhaps the most important thinker on world hunger, has observed, “Starvation is the characteristic of some people not having enough food to eat. It is not the characteristic of there being not enough food to eat.”

So why does 15 percent of the planet remain underfed? Sen, a Nobel Prize-winning economist and Harvard professor, has argued that the lack of international solidarity about transferring agricultural technology, coupled with corruption, war, natural catastrophes and a dearth of democratic institutions, all contribute to empty plates.

In terms of technology transfer, inefficiency remains a huge problem. Rising agricultural productivity has freed many people from farming. Most advanced economies now employ only a tiny fraction of their workforce in agriculture. In the United Kingdom, for instance, only 1.3 percent of workers have anything to do with farming. Even worldwide, for the first time in history, agriculture is no longer the dominant occupational sector. About a third of the world’s people are engaged in some kind of agriculture, but more are now employed in services, [according to International Labor Organisation statistics](#). Yet in a number of subsistence economies, almost everyone still farms. In Zaire, for instance, 80 percent of the population reportedly remains engaged in agriculture – a higher level than in parts of Europe a century and a half ago.

Accountable governments also seem to be an important variable. Wars and other political disruptions tend to lead to hunger. Historically, as Sen has noted, famines almost never occur in democratic countries. Others have pointed out, however, that hunger and democracy do mix when it comes to smaller-scale starvation. In India, for instance, hunger remains a major problem although the country as a whole is now a net exporter of food.

### A Tipping Point for the Vulnerable

Other scholars see somewhat different causes. In a new book, [The Atlas of World Hunger](#), geography professor Thomas Bassett and agricultural and consumer economics professor [Alex Winter-Nelson](#), both at the University of Illinois, argue that war and natural disasters don’t really cause hunger, but rather expose people who were already at risk of a disruption to their food supply. “Natural or human-made disasters are exacerbating events that push people into hunger because they are already vulnerable,” Bassett says. Drought, for example, does not lead to famine, he says, if people “have the resources to cope with disaster.”

In their atlas, Bassett and Winter-Nelson have developed a hunger vulnerability index, a ranking system that synthesizes a number of metrics that seem to correlate most with hunger. They hope the index will be useful to policymakers trying to evaluate the best way to reduce hunger's prevalence and the number of those at risk.

After looking at statistics on an individual, national and international level, they found that starvation correlates most with a number of social indicators, particularly poverty and lack of access to some kind of social or political entitlement, and not with agricultural productivity.

Overall, the degree of political stability and the availability of social services, particularly health-care programs, are key predictors of how well-fed the population is. "The less health care there is, the more hunger there is," Bassett says.

Gender equality is another important factor, according to Bassett. "In countries where women have more status, children are better off," he says. "As women get educated, their income-earning opportunities increase, and they have more power in the household to decide upon reproductive questions or who gets to eat the meat tonight."

The more economic opportunity women have, the less likely it is that children will be stunted, or that daughters will receive less food than boys (a major culturally-related barrier to nutrition in India, one of the few countries in the world where, not by coincidence, men actually outnumber women).

Finally, technology seems to be crucial – not so much agricultural technology, but any technology, according to Bassett. The more advanced the economy, it seems, the less likely its people will be starving. In fact, Bassett argues that citizens of countries engaged in higher-value economic production, such as manufacturing or services, tend to be better off when it comes to food availability. "That's definitely an improvement," he says.

### Donating Food May Add to the Problem

What doesn't help prevent hunger, unfortunately, is simply sending food. At the national level, redistribution programs can help alleviate spot shortages, but at the international level, shipping surplus food to a hungry country isn't a real solution. "First, they often lack the kind of storage facilities needed to receive, much less distribute, such

donations,” says Pampillon of IE. “For instance, the lack of refrigerated networks means that there is no way to get perishable goods to the people who need them.”

Donations from the rich north can also make the problem worse, he says, by disrupting the local economy. “Basic aid in the form of food only serves to put off inevitable future problems and widen the world wealth and food gap,” Pampillon says.

