Strengthening Rural Communities

HUNGER REPORT 2005

15th Annual Report on the State of World Hunger

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Bread for the World Institute

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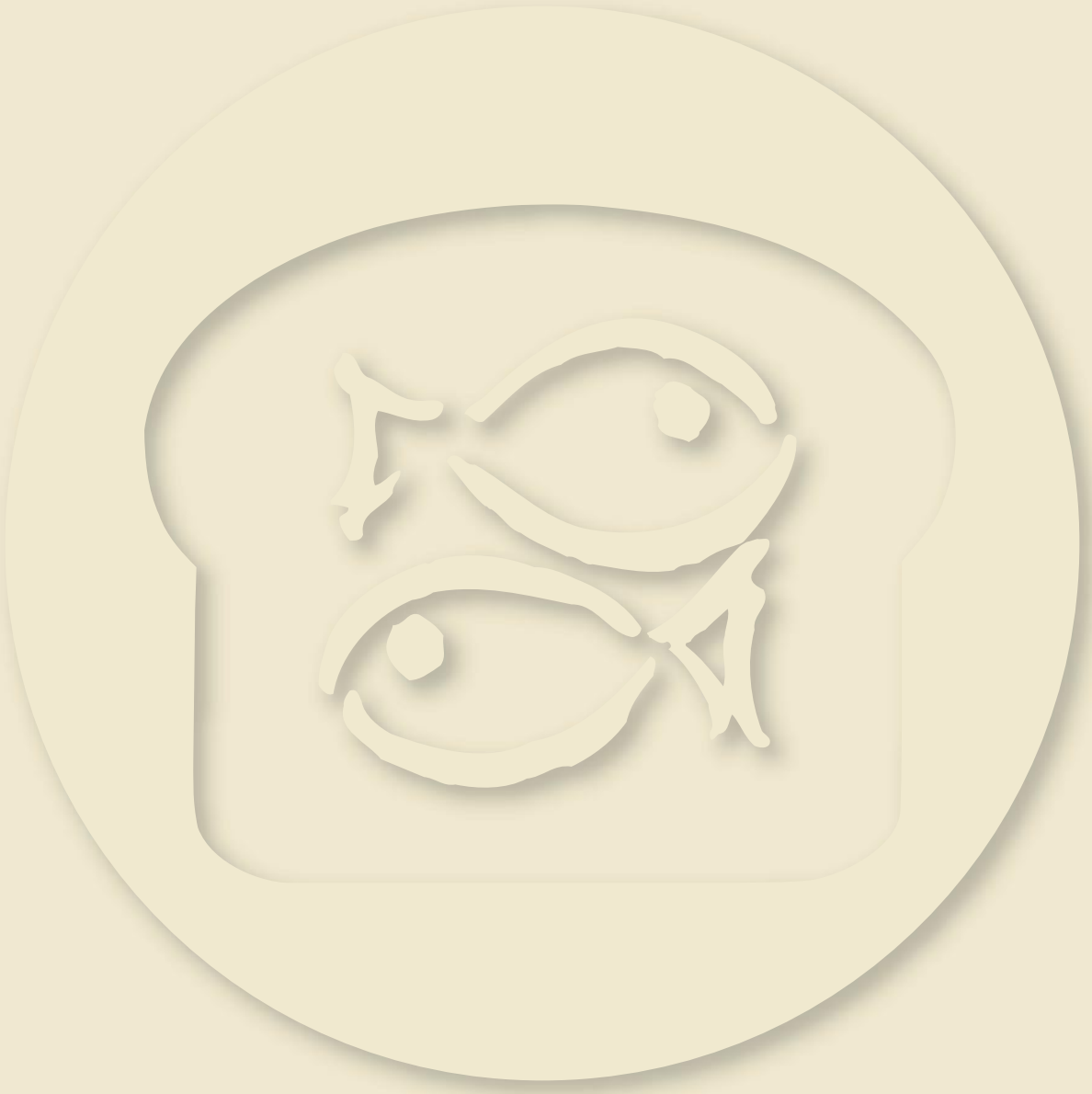


Foreword

Rick Reinhard

Year after year, millions of struggling families in rural communities around the world quietly persevere in spite of extraordinary obstacles. All at once then, something happens that makes it impossible to ignore their plight. The tsunamis in South Asia last year remind us how vulnerable some rural areas of the world are. In a few hours whole villages were destroyed, lives ruined. Hunger, already gripping so many of these communities, tightened its oppressive hold.

The generous response to the tsunamis was heartening. But must it come to this before the world takes notice of the many people in rural areas who struggle to survive every day?

We cannot substantially reduce hunger without paying special attention to the plight of rural communities. Three of every four persons who are undernourished in the world live in a rural area. Here in the United States, some of the most severe concentrations of hunger and poverty are in rural areas. To significantly reduce the numbers of hungry people in the world, we must strengthen rural communities.

The impetus for this year's Hunger Report grew out of our 2003 report, *Agriculture in the Global Economy*. We realized then that the complexity of the problems facing rural communities reached well beyond agriculture. Impoverished rural communities are beset with many problems. Where to start? Limited healthcare, limited educational opportunities, fragile infrastructure, few well paying jobs—these and other problems mount, bringing with them hunger.

We also realized that the same farm policies that fail many rural communities here in the United States depress prices for many farmers in poor countries. Small farmers represent the largest percentage of undernourished people in the world, and giving them a chance to raise their income will also open economic opportunities for non-farmers in poor rural communities.

Changes in trade policy will benefit rural communities in poor countries, but these communities also need public investments—better rural roads, for example—that will bolster their ability to take advantage of trade opportunities. In addition to investment in agriculture, poor rural communities also need schools, health care and nutrition programs.

Public funding for poverty-reducing rural development should increase here in the United States, too. Federal and state governments and local communities, working together, can foster rural development that allows poor people and poor communities to escape from poverty. One way to find the needed money in tight fiscal times would be to cap farm subsidy payments to the largest producers and divert the savings into programs to benefit rural communities.

2005 is a year of decision about hunger and poverty. This is the first year of the second Bush administration, so decisions made in Washington this year will shape the next four years. A series of international events, including the G-8 Summit in July, will call for a deeper commitment to the Millennium Development Goals to cut hunger, poverty, and disease in half by 2015. Debate about farm policy will also get underway in Congress and in multilateral trade negotiations.

Bread for the World's *Make Hunger History* campaign aims to get President Bush and Congress to commit to cutting U.S. food insecurity in half by 2015 and to strengthen what community groups can do to overcome hunger. Bread for the World and the ONE Campaign are also pushing to get the U.S. government to step up support for what poor countries are doing to overcome hunger, poverty and disease.

This 2005 Hunger Report will help deepen the awareness and understanding of policymakers, the media and the public about the importance of rural development to progress against hunger in our country and worldwide.

Rev. David Beckmann
President, Bread for the World and Bread for the World Institute

Introduction

If all the food produced worldwide were distributed equally, every person would be able to consume enough calories per day that no one would have to go hungry.[1] "Imagine," as John Lennon said. But, of course, food is not distributed equally; it's hardly even close.

Margaret Nea

In 2005, the number of hungry people in the world stands at 852 million.[2] Approximately one in six people on the planet is hungry. While we have made progress, true—30 years ago, one in three people were hungry—still, it is unacceptable in a world that produces enough food to feed everyone that so many should go hungry.

The numbers are a stark reminder that the world has yet to seriously focus attention on the problem of hunger. And it is a critical time to get serious. 2005 marks the five-year point on the way to the Millennium Development Goals (MDGs), a framework of proposals agreed on by virtually all countries in the world. The MDGs are a challenge to the world's leaders to make a substantial impact on problems of hunger, poverty, disease, illiteracy, infant mortality, maternal health, discrimination against women and unsafe drinking water by 2015, only a decade from now.

These problems are of course magnified in the developing world, where their severity is also unevenly distributed. China and India, the two biggest countries in the world, have made remarkable strides over the past two decades in reducing hunger and poverty rates in their countries. In sub-Saharan Africa, however, progress towards alleviating hunger and poverty has been much, much slower. For countries like Mali, Uganda and Cote d'Ivoire it is not for lack of trying. Several countries in sub-Saharan Africa have demonstrated that they are firmly committed to doing what they need to achieve the MDGs. With help, a number of African countries could make significant advances in economic development. But these countries lack the resources needed to break out of poverty.

In spite of the continued struggles of sub-Saharan Africa, 2005 brings some good news in the progress towards reaching the MDGs. Many countries in the developing world have raised their living standards over the past decade. Overall, developing regions recorded unprecedented levels of growth in 2004.[3] Some of this is skewed by the incredible performance of the giants China (8.8 percent) and India (6.0 percent), but overall growth in 2004 in the developing world was the highest in 30 years, and that is welcome news.

Jim Stipe

The poorest and most marginalized groups in the world are smallholder farmers and rural landless people; they make up three-quarters of undernourished or hungry people.

While it would appear, based on raw economic data, lives are improving in the developing world, the numbers do not correspond to similar progress in the fight against hunger. While many developing nations are clearly making impressive progress towards achieving several of the other Millennium Goals, the stubbornness of hunger persists.

Much greater attention on hunger is needed to even get close to achieving the goal prescribed in the MDGs of halving the number of hungry people in the world by 2015. Though this goal is entirely achievable—we know what to do—we will not reach it without significant increases in aid from the richer countries of the world to the most impoverished. "A quantum leap" is how United Nations Secretary-General Kofi Annan describes the increases in assistance necessary to effect real change in the developing world.

Chronic hunger could be greatly impacted if governments sought to raise the incomes of the most vulnerable people. And where the most vulnerable reside typically is in rural areas of their country. Three out of every four hungry people in the world lives in a rural area. In the United States, as well, some of the poorest places in the country are rural areas cut off from economic opportunities, from services, and, most distressing of all, from affordable, nutritious food.

The Bread for the World Institute 2005 Hunger Report focuses on rural communities because this is where some of the greatest challenges—as well as the greatest potential—remain to achieving the MDGs, especially the goal of reducing hunger.

"Poverty Traps" and Hunger

Aggregate economic data leaves out much of the story when it comes to poverty and hunger. Cote d'Ivoire and Nigeria, for instance, have similar per capita incomes, but Cote d'Ivoire has a much lower poverty headcount ratio because it has more equal distribution of income.[4] You wouldn't see this if all you had to go on were data on Gross Domestic Product (GDP).

Table I.1 **Millennium Development Goals: Progress Report**

	Africa 840 million (Population 2002)		**Asia** 3,738 million				**Oceania** 8 million	**Latin America & Caribbean** 536 million	**Commonwealth of Independent States** (former republics of the Soviet Union) 281 million	
Goals and Targets	Northern	Sub-Saharan	Eastern	Southeastern	Southern	Western			Europe	Asia
Goal 1. Eradicate extreme poverty and hunger										
Reduce extreme poverty by half	on track	high, no change	met	on track	on track	increase	...	low, minimal improvement	increase	increase
Reduce hunger by half	on track	very high, no change	on track	on track	progress but lagging	increase	moderate, no change	on track	low, no change	increase
Goal 2. Achieve universal primary education										
Universal primary schooling	on track	progress but lagging	on track	lagging	progress but lagging	high but no change	progress but lagging	on track	decline	on track
Goal 3. Promote gender equality and empower women										
Equal girls' enrolment in primary school	on track	progress but lagging	met	on track	progress but lagging	progress but lagging	on track	on track	met	on track
Equal girls' enrolment in secondary school	met	no significant change	...	met	no significant change	no significant change	progress but lagging	on track	met	met
Literacy parity between young women and men	lagging	lagging	met	met	lagging	lagging	lagging	met	met	met
Women's equal representation in national parliaments	progress but lagging	progress but lagging	decline	progress but lagging	very low, some progress	very low, no change	progress but lagging	progress but lagging	recent progress	decline
Goal 4. Reduce child mortality										
Reduce mortality of under-five-year-olds by two thirds	on track	very high, no change	progress but lagging	on track	progress but lagging	moderate, no change	moderate, no change	on track	low, no change	increased mortality
Measles immunization	met	low, no change	...	on track	progress but lagging	on track	decline	met	met	met
Goal 5. Improve maternal health										
Reduce maternal mortality by three quarters	moderate level	very high level	low level	high level	very high level	moderate level	high level	moderate level	low	low
Goal 6. Combat HIV/AIDS, malaria and other diseases										
Halt and reverse spread of HIV/AIDS	...	stable	increase	stable	increase	...	increase	stable	increase	increase
Halt and reverse spread of malaria	low risk	high risk	moderate risk	moderate risk	moderate risk	low risk	low risk	moderate risk	low risk	low risk
Halt and reverse spread of tuberculosis	low, declining	high, increasing	moderate, declining	high, declining	high, declining	low, declining	high, increasing	low, declining	moderate, increasing	moderate, increasing
Goal 7. Ensure environmental sustainability										
Reverse loss of forests	less than 1% forest	decline	met	decline	small decline	less than 1% forest	decline	decline (except Caribbean)	met	met
Halve proportion without improved drinking water in urban areas	met	no change	decline in access	high access but no change	met	met	high access but no change	met	met	met
Halve proportion without improved drinking water in rural areas	high access but little change	progress but lagging	progress but lagging	progress but lagging	on track	progress but lagging	low access, no change	progress but lagging	high access but limited change	high access but limited change
Halve proportion without sanitation in urban areas	on track	low access, no change	progress but lagging	on track	on track	met	high access but no change	high access but no change	high access but no change	high access but no change
Halve proportion without sanitation in rural areas	progress but lagging	no significant change	progress but lagging	progress but lagging	progress but lagging	no significant change	no significant change	progress but lagging	no significant change	no significant change
Improve the lives of slum-dwellers	on track	rising number & proportion of slum-dwellers	progress but lagging	on track	some progress	rising number & proportion of slum-dwellers	...	progress but lagging	low but no change	low but no change
Goal 8. A global partnership for development										
Youth unemployment	high, no change	high, no change	low, increasing	rapidly increasing	low, increasing	high, increasing	low, increasing	increasing	low, rapidly increasing	low, rapidly increasing

