WORLD HUNGER

TWELVE MYTHS

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To the memory of our friend Harry Chapin,
who believed that ordinary people could overcome hunger
once we free ourselves from the myths that entrap us.
Beyond Guilt and Fear

For over twenty-five years we have sought to understand why there is hunger in a world of plenty. For us, learning had to begin with unlearning. Cutting through the simplistic and scary dichôs about hunger, we arrived at some surprising findings:

- No country in the world is a hopeless case. Even countries many people think of as impossibly overcrowded have the resources necessary for people to free themselves from hunger.
- Increasing a nation's food production may not help the hungry. Food production per person can increase while more people go hungry.
- Our government's foreign aid often hurts rather than helps the hungry. But in a multitude of other ways we can help.
- The poor are neither a burden on us nor a threat to our interests. Unlikely as it may seem, the interests of the vast majority of Americans have much in common with those of the world's hungry.

Our book explains these surprising findings and many more that have freed us from a response to hunger motivated by guilt and fear. But first we must ask the seemingly grade-school question, just what is hunger? Many people assume they know—they've felt it, they've read about it, they've been touched by images of hungry people on
television. But the greatest obstacle to grasping the causes and solutions to world hunger is that few of us stop to ponder this elemental question.

What Is Hunger?

Television images haunt us. Stunted, bony bodies. Long lines waiting for a meager bowl of gruel. This is famine hunger in its acute form, the kind no one could miss.

But hunger comes in another form. It is the day-in-day-out hunger that almost 800 million people suffer. While chronic hunger doesn’t make the evening news, it takes more lives than famine.

Every day this largely invisible hunger, and its related preventable diseases, kill as many as thirty-four thousand children under the age of five. That’s 12 million children per year—more than the total number of people who died each year during World War II. This death toll is equivalent to the number killed instantly by a Hiroshima bomb every three days.

Statistics like this are staggering. They shock and alarm. Several years ago, however, we began to doubt the usefulness of such numbers. Numbers can numb. They can distance us from what is actually very close to us. So we asked ourselves, what really is hunger?

Is it the gnawing pain in the stomach when we miss a meal? The physical depletion of those suffering chronic undernutrition? The listless stare of a dying child in the television hunger appeal? Yes, but it is more. And we became convinced that as long as we conceive of hunger only in physical measures, we will never truly understand it, certainly not its roots.

What we asked ourselves, would it mean to think of hunger in terms of universal human emotions, feelings that all of us have experienced at some time in our lives? We’ll mention only four such emotions, to give you an idea of what we mean.

A friend of ours, Dr. Charles Clements, is a former Air Force pilot and Vietnam veteran who spent a year treating peasants in El Salvador. He wrote of a family he tried to help whose son and daughter had died of fever and diarrhea. “Both had been lost,” he writes, “in the years when Camila and her husband had chosen to pay their mortgage, a sum equal to half the value of their crop, rather than keep the money to feed their children. Each year, the choice was always the same. If they paid, their children’s lives were endangered. If they didn’t, their land could be repossessed.”

Being hungry thus means anguish. The anguish of impossible choices. But it is more.

In Nicaragua some years ago, we met Amanda Espinoza, a poor rural woman, who until then had never had enough to feed her family. She told us that she had endured six stillbirths and watched five of her children die before the age of one.

To Amanda, being hungry means watching people you love die. It is grief.

Throughout the world, the poor are made to blame themselves for their poverty. Walking into a home in the Philippine countryside, the first words we heard were an apology for the poverty of the dwelling. Being hungry also means living in humiliation.

Anguish, grief, and humiliation are a part of what hunger means. But increasingly throughout the world, hunger has a fourth dimension.

In Guatemala we met two poor highland peasants who, with the help of World Neighbors, an Oklahoma City–based voluntary aid group, were teaching their neighbors how to reduce erosion on the steep slopes onto which they had been pushed by wealthy landowners monopolizing the flat valley land. Two years later, we learned that one had been forced into hiding, the other had been killed. In the eyes of the wealthy their crime was teaching their neighbors better farming techniques. Guatemala’s oligarchy feels threatened by any change that makes the poor less dependent on low-paying jobs on their plantations.

Often, then, a fourth dimension of hunger is fear.

Anguish, grief, humiliation, and fear. What if we refused to count the hungry and instead tried to understand hunger in terms of such universal emotions?

We discovered that how we understand hunger determines what we think are its solutions. If we think of hunger only as numbers—numbers of people with too few calories—the solution also appears to us in numbers—numbers of tons of food aid, or numbers of dollars in economic assistance. But once we begin to understand hunger as real people coping with the most painful of human emotions, we can perceive its roots. We need only ask, When have we experienced any of these emotions ourselves? Hasn’t it been when we have felt out of control of our lives—powerless to protect ourselves and those we love?

Hunger has thus become for us the ultimate symbol of powerlessness.
The Causes of Powerlessness

Understanding that hunger tells us that a person has been robbed of the most basic power—the power to protect ourselves and those we love—is a first step. Peeling back the layers of misunderstanding, we must then ask, If powerlessness lies at the very root of hunger, what are hunger’s causes?

Certainly, it is not scarcity. The world is awash with food, as chapter 1 will show. Neither are natural disasters to blame. Put most simply, the root cause of hunger isn’t a scarcity of food or land; it’s a scarcity of democracy.

Wait a minute! What does democracy have to do with hunger? In our view—everything. Democracy carries within it the principle of accountability. Democratic structures are those in which people have a say in decisions that most affect their well-being. Leadership can be kept accountable to the needs of the majority. Antidemocratic structures are those in which power is so tightly concentrated that the majority of people are left with no say at all. Leaders are accountable only to the powerful minority.

In the United States, we think of democracy as a strictly political concept, so it may seem contrived to apply it to the economic questions of land, food, jobs, and income. Political democracy helps us as citizens to protect certain rights—to reside where we will, to vote, to have our civil liberties upheld, and so on. Unlike many societies, here such universal political citizenship is taken for granted.

But along with many other societies, we lack a concept of economic citizenship. To parallel our universal political rights, we have not yet established universal economic rights, such as the right to life-sustaining resources or the right to participate in economic decision making.

What we hope to show in this book is that as long as this fundamental concept of democracy—accountability to those most affected by decisions—is absent from economic life, people will continue to be made powerless. From the family, to the neighborhood or the village, through the national level, to the level of international commerce and finance, we will witness the continued concentration of decision making over all aspects of economic life, including what it takes to grow and distribute that on which all life depends: food. Poverty and hunger will go on destroying the lives of millions each year and scarring the lives of hundreds of millions more.

Let us look briefly at how antidemocratic decision making robs people of power over their lives on each of the levels mentioned above.

First, within the family, who controls food resources? Women are responsible for growing at least half the world’s food. The resources women have to grow staple foods largely determine their family’s nutritional well-being. But many women are losing authority over land use—the result of the privatization of land ownership and a focus on export crops that began under colonialism. Credit for growing cash crops goes overwhelmingly to men, and food crops have stagnated. This dynamic within the family helps explain growing hunger.4

Second, at the village level, who controls the land—and how many families have none at all? In most countries, a consistent pattern emerges: Fewer and fewer people control more and more farm and pasture land. With fewer families controlling an ever greater share of the land, more and more people have none at all. A 1993 study reported alarming percentages of rural families who are landless or have insufficient land to support themselves. In Peru the number of landless or land-poor was 75 percent, in Ecuador 75 percent, 66 percent in Colombia, 32 percent in Kenya, and 95 percent in Egypt, among many others.5

Third, at the national level, how are public resources allocated? Wherever people have been made hungry, power is in the hands of those unaccountable to their people. These antidemocratic governments answer only to elites, lavishing them with credit, subsidies, and other assistance. With increasing brutality, such governments fight any reform that would make control over food-producing resources more equitable. The Landless Workers Movement (Movimento dos Trabalhadores Rurais Sem Terra, or MST) in Brazil is struggling to turn over land left idle on huge estates to landless families. In 1995 and 1996 at least eighty-six landless workers, family members, and MST activists were assassinated, most by the military police acting at the behest of wealthy landowners.6

There is yet a fourth level on which democracy is scarce—the international arena of commerce and finance. A handful of corporations dominate world trade in those commodities that are the lifeblood of third world economies. Efforts by third world governments to bargain for higher commodity prices have repeatedly failed in the face of the preeminent power of the giant trading corporations and the government trade policies of the industrial countries. Industrial countries import $60 billion a year worth of food from the third world,7 but traders, processors, and marketers reap most of the profit. For every dollar a U.S. consumer spends to buy cantaloupes grown in El Salvador,
less than a penny goes to the farmer, while traders, shippers, and retailers receive eighty-eight cents.\textsuperscript{6}

Heavily indebted to international aid agencies and private banks, third world nations are also at the mercy of policies decided upon in the capitals of the industrial nations, policies leading only to further impoverishment.\textsuperscript{9}

In attempting to encapsulate the antidemocratic roots of hunger, we have traveled from the level of the family to that of international commerce and finance. Let us complete the circle by returning to the family.