Such gifts can have other negative unintended effects as well, for instance by giving recipients a taste for foods that can only be imported, a seemingly harmless preference which over time can actually increase the precariousness of their condition by leading them to neglect local crops.. In extreme cases, such as war-torn areas, donations can even lead eventually to a loss of farming skills, analysts say.

It’s better, Pampillon says, to transfer agricultural expertise than sacks of grain. Developing countries need the knowledge to “produce seeds, fertilizers, pesticides, tools, tractors and means of transport that will enable them to produce more of the type of food that is in line with the needs and geographical features of the region,” he says.

A greater social obstacle to agricultural development, however, are the trade barriers of high-income countries, according to Pampillon. The subsidies enjoyed by farmers in the European Union, for instance, make it more difficult for poor countries to bring in money from their agriculture. Often, the subsidies and tariffs in the advanced markets limit the incentive of emerging-market farmers to grow specialized, higher-value crops for export.

In the shorter run, an overstretched supply chain can also contribute to hunger. [In a recent article](#), Frédéric Baudouin and David Parlongue of the Ecole des Mines, argue that inventory shortages were a major reason for the price shocks that led to a surge in hunger in 2007-2008, when an estimated 115 million people joined the ranks of the underfed.

Although such factors as the use of grains for biofuels and the growth of consumption in China were widely blamed for the rise in prices, these developments just tightened supply slightly, Baudouin and Parlongue say. The real roots of the crisis, the authors conclude, were back in the 1970s, when the International Monetary Fund and the World Bank began to encourage governments in developing countries to spend less, principally by cutting back on infrastructure, including food-storage facilities. At the same time, the

Washington advisors encouraged these countries to try to raise the value of their exports by focusing on high-end crops such as cotton and coffee. Countries that were more efficient grain producers, including Canada, France and the United States, would satisfy the developing world's need for staples, the thinking went.

In general, the strategy turned out to be correct, say Baudouin and Parlongue. The percentage of hungry people did go down prior to 2007. However, in 2007-2008, as a result of a season of unusually low inventories, this "lean" model made more people vulnerable. First, because the model left countries such as Senegal with few facilities for grain storage, which would have helped them to cope better with rising prices, and second, because it meant that they did not have crops they could use to substitute for the expensive grain. One proof: Mali, which did not take the IMF advice and continued to grow rice, suffered less during the price spike than Senegal, a major rice importer.

At the same time, governmental solutions to the problem tended to focus mostly on reducing unrest in the cities while ignoring the hard-to-reach rural people who make up 80 percent of the world's hungry. In Senegal, for instance, the price of rice was higher for rural people the farther away they lived from the capital.

### Setting a Table for Nine Billion

With the memory of the 2008 food price riots still fresh, many countries are looking harder for ways to provide their citizens with food security to meet the new demands that will accompany the continued rise in the world's population.

By 2050, the population is expected to jump to nine billion, with most of the gain coming in the developing countries. This increase, plus the growing appetites of increasingly affluent Asians, might mean that the total food produced in the world will need to rise by 70 percent and the total produced in developing markets by 100 percent, according to forecasts from the OECD's [Business and Industry Advisory Committee](#).

Will the world meet the need?

"The power of population is so superior to the power in the earth to produce subsistence for man that premature death must in some shape or other visit the human race," wrote Thomas Malthus, who was wrong for 250 years in his prediction of doom and who seems likely to continue to be wrong for at least the next 50.

However, tomorrow will definitely have its own set of challenges. Pesticides that helped boost yields in the postwar Green Revolution may have also inadvertently helped nature select hardier bugs and mites. Water, too, is an extremely limited resource in many of the countries that could benefit the most from enhanced agricultural productivity, according to the OECD, particularly in an era of climate change. Finally, although some experts believe genetically modified varieties will overcome all these difficulties, others see genetic modification as a potential source of disaster in its own right.

The most likely forecast: another bumper crop of complexity.

Source : <http://www.paristechreview.com/2010/06/29/with-enough-food-for-all-a-billion-people-remain-hungry/>