The chart shows the targets set by the Millennium Development Goals for achievement by 2015 (or by 2005, in the case of equal access to schooling for girls).

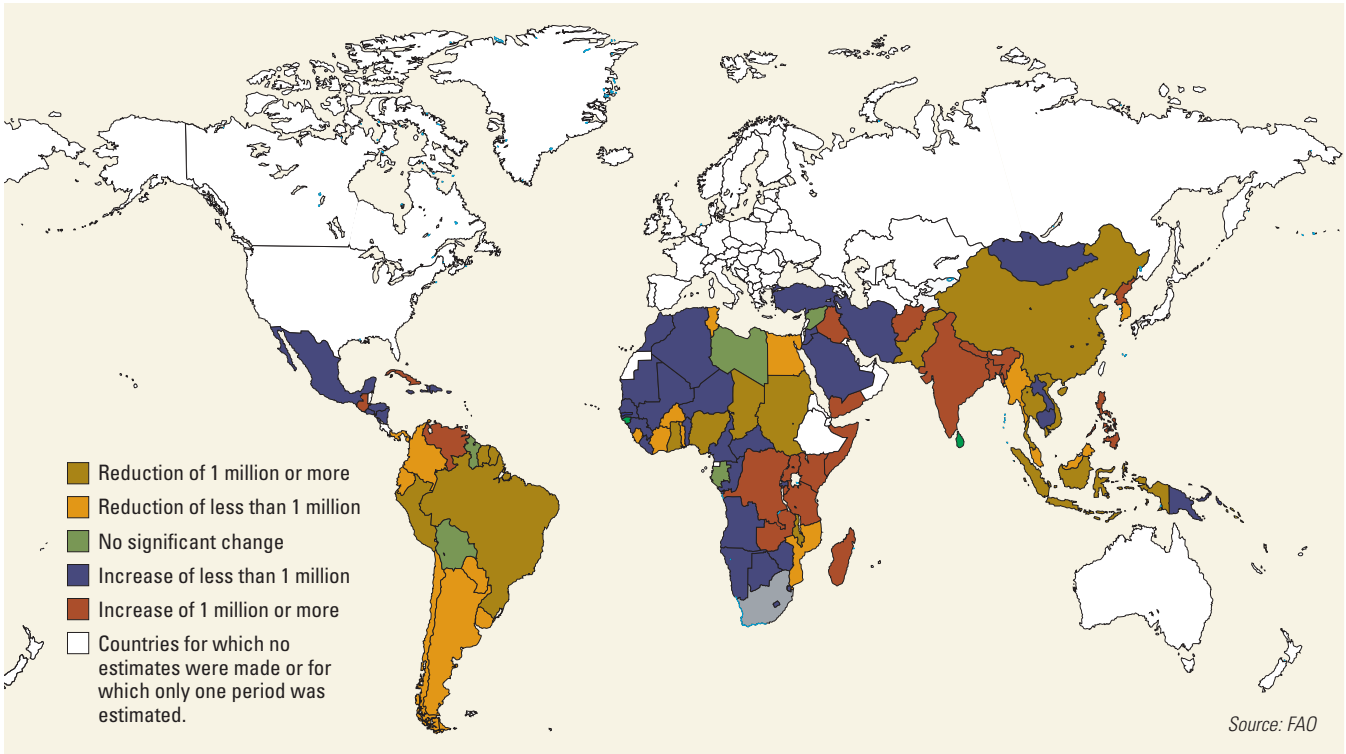
Green squares indicate that in a particular sub-region, the MDG target has been met, or is on track for achievement or near achievement by 2015. Orange indicates progress, but at a rate that is so far insufficient to meet the target. Red squares flag areas where there is no change or negative change relative to the target, since 1990, or where current levels are unsatisfactory in comparison with global standards. A lack of data is shown by a gray box with three dots.

Country experiences in each region may differ significantly from the regional average. For the regional groupings and country data, see http://millenniumindicators.un.org.

Sources: United Nations, based on data and estimates provided by: Food and Agriculture Organization; Inter-Parliamentary Union; International Labour Organization; UNESCO; UNICEF; World Health Organization; UNAIDS; UN-Habitat; World Bank—based on statistics available September 2004.

Compiled by: United Nations Department of Economic and Social Affairs.

Figure I.1 **Change in Undernourishment 1990-92 to 1998-2000, by Region**



Country-level measures may also hide significant variations. The inadequacy of measuring poverty based on national data comes into focus in the United States. While the United States is one of the richest countries in the world, areas within its borders such as central Appalachia, the Rio Grande Valley, the Mississippi Delta and parts of the Great Plains experience poverty levels rivaling countries in the developing world. Many of the poorest areas are rural. Of the nation's poorest 250 counties in terms of per capita income, 240 are rural counties.[5]

Certain places in the United States, and the developing world too, are systematically missing out. These places have come to be known as "poverty traps," and they exist predominantly in rural areas. They become trapped in poverty because they lack sufficient resources to overcome structural challenges to achieve self-sustaining economic development. They face such colossal barriers that they are incapable of breaking the cycle of poverty without help from outside.

No large-scale area of the world fits this description "better" than sub-Saharan Africa. In sub-Saharan Africa, one-third of the population is undernourished and the numbers are increasing. "It is clear that sub-Saharan Africa needs to be the primary focus for urgent efforts to achieve the MDGs,"[6] wrote the Poverty and Economic Development Task Force of the UN Millennium Project in its Interim Report. Achieving the MDGs would have the greatest impact on transforming this region, and yet ironically because countries there are beset with so many problems it makes climbing out of poverty that much harder.

Hunger is a problem that consists of many pieces, and like a puzzle, the picture it forms comes into view as the pieces are assembled and understood as a whole. Certainly hunger is a byproduct of poverty, but it also trails in the wake of disease, lack of health care, education, safe drinking water and adequate sanitation. All of the problems targeted by the MDGs exacerbate people's vulnerability to hunger.

Without education people have less opportunities for better paying jobs which in turn allow them to afford more food; HIV/AIDS victims may be too weak to work or must be cared for by family members who are also unable to work and have less earnings to provide food; women are responsible for much of the agricultural work in the world and are often inclined to sacrifice their own share of food to their children and are thereby undernourished and less able to work to provide food.

These are examples of the structural challenges mentioned above that make rural development such a complicated issue. "Poverty traps" of the world, most of which are in rural areas of developing countries, need to be the primary focus of efforts to reduce hunger. Where there is hunger there is poverty, as well as a raft of other problems. To address one without the others misses the complexity of the problem.

China: Rural Development On A Grand Scale

For the past two decades, China has almost single-handedly accounted for the falling rates of global poverty and hunger. James Morris, executive director of the World Food Program, recently declared, "China has had more experience moving people out of hunger and poverty than any country in the world in the history of mankind."

Between 1981 and 2001 the proportion of extremely poor people in the world—those living on less than $1 per day—was cut in half. The driver of this tremendous change has been China, where the number of extremely poor people has fallen from 600 million to a little more than 200 million over the two decades.

During the first half of the 1990s, China also registered dramatic progress against hunger, reducing the number of undernourished by almost 50 million. These gains, combined with those in India, mean that global undernourishment rates continued to decline even though hunger in the rest of the developing world grew by 34 million. All in all, China's achievements in combating hunger and poverty have been astounding.

What accounts for this remarkable progress? In short, government policies that encouraged and supported smallholder farmers, coupled with openness to foreign investment that produced massive numbers of new jobs.

In 1978, the central government initiated a rural reform program that de-collectivized farmland, allowing individual family-sized plots and giving farmers the right to sell surplus produce. This greatly boosted farmers' enthusiasm to produce more and earn more. Between 1978 and 1985, farmers' incomes increased almost twofold. The result has been rapid poverty reduction.

China's breathtaking success, though, masks some less positive realities. While the cities, especially along the East coast, are bastions of prosperity, extreme poverty is still common in many parts of rural China, mostly in the western and central regions.

There is still a long way to go. The latest estimates of undernourished people in the world have indicated that progress against hunger in China is slowing. During the second half of the 1990s, the number of undernourished people fell by only 4 million. And 200 million people, equal to the populations of France, Germany and Great Britain combined, still live on less than 1 dollar per day.

The Chinese economy will need to find jobs for at least 150 million new workers, mostly from the rural areas, in the near future. With development reaching deeper and deeper into the countryside from cities like Shanghai, millions are struggling to scrape a living from small plots of land. At the moment, there are too many people farming too little land. The size of plots allocated to each household by the government are too small—in some cases less than an acre—to absorb any new workers.

This situation has resulted in a growing divide between the urban rich and the rural poor. Rural incomes are increasing in absolute terms, but urban incomes are growing faster. Average rural incomes are only a third of those in the cities. Many poor Chinese leave their villages to work in factories or on construction sites in the cities for months or years at a time, sending earnings back home to pay for school fees or medical bills.

Celia Escudera-Espadas

China is on track to achieve most of the Millennium Development Goals by 2015, but this could be jeopardized without a plan to spread growth among the regions. The government has vowed to move to eliminate rural poverty by 2010 and has identified raising rural incomes as its top priority.

Six central government ministries launched a program in early 2004 designed to help surplus rural workers find employment in industries other than farming. Reports of widespread corruption, especially among local administrators, raise questions about how effective such programs can be in the current operating environment.

While most discussions of China focus on economics, social and political reforms are uncertain factors in the country's future. These could ultimately determine whether China's incredible progress continues.

Out of Sight, Out of Mind

Despite their many differences, rural people around the world have one thing in common—they are more likely to be hungry and poor than others in their country. This report explores why this is true. A theme that runs through is "marginalization."

Half of all the hungry people in the world live on what is called "marginal land," that is, land environmentally degraded and stingy in what it yields up to those who depend on it for food and income. People living on marginal lands are cut off from more prosperous areas of their country and from economic opportunities. These are places literally isolated from other parts of the country. National governments regard them as low priority. Out of sight, out of mind indeed.

But what we find also is that geographic isolation begets social isolation, which begets political and economic, and to a certain extent leads to a form of psychological isolation: "We, too, see ourselves as isolated."

The poorest and most marginalized groups in the world are smallholder farmers and rural landless people in the developing world; they make up three quarters of undernourished or hungry people in the world. In the United States, while the degree of isolation may be less extreme, people in many rural areas are still cut off from opportunity.

The vast majority of persistently poor counties in the United States are rural. A preponderance of low-skill, low-wage jobs means that even those who work full time cannot always make ends meet.