As economic decisions are made by those unaccountable to the majority, insecurity deepens for millions of people. Economic pressures tear family bonds asunder as men are forced to leave home in search of work, and joblessness leads to family violence and dissolution. More and more women shoulder family responsibilities alone; worldwide, perhaps as many as one-third of all households are now headed by women. On top of the weight of poverty, they confront barriers of discrimination against women. The breakdown of the traditional family structure does not bring liberation for them; it simply means greater hardship. Most of the hungry in the world are women and the children they care for. Most of those who die from hunger every year are children.

In our effort to grasp the roots of hunger, we have identified the problem: the ever greater scarcity not of food or land but of democracy, democracy understood to include the life-and-death matter of economics. But we must dig deeper. Why have we allowed this process to happen at the cost of millions of needless deaths each year?

How We Think about Hunger

Especially in troubled times, people seek ways to make sense of the world. We grasp for organizing principles to help us interpret the endlessly confusing rush of world events. It's a natural human process—perhaps as natural as eating itself. But living effectively depends on how well our organizing principles reflect reality.

Unfortunately, the principles around which many of us have come to organize our thinking about world hunger block our grasp of real solutions. This entire book is structured around such organizing principles. We call them myths, to suggest that the views embodied may not be totally false. Many have some validity. It is as organizing principles that they fail. Not only do they prevent us from seeing how we can help the hungry, they obfuscate our own legitimate interests as well. Some fail us because they describe but don't explain, some are so partial that they lead us down blind alleys, and some simply aren't true.

What we want to do is to probe the underlying assumptions people have about world hunger's causes and cures. For we've come to believe that the way people think about hunger is the greatest obstacle to ending it.

After reading our book, we hope you will find that you no longer have to block out bad news about hunger but can face it squarely because a more realistic framework of understanding—to be repeatedly tested against your own experience—enables you to make real choices, choices that can contribute to ending this spreading but needless human suffering.

Our book may shake your most dearly held beliefs or it may confirm your deepest intuitions and experiences. Most of all, we hope that it convinces you that until humanity has solved the most basic human problem—how to ensure that every one of us has food for life—we cannot consider ourselves fully human.
CHAPTER 1

Myth 1: There's Simply Not Enough Food

Myth: With food-producing resources in so much of the world stretched to the limit, there's simply not enough food to go around. Unfortunately, some people will just have to go hungry.

Our Response: The world today produces enough grain alone to provide every human being on the planet with thirty-five hundred calories a day. That's enough to make most people fat! And this estimate does not even count many other commonly eaten foods—vegetables, beans, nuts, root crops, fruits, grass-fed meats, and fish. In fact, if all foods are considered together, enough is available to provide at least 4.3 pounds of food per person a day. That includes two and a half pounds of grain, beans, and nuts; about a pound of fruits and vegetables; and nearly another pound of meat, milk, and eggs.

Abundance, not scarcity, best describes the supply of food in the world today. Increases in food production during the past thirty-five years have outstripped the world's unprecedented population growth by about 16 percent. Indeed, mountains of unsold grain on world markets have pushed prices strongly downward over the past three and a half decades. Grain prices rose briefly during the early 1990s, as bad weather coincided with policies geared toward reducing overproduction, but remained well below the highs observed in the early sixties and mid-seventies.

All well and good for the global picture, you might be thinking, but doesn't such a broad stroke tell us little? Aren't most of the world's hungry living in countries with food shortages—countries in Latin America, in Asia, and especially in Africa?

Hunger in the face of ample food is all the more shocking in the third world. According to the Food and Agriculture Organization (FAO) of the United Nations, gains in food production since 1950 have kept ahead of population growth in every region except Africa. The American Association for the Advancement of Science (AAAS) found in a 1997 study that 78 percent of all malnourished children under five in the developing world live in countries with food surpluses.

Thus, even most “hungry countries” have enough food for all their people right now. This finding is based on official statistics even though experts warn us that newly modernizing societies invariably underestimate farm production—just as a century ago at least a third of the U.S. wheat crop went uncounted. Moreover, many nations can’t realize their full food production potential because of the gross inefficiencies caused by inequitable ownership of resources. We will discuss this in chapters 4 and 6.

Finally, many of the countries in which hunger is rampant export much more in agricultural goods than they import. Northern countries are the main food importers, their purchases representing 71.2 percent of the total value of food items imported in the world in 1992. Imports by the thirty lowest-income countries, on the other hand, accounted for only 5.2 percent of all international commerce in food and farm commodities.

Looking more closely at some of the world’s hunger-ravaged countries and regions confirms that scarcity is clearly not the cause of hunger.

India. India ranks near the top among third world agricultural exporters. While at least 200 million Indians go hungry, in 1995 India exported $629 million worth of wheat and flour and $1.3 billion worth of rice (5 million metric tons), the two staples of the Indian diet.

Bangladesh. Beginning with its famine of the early 1970s, Bangladesh came to symbolize the frightening consequences of people overrunning food resources. Yet Bangladesh’s official yearly rice output alone—which some experts say is seriously underreported—could provide each person with about a pound of grain per day, or two thousand calories. Adding to that small amounts of vegetables, fruits, and
legumes could prevent hunger for everyone. Yet the poorest third of
the people in Bangladesh eat at most only fifteen hundred calories a
day, dangerously below what is needed for a healthy life.15

With more than 120 million people living in an area the size of Wis-
sconsin, Bangladesh may be judged overcrowded by any number of
standards, but its population density is not a viable excuse for its wide-
spread hunger. Bangladesh is blessed with exceptional agricultural
endowments, yet its 1995 rice yields fell significantly below the all-Asia
average.16 The extraordinary potential of Bangladesh’s rich alluvial
soils and plentiful water has hardly been unleashed. If the country’s
irrigation potential were realized, experts predict its rice yields could
double or even triple.17 Since the total calorie supply in Bangladesh falls
only 6 percent short of needs,13 nutritional adequacy seems an achieve-
able goal.

Brazil. While Brazil exported more than $13 billion worth of food in
1994 (second among developing countries), 70 million Brazilians can-
not afford enough to eat.19

Africa. It comes as a surprise for many of us to learn that the coun-
tries of sub-Saharan Africa, home to some 213 million chronically mal-
nourished people (about 25 percent of the total in developing coun-
tries),20 continue to export food. Throughout the 1980s exports from sub-Saharan Africa grew more rapidly than imports,21 and
in 1994, eleven countries of the region remained net exporters of
food.22

The Sahelian countries of West Africa, known for recurrent famines,
have been net exporters of food even during the most severe droughts.
During one of the worst droughts on record, in the late 1960s and early
1970s, the value of the region’s agricultural exports—$1.25 billion—
remained three times greater than the value of grain imported,23 and
such figures did not even take into account significant unreported
exports.24 Once again, during the 1982–85 drought food was exported
from these countries.25

Nevertheless, by 1990, food production per person had apparently
been declining for almost two decades,26 despite the productive capa-
city suggested by Africa’s agricultural exports, and in 1995 over one-
third of the continent’s grain consumption depended on imports.27
We use the word “apparently” because official statistics notoriously
underreport, or ignore all together, food grown for home consump-
tion, especially by poor women, as well as food informally exchanged
within family and friendship networks, making a truly accurate assess-
ment impossible.28 In fact, the author of the AAAS report referred to
earlier argues that hunger is actually less severe in sub-Saharan Africa
than in South Asia.29

Repeated reports about Africa’s failing agriculture and growing
dependence on imports have led many to assume that simply too many
people are vying for limited resources. Africa’s food crisis is real, as
evidenced by moderately high rates of childhood malnutrition, but
how accurate is this assumption as to why the crisis exists?