In most rural areas, the vast majority of people are doing something other than farming. The family farmer, a symbol of rural life as important to the American psyche as the bald eagle, is a dying breed. Those who have held on are finding it increasingly difficult to maintain a livelihood just by farming. Most family farmers today are forced to work off the farm to supplement the inadequate returns from farming.

Nothing that comes up in this report more poignantly conveys the isolation of rural communities in the United States than "food deserts." These are areas without access to grocery stores or any affordable healthy food, and they have become an increasingly common part of the rural landscape.

Food deserts are not unique to rural areas. They exist in impoverished urban areas as well, but the problem for rural areas is aggravated by distance and a lack of public transportation in many cases. Imagine the choices a parent has when the only food within 40 miles is a convenience store attached to the one gas station in town. Traveling 40 miles is an inconvenience for sure if you have a car, but if you don't have a reliable car, and there is no public transportation, suddenly an inconvenience can become a crisis.

Food banks can make up the difference, but it is impossible to put a food bank in every community that needs one. Not being able to afford food is bad enough; not having access to it does begin to seem like one has been cast out into a desert.

Chronic hunger could be greatly impacted if governments sought to raise the incomes of the most vulnerable people. And where the most vulnerable people reside typically is in rural areas of their country.

Inside the Report

In Chapter 1, "Who are the Rural Poor?" we begin by analyzing the ways in which rural people earn their living, breaking it down by occupation. In developing countries, the overwhelming majority of people in rural areas are smallholder farmers, but farming alone rarely provides enough to support a family. Those who have built sustainable livelihoods in rural areas have mostly found ways to diversify their income.

We look at other means rural people use to make a living, and we consider the urban-rural connection. In some countries, it is common for a family member to leave for part of the year to find work elsewhere, frequently in a metropolitan area, mailing remittances back home to the family. An increase in urban poverty means fewer job opportunities in urban areas for rural dwellers and less money sent home from urban to rural areas. Plus, it means fewer urban buyers for rural products.

The focus then shifts to rural America, where the picture is considerably different in that the majority of people do not make their living from agriculture. A much greater number have jobs in the service sector, with manufacturing also coming in ahead of agriculture. Accordingly, most poor rural people face problems that are not agricultural: factory closings, job losses, shifts in the economy, low-wage jobs, inadequate health care, and lack of access to education and training.

In Chapter 2, "Why Are So Many People in the Developing World Poor and Hungry?" agriculture *is* the primary focus and the answer to the question, simplified for the sake of summary, derives from living on marginal land.

Rural communities are by nature remote, but to say their problems result just from their geographic isolation is an entry point into a much broader discussion of isolation. As we say, one form of isolation begets another—geographic, social, economic and political—and in this chapter we look at how that process unfolds.

Chapter 2 also considers the policies of national governments, along with the trade policies of rich countries, to understand how these have contributed to rural people's hardships.

Although distances cannot be decreased, the effect of them surely can be. The factors that cause poverty and hunger must be addressed together rather than in isolation. Problems addressed in Chapter 2 prepare the way to systematically address them in Chapter 4.

Chapter 3, "Rural America in Flux: Understanding Rural Poverty and Hunger in the United States" begins by looking at economic and demographic shifts that have occurred over the last several decades. In 1950, more than 2,000 rural counties were defined as agriculturally dependent. By 1990, that number had dropped to 556 and by 2000 to 420.

As rural America continues to change at a rapid pace, we look at who has been left behind and what has been the impact on communities. Among the most significant developments are the consolidation of farming and the impact of globalization on the rural manufacturing base.

We look at some of the areas of the country where hunger and poverty are most stubborn. Not surprisingly, some of the same problems in the developing world occur in rural America, only on a different order of magnitude.

Chapter 4, "Strengthening Rural Communities in the Developing World," makes clear that the conditions under which poor rural people are living are not hopeless. Knowledge exists to improve the capacity of marginal lands. New technologies have been proven out. Our discussion offers many examples of successful technologies used around the world and underscores a message of hope: with what we know to improve the production capacity of marginal land, there is strong potential to ease hunger and poverty in rural communities.

But improving the livelihoods and health of the people in rural communities will not only come about by focusing on technologies to improve agricultural production; it will require the commitment of government leaders to make happen through development aid, debt relief and fair trade. Before this chapter closes, we lay out some of the key pieces of a rural development program for the developing world, and we call on leaders in rich countries to work together with national governments to ensure that the solutions outlined above can reach the largest number of people.

Where there is hunger there is poverty, as well as a raft of other problems. To address one without the others misses the complexity of the issue.

In Chapter 5, "Strengthening Rural Communities in the United States," we look at rural development policy as it has evolved over more than a century. From the beginning, U.S. rural development policy has principally been about agriculture, but as we saw from Chapters 1 and 3, agriculture is no longer the predominant driver in most rural communities.

Because of the failures of traditional economic development in many rural areas, policymakers must generate new economic value for these communities. Thus we are calling for a major overhaul of U.S. rural policy that will address the needs of the entire rural population, not just agricultural interests.

The federal government must play a pivotal role in providing structure that promotes economic development in rural regions. Ultimately, it will be the states and, to an even larger extent, local governments that ensure new businesses can grow and prosper and that social safety nets are festooned from one end of the community to the next, but the federal government has to provide seed money for market forces to operate.

Chapter 6, "The Way Forward," continues the discussion of domestic policy, but now the focus shifts to the politics of farm policy and by extension agricultural trade policy and reforming both. There are indeed trade policies that can benefit rural communities in the United States and smallholder farmers in developing countries, but achieving the needed changes will be difficult; however, the time is right to begin building coalitions that can change Farm Bill politics and win gains for rural people in the United States and the developing world.

These policies, justified as necessary to protect domestic rural interests, are doing little to help the most vulnerable people of the United States. Rather than invest in rural communities to improve capacity to compete in the global marketplace, most of the money spent on rural America (via the Farm Bill) ends up in the pockets of large landholders and agribusinesses, doing little to help struggling rural families.

As the richest nation on earth, the United States has a leadership role to play. It's time for the United States to significantly reduce agricultural subsidies by phasing out the trade distorting ones and capping those paid to large landholders and agribusinesses. The money saved should be redirected into rural development to help build sustainable rural communities. This

Marty Lueders

Key Hunger Terms

Key Terms	Definition
Hunger	A condition in which people do not get enough food to provide the nutrients (carbohydrates, fats, proteins, vitamins, minerals and water) for active and healthy lives.
Malnutrition	A condition resulting from inadequate consumption (undernutrition) or excessive consumption of one or more nutrients that can impair physical and mental health, and cause or be the consequence of infectious disease.
Undernutrition	A condition resulting from inadequate consumption of calories, protein and/or nutrients to meet the basic physical requirements for an active and healthy life.
Food Insecurity	A condition of uncertain availability of or ability to acquire safe, nutritious food in a socially acceptable way.
Food Security	Assured access for every person to enough nutritious food to sustain an active and healthy life, including food availability (adequate food supply); food access (people can get to food); and appropriate food use (the body's absorption of essential nutrients).

Bev Abma

must be coupled with programs that ease the effect on farmers that will suffer during the transition.

In addition to a reconstituted U.S. farm policy, we call for increased development assistance. Development assistance must target sectors that can address the needs of hungry and poor people, especially programs that help smallholder farmers raise their productivity and supports locally designed, integrated approaches to rural development. Foreign aid targeted effectively is essential, and the United States needs to do its share. More and better development aid from wealthy countries like the United States is essential to cutting poverty and hunger in the developing world.

If the Doha Round of the World Trade Organization (WTO) is to truly be a development round, agriculture must be at the center. The Doha Round goal of enabling the rural poor to share in the benefits of expanding trade and integrated global markets is well aligned with the MDGs. To get there, this means the rich countries of the world must continue to take into account the needs and concerns of poor countries, a fairly standard approach to what is termed "special and differential treatment," involving technical assistance, capacity building and flexible implementation.

Finally, Chapter 7, "What You Can Do," considers what role you can play in the fight to end hunger. In this chapter, you learn about what some of the members of Bread for the World have done in the past year in their communities. Some of these are as simple as writing letters to local representatives in Congress, urging them to do more to achieve progress on the MDGs.

You also learn about two of the other programs Bread for the World is working on in 2005—its annual Offering of Letters and its involvement in the ONE Campaign. Every year Bread for the World members organize offerings of letters in support of anti-hunger legislation. *Make Hunger History,* the 2005 Offering, is urging Congress and the president to begin a national effort to cut U.S. hunger in half by 2010.

United Nations, Mark Garten

In September, the United Nations convenes a meeting to review progress on the Millenium Development Goals. With progress on reaching the hunger goal lagging behind other MDGs, this is the time for world leaders to make hunger a priority.

In recent years, the number of hungry people in the United States has gone up. While government programs keep the numbers from expanding faster, they obviously aren't reaching all the people who need help. *Make Hunger History* will seek to deepen anti-hunger advocacy, expand research on hunger, and take steps to strengthen and improve our national nutrition programs.

Bread for the World has joined a number of other organizations in the ONE Campaign, a coalition of anti-poverty advocates including hundreds of thousands of people across the United States, coming together to fight global AIDS, extreme poverty and hunger. As ONE, the groups are calling for an additional 1 percent of the U.S. budget to help poor countries fight poverty. You can sign a declaration of support for the ONE Campaign on the Bread for the World website at www.bread.org, as well as order resources such as *The Power of ONE,* a Bread for the World campaign handbook.

There are ample opportunities for citizens concerned about hunger to get involved. We hope this report will spark an interest in you, if this is your first exposure, or rekindle an old flame, or simply be part of what sustains the fire inside you for another year.

2005: A Year of Opportunity

2005 could well be an important turning point in the fight against hunger. In July, Britain hosts the G-8 Summit, a meeting of the richest industrialized countries. Prime Minister Tony Blair and Chancellor for the Exchequer Gordon Brown have been preparing an aggressive agenda focused on Africa, AIDS and the MDGs. They will be seeking additional commitments from other industrialized governments for deeper debt relief and substantially more development assistance.

In September, the United Nations convenes a meeting to review the progress on the MDGs. Ten years remain before the goals come due. With progress on reaching the hunger goal lagging behind other MDGs, this is the time for world leaders to make hunger a priority.

The Doha Round of the WTO meetings resumes in December. It is now widely agreed that trade is a crucial element in the fight against global poverty and hunger. The potential benefits to developing countries from increased trade far surpass anything possible through aid alone.

In the United States, 2005 is a year of important decisions about how to address the problems of hunger and food insecurity at home. A new administration and Congress will be setting the national agenda. Bread for the World and its coalition partners are asking Congress and the president to commit to cutting hunger and food insecurity in half by 2010. At the same time, a large federal deficit will put pressure on reducing spending. Decisions in 2005 could define whether the United States is serious about cutting hunger and food insecurity.

The U.S. Farm Bill is up for renewal in 2007, and discussions are already taking place on what should be included in the next bill. The Farm Bill, for better or worse, is currently the vehicle for rural development policy, and so these discussions will be critical to the fate of rural communities in America for years to come.

These are important opportunities to focus attention on strengthening rural communities. The plight of rural communities could be easily overlooked as all of these important decisions are made. Most of the hungry people in the world—and the most severe hunger in the United States—are in rural areas. Rural areas need to be in the focus of efforts to reduce hunger.

A Partnership for Africa's Rural Future

Alpha Oumar Konaré and Peter McPherson

Sub-Saharan Africa is the only region in the world where the proportion of people living in extreme poverty has increased over the past two decades. Such extreme poverty brings hunger, disease, and often political and physical insecurity. Hunger and malnutrition along with major infectious diseases such as malaria, tuberculosis and HIV/AIDS mean higher child mortality and early death for many.

We know that such levels of poverty and human misery can topple governments, foster violence, and spread communicable diseases worldwide. Creating a better life for the world's poor is not just a humanitarian duty, but is increasingly the basis of global security.

In spite of Africa's many problems, however, there is reason for hope. We are dealing with a continent in full evolution. Through a strengthened African Union and its program, the New Partnership for African Development (NEPAD), African leaders are creating a united vision for actions to resolve their continent's most serious problems.

National leaders also are achieving success at the country level: Mali, formerly dependent on food aid, now exports cereals to West African neighbors; Uganda battles AIDS and lowers its HIV infection rate; Botswana models accountable government; and Mozambique's strong growth is fueled by a new investment climate.