Africa has enormous, still unexploited, potential to grow food, with
potential grain yields 25 to 35 percent higher than maximum poten-
tial yields in Europe and North America.30 Beyond yield potential,
ample arable land awaits use. In Chad, for example, only 10 percent of
the farmland rated as having no serious production constraints is ac-
tually farmed. In countries notorious for famines—Ethiopia, Sudan,
Somalia, and Mali, for example—the area of unused good-quality far-
mland is many times greater than the area actually farmed,31 casting

doubt on the notion that there are simply too many people for scarce
resources.

Many long-time observers of Africa’s agricultural development tell
us that the real reasons for Africa’s food problems are no mystery.32
Africa’s food potential has been distorted and thwarted as follows:

• The colonial land grab that continued into the modern era dis-
placed peoples and the production of foodstuffs from good lands
toward marginal ones, giving rise to a pattern by which good land
is mostly dedicated to the production of cash crops for export or
is even unused by its owners.33 Furthermore, colonizers and, sub-
sequently, national and international agencies have discredited
peasant producers’ often sophisticated knowledge of ecologically
appropriate farming systems. Promoting “modern,” often im-
ported, and ecologically destructive technologies,34 they have cut
Africa’s food producers out of economic decisions most affecting
their very survival.

• Public resources, including research and agricultural credit, have
been channeled to export crops to the virtual exclusion of peasants’
produced food crops such as millet, sorghum, and root crops. In the
1980s increased pressure to export to pay interest on foreign debt
further reinforced this imbalance.35

• Women are principal food producers in many parts of Africa, yet
both colonial policy and, all too often, ill-conceived foreign aid and
investment projects have placed decisions over land use and credit in the domain of men. In many cases that has meant preferential treatment for cash crops over food crops, skewing land-use and investment patterns toward cash crops.\textsuperscript{36}

- Aid policies unaccountable to African peasant producers and pastoralists have generally bypassed their needs in favor of expensive, large-scale projects. Africa has historically received less aid for agriculture than any other continent, and only a fraction of it has reached rain-fed agriculture, on which the bulk of grain production depends.\textsuperscript{37} Most of the aid has backed irrigated, export-oriented, elite-controlled production.

- Because of external as well as domestic factors, African governments have often maintained cheap food policies whereby peasants are paid so poorly for their crops that they have little incentive to produce, especially for official market channels.\textsuperscript{38} The factors responsible for these policies have included developed-country dumping of food surpluses in African markets at artificially low prices, developed-country interest in cheap wages to guarantee profitable export production, middle-class African consumer demand for affordable meat and dairy products produced with cheap grain, and government concerns about urban political support and potential unrest.\textsuperscript{39} The net effect has been to both depress local food production and divert it toward informal, and therefore unrecorded, markets.

- Until recently many African governments also overvalued their currencies, making imported food artificially cheap and undercutting local producers of millet, sorghum, and cassava. Although recent policy changes have devalued currencies, which might make locally produced food more attractive, accompanying free-trade policies (discussed in chapter 8) have brought increased imports of cheap food from northern countries, largely canceling any positive effect.\textsuperscript{40}

- Urban tastes have increasingly shifted to imported grain, particularly wheat, which few countries in Africa can grow economically. Thirty years ago, only a small minority of urban dwellers in sub-Saharan Africa ate wheat. Today bread is a staple for many urbanites, and bread and other wheat products account for about a third of all the region’s grain imports.\textsuperscript{41} U.S. food aid and advertising by multinational corporations (“He’ll be smart. He’ll go far. He’ll eat bread.”)\textsuperscript{42} have played parts in molding African tastes to what the developed countries have to sell.\textsuperscript{43}

Thus, beneath the “scarcity diagnosis” of Africa’s food situation lie many human-made (often Western-influenced) and therefore reversible causes. Even Africa’s high birth rates are not independent variables but are determined by social realities that shape people’s reproductive choices, as we will see in chapter 3.

A Future of Scarcity?

A centuries-old debate has recently heated up: Just how close are we to the earth’s limits?

Major studies have arrived at widely varying conclusions as to the earth’s potential to support future populations. In a 1995 book Professor Joel Cohen of Rockefeller University surveyed estimates put forth over four centuries.\textsuperscript{44} Always a slippery concept,\textsuperscript{45} estimates of the earth’s “carrying capacity,” or the number of people who could be supported, have varied from a low of 1 billion in a 1970 study to a high of 1,022 billion put forth in 1967. Among studies published between 1990 and 1994, the range was from “much less than our current population of 5.5 billion,” according to Paul Ehrlich and others, to a high of 44 billion estimated by a Dutch research team, with most estimates falling into the 10 to 14 billion range.\textsuperscript{46} By contrast, the 1996 United Nations forecast, generally considered to be the best future population projection, predicts that the world population will peak at 9.36 billion in the year 2050 and stabilize thereafter (projections of the maximum future population have been coming down over the past few years). This is well within what most experts view as the capacity of the earth.

In view of today’s abundant food supplies, as well as the potential suggested in this chapter and in chapter 6, we question the more pessimistic predictions of demographic catastrophe. Only fifty years ago, China pundits predicted that that famine-ridden nation could never feed its population. Today more than twice as many people eat—and fairly adequately\textsuperscript{48}—on only one-fourth the cropland per person used in the United States.\textsuperscript{49}

Not that anyone should take the more pessimistic predictions lightly; they underscore the reality of the inevitably finite resource base entrusted to us. They should therefore reinforce our sense of urgency to address the root causes of resource misuse, resource degradation, and rapid population growth.
Lessons from Home

Finally, in probing the connection between hunger and scarcity, we should never overlook the lessons here at home. More than 30 million Americans cannot afford a healthy diet; 8.5 percent of U.S. children are hungry, and 20.1 percent are at risk of hunger. But who would argue that not enough food is produced? Surely not U.S. farmers; overproduction is their most persistent headache. Nor the U.S. government, which maintains huge storehouses of cheese, milk, and butter. In 1995, U.S. aid shipments abroad of surplus food included more than 3 million metric tons of cereals and cereal products, about two-thirds consisting of wheat and flour. That’s enough flour to bake about six hundred loaves of bread per year for every hungry child in the United States.

Here at home, just as in the third world, hunger is an outrage precisely because it is profoundly needless. Behind the headlines, the television images, the superficial clichés, we can learn to see that hunger is real; scarcity is not. Only when we free ourselves from the myth of scarcity can we begin to look for hunger’s real causes. That search is what our book is about.

CHAPTER 2

Myth 2: Nature’s to Blame

MYTH: Droughts, floods, and other events beyond human control cause famine.

OUR RESPONSE: On January 22, 1994, the Chicago Tribune ran the following story: “Man Dies; Found in Unheated Home.” The article called it “the fourth fatality of the week’s cold wave.” Surely the reporter who wrote the story didn’t really believe that the weather caused the four deaths. The man was probably poor and unable to pay his heating bills. Maybe the others couldn’t even afford a home. In 1965, four hundred homeless people died on the streets of Chicago. Yet who could really blame the weather? In the United States people are vulnerable to bad weather only if they are too poor to afford heat or shelter.

The “great potato famine” killed over a million Irish people between 1845 and 1849 and caused another million and a half to emigrate to America. In official histories it is described as a natural disaster, an epidemic of potato blight, that caused the famine. Few people know that Ireland was a net exporter of food throughout those years. The same blight devastated potato crops across Europe, but mass starvation occurred only in Ireland.

In an 1846 letter to the prime minister, an observer remarked, “For 46 years the people of Ireland have been feeding those of England with
• *Who will use hunger against whom.* Food is often used as a weapon of war, and hunger is always a product of it.⁵⁹

If we believe that famines are caused by nature's vagaries, we will feel helpless and therefore excused from action. Learning that famines result from human-made forces, we discover hope. No one can change the weather, but we can take responsibility for establishing more stable farming systems and altering the economic rules so that people's claim to food may never be denied.

Only in this direction can we further humanity's age-old quest for food security.

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**CHAPTER 3**

**Myth 3:**
**Too Many Mouths to Feed**

**MYTH:** Hunger is caused by too many people pressing against finite resources. We must slow population growth before we can hope to alleviate hunger.

**OUR RESPONSE:** In all of our educational efforts during the past twenty-five years, no question has been more common than Do too many people cause hunger? We've answered no, but in the eyes of some this is tantamount to irresponsibly dismissing population growth as a problem.

We do not take lightly the prospect of human numbers so dominating the planet that other forms of life are squeezed out, that all wilderness is subdued for human use, and that the mere struggle to feed and warm ourselves keeps us from more satisfying pursuits.

The question of population is so vital that we can't afford to be the least bit fuzzy in our thinking. So here we will focus on the three most critical questions this myth poses. Is the human population of the world growing "out of control"? Are population density and population growth the cause of hunger? And what is the nature of the link, if any, between slowing population growth and ending hunger?
Is Population Growth Out of Control?

On November 23, 1997, the New York Times Magazine proclaimed in a headline: "The Population Explosion Is Over." The author of the article summed up what demographers have known for some time: human fertility and population growth rates are falling as quickly as they once rose. In fact, the secondary headline read in part, "the prospect of an emptier planet is creating its own set of problems." Since we published the last edition of this book, it has become clear that human fertility and population growth rates are dropping rapidly around the world. In the early 1950s, when we began to hear echoes of Thomas Malthus in warnings of an impending population explosion, the global total fertility rate (the number of children per woman) was five, more than double the replacement rate of 2.1 (the number that gives a stable population size over time). By the late 1970s the total fertility rate had fallen to four, and by the mid-1990s it was 2.8 and dropping.

European and North American fertility rates peaked in 1955, dropping steadily since, and in Europe are now well below replacement. In Asia and Latin America, fertility has fallen steadily from about six in 1950 to below three in 1995. In Africa, fertility peaked at 6.75 in the early 1960s, dropping slowly through the 1960s, 1970s, 1980s, and 1990s. In 1995 it stood at 5.7, about where South Asia and Latin America were twenty years earlier, and precisely the fertility level at which those regions then experienced accelerated fertility declines.

The Demographic Transition

All of this neatly fits the concept of the "demographic transition," first observed in the two centuries preceding 1950 in what are today's developed countries. Prior to the transition, these northern countries experienced high death rates matched by high birth rates, resulting in a relatively stable population size over time. But then improving living standards and public health measures caused death rates to drop, followed by a gradual drop in birth rates, which by the 1970s once again matched death rates. Between the onset-of-mortality decline and the drop in birth rates, population surged in northern countries, actually quadrupling. But that is long over, and most developed countries are now projected to experience population shrinkage in the future.

Demographers long posited that today's third world countries would undergo a similar transition. Indeed, in the period following World War II, mortality decline accelerated in developing countries. As the demographic transition model would predict, that led to a surge in population growth. And as expected, the death rate decline was later followed by a compensatory drop in birth rates. Instead of taking two centuries for the process to complete itself, this time it appears it will happen in less than one century.

Based on new data on fertility decline, the United Nations projection of the size the human population will reach in the year 2050 is now 9.37 billion, about 50 percent larger than today's population. While that may still seem large, the new estimate is down from the 11.16 billion that was projected just twenty years ago. The population is projected to stabilize shortly thereafter, most likely below 11.5 billion. As noted in chapter 1, that is within the levels that most experts estimate the earth could support. If that is so, then why all the fuss? It seems that many nongeographers either lost sight of, or never really understood, the nature of the demographic transition. Terrified by the apparently exponential growth of third world populations, which they assumed would continue to grow explosively until checked by massive famine and epidemics, these analysts generated alarmist predictions. In his 1968 best-seller The Population Bomb Paul Ehrlich wrote: "The battle to feed all of humanity is over. In the 1970s the world will undergo famines—hundreds of millions of people are going to starve to death..." Similar treatises have been written over the years by others, such as Lester Brown of the WorldWatch Institute. Though starvation on the scale predicted by Ehrlich has not occurred, he repeated the warning in 1990 in The Population Explosion.

Ironically, these warnings came just as demographers were announcing that fertility was starting its decline in the last regions of the world, beginning the final phase of the demographic transition. Of course, once fertility rates drop, there is a time lag before population-growth rates fall, as people who are now children come into their child-bearing years. While the final phase of the transition seems to have begun everywhere, concern remains as to its pace and irreversibility. Organizations that earlier advocated population control programs to avert famine and environmental catastrophe, now say that precisely these programs have brought fertility down. They argue that population control efforts must be redoubled to assure that the gains are not reversed and that the
subsequent declines in population-growth rates come quickly enough to avoid too many more people being born in the interim. In order to address these concerns we must examine the specific mechanisms that make some countries move more quickly through the phases of transition than others. We will do that in a later section of this chapter on the causes of fertility decline.

As a conclusion to this section, however, we can say with confidence that there is abundant evidence that the human population-growth rate is slowing and will eventually stop. It is hardly out of control. Populations will continue to grow rapidly for several decades before leveling off in many third world countries, but that does not, in and of itself, mean that population density or growth causes hunger in our world, an issue we address in the following section.

Does “Overpopulation” Cause Hunger?

Our second question can now be restated as: Do too many people already cause hunger? If that were the case, then reducing population density might indeed alleviate hunger. But for one factor to cause another, the two must consistently occur together. Population density and hunger do not.

Hunger is not caused by too many people sharing the land. In the Central America and Caribbean region, for example, Trinidad and Tobago show the lowest percentage of stunted children under five and Guatemala the highest (almost twelve times greater); yet Trinidad and Tobago’s cropland per person—a key indicator of human population density—is less than half that of Guatemala’s. Costa Rica, with only half of Honduras’ cropped acres per person, boasts a life expectancy—one indicator of nutrition—eleven years longer than that of Honduras and close to that of northern countries.

In Asia, South Korea has just under half the farmland per person found in Bangladesh, yet no one speaks of overcrowding causing hunger in South Korea.

Surveying the globe, we in fact can find no direct correlation between population density and hunger. For every Bangladesh, a densely populated and hungry country, we find a Nigeria, Brazil, or Bolivia, where significant food resources per capita coexist with hunger. Or we find a country like the Netherlands, where very little land per person has not prevented it from eliminating hunger and becoming a large net exporter of food.

But what about population growth? Is there not an obvious correlation between rapid population growth and hunger? Without doubt, most hungry people live in Asia, Africa, and Latin America, where populations have grown fastest in recent decades. This association of hunger and rapid population growth certainly suggests a relationship between the two. But what we want to probe is the nature of that link. Does rapid population growth cause hunger, or do they occur together because they are both consequences of similar social realities?

In 1989 Cornell University sociologists Frederick Buttel and Laura Raynolds published a careful study of population growth, food consumption, and other variables in ninety-three third world countries. Their statistical analysis found no evidence that rapid population growth causes hunger. What they did find was that the populations of poorer countries, and those countries where the poorest 20 percent of the population earned a smaller percentage of a nation’s total income, had less to eat. In other words, poverty and inequality cause hunger.

Buttel and Raynolds did not explicitly look for the causes of high population-growth rates. However, University of Michigan ecologist John Vandermeer conducted a follow-up study using 1994 data that explicitly asked that question. He found that inequality and poverty were the key factors driving rapid growth as well.

Poverty and Population Growth: Lessons from Our Own Past

Let’s try to understand why, by looking at our own demographic history. As recently as two or three generations ago, mortality rates in the United States were as high as they are now in most third world countries. Opportunities for our grandmothers to work outside the home were limited. And ours was largely an agrarian society in which every family member was needed to work on the farm. Coauthor Frances Lappé’s own grandmother, for example, gave birth to nine children, raised them alone on a small farm, and saw only six survive to adulthood. Her story would not be unusual in a still fast-growing third world country today.

Faced with scarcity, poor families needed many children to help with work on the farm, and because of high infant-mortality rates, they needed many more pregnancies and births to achieve the necessary family size.

In the United States, the move to two-children families took place only after a society-wide transition that lowered infant death rates,
opened opportunities to women outside the home, and transformed ours into an industrial rather than agrarian economy, so that families no longer relied on their children’s labor. If we contrast Lappe’s grandmother’s story to a latter-day urban middle-class family, we can see that children who were once a source of needed labor are now a source of major costs, including tuition, an extra room in the house, the latest model basketball shoes, and forgone earnings for every year that a professional mom stays home with the kids.