Despite Africa's increasing capacity to solve its problems and heightened world attention, we are still not doing enough to keep Africa from slipping further backwards. We are not creating an adequate foundation for the kind of broad-based rural economic growth that is a critical precondition for lifting millions out of poverty and hunger. Africa and its world partners are focused on humanitarian and social interventions but skip over the lessons from successful development in Asia and Latin America. Important lessons from rural-led development successes in Asia and Latin America must guide a larger and more focused effort for Africa.

Start with the people—provide them with opportunity and trust them

We know that individual ambition for a better life is the primary driver for improving conditions in any country. Governments need to help make opportunity possible, lifting barriers that inhibit the individual drive for prosperity and success.

Real change comes, as Amartya Sen so eloquently argued, when people have the freedom to make decisions for themselves for reasons that they believe are right. No doubt, donors can have a major impact in arguing for change, building policy analysis capability, or promoting advocacy groups within a country. But unless local leaders participate in the decision process, unless local producers see the personal advantage of a program, imported ideas will not have a sustainable influence. Local populations must recognize the problem, initiate the solution, and carry forward the work.

Set policies that work to nurture markets and stimulate productivity

We have learned the importance of economic reform that makes investment of effort and resources productive. The basic ideas include maintaining sound fiscal and monetary policies, supporting governments that encourage—not burden—markets, and promoting domestic and foreign investment. Raising domestic and foreign investment levels is critical.

Africa and its development partners must fully embrace the challenge of building African markets and integrating Africa into regional and world markets. In order to realize the potential of growing regional and world demand for agricultural products, Africans will need improved access to investment capital and much greater levels of technical assistance, improved market information systems, and infrastructure development.

Build capacity through education and strengthen institutions

In today's knowledge-driven world, training and education are clearly fundamental for sustained economic growth. Education must cover the spectrum from elementary education to graduate programs. In Africa, primary and secondary education is vital, especially ensuring equal opportunity to girls. Renewed focus on tertiary education is also important if Africa is to fully participate in the global knowledge economy.

Decades ago, Ted Schultz documented the relationship of human capital to economic development. Educated people have the knowledge and skills to shape their own futures and build the societal institutions—universities, government agencies—that are so critical to sustained economic progress. Far more significant support is needed to build the robust institutions required to develop Africa's human resources.

Develop technology

New technologies and their applications have been primary drivers in economic change. During the 1960s and 1970s, Asian and Latin American leaders took bold actions to train scientists and implement policies and programs to accelerate the application of Green Revolution technologies to their own countries.

More than a Green Revolution, Africa needs a "Rainbow Evolution" to boost productivity among the continent's vast diversity of crops, livestock, climates and soils. Biotechnology holds considerable promise as a technology that, wisely managed, can play a key role with other scientific tools—soil fertility, water management, agronomy and animal husbandry—in solving pressing agricultural problems.

We must also be smart in how we use limited scientific resources, organizing regional centers of excellence to address key problems wherever possible and rapidly disseminating their results.

Improve infrastructure

Infrastructure is central for economic growth. Without appropriate infrastructure, none of these lessons are likely to work: individuals cannot work together, marketing costs are prohibitive, and knowledge cannot be translated into improved productivity. Rural areas of Africa will develop only if road, communication, power, and air and seaport networks that connect rural communities to each other, to urban areas, to the region and to the globe are vastly improved.

Marty Lueders

The World Bank, the United States and other donors must recognize the importance of increasing the capacity of African Union/NEPAD and the African Regional Economic Communities to prioritize among regional investments and oversee their financing and implementation. Ways must be found to attract substantially more private investment by using donor resources to develop African private sector capacity and to share the risk for domestic and foreign investors.

Consideration also needs to be given to the most appropriate public/private investment mix for particular projects and how African national and regional entities will maintain and regulate public infrastructure once it is built.

Take a long-term view, not just a short-term transfer of goods and services

There are no quick fixes to cure poverty. We have learned from Asia and Latin America that development is a long-term process. Much of what needs to be done will take time to realize its full impact. This is a critical point and is not commonly addressed in the U.S. political process.

Transfers of goods and services and budget-covering transfers usually have little permanent impact. If emergency relief is not matched by long-term engagement, we only buy time until the next emergency.

Promote political stability and physical security

Little progress can be made without a reasonable degree of stability and security. Individual freedom and private initiative go hand in hand. Democratic processes provide greater opportunities for rural populations and others to have their views heard; transparency and accountability help minimize corruption.

Having seen the horror of internal wars in Rwanda, the Sudan and elsewhere, we must recognize the need for mechanisms and policies that prevent conflict. The African Union has decided to build up a ready-reaction peacekeeping force to stop conflict before it becomes genocidal; that is why the United States has focused military cooperation on training peacekeepers. This is a start, but we need to do more.

The path forward

There is today a reasonable chance for Africa to succeed in the long term, especially when one considers what has happened in other regions of the world in terms of progress and leadership. We believe that the development lessons of the last 50 years, adapted for specific areas of Africa, can be the basis of a successful partnership. The time is right. There is interest, compelling need, and opportunity for a new partnership with Africa.

For this vision to succeed we need a timeframe of at least a generation and must outline significant benchmarks along the way. Primary goals should be few in number, simple in concept, and absolutely basic to the success of the partnership.

Agricultural production and rural income must be at the core because two-thirds of Africa's population is rural. But we want to be clear that other issues need to be addressed; for instance, urban challenges, governance issues, the role of women, preserving the environment and family planning. The development lessons set forth in this article are generally applicable to these concerns.

We call upon the leaders of the United States, Africa, and the G-8 to join together to incorporate these lessons and create a new, long-term alliance for Africa that responds to priorities determined by African leaders through the African Union and its program NEPAD. This new partnership should have the vision and scope to be this generation's equivalent of the 1960s Alliance for Progress for Latin America. The goal should be achieving broad-based economic growth, freedom and security for all Africans.

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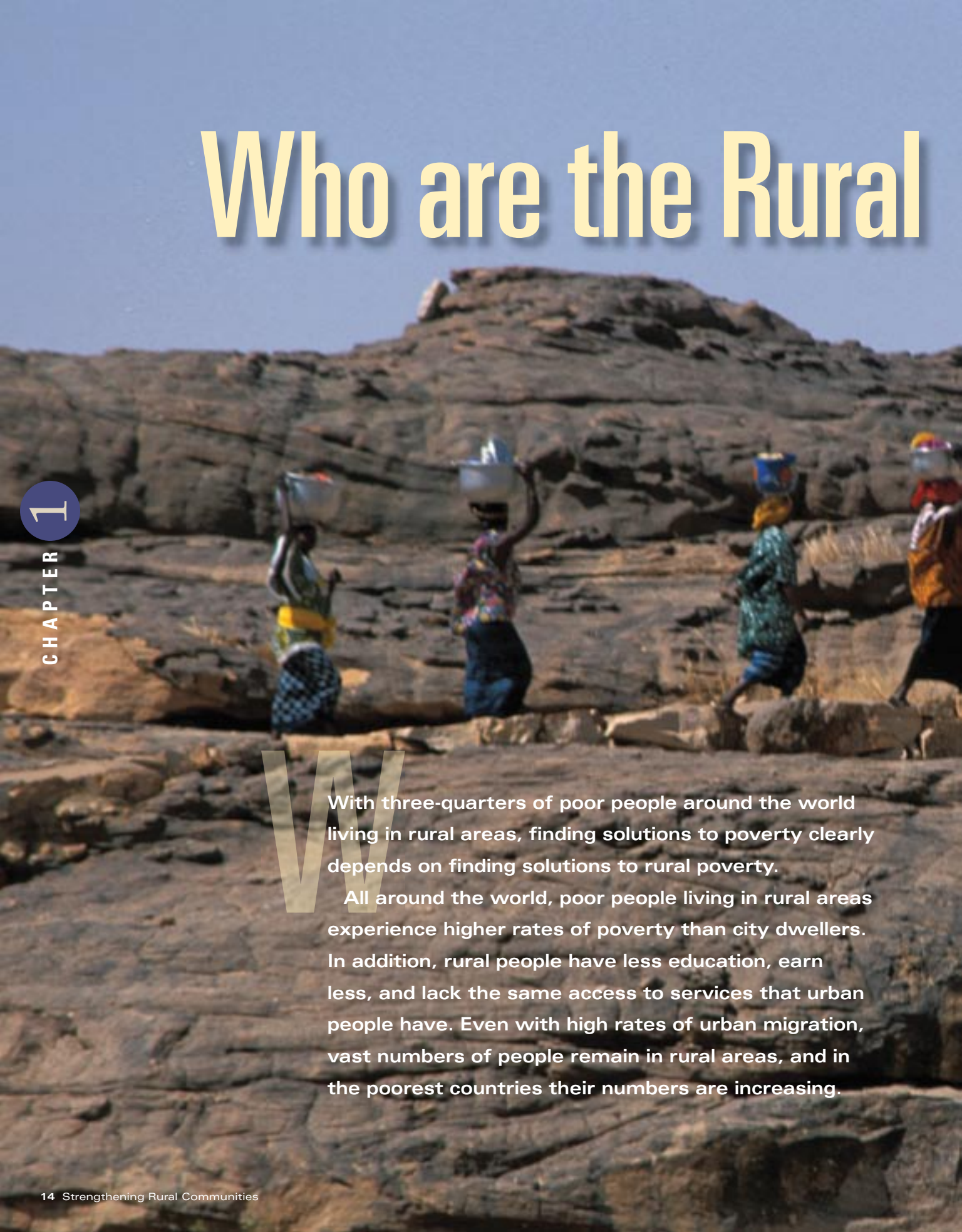
CHAPTER 1

Who are the Rural



With three-quarters of poor people around the world living in rural areas, finding solutions to poverty clearly depends on finding solutions to rural poverty.

All around the world, poor people living in rural areas experience higher rates of poverty than city dwellers. In addition, rural people have less education, earn less, and lack the same access to services that urban people have. Even with high rates of urban migration, vast numbers of people remain in rural areas, and in the poorest countries their numbers are increasing.

Poor?

Rick Reinhard

While it might be tempting to imagine that rural people are the same everywhere—leading similar lives, facing similar challenges, and having similar strengths and weaknesses—in fact, the "rural population" is made up of people who differ as much from each other as they do from those in urban areas. While problems—and thus solutions—may differ from one community to the next, we can at least identify some common ways of earning a living and the common struggles associated with each.

Margaret Nea

Farmers

More than a third of all people on earth, approximately 2.5 billion at present, rely on agriculture for a significant portion of their livelihood. Farming and farm labor generate roughly 70 percent of rural household income in Asia and about 60 percent in Africa and Latin America. In East Asia, sub-Saharan Africa and Latin America, remarkably few rural people work outside of agriculture. Agriculture is also dominant in South Asia, the Middle East and North Africa, though it involves a smaller percentage of the population. By 2010, at least two thirds of rural people in developing countries—and 47 percent of all people—are expected to depend on agriculture.[1]

By far, the largest group of rural poor people consists of farmers who work small plots of land, usually 2 hectares or less (1 hectare is equivalent to roughly 2.5 acres). These smallholder farmers also make up the largest group of hungry people worldwide.

Challenges faced by smallholder farmers in places like Uganda affect entire families. Women and children, for instance, often bear the burden of collecting water or gathering wood to prepare fires for cooking meals. This may require treks of several kilometers, staggering up hillsides and back down, the task made worse by jugs of water balanced on heads while negotiating the difficult terrain.

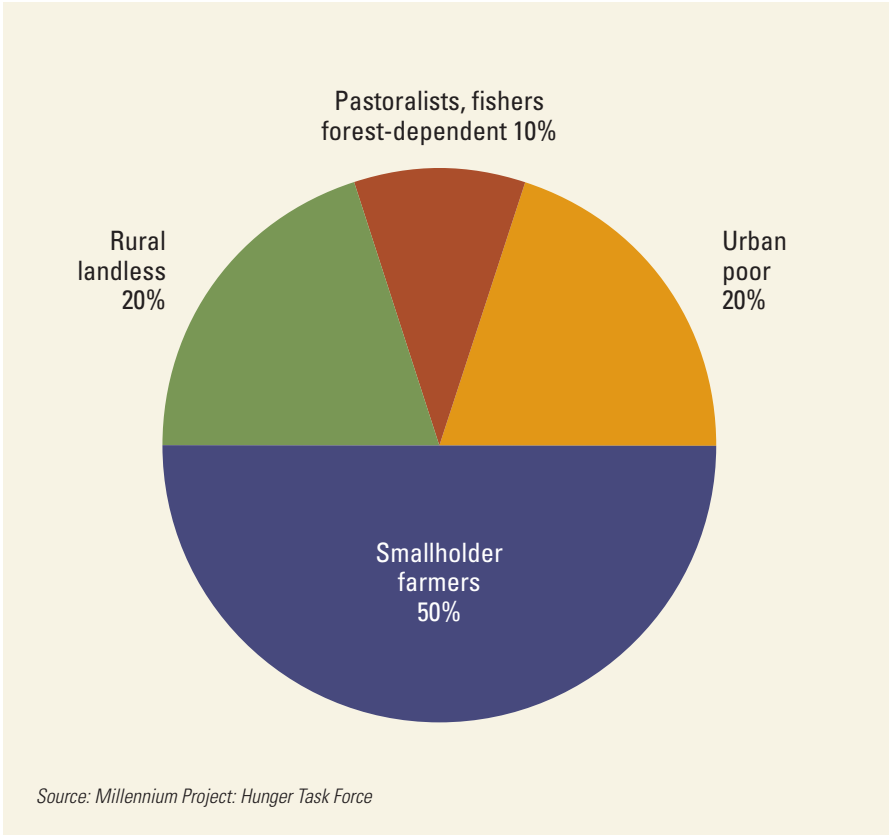
In Uganda, the majority of farms are smaller than 2 hectares and family members do most of the farm work. Families depend on these small plots to grow food crops like sweet potatoes, corn, beans, sorghum and sesame, which they eat or sell. Growing food to eat, what may be called subsistence agriculture, accounts for roughly two-fifths of Uganda's agricultural output.

Extremely poor smallholders spend most of their time growing staples: teff, wheat, barley, corn, sorghum and millet in Ethiopia; potatoes and corn in Bolivia; corn, yams and cassava in Ghana; and rice in India and Indonesia. Families who are less poor may earn more of their income from livestock, other crops and jobs off the farm; but even with these alternatives, staples are

Kimberly Burge

The survival of some communities may depend on a single crop, such as cotton in many parts of West Africa, where the entire community has a stake in helping its farmers get that product to market.

Figure 1.1 **Who are the Hungry?**



Source: Millennium Project: Hunger Task Force

Agriculture is Not the Whole Rural Story

The proportion of people who work primarily outside agriculture varies greatly by region, from 5-8 percent in East Asia and sub-Saharan Africa to 31 percent in the Middle East/North Africa. About 15 percent of rural people (437 million) do not earn their living from agriculture at all. Rather, they produce a variety of goods and services and include shopkeepers, weavers and even brewers.

Because farming incomes are so low and plots of farmland are very small and often shrinking, the rural non-farm sector is likely to become increasingly important. Indeed, consensus is growing that rural activities other than farming are a good thing for poor people, but pragmatic questions of how to create rural non-farm employment have no clear answer.

Focusing on very poor people and their needs leads logically to efforts to improve non-farm opportunities, so development groups such as the International Fund for Agricultural Development (IFAD) have stepped up their promotion of these sectors of the rural economy. One development strategy is microcredit lending, which helps poor landless people—usually women—start and build feasible non-farm-dependent small businesses such as sewing, selling household necessities and handmade goods.

Marty Lueders

While still a small portion of the rural economy, the non-farm sector is likely to become more important as fertile land becomes less available. How to create rural non-farm employment remains a large challenge.

still a major source of income, especially in remote areas where transportation is expensive. In remote areas, staples account for 70-80 percent of the calories these people consume.

In most regions, agricultural production is lowest and poverty rates highest where there are poor soils, low rainfall and adverse climate changes. Many of these so-called "marginal" areas are now centers of relatively high population density and, therefore, are being cultivated more and more intensively. In many marginal areas of Africa, average grain crop yields are low and declining because of problems like soil degradation. Unfortunately, rural families are unable to make up for these low yields by working off the farm. Jobs are scarce in marginal areas and do not pay much.

Landless Poor People

Smallholder farmers tend to be at least marginally better off than landless or near-landless people. In rural Bangladesh, for example, even households with less than 0.2 hectare of land with good soil and sufficient water consume 7 percent more food per person than people with no land at all.[2] Yet in places where land quality is poor (for example, in Burkina Faso, Mali, western Kenya), there is less difference in the food security of those who have land and those who do not.[3]

In some areas, many poor landless people previously were farmers, but they either lost their land during hard economic times, perhaps caused by the death of a family's main income earner or a failed harvest, or they found that their land had become too degraded to feed or support the family.

Without land, rural people must support themselves by working for wages, often on farms owned by others. With low wages being the norm in rural areas, people may have jobs and still live in poverty. In the Near East/North Africa and Latin America/Caribbean regions, wage earners are commonly concentrated in more densely populated areas, where greater work opportunities exist.[4] Whether these people depend primarily on agricultural or non-agricultural

Case Study in Strengthening Rural Communities:

Helping Smallholder Farmers in Africa

Elizabeth Mayang Elango

One of the many challenges to increasing the productivity of rural smallholder farmers is the lack of low-cost, reliable veterinary medicines to combat common livestock diseases. Heifer International's ethnoveterinary project, otherwise known as "ethnovet," was originally conceived to address this issue.

The project is a partnership between Heifer and the Fulani, a nomadic cattle-rearing people who inhabit parts of many West African countries. Having reared cattle for years, the Fulani possess vast knowledge of treatments for many diseases that afflict their animals. The knowledge is held by a council of elders and transferred through a closely guarded oral tradition.

Margaret Nea

In partnering with Heifer, beginning in the 1980s, the elders agreed to share what they know with groups they normally did not interact with—and often even clashed with. Ethnovet remedies rely on local plants or easily available organic materials and sometimes even rituals that are based on centuries of experience.

For more than a decade, Heifer has been documenting some of the proven treatments that the Fulani use. In the next year, Heifer will be co-publishing a manual that attempts to put into writing much of the knowledge that it has gained from the partnership with the Fulani. Ethnoveterinary medicines are used because conventional drugs are expensive for most rural farmers in developing countries, veterinary pharmaceutics are not always available or accessible, and ethnoveterinary remedies are practical, effective and cheap.

Rural farmers in Africa, especially livestock farmers, have no shortage of challenges to contend with from farm to market. A reduction in their production costs means they are able to sell more and at a price the market can afford. Any means by which they can reduce their dependency on costly drugs from Europe, Asia, the Middle East and elsewhere for treating livestock is a boon.

The International Livestock Research Institute (ILRI) estimates that there will be a 60 percent growth in demand for animal source foods in the next 20 years, largely in developing countries due to population growth, moderate income increases and a rise in urbanization. Speaking at a symposium on Small Farmers at Heifer's 60th anniversary celebration recently, the FAO's Irene Hoffman stated that "the projected demand in livestock products offers a unique opportunity and a rapidly growing market in which many rural people already have experience."

If small rural farmers are going to take advantage of this market they must seek more cost effective ways of producing. For small farmers in a global community, reducing costs means increasing profits.

***Elizabeth Elango** is Heifer International's Program Officer for West Africa.*

A number of rural families in Africa rely on remittances sent from family members living elsewhere and who have sometimes had to travel great distances to find work.

employment is often determined by the strength of the local non-farm economy.

Wage laborers everywhere, but especially farm workers, are the most likely to be poor.[5] In El Salvador, landless people who do not work on farms earn more than twice that of the country's landless agricultural workers. In below-normal harvest seasons, landless or near-landless hired workers are the first to lose their jobs; and landless people are more likely than farmers, even smallholders, to die during famines.[6]

Information has been hard to obtain about the extent and location of landless populations, but experts estimate that the greatest number are found in areas of high population density where land is scarce like India, in areas where land distribution is highly skewed like Brazil, and in historically "favored" rural regions whose employment opportunities have attracted immigrants from other poor rural regions like South Africa.

Rebecca Vander Meulen

When work is scarce in their local communities, those who can migrate to places with job opportunities. South Africa, for example, is home to a thriving mining industry that draws workers from all over southern Africa—and increasingly from much further north. Laborers, most of them young men from Lesotho, Mozambique and Zimbabwe, leave their families and come to work in gold and diamond mines, sending all that they can of their earnings back home. For these migrants, both the journey to South Africa and the extraction work in the mines can be dangerous, and workers who come without documents face deportation if their illegal status is discovered.

The Great Noligwa mine in Orkney, South Africa, conveys the harshness of the work inside the mines, where a keyhole opening drops 5,100 feet, nearly a mile, into the work area.[7] Inside the blackness and dust, explosives and pneumatic drills rock the creaky walls and braces holding up gullies and crawl spaces. The men who make the journey to these places spend months at a time separated from their families; it is a brotherhood of the landless in a place far from home.

Natural-Resource-Dependent People

Rural populations also include hundreds of millions of people whose primary means of survival are not farm-related but still consists of using whatever natural resources are available. These "natural-resource-dependent" people experience some of the highest rates of poverty in the world.[8]

Pastoralists

An estimated 675 million rural poor people use livestock for some or all of their subsistence, and these include nearly 200 million pastoralists.[9] Traditional pastoralism, particularly nomadic herding, is the main source of food and income in dry areas ill suited to growing crops.[10] Herds represent both people's livelihoods and their life savings.[11] Unfortunately, animals are highly vulnerable to floods and droughts, land degradation such as desertification, and disease outbreaks. In Mongolia, where tending livestock is the backbone of the rural economy, a combination of summer droughts and extreme winters—a disaster that Mongolians call "zud"—caused the deaths of 4.8 million animals in 2001, a loss estimated to be in the tens of millions of dollars.[12]

Pastoralist communities are also coming under increasing pressure from their neighbors as local populations increase and grazing areas shrink.[13] For instance, the sudden arrival of large numbers of Somalis in southeastern Ethiopia during the summer of 2001 put significant pressure on the limited water supplies and grazing areas of the region. Ethiopian pastoralists were then forced to migrate earlier and farther in search of water and suitable grazing lands for their herds.[14]

Pastoralists in the Near East and North Africa tend to be nomadic but are generally concentrated in steppe regions. In Asia and Latin America, pastoralists are found on high mountain slopes and plateaus, remote areas generally with harsh climates.[15] More than 10 percent of rural Africans are herders,[16] and they too live in harsh climates, grazing their herds in arid and semi-arid areas.

One of the most widely known of Africa's pastoralist groups is the Masai of northern Tanzania and southern Kenya. They are a semi-nomadic people who lost much of their traditional grazing lands to British settlers in early 20th century agreements. The descendents of these settlers still farm on these lands and have transformed

Margaret Nea

Pastoralism, particularly nomadic herding, is the main source of food and income in dry areas ill suited to growing crops.

Table 1.1 **Who are the Poor? by Region**

Region	Rainfed farmers	Smallholder farmers	Pastoralists	Artisanal fisherman	Wage labourers/ landless	Indigenous people; scheduled castes/tribes	Female-headed households	Displaced people
West and Central Africa		■						
East and Southern Africa		■		■	■			
Asia and the Pacific		■	■	■	■	■	■	■
Latin America and the Caribbean	■	■	■	■	■	■	■	■
Near East and North Africa	■		■	■	■	■	■	■

Source: International Fund for Agricultural Development

some into national and tourist parks. Due to the loss of their land, the Masai are facing significant challenges to their way of life, and some Masai have begun to hold public protests demanding the return of lands from the white farmers.[17]

Fishers

There are an estimated 30 million fishers worldwide, twice as many as in 1970.[18] More than half of the world's seagoing fishers—about 8 million people—are "artisanal" fishers, who work from non-motorized boats without decks and/or cast large nets from the beach. Unlike large-scale fishing fleets that remain at sea for days or weeks at a time, most artisanal fishers return to shore each day.[19] As a group, they are becoming increasingly vulnerable to food insecurity as pollution and overfishing threaten stocks in many areas.[20]

Often fishing is not enough to sustain families year-round. In Benin, for example, men will migrate during the rainy season to the capital city of Cotonou and other cities to find non-fishing work like the miners, sending much of their earnings back home. The wives supplement this by selling crafts and food from their gardens.[21]

In Asia, dependence on freshwater and coastal fisheries is especially high.[22] Coastal artisanal fishing is a communal activity in which the focal point is the mooring from which boat crews set out each day. Buyers and sellers congregate at the landing site; nearby, women clean and smoke or dry part of the catch.[23]

Celia Escudero-Espadas

Fishers are becoming increasingly vulnerable to food insecurity as pollution and overfishing threaten stocks in many parts of the world.