The United States advanced through the falling-birth-rate phase of the demographic transition in response to these societal changes, well before the advent of sophisticated contraceptive technologies, even while the government remained actively hostile to birth control. (As late as 1965, selling contraceptives was still illegal in some states.)

Using our own country’s experience to understand rapid population growth in the third world, where poverty is more extreme and widespread, we can now extend our hypothesis concerning the link between hunger and high fertility rates: both persist where societies deny security and opportunity to the majority of their citizens—where infant-mortality rates are high and adequate land, jobs, education, health care, and old-age security are beyond the reach of most people, and where there are few opportunities for women to work outside the home.

Without resources to secure their future, people can rely only on their own families. Thus, when poor parents have lots of children, they are making a rational calculus for survival. High birth rates reflect people’s defensive reaction against enforced poverty. For those living at the margin of survival, children provide labor to augment meager family income. In Bangladesh, one study showed that even by the age of six a boy provides labor and/or income for the family. By the age of twelve, at the latest, he contributes more than he consumes.

Population investigators tell us that the benefit children provide to their parents in most third world countries cannot be measured just by hours of labor or extra income. The intangibles are just as important. Bigger families carry more weight in community affairs. With no reliable channels for advancement in sight, parents may hope that the next child will be the one clever or lucky enough to get an education and land a city job despite the odds. In many countries, income from one such job in the city can support a whole family in the countryside.

And impoverished parents know that without children to care for them in old age, they will have nothing. They also realize that none of these possible benefits will be theirs unless they have many children, since hunger and lack of health care will kill many of their offspring before they reach adulthood. The World Health Organization has shown that both the actual death and the fear of death of a child will increase the fertility of a couple, regardless of income or family size.

Finally, high birth rates may reflect not only the survival calculus of the poor, but the disproportionate powerlessness of women as well. Many women have little opportunity for pursuits outside the home, because of power relations internal to the family and/or in the larger society. Continued motherhood may then become their only “choice.” Perhaps the best proof that the powerlessness of women can undergird high fertility comes from extensive research on the effect of women’s education. In one study after another, women’s education turns out to be a powerful predictor of lower fertility. As women’s schooling increases, fertility typically falls.

Of course, we should guard against interpreting these findings literally—that what women learn is how to limit births. In fact, study after study has shown that people tend to have the number of children they want, regardless of whether more modern birth control methods are available or the government has a family planning program. Rather, the fact that women are getting educated reflects a multitude of changes in society that empower women and provide them with opportunities in the workplace.

Just as the powerlessness of women subordinated within the family and society may partially explain high birth rates, we must recognize that the men who hold power over women may themselves be part of subordinated groups in society. As long as poor men are denied sources of self-esteem and income through productive work, it is likely they will cling even more tenaciously to their superior status vis-a-vis women, and to a desire or need for more children.

**Good and Bad Fertility Decline**

Rapid population growth, then, results from poverty and powerlessness, the need for family labor or the income children can bring home, high infant-mortality rates, and lack of education and opportunity for women. Our thesis for fertility decline is that, during the demographic transition, population growth normally slows only with far-reaching changes in society. Unfortunately, these changes can be of a positive or a negative nature.

On the positive side are economic and political changes that reduce infant mortality and convince the majority of people that social arrangements beyond the family—jobs, health care, old-age security, and education (especially for women)—offer security, or at least better
opportunities than does large family size. We can call that the positive way that fertility rates fall, or because people are better off, they need fewer children.

On the other hand, the nature of poverty and powerlessness can change in ways that transform children from a net benefit to the family into a net cost without empowering people or raising them out of poverty and hunger. That could also bring fertility rates down, but in a negative way. We might describe this as things getting so bad that people can’t even afford to have kids.

Another negative scenario of lowered fertility might occur when the economic structures that make additional children necessary have been left intact, yet birth control has been enforced through coercion and/or indoctrination. Then people would have less children when for economic reasons they should be having more, deepening poverty still further. This might be described as the tragedy of the sterilized, poor, older woman without children to support her.

Positive Changes and Declining Fertility
Some of the earliest and most spectacular fertility declines occurred in the context of broad-based changes in living standards. Let’s look at some of those examples.

**Sri Lanka.** From the postwar period to 1978, the Sri Lankan government supported the consumption of basic foods, notably rice, through a combination of free food, rationed food, and subsidized prices. Initiating a long-term decline in fertility and population-growth rates.31

**Cuba.** Rationing and setting price ceilings on staples kept basic food affordable and available to the Cuban people from the 1959 revolution to the economic crisis of 1989. All citizens were guaranteed enough rice, pulses, oil, sugar, meat, and other food to provide them with nineteen hundred calories a day. As universal health care and education were made available to all, Cuba’s birth rate fell from 4.7 to 1.6.34

**Kerala, India.** In this Indian state eleven thousand government-run fair-price shops keep the cost of rice and other essentials like kerosene within the reach of the poor. This subsidy accounts for as much as one-half of the total income of Kerala’s poorer families. Its population density is three times the average for all India, yet commonly used indicators of hunger and poverty—infant mortality, life expectancy, and death rate—are all considerably more moderate in Kerala than in most low-income countries, as well as in India as a whole. Its infant mortality is half the all-India average. Literacy and education levels are far superior to other states, particularly for women: the female literacy rate in Kerala is two and a half times the all-India average. Not surprisingly then, Kerala rapidly reduced fertility and population growth in the postwar period. By 1991 Kerala had a birth rate that was one-third of the all-India average. That was about half the average for all low-income countries and only slightly higher than the United States.

In most of these societies, income distribution is less skewed than in many other countries. The distribution of household income in Sri Lanka, for example, is more equitable than in Indonesia, India, or even the United States. In Thailand, the Philippines, and Costa Rica—other countries that experienced early fertility decline—health and other social indicators offer clues as to why. Infant death rates are relatively low, especially in Costa Rica, and life expectancy is high—for women, ranging between sixty-five and seventy-six years. Perhaps most important, in the Philippines and Costa Rica an unusually high proportion of women are educated, and in both the Philippines and Thailand, proportionately more women work outside the home than in most third world countries.

Our careful reading of the scientific literature on fertility decline leads us to the conclusion that the bulk of it observed in the world so far has occurred for the “right” reasons. The Vandermeer study noted above indicates that reductions in poverty and inequality have been key factors. A 1994 Yale University study found that the education of women was the best predictor of reduced fertility rates among sixty-eight low-income countries. While the researchers did not consider inequality and poverty in this study, it seems reasonable to assume that greater education of women goes hand in hand with reductions of both.

Negative Changes and Declining Fertility
Unfortunately, there are several cases of fertility decline that do not fit the pattern of improving conditions for the poor. In the late 1980s and early 1990s a very rapid decline in fertility rates began in Kenya and a number of other African countries. At first glance this fit with the notion of the demographic transition. Infant-mortality rates had dropped and women’s enrollment in primary and secondary education had risen throughout the 1970s and early 1980s. However, the actual
declines, in the late 1980s and early 1990s, coincided with a severe economic crisis brought on by externally imposed “structural adjustment” policies, in which the poor were particularly hard hit (these policies are discussed in chapters 7 and 8). According to one observer, “Parents suffered a decline in real incomes, a rise in the cost of children and lowered expectations of what children could do for them.” In response people either put off having more children or decided not to have them altogether.

Some observers have leapt to the frightening conclusion that economic crisis is the best contraceptive, with all the policy measures that implies. Others have celebrated that we need no longer tackle the arduous task of poverty reduction in order to reduce population growth. That makes no sense at all, on three levels. First, economic crisis may cause a temporary delay in childbearing, but once things get better, people will likely have the children they had put off. Second, economic crisis has unpredictable effects. Structural-adjustment-driven crisis in Costa Rica, unlike in Africa, led to an increase in fertility rates in the mid-1980s. Third, and far more important, we must keep track of our principal focus: hunger. Even if economic crisis were a good way to lower fertility, it certainly would be no help at all in alleviating hunger!

Nevertheless, the evidence on fertility decline and crisis tend to support our earlier argument that by and large people have the number of children they want. That, however, does not mean that under exceptional circumstances people cannot be coerced, paid, or indoctrinated to have fewer children than would normally make sense for them.

But We Don’t Have Time

In presenting the essence of our thesis—that the best way to lower fertility is to reduce poverty—to concerned audiences over the years, at least one questioner will invariably respond, “All well and good, but we don’t have time! We can’t wait for societywide change benefiting the poor. That takes too long. The population bomb is exploding now.”