Artisanal fishing communities are closely-knit social units, often comprising one or a few extended families that are proud of their fishing tradition. These communities are frequently isolated from the rest of society and thus tend to be marginalized, with very little market power or political influence.[24]

Diversified Livelihoods

Most poor rural households use a variety of strategies to piece together their livelihood and get the food they need. Smallholder households, for example, will cultivate traditional and cash crops and combine this with raising small livestock. Sometimes farming generates only a small portion of a family's total earnings.

Poor people may rely on both urban and rural resources to secure a living. A number

of families rely on remittances sent from family members living elsewhere. A father might leave his rural village to work several months a year in the city, sending money back. According to the World Bank, in 2001 almost $73 billion was sent back to developing countries from relatives in the industrialized world in the form of remittances.

A study of rural poverty in Bangladesh found that for families who had escaped poverty, the key was to combine multiple strategies. The ones who were "better diversifiers" used a combination of strategies, for instance, devoting more of their land to higher-yielding varieties of rice or crops other than rice, engaging in trade, migrating to more prosperous areas, doing construction work, and/or providing transportation services. The study also revealed that families starting from a position of extreme poverty were likely unable to pursue multiple strategies.[25]

In the last 50 years, 20 million people have moved off farms and into other types of employment in rural America.

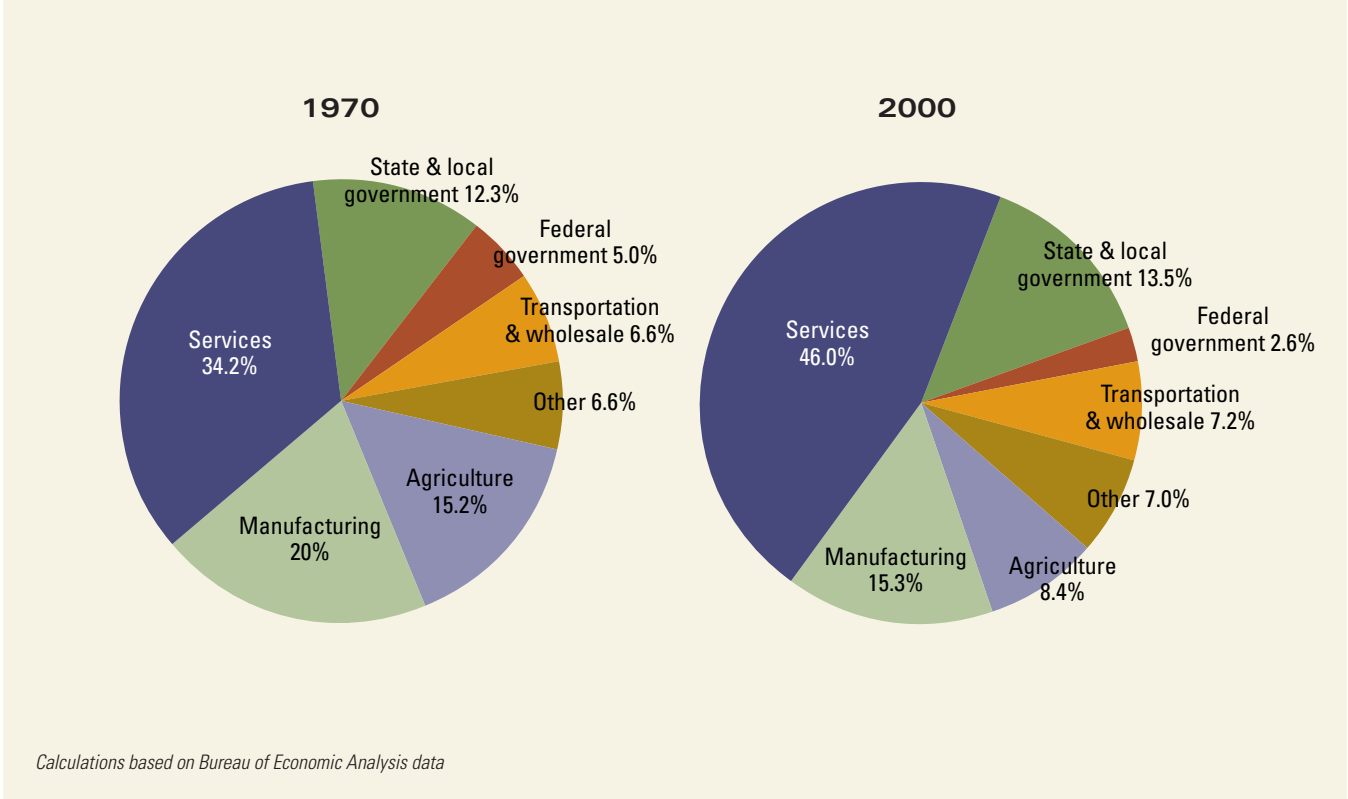
Who Lives in Rural America?

For most people, "rural America" still brings to mind the family farm. At one time this image would have been correct. In the early 1900s, nearly all of the country's 2,000 rural counties were economically dependent on agriculture. But today, only 250 counties depend on agriculture, and many are sparsely populated.[26] Today, less than 10 percent of the American rural population lives on farms, and only 2 percent earn their primary income from farming.

In contrast to developing countries, most people in the United States—like most people in the industrialized world—live in cities. Rural counties are home to nearly 49 million people—only 17 percent of the U.S. population—but account for three-quarters of the nation's land. A country called "Rural America," considered apart from urban areas of the United States, would still be the fourth largest in the world.[27]

Who are the 49 million rural Americans? Almost half of the total rural population lives in the South and a third in the

Figure 1.2 **Share of Total Employment by Industry in Rural America**



Calculations based on Bureau of Economic Analysis data

Sowing Seeds of Hope in Perry County, Alabama

In an isolated part of Alabama, nowhere in sight of the nearest interstate, Perry County would be easy to miss on the map if it were not for its notoriety as being one of the 20 poorest counties in America.

"The unemployment rates, infant mortality rates, the number of elderly and children who lack support—you name the indicator and it's heartbreaking," said Mart Gray, who is regional coordinator for the Cooperative Baptist Fellowship (CBF), one of the founders of Sowing Seeds of Hope in Perry Country.

And yet that is only one way of looking at Perry County.

In the 1960s, a study done on African Americans with PhDs revealed that a substantial number came from Perry County in Alabama. In 1968, at the 25th reunion of the Lincoln Normal School in Marion, located in Perry County, the assembled graduates discovered that all of their children who were old enough to be attending college had either completed a degree or were presently pursuing one.

But in the last 50 years, the population in Perry County has shrunk from 30,000 to 11,000. In 1998, when the one remaining hospital in the county closed its doors, Mart Gray started thinking something needed to happen quickly to reverse this tide, and that's when he got serious about sowing Seeds of Hope.

Rick Reinhard

Out of Despair Comes Hope

The program started by establishing a steering committee of leaders from the black community and the white community, and then getting them to sit down together in the same room and to begin discussing what needed to be done—and not just for the next year or two, but as part of a long-term vision.

"We asked ourselves," recalled Gray, "what if we made a 25-year commitment? What if those of us who say we are committed to faith made a long-term commitment to faith?"

It was a galvanizing experience and forged a commitment to working as a team that has burned stronger as the years have passed.

One of the first initiatives was to hire a health care coordinator to address some of the difficulties created since the hospital closed. Frances Ford was hired in 2000 and one of her first tasks was to create a health care resource manual for the county.

"In a place like Perry County, the center of activity for health care referrals is the hospital," said Ford. "You take that away and you remove what for some people is all they know to do to get help.

"The resource manual provides information on daycare centers, Medicaid, pharmacies, food banks, clinics, police, Salvation Army—you name it, everything you could imagine."

The manual has been distributed to social workers at health departments, in government buildings, at the schools, in libraries and office buildings, including some offices where you would never expect to find a resource like this. "The amount of support behind this project has been wonderful," said Ford. "It goes to show how strong the community is in spite of the difficulties we face."

And From These Seeds Comes New Hope

Frances Ford continues to work with Seeds of Hope, connecting people in Perry County with services. Since she began, the number of people who are now receiving Medicaid benefits has increased twofold, simply by virtue of her educating them that they qualify.

She also does health fairs. "I try to do at least four a year, and that includes screening for diabetes, cholesterol, high blood pressure, blood sugar, HIV-AIDS, body mass and bone density. At least monthly I do an educational seminar wherever I can be heard."

Ford, a lifetime resident of Perry County and a registered nurse for more than 20 years, knows as well as anyone the challenges she faces. With heart disease being the leading cause of death in Perry County, she is a tireless promoter of exercise and has been at least partially responsible for the improvement and grooming of walking trails around the county.

Frances Ford and Seeds of Hope are making a difference in Perry County—and while many challenges lie ahead, so does much hope.

"There are days," said Mart Gray, "when I'm in my car driving to Perry County and I'm thinking, this is not really where I want to be today. But I have never driven out of there, not one time, when I did not feel more positive about life than when I arrived. And not because of the things that I did while I was there, but because of my experience with the people. I believe there is so much strength in the human spirit."

Midwest.[28] Demographically, the rural population is evolving. It is getting older as baby-boomers prepare to retire. Immigrant communities, mainly Hispanic, are growing as low-wage jobs become more plentiful in rural areas. In the last 50 years, 20 million people moved off farms and into other types of employment in rural America.[29] Service industries such as retail and telecommunications have expanded rapidly, bringing new stores and jobs to rural towns.[30] Recreation centers, prisons and casinos are springing up as factories and farms close down.

In many ways, rural areas are as different from one another as they are from urban areas. The truth about rural America, contrary to the stereotype of family farms being everywhere, is actually much more complicated.

Agriculture

Another surprise is just how small a portion of overall employment farming is in the United States. Farming employs less than 2 percent of the total American workforce, and the number of hungry and poor people who farm for a living is actually quite small compared with the rest of rural America.

During the 20th century farming lost the role it once played as the main rural occupation. Technological advances have reduced the need for labor. In 1930, for example, it took 15-20 hours of labor to produce three bushels of wheat. By 1987, it took only three.[31] Over the past few decades, U.S. agriculture has seen a consolidation trend as the number of farms has declined while their average size has grown. The largest farms use more efficient, mechanized equipment—and fewer workers—to produce the vast majority of the country's food and fiber.

Today, almost eight in ten rural counties are dominated by non-farm activities.[32] Agriculture is one of the smallest and slowest-growing sectors of an increasingly diversified rural economy, according to the U.S. Department of Agriculture (USDA). In 2001, just 4 percent of rural earnings were generated from agriculture, fishing and forestry combined.

Even with an expanded definition of "farm-related employment," one which includes agricultural services, input industries (like fertilizer and machinery), agricultural processing and marketing (including all food products, apparel and textiles, tobacco, and warehousing), and wholesale and retail trade of agricultural products—even then—agriculture accounts for only 23 percent of nonmetropolitan employment.[33]

Of course farming is an important use for the land itself and remains an important source of jobs in some areas, but the remaining agriculturally dependent counties are often geographically remote, with low population densities and few natural amenities.[34] And yet in spite of all this, it is clear that farming is not disappearing from the United States. Over the 1990s, farm jobs declined by less than 2 percent, after falling 15 percent through the 1980s.[35]

The point is rural policy must encompass more than farming. "Simply stated, agricultural policy is no longer a robust policy instrument to spur widespread growth in the rural economy," argues Mark Drabenstott, director of the Center for the Study of Rural America.[36]

Manufacturing

The rural poor are far more likely to work in retail or manufacturing. After 1950, large-scale manufacturing operations, attracted by lower land and labor costs, became the main employers in many rural areas. During the 1990s, however, many low-wage, low-skill manufacturing operations moved out of the United States to countries with even lower labor costs. This precipitated another economic transition in much of rural America, as communities sought to diversify their economies and become less dependent on big factories for jobs.