While the bomb has been largely defused, the implication remains that to bring growth down more rapidly we should do the only thing we can do now: fund and promote family planning programs among fast-growing populations. The rest is pie in the sky.

Our response is twofold. First, demographers will tell you that even if average family size in a fast-growing society were cut by half tomorrow, its population would not stop growing until well into the next century. So every solution, including family planning programs, is a long-term one; there are no quick fixes. The second part of our answer is more surprising: simply providing birth control technology through family planning programs doesn’t affect population growth all that much.

In 1984, D. J. Hernández, chief of the Marriage and Family Statistics Branch of the U.S. Bureau of the Census, reviewed all available research to determine the contribution of family planning programs to fertility decline. After examining the research on demographic change in eighty-three countries, he concluded that the best studies have found little net effect from family planning programs. Hernández observed that “perhaps as much as 10 percent but possibly as little as 3 percent of the cross-national variation in fertility change in the third world during the late 1960s and early 1970s was an independent effect of family planning programs.”

Naturally, Hernández was roundly attacked by family planning proponents. But even the study most cited by his critics, a 1978 overview of ninety-four third world countries, concluded that birth control programs alone accounted for only 15 to 20 percent of overall fertility decline, with largely social and economic factors accounting for the rest. Follow-up studies published by different researchers in 1994 came to the same conclusion as the original Hernández study: the contribution of family planning to fertility decline is negligible compared to the contribution of socioeconomic change.

Our highlighting of these findings—which reveal a relatively small impact of family planning programs on population—does not mean that we belittle their potential value. Making contraceptives widely available and helping to reduce inhibitions against their use are critical to the extension of human freedom, especially the freedom of women to control their reproduction. But these findings do confirm that what is truly pie in the sky is the notion that population-growth rates can be brought down to replacement levels through a narrow focus on the delivery of contraceptive technology.

Although the experiences of some countries suggest that birth rates can fall while great economic inequalities remain, an overwhelmingly clear pattern emerges from worldwide demographic change. At the very least, critical advances in health, social security, and education must change the lives of the poor—especially the lives of poor women—before they can choose to have fewer children. Once people are motivated to have smaller families, family planning programs can...
quicken a decline in fertility, but that is all; they cannot initiate the
decision to have smaller families.53

Upping the Ante
Refusing to admit the implications of these findings, many govern-
ments and international agencies have responded to the marginal im-
portant of family planning programs by upping the ante: designing ever
tougher programs involving long-term injected or implanted contra-
ceptive, sterilization, and financial incentives and penalties.
One example is the injectable contraceptive Depo-Provera. Although
considered too hazardous for general use in the United States, it has
been widely distributed in third world countries. Known short-term
side effects include menstrual disorders, skin disorders, headaches,
weight gain, depression, hair loss, abdominal discomfort, loss of libido,
and delayed return to fertility. And while long-term side effects will
not be known for some time, preliminary studies suggest that Depo-
Provera is probably linked to an increased risk of cervical cancer.54
The World Health Organization (WHO) and the International Planned
Parenthood Federation (IPPF) approved Depo-Provera for use in the
third world while it was banned in the United States, arguing that
overpopulation requires an “entirely new set of medical standards for
developing countries.”55 Another example is the hormonal implant
Norplant, which is increasingly being used in the third world despite
side effects being reported in 64.7 percent of users.56
The sterilization of women continues to be the preferred course of
birth control in much of the third world, usually funded by Western
donors. In many countries doctors, nurses, and paramedics have nu-
merical sterilization targets they have to meet. Studies in India and
Bangladesh show how in their urgency to meet their targets, nurses
and doctors act hastily and hazardously, often disregarding their
patients’ needs and complaints. Furthermore, a variety of material
incentives are used to induce patients to undergo sterilization or
to use contraception.57 Defenders of incentive programs stress that
they are voluntary, but when you are hungry, how many choices are
voluntary?
Sri Lankan scholar Dr. Asoka Bandarage reports that “not only do
door people lack all relevant information, but, in many cases, the des-
peration of poverty drives them to agree to accept contraception or
sterilization in return for payments in cash or kind. In such cases, choice
simply does not exist. Direct force has reportedly been used in some
countries...however, coercion does not pertain to simply the outright
use of force. More subtle forms of coercion arise when individual re-
productive decisions are tied to sources of survival like the availabil-
ity of food, shelter, employment, education, health care and so on.”58
In Thailand, for example, roads, transportation, and latrines have been
tied to the acceptance of contraception.59
The use of heavy-handed publicity campaigns, numerical targets,
and subtle coercion had perhaps their saddest consequences in Puerto
Rico. After the United States seized the island from Spain in 1898, U.S.
sugar companies rapidly set up vast plantations while engaging in the
wholesale eviction of small farmers. By 1925, less than 2 percent of the
population owned 80 percent of the land, and 70 percent of the popula-
tion was landless. With so many people out of work and livelihood,
Puerto Rico suddenly had a problem that U.S. colonial officials labeled
“overpopulation.”60
In the 1940s light manufacturing industries began to move in from
the U.S. mainland, attracted by cheap labor and low taxes. Young
women were a key and “docile” part of that labor force, but subject to
“loss” (from the employer’s point of view) due to pregnancy. The re-
result was a massive sterilization campaign carried out by the local gov-
ernment and the IPPF, with U.S. government funding. Women were
cajoled and coerced into accepting sterilization, often not even being
told that the process wasn’t reversible. The result was that by 1968
one-third of the women of childbearing age had been sterilized.61 The
combination of mass sterilization and heavy out-migration due to a
declining economy caused the population of Puerto Rico to actually
drop—with no resultant improvement in living standards, or the
environment.62
The television documentary La Operación vividly portrays the an-
guish of now middle-aged, childless women in depopulated Puerto
Rican towns.63 It is impossible to witness their tearful testimony of
lives filled with loneliness and not sympatize with Asoka Bandarage
and reproductive rights activist Betsy Hartmann when they charac-
terize such programs as violations of the most basic of human rights.64
We may be witnessing a similar tragedy-in-the-making in Mexico,
along the northern border with the United States. There many of the
U.S.-owned maquiladora factories employing young women demand
negative pregnancy tests as a condition of employment. Some even go
so far as to require that female employees show their menstrual pads
to a supervisor every month in order to keep their jobs.65
Here in the United States we face the specter of similar programs. Economic incentives for women on welfare to use Norplant inserts have been proposed by various state legislators including David Duke of Ku Klux Klan infamy. While such bills haven’t yet passed, Norplant has been introduced into public school health clinics in several cities. In fact, the attack on minority “teenage pregnancies” in the United States smacks of racism and misinformation in the same way as do many of the arguments about third world overpopulation.

Can investment in birth control bring down fertility rates without broad socioeconomic change taking place? The case of La Operación suggests that it can, though no one should want to repeat that experience. Many family planning advocates today point to the experience of the Matlab region in Bangladesh as an example to be replicated.

The most famous “social experiment” in family planning was carried out in Matlab by the International Center for Diarrheal Disease Research with funding from Western donors. The region was chosen because it was “uncontaminated” by any mother and child care system prior to the experiment’s inception. The project began in 1977 by providing half the villages in the region with intensive family planning services, including fortnightly health visits and family planning clinics. The other half of the villages received no special services. By 1990 contraceptive use in the intensive villages was more than double that of the control villages, and fertility was a less impressive quarter lower. This experiment was the first to prove that intensive family planning alone, in the absence of any other change, can reduce fertility. But the financial costs were so high—$120 per “birth averted,” or 120 percent of the per capita gross domestic product—that the results are “not replicable on a national scale, let alone everywhere in the developing world.”

Such concerns led researchers to cost-cutting experiments, which showed that with a minimal package it is still possible to raise contraceptive use rates. They concluded, for example, that prenatal care and midwife training were superfluous, and that teaching about oral rehydration therapy for infants suffering from diarrhea actually interfered with contraceptive education and thus should be tossed as well. The implications are grave. As Betsy Hartmann put it: “By holding up Bangladesh as a model, the population establishment is turning the whole concept of development on its head: it’s all right if the poor stay as poor as ever, just as long as there are fewer of them born.” This is what we earlier called a “negative way that fertility can decline.”