Manufacturing still makes up a substantial part of the economy in many rural places and, along with the leisure and recreation industries, is one of the mainstays of the rural economy in the 2000s.[37] Manufacturing accounted for 22 percent of rural earnings in 1998, and rural areas actually gained more than 40,000 manufacturing jobs through the 1990s.[38] Unfortunately, most of those jobs were in lower-skill sectors, plus growth was not evenly distributed across the country. The Southeast, for example, disproportionately dependent on apparel and textiles, lost many jobs and more than $1.5 billion in earnings.

USDA, Ken Hammond

A factory worker in Mississippi grades cotton for processing. Factory jobs like this have become scarcer in the south and southeast United States as manufacturers seek out lower labor costs overseas.

Box Half Empty—or Box Half Full?

An increasingly common feature of rural landscapes these days is the big "box store," most notably Wal-Mart. When Wal-Mart comes to town to break ground on a new store, it is hard not to notice the impact right away.

In Harrisville, Utah, population 2,000, a 24-hour Wal-Mart Supercenter swallowed up 212,000 square feet of rural fields. In Robert, Louisiana, a town of 900, the arrival of a Wal-Mart distribution center in 2001 required 34-acres of concrete poured over pasture and woodlands.

Proponents of Wal-Mart argue that the giant retail chain offers employment opportunities to rural communities that would not have existed otherwise. Others find this development more troubling. In Robert, many were not at all happy about the extra 400 trucks pulling into town each day exclusively on behalf of the Wal-Mart. The new store caused such a stir one resident characterized the way it divided the town as "almost like a Civil War."

Not only is Wal-Mart now the nation's largest employer, with 1.2 million workers on its payroll, but the mega-store is also expanding at a rapid rate into new markets and putting its stamp on rural America. Take, for instance, groceries. Whereas most grocery store workers are covered by benefits packages, Wal-Mart does not have a pension program for its 1.2 million workers, and the health care coverage it offers is expensive.

Perhaps the most problematic of Wal-Mart's policies is the company's active discouragement of unionization, which puts its competitors with unionized workers at a significant financial disadvantage.

It's not hard to see why Wal-Mart would like to blend into rural America. In urban areas, and even many suburban areas, it's difficult, if not impossible, to find enough open land needed to build one of these giant stores. And once the Arkansas-based company draws a bead on a new location, seldom can a community do much more than stand back and watch as its world suddenly changes.

Margaret Nea

Seventy percent of Wal-Mart supercenters are in rural areas. When Wal-Mart supercenters open, they draw customers from a wide range—and they also put pressures on smaller groceries. Competition drives the food business like any other, and the small stores are finding it harder to compete with Wal-Mart.

As a manufacturing base, rural areas are squeezed because their costs are higher than those in developing countries, while at the same time they lack the education, skills and services required to attract better-paying jobs in the higher technology sectors.

Cherokee County in North Carolina is an example of a rural county that now finds itself at the crossroads of globalization. Less than 10 years ago, Cherokee County was a thriving manufacturing center. The well-paying jobs in the textile and furniture industries have all left. In 1999, Levi Strauss & Co. shut its blue jean plant and moved production overseas, laying off 400 workers; in 2000, Baker Furniture closed, citing high costs, laying off another 300; and in 2002, VF Corp., maker of Lee and Wrangler jeans, shut its plant, laying off another 500.[39] After the VF plant closed, the town of Andrews had to raise its water and sewer rates by 15 percent to cover lost revenue.

Today, the future of Cherokee County, like much of North Carolina and other once prosperous manufacturing areas, hangs in the balance. "If we don't find a way to transition 2 million folks in the rural labor force to emerging, high-knowledge jobs," says Billy Ray Hall, president of the North Carolina Rural Development Center, "then we are in for cold times."

Services

Services now comprise two-thirds of all rural jobs and are the fastest-growing sector of the economy. This follows the national trend—more than four of five U.S. jobs are now in services.[40]

Economists have traditionally believed that services are unlikely to provide the basis for a strong economy, but new evidence suggests that not all services are created equal.[41] Social services provide relatively well-paid, stable employment. In regions like southeast Missouri, for example, the public school system is one of the top employers. But services like schools and hospitals cannot be maintained without a minimum number of people. A community whose population shrinks is likely to lose these institutions and the jobs they bring. In Perry County,

Alabama, the one hospital serving an entire county of 11,000 people has been closed since 1998. In North Dakota, 90 percent of the people who staff ambulance services are volunteers—inspiring, yes, but also unnerving to consider that national statistics say every person, on average, will need ambulance services twice in a lifetime.[42]

Rural areas are falling behind in the well-paying "producer services" (legal, financial and computer services, engineering and consulting). Only 4 percent of producer service growth between 1995 and 1998 occurred in rural areas.

Most of the service jobs now becoming available in rural areas are in the consumer sector, for example, restaurants and retail stores. Attracting large employers like stores and restaurants has been a common development strategy for rural communities in the last few decades, and consumer services are now a major component of rural economies.

Wal-Mart is perhaps the most famous (or infamous) example. Large discount, or "big box," stores like Wal-Mart have a strong impact on local economies that is positive in some ways and negative in others. While the stores bring low-cost items to consumers, and jobs and tax revenue to communities, those jobs pay low wages and require low skill levels without providing any real opportunity for employees to advance. With the low prices the big box stores can offer, smaller local businesses may be unable to compete, and the ultimate result may be the death of a town's small business sector.

How Does Rural America Compare to Rural Areas Around the Globe?

The difficulties associated with rural life are to some extent universal. Physical isolation from large population centers presents barriers in everything from education to health care to electricity. Poverty rates are higher both for rural Americans and rural people around the world than for people in the nearest cities. Governments all over the world must grapple with the problem

Information Technology and Its Opportunities for Rural Communities

Robert D. Atkinson

In the old economy, economic transactions involved processing paper, conducting face-to-face interactions, and producing or moving physical goods. These activities were often located near natural resources (e.g., steel mills located in Pittsburgh near Pennsylvania coal deposits) or population centers (e.g., banks in local neighborhoods). However, a growing share of the economy consists of digital information transactions—be they stock trades, insurance forms, or e-commerce sales. These digitized electronic processes have the potential to replace many paper transactions and some person-to-person transactions.

Rick Reinhard

As these transactions differ so markedly from transactions that were more burdened by space and time constraints in the past, they have, through their impact on industries and jobs, the potential to significantly reshape the location of economic activity. In short, the digital economy is creating an ever-more spatially dispersed and footloose economy, which allows an increasing share of economic activity now located in high-cost metro areas to relocate to lower-cost areas.

As more of the economy processes information digitally, more firms are able to locate anywhere with skilled workers and advanced telecom structures. For example, the U.S. Postal Service uses telecommunications technology to allow workers in Greensboro, N.C., to view mail being sorted in real time in their Washington, D.C., central mail facility. Workers in Greensboro see an image of a letter in Washington and manually type in the address so that a machine in the Washington facility can print a bar code on the letter. The postal service does this because costs are lower in Greensboro than in Washington.

Likewise, e-commerce and advanced telecommunications enabled Northwest Airlines to recently open a travel agency booking office in the small town of Minot, N.D., bringing a number of jobs with it. Continuing advances in information technology (IT), including grid computing, ubiquitous broadband, and increased digitization of more sectors and activities, will only accelerate these trends. However, rural areas are not just competing with urban areas for these jobs. IT is sending these jobs not just to rural areas, but also overseas to low-cost places like India and China. Still, not all these IT-enabled jobs will go offshore, and rural areas are in a position to capture some of this market.

There is an additional way in which the digital economy is increasing the competitiveness of small, remote places. The Internet revolution has reduced the isolation that rural locations used to face. Before satellite TV, many rural areas had poor TV reception. Before the Internet, many had difficulty accessing a range of goods and services that metropolitan residents took for granted. As a result, the increased retail, learning, health care, entertainment and information access of the high-speed Internet reduces the disparities between rural and metro areas' access to goods and services.

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of how to get services to small communities in sparsely populated areas in an affordable way.

Not surprisingly, the same difficulties are of a different order of magnitude in developing countries. Whereas residents of Charleston, Missouri (pop. 6000) may need to travel 20 miles to the nearest doctor, a distance of 20 miles is likely not the same obstacle for a farmer in Missouri as it is for a farmer in Kenya. Also, in rural Kenya there may be only one doctor to care for 100,000 people versus one per 2,000 in Charleston.[43]

Stronger U.S. transportation networks mean that rural residents in the United States have much easier access to urban centers than do most people in poor countries. Even just a few miles outside a major city, villages in many parts of the developing world can face extreme isolation. In both places, the most remote are the most disadvantaged and the most likely to be poor.

Another difference between rural groups in the United States and the developing world is in how people spend their time. Nearly 70 percent of rural residents in developing countries spend most of their time working on farms, but less than 7 percent of the people in rural America earn their living in agriculture.

Despite the obvious differences, rural people the world over are connected because in both industrialized and developing countries they face the realities of globalization. U.S. farmers look increasingly to foreign markets to sell their produce. Some U.S. textile workers have lost their jobs as manufacturers move operations to countries where wages, and therefore costs, are lower. Conversely, some rural communities have gained as foreign companies have moved factories to rural America. Even as Cherokee County suffers through the transitions of globalization, foreign companies still employ one out of every six manufacturing workers in North Carolina.[44]

Jim Stipe

Food insecurity and hunger are more prevalent in rural America than in the nation as a whole. One in five rural children lived in food insecure households in 2000, according to Census data.

In recent years, it has become clear that **agricultural policy** in the **industrialized world**—specifically agricultural trade policy—can have a **harmful effect** on **farmers** in developing countries.

In recent years, it has become clear that agricultural policy in the industrialized world—specifically agricultural trade policy—can have a harmful effect on farmers in developing countries. The Dispute Settlement Board of the World Trade Organization (WTO) has recognized the harm caused by agricultural subsidies for producers in industrialized countries. The board ruled in August 2004 that U.S. payments to its cotton farmers had lowered world prices and inhibited the ability of Brazilian farmers to export their cotton.

The rural poor in the United States are also harmed by U.S. agriculture policy, which spends significantly more money on the largest farms, leaving less for small farmers and rural residents who do not work in agriculture. Changes in U.S. agriculture policy will be needed to improve the lives of rural people, wherever they may live.

A Conversation with Dr. Norman Borlaug on the Past, Present and Future of Hunger in the Developing World

Nobel Peace Prize winner, Medal of Freedom winner and recipient of more than 45 honorary doctorate degrees, Dr. Norman Borlaug has been persevering for more than 60 years on behalf of millions of people in developing countries.

Bread for the World Institute interviewed Dr. Borlaug when he was in Washington, D.C., in November 2004 to receive the Wittenberg Award from the Luther Institute.

Hunger Report: What should wealthy countries be doing to reduce hunger in the developing world?

Dr. Borlaug: Under emergencies—earthquakes, floods, widespread drought, disease or pests—wealthy countries can help by making grain available. Over the long term, however, the goal must be to revolutionize food production, especially in developing nations where there are food deficits.

This begins with improving agricultural productivity and food production of small subsistence farmers. They currently constitute 65 to 80 percent of the total population in the more than 40 sub-Saharan African countries. Technology capable of doubling, tripling or quadrupling crop production must be developed and demonstrated widely on many thousands of small plots.

When the new technology is adopted, the subsistence farmer will produce more grain than he needs for his family. He sells the surplus, which helps feed the urban population. And with the sale of "surplus" grain he has money with which to purchase basic goods that will improve the family's standard of living—or to purchase simple, locally made tools and equipment to further improve his crop production.

What I'm describing here is the catalyst that triggered the so-called "Green Revolution" in Pakistan and India.

Hunger Report: So is hunger simply a productivity and production problem?

Dr. Borlaug: Not at all. When you talk about hunger, you must consider two aspects of the problem: food production and obstacles to equitable distribution of food. Poverty and lack of purchasing power, due to unemployment or underemployment, is the main cause of hunger.

Above I focused on the production of food. I did so because I have never accepted the opinion that the first step toward reducing human misery is to strive for equitable distribution of "hunger." I contend that the first step toward alleviating hunger must be to increase production of food in a hungry nation, while at the same time increasing employment and food safety nets like school-lunch programs and food-for-work on public projects including building roads, hospitals, and schools.