China’s Solution?
Those who cling to family planning programs as the answer to population growth might do well to heed the current experience of China.

Through a far-reaching redistribution of land and food, assurance of old-age security, and making health care and birth control devices available to all, China achieved an unprecedented birth rate decline. Since 1979, the country has taken a different tack. Believing that population growth was still hindering modernization, the Chinese government instituted the world’s most restrictive family planning program. Material incentives and penalties are now offered to encourage all parents to bear only one child. According to John Ratcliffe of UC Berkeley’s School of Public Health:

Enormous pressure—social and official—is brought to bear on those who become “unofficially” pregnant: few are able to resist such constant, heavy pressure, and most accede to having an abortion. While coercion is not officially sanctioned, this approach results in essentially the same outcome.

At the same time, Ratcliffe points out, some of China’s post-1979 economic policies undercut both guaranteed employment and old-age security. This has thrown rural families back on their own labor resources, so that large families—especially boys—have once again become a family economic asset.

And what have been the consequences? Despite the world’s most stringent population control program, China’s birth rates have actually fallen more slowly since 1980 than before the one-child policy was introduced. The message should be unmistakable: People will have children when their security and economic opportunity depend on it, no matter what the state says.

Advocates of more authoritarian measures seem to forget altogether the experience of the other poor societies that along with China have reduced their growth rates to below 2 percent. Recall that among them are India, Nepal, and Sri Lanka. None relied significantly on social coercion or financial incentives. As health care was made available to all, Cuba’s birth rates fell, for example, without even so much as a public education campaign on family planning, much less financial incentives.

No one should discount the consequences of high population density, including the difficulties it can add to the already great challenge of development. While in some African countries low population
density has been an obstacle to sustainable agricultural development, in many countries much higher population densities would make more difficult the tasks of social and economic restructuring necessary to eliminate hunger. But if it is eliminating hunger that we are after, then we should attack poverty, inequality, and powerlessness head on. That is especially true as they are the root causes of high fertility and rapid population growth. Improving living standards and lessening inequality, including providing education for women, have proven to be the best ways to lower fertility.

The Challenge Ahead

In this brief chapter, we've outlined what we believe are the critical points too often muddled in discussions of population:

- Fertility and population-growth rates are declining worldwide.
- Population density nowhere explains today's widespread hunger.
- Rapid population growth is not the root cause of hunger but is—like hunger—a consequence of social inequities that deprive the poor majority, especially poor women, of the security and economic opportunity necessary for them to choose fewer children.
- To bring the human population into balance with economic resources and the environment, societies must address the extreme maldistribution of access to resources—land, jobs, food, education, and health care. That is our real challenge.
- Family planning cannot by itself reduce population growth, though it can speed a decline. Family planning can best contribute to the transition when it is but one part of comprehensive changes in health care that expand human freedom and opportunity rather than control behavior.

We believe that precisely because population growth is such a critical problem, we cannot waste time with approaches that do not work. We must unflinchingly face the evidence telling us that the fate of the world hinges on the fate of today's poor majorities. Only as their well-being improves can we attack hunger and assure that fertility decline is sustainable.

To attack high birth rates without attacking the causes of poverty and the disproportionate powerlessness of people is fruitless. It is a tragic diversion our small planet can ill afford.

MYTH: Pressure to feed the world’s hungry is destroying the very resources needed to grow food. To feed the hungry, we are pushing crop and livestock production onto marginal, erosion-prone lands, clearing age-old rain forests, and poisoning the environment with pesticides. Clearly, we cannot both feed the hungry and protect our environment.

OUR RESPONSE: We should be alarmed. A many-pronged assault on the environment is damaging the resources on which food production depends. Environmental scientists alert us to these threats:

- Roughly 70 percent of the 5.2 billion hectares of dry lands used for agriculture around the world—almost 30 percent of the earth’s total land area—is at risk of being turned into deserts. More than one billion people in 135 countries depend on this land.¹
- If current rates of destruction continue, the world’s surviving rain forests will have been leveled by the year 2031.²
- With global pesticide use increasing from virtually nothing only fifty years ago to 4.7 billion tons a year,³ at least 6 people are poisoned by pesticides somewhere in the world every minute and an estimated 220,000 die annually.⁴

That an environmental crisis is undercutting our food-producing resources and threatening our health is no myth; but myths and half-
The Essential Ingredient

Our capacity to help end world hunger is infinite, for the roots of hunger touch every aspect of our lives—where we work, what we teach our children, how we fulfill our role as citizens, where we shop and save. But whether we seize these possibilities depends in large measure on a single ingredient. You might expect us to suggest that the needed ingredient is compassion for the millions who go hungry today. As we have pointed out, compassion is indeed a profoundly motivating emotion. It comes, however, relatively easy. Our ability to put ourselves in the shoes of others makes us truly human. Some even say it’s in our genes and that we deny our innate compassion only at great peril to our own emotional well-being. There is another ingredient that’s harder to come by. It is moral courage.

At a time when the old “isms” are clearly failing, many cling even more tenaciously to them. So it takes courage to cry out, “The emperor wears no clothes! The world is awash in food, and all of this suffering is the result of human decisions!”

To be part of the answer to world hunger means being willing to take risks, risks many of us find more frightening than physical danger. We have to risk being embarrassed or dismissed by friends or teachers as we speak out against deeply ingrained but false understandings of the world. It takes courage to ask people to think critically about ideas so taken for granted as to be like the air they breathe.

And there is another risk—the risk of being wrong. For part of letting go of old frameworks means grappling with new ideas and new approaches. Rather than fearing mistakes, courage requires that we continually test new concepts as we learn more of the world—ever willing to admit error, correct our course, and move forward.

But from where does such courage come? Surely from the same root as our compassion, from learning to trust that which our society so often discounts—our innate moral sensibilities, our deepest emotional intuitions about our connectedness to others’ well-being. Only on this firm ground will we have the courage to challenge all dogma, demanding that the value of human life be paramount. Only with this new confidence will we stop twisting our values so that economic dogma might remain intact while millions of our fellow human beings starve amid ever greater abundance.

Notes

Beyond Guilt and Fear


MYTH 1: There’s Simply Not Enough Food

1. Calculated from Food and Agriculture Organization, 1992 FAO Production Yearbook, vol. 46 (Rome: FAO, 1993). Thirty-eight percent of the world’s grain supply is now fed to livestock (World Resources 1996–97, [New York: Oxford University Press, 1996] table 10.3). Most of the land and other resources now used to produce feed grain could be used to grow grain and other foods for human consumption. Feed grains are grown because better-off consumers prefer livestock products, making feed grains more profitable than food grains. While daily calorie requirements vary greatly and are notoriously difficult to estimate, it seems reasonable to use the FAO figure of 2,450 per day for the average person (see P. R. Payne, “Measuring Malnutrition,” IDS Bulletin 21, no. 3, July 1990). Calories adequate to cover energy needs are generally sufficient to meet protein needs, except for people (especially young children) subsisting on low-protein roots, tubers, and plantains.


6. Food and Agriculture Organization, FAO Production Yearbook 1966, 1974, 1984, 1995 (Rome: FAO), table 9. See Philip Raike, Modernising Hunger: Famine, Food Surplus & Farm Policy in the EEC & Africa (London: Catholic Institute for International Relations, 1988). Raikes argues that the FAO statistics seriously underestimate African production because, among other things, often only products sold through official marketing channels are counted. He suggests that there has been a decline in the proportion of production sold through such channels, as farmers sell elsewhere in response to artificially low prices.


8. Thomas T. Po lame, “Quantifying the Nutrition Situation in Developing Countries,” Food Research Institute Studies 18, no. 1: 9. This article is a good discussion of the multifaceted problems of most agricultural and nutritional statistics. (See also Donald McGranahan et al., Measurement and Socioeconomic Development [Geneva: United Nations Research Institute for Social Development, 1985].)


11. According to the FAO, 21 percent of Indians, or about 185 million people, are undernourished (Mapping Undernutrition: An Ongoing Process, poster, 1996, Food and Agriculture Organization, Rome). However, in The FAO Measure cited above, Lisa Smith argues that this number is a
gross underestimation, as it is calculated not from real surveys but from projections based on food production and imports, and thus does not reliably take into account food distribution and access. A better index of the prevalence of hunger, she suggests, is the percent of children who are malnourished, which is calculated from surveys and represents the outcome of food availability and access. The FAO estimate for percent of children under five who are malnourished in India is 61 percent, the second highest in the world (The Sixth World Food Survey, FAO, 1996, appendix 2, table 8), suggesting that the total number of hungry people is probably far higher than the 21 percent or 185 million figures reported.


14. FAOSTAT Database.


22. Calculated from Food and Agriculture Organization, 1994 FAO Trade Yearbook, table 8. When all agricultural products are taken into account, the figure rises to twenty countries (Ibid., table 7). Note that the increase of imports in a specific country may reflect an increase in food aid received by it. Calculations of imports include food aid, according to James Hill, senior economist at the North American UN FAO Liaison Office, Washington, D.C., interviewed by Joseph Collins in May 1986.

23. Calculated from 1984 FAO Trade Yearbook. For Chad, Niger, Mauritania, Mali, Burkina Faso, and Senegal, years of net exports were 1980, 1982, and 1983. Years of net imports were 1981 and 1984 due to exceptionally high imports into Senegal and Niger those two years.

24. Reports from two of the Sahelian countries, Niger and Burkina Faso (formerly Upper Volta), estimate that traders smuggle out as much as half the grain produced to sell elsewhere to customers able to pay more. (Interview with chief economist, U.S. Agency for International Development Mission, Ouagadougou, Upper Volta on January 17, 1977).

25. During the comparatively less severe drought of 1982–85, the value of food exported by these countries was three-fourths that of food imported, Chad, Mali, and Niger being net exporters (calculated from FAO Trade Yearbook 1985, table 7).


29. Lisa Smith, The FAO Measure, pp. 15–16. The much reported but, she argues, inaccurate FAO estimate of chronic undernourishment for sub-Saharan Africa is 43 percent, while it is only 22 percent for South Asia. Yet the percent of children under five who are malnourished, a better index of hunger (see note 8 above), is 53 percent in South Asia, almost double to that of sub-Saharan Africa (30 percent).


41. Calculated from FAOSTAT Database.


48. According to the 1994 Human Development Report, by the United Nations Development Program (UNDP New York and Oxford University Press, 1994), the average per capita calorie supply for China in the early 1990s was 12 percent above minimum requirements. See also Elizabeth Croll, The Family Rice Bowl: Food and the Domestic Economy in China (Geneva: UN Research Institute for Social Development, 1982). Though Lester Brown of the WorldWatch Institute recently created a media frenzy when he argued that China’s future grain consumption would grossly deplete the food available to the rest of the world (Lester R. Brown, Who Will Feed China?: A Wake-Up Call for a Small Planet, New York: W. W. Norton, 1995), calmer heads responded by recalculating his data, as well as furnishing new data that clearly demonstrates China’s ability
49. In 1994, the United States had 1.6 ha/per capita of cropland and China had 0.4 ha/per capita (calculated from FAOSTAT Database).


51. World Food Programme. INTERFAIS Internet information system, September 19, 1997.


MYTH 2: Nature’s to Blame


8. Ibid., 151, table 10.1.


10. Talk by Mahmood Mandani, dean of social sciences, Makerere University, Kampala, Uganda, March 19, 1985. Following the speech he was stripped of his citizenship and deported. Abridged version printed in Dollars and Sense, no. 109 (September 1985): 6, 7, 15.

11. The exception was mineral-rich Mauritania, which has very little land suitable for cultivation. Information from Marcel Ganzin, director, Food Policy and Nutrition Division, FAO, Rome, December 18, 1975.


15. During the past three decades, rainfall in the Sahel has been 20 to 40 percent less than it was during the previous three decades. M. B. K. Darkoh, "Desertification: Its Human Costs," Forum for Applied Research and Public Policy 11, no. 3 (Fall 1996): 13.

55. The number of internally displaced persons, many in camps, was estimated at about 1 million, and the number of Rwandan refugees in other countries at about 2 million (UNHCR [U.N. High Commission for Refugees], Special Unit for Rwanda and Burundi, March 1995, quoted in Joint Evaluation, 54).


57. Tourism, for example, was a flourishing source of income. Rwanda ranked third in tourism earnings in the continent (Joint Evaluation, 19, 47).


MYTH 3: Too Many Mouths to Feed


2. Shrinking populations can lead to an age distribution dominated by elderly people, with increasing numbers of middle-aged, childless couples.

3. Unless indicated otherwise, all population growth and fertility figures in this chapter come from World Population Prospects: The 1996 Revision, the conservative and most widely accepted set of population data and projections, produced periodically by the highly regarded Population Division of the Department for Economic and Social Information and Policy Analysis, United Nations, New York. The projections produced by the division are known popularly as the “UN Projections.”


5. World Population Prospects, various projections throughout.


7. World Population Prospects, annex 1, 10–11.


14. For example, see the many publications of the Population Council available on the web at www.popcouncil.org. See also Rockefeller Foundation, High Stakes: The United States, Global Population and Our Common Future (New York: Rockefeller Foundation, 1997).

15. 1990 hectares-per-capita values are: Trinidad and Tobago 0.09, Guatemala 0.20 (World Resources Institute, World Resources 1992–93 [New York: Oxford University Press, 1992], table 18.2). 1987 prevalence-of-stunted-children values are: Trinidad 5.0, Guatemala 57.9 (Food and Agricultural Organization, The Sixth World Food Survey [Rome: FAO, 1996], 8 appendix 2).


17. Per capita cropland from World Resources 1992–93, table 18.2.


19. Per capita, the Netherlands has only about one-thirteenth the cropland of the United States. Yet if the people of the Netherlands consumed
all they produce (i.e., did not export food), almost five thousand calories of food would be available per person, not even counting imports. Calculated from Food and Agriculture Organization, FAO Food Balance Sheets, 1992–1994 (Rome: FAO, 1995).


Some studies purport to show that the presence of family planning programs is the key element leading to fertility decline; nevertheless, their own data generally support the view that people take advantage of these programs when they want them, in order to have the number of children that make sense from the point of view of economic development and improved education and economic opportunity for women (see, for example, Paul J. Gertler and John W. Molyneaux, “How Economic Development and Family Planning Programs Combined to Reduce Indonesian Fertility,” Demography 31, no. 1 [1994]: 33–63, 57–58, 60). The editors of a recent volume comparing four cases of fertility decline conclude that “fertility change occurs with or without access to modern contraception” (Understanding Reproductive Change: Kenya, Tamil Nadu, Punjab, Costa Rica, ed. Bertil Egeró and Mikael Hammarskjöld [Lund, Sweden: Lund University Press, 1994], 20).


29. Ibid., 29.


34. World Population Prospects: The 1996 Revision, 154, annex 2 and 3.


36. A. V. Jose, “Poverty and Inequality: The Case of Kerala,” in Poverty in Rural Asia, ed. Azizur Rahman Khan and Eddy Lee (Bangkok:


49. An example of this kind of thinking can be found in Porritt, “Birth of a Brave New World Order.”


56. Ibid., 86.

57. Ibid., 70–80.

58. Ibid., 71.


61. Ibid. See also Vandemere, *Reconstructing Biology*, 370.


65. Maquiladora factories assemble imported components into goods for re-export and pay very low wages. See Laura Eggertson, “It’s Pregnancy


67. Ibid., 163–167.


71. Ibid., 38.

72. Ibid., 37.

73. Hartmann, Reproductive Rights and Wrongs, 236.

74. Ibid., 224.

75. See Bandarage, Women, Population and Global Crisis, 78–80.


77. From 1960 to 1980 total fertility fell by an average of 0.12 percent per year. Since 1980 it has fallen by an average 0.09 percent per year. Calculated from World Population Prospects, 140–141, annex 2 and 3.

78. For example, see Mary Tiffen, Michael Mortimore, and Francis Gichuki, More People, Less Erosion: Environmental Recovery in Kenya (New York: John Wiley & Sons, 1994).

**MYTH 4: Food vs. Our Environment**


2. John Vandermeer and Ivette Perfecto, Breakfast of Biodiversity: The Truth About Rain Forest Destruction (Oakland: Food First Books, 1995), 20. Table 2.1

3. 4.7 billion tons of active ingredient; Natural Resources Defense Council (NRDC), Summary of EPA Data (May 1996).

4. Calculated from World Health Organization estimate, cited by David Pimentel and Anthony Greiner, “Environmental and Socio-