Consider India and China and the contrast in equity of distribution. Both countries have been self-sufficient in basic food for 15 years. In India, you still see a lot of people that are obviously malnourished and need more food, and yet there are big stocks of food in the warehouses. Many poor Indians can't afford the food and the safety nets are deficient. Traveling widely in China one seldom sees emaciated people anymore. China has done a better job of putting food into the empty stomachs.

Hunger Report: What do you say to those who argue the effort needed to transform sub-Saharan Africa is too great?

Dr. Borlaug: This is the same argument used by a number of famous U.S. academicians in the early 1960s in describing the hopelessness of food production in Pakistan, India and China. But look what happened with food production as a result of the Green Revolution. Between 1961 and 1965, the average annual production of wheat in India was 11 million metric tons. In the year 2000, it was 75 million.

Technology is now available to double, triple, and in some cases quadruple maize (corn) production, which would alleviate the hunger of sub-Saharan African countries. But this potential is not being realized because of lack of infrastructure, especially roads, lack of courageous African political leadership, and lack of financial assistance from affluent nations.

Hunger Report: How much does world food production depend on improved technology?

Dr. Borlaug: Since the 1950s, with a shortage of additional land for cultivation in many countries, the use of high yield technology on land already under cultivation has become paramount.

The dramatic change in production in recent decades in formerly food deficit nations, notably India, Pakistan and China, resulted from the adoption and widespread commercial

Ray Almeida

Rev. David Beckmann (l), president of Bread for the World and Bread for the World Institute, standing with Dr. Norman Borlaug when the latter was in Washington, D.C., in November 2004.

Margaret Nea

use of a package of improved crop management practices. There was no single silver bullet. It involved the use of high-yield, broadly adapted, disease-resistant varieties of wheat and rice primarily; restoration of fertility to nutrient-depleted soils; improved irrigation; and control of weed, disease and insect pests—all combined with changes in economic policies that stimulated farmers to adopt the new technology.

If the high-yield varieties had been grown without restoring fertility to the nutrient-depleted soil, yield would have increased by only about 10 percent over traditional varieties. If farmers had applied proper fertilization, which is the greatest single cost in the new technology, but continued to sow the traditional disease-susceptible varieties, they would have run the risk of losing their entire crop, plus the cost of the fertilizer. When all components of the high-yield technology package were properly applied, though, yields of many farmers soared to 5 tons per hectare, a more than five-fold increase over the traditional yield.

Hunger Report: Some say that high-yield agriculture harms biodiversity. Do you agree?
Dr. Borlaug: I disagree. The proper use of high-yield technology on land suitable for cultivation spares huge tracts of land for other uses and preserves native vegetation and biodiversity.

Let's look at the impact of high-yield technology on land over the past half-century. World cereal grain production in 1950 was 650 million tons. In the year 2000, it was 1.9 billion tons, nearly three times as much. But that increase in production came from an increase of less than 10 percent in the amount of land cultivated. If the world had tried to produce that harvest in 2000 with the technology of 1950, it would have had to cultivate an additional 1.1 billion hectares of land of the same quality, nearly 2.5 times as much land as was actually used. The world would have cut down much of the forests and destroyed many of its wildlife habitats. All of these are indirect but important benefits of using high-yield technology in the right way.

Hunger Report: Why has it been so difficult to duplicate the achievement of the Green Revolution in sub-Saharan Africa?
Dr. Borlaug: Well, a lot of this has to do with infrastructure, especially roads and railroads. This goes back to the needs of colonial times. The colonial powers in Africa were not primarily interested in agricultural products. They wanted minerals, and that largely determined where the railroads were located. In India, what did Britain need? Cotton fiber—an agricultural product for its textile industry.

Consequently, the railroads were built into the Punjab, the best agricultural area. As soon as the railroads were in place roads were built by provincial governments and farmers' organizations to bring the cotton to the rail-head. Later the colonial government brought the best hydraulic engineers from Britain to develop the irrigation system and further increased production. In Africa, though, the railroads in colonial times went to the mines, not to serve agriculture.

The lack of transport is the bottom line. Four years ago in one area of Ethiopia there was a surplus production of maize while in another area of the country only 200 miles away, at a lower elevation, there was hunger and starvation. The market collapsed in the surplus area and people starved in the food-deficit area. With no roads they were unable to move the food surplus to the people who needed it.

Roads are essential for rural development; they are catalysts for fostering many changes. They facilitate the importation of essential production inputs like fertilizer. They permit moving surplus grain from areas of over production to areas of deficit. Wherever a road is built there will soon be a school, shortly thereafter a public health official, and then a bus; and that bus breaks down ethnic and cultural barriers, and ultimately it breaks down fear; and then everything begins to change.

If sub-Saharan African countries are to achieve acceptable levels of economic, social and political development in the next four decades, they must build an international artery of highways linked to seaports. Smaller roads will follow. Unfortunately, poor African countries will not be able to afford this on their own. The world now spends $900 billion annually on armaments and military, yet has been unable or unwilling to assist sub-Saharan African nations develop a basic system of roads.

Hunger Report: Long-term development assistance is of course important, but what about short-term solutions?

Dr. Borlaug: In the short term, three to five years, the sub-Saharan African nations need foreign assistance especially in food, health and sanitation, education and agriculture from both government and non-governmental organizations.

Food aid is a valuable means to provide employment and also reduce hunger when used to support public projects that will provide public services, for example, local roads, hospitals, schools, and potable water systems. Food aid that supports free school lunches has been used effectively in some areas to entice children to attend school and reduce hunger. This is an effective approach that needs to be expanded. It is important to emphasize the food that goes into school lunch programs and community development programs is not just filling empty stomachs, but that it is also investing and building for the future.

Few Americans now realize the great importance of the federal government's emergency-relief programs that were used to provide employment and hunger relief during the Great Depression. I was a young adult and realize the importance that emergency projects such as the Works Progress Administration (WPA), Civilian Conservation Corps (CCC), the National Youth Administration (NYA) and others played in getting the economy restarted and avoiding social and political chaos.

Hunger Report: Any final thoughts?

Dr. Borlaug: For the past 60 years I have been working on food production problems in developing countries. As I think back to 1944 and the small wheat research and production program in Mexico that I was involved in, I am overwhelmed by its impact on cereal production in so many countries. But this is not the time for reminiscence on the impact of the Green Revolution. Rather it is a time for action on the African hunger front.

It is criminal that there is hunger in the world when there is technology and know-how to solve that problem. The question is, as Dr. David Beckmann frequently puts it, do we have the political courage to solve the problem?

The Remarkable Achievements of the "Green Revolution"

The term "Green Revolution" was coined by USAID director William Gaud in 1968. Since then, it has been used to describe the unprecedented growth in the yield of cereal grains, especially wheat and rice, in many developing countries.

The Green Revolution is widely credited with preventing the famines and widespread starvation resulting from population growth that many predicted for Asia beginning in the late 1960s. What were its main elements?

- New high-yielding crop varieties, especially rice and wheat.
- Increased irrigation.
- Expanded use of chemical fertilizers and pesticides.
- Better national agricultural policies.

How did it arise? Beginning in the mid-1940s, the Ford and Rockefeller foundations began to fund the establishment of agricultural research centers focused on adapting scientific advances to developing countries. Working together, these centers developed varieties of wheat and rice that had shorter and stronger stalks, heavier heads of grain, matured more quickly, grew any time of year and were resistant to pests.

By 1965, Dr. Norman Borlaug, along with many local scientists he had trained at a research center in Mexico, coordinated the planting of high-yielding wheat in India and Pakistan. Within a few years, both countries were self-sufficient in grains.

Margaret Nea

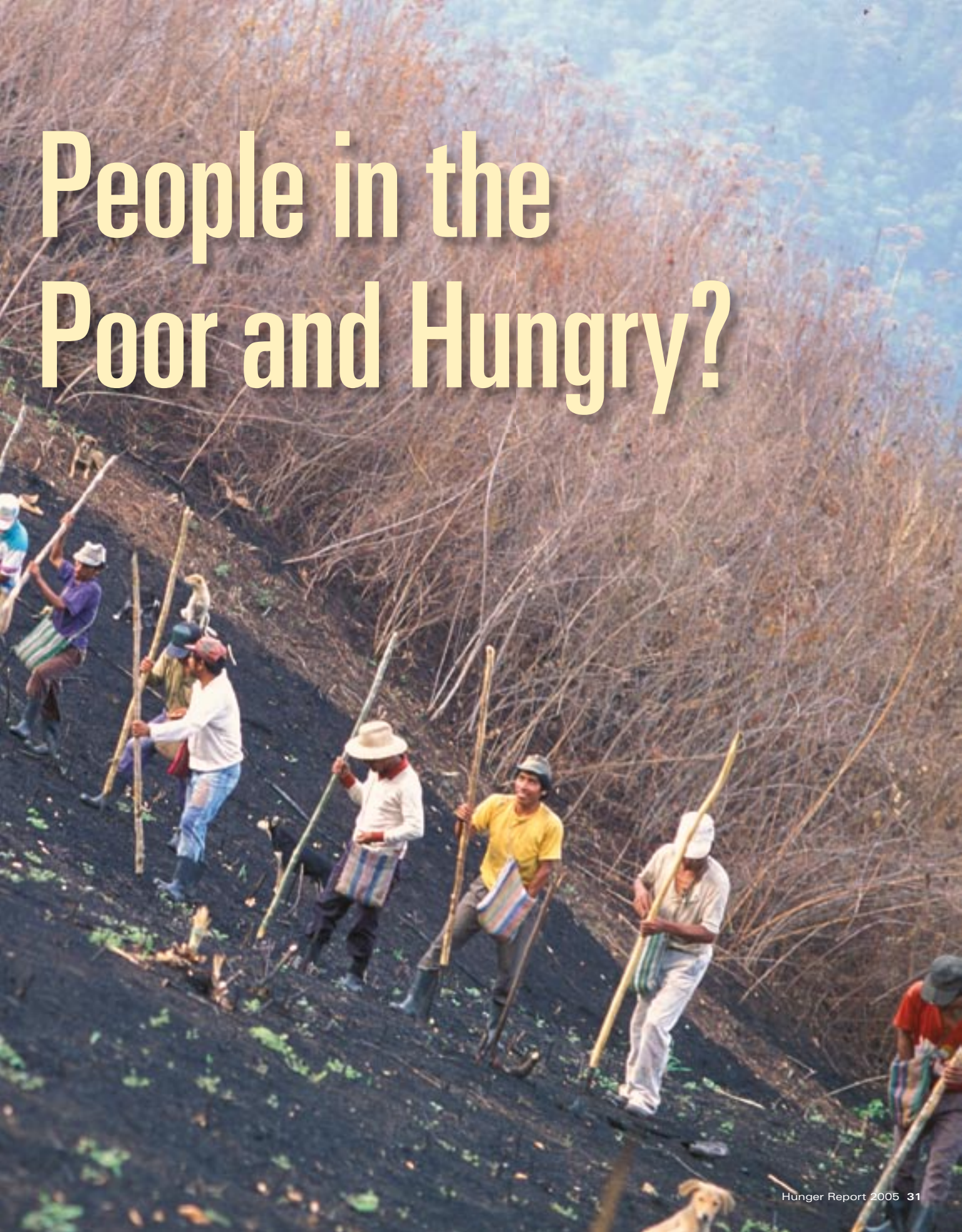
CHAPTER 2

Why are So Many Developing World

While agriculture is not the whole story, it is a large chapter in the epic struggles of the poor and hungry around the world. Whether they farm their own land or work someone else's, most people in developing countries depend on agriculture for their livelihood. In the developing world, the plight of the rural poor usually begins with the land, so vast compared to the ineffectual power it yields those born to be its stewards.

Celia Escudera-Espadas

People in the Poor and Hungry?



Jim Stipe

In the developing world, the majority of the rural poor live on what is called "marginal" land, regions usually not served well by irrigation systems and where soil quality is poor. An estimated 1.3 billion people now live on marginal land.

Agriculture differs from so many other industries in its super-dependence on nature, and with this come inherent risks. Weather, for instance, is all-important and unpredictable. No one knows for sure what the skies will do from month to month, how often each year the sun will shine and with what regularity rains will come to refresh the earth.

The nature of these risks means everyone who depends on agriculture is vulnerable to its vicissitudes. New technologies in farming can help reduce risk, but ultimately farmers are dependent on many things beyond their control.

In the developing world, the majority of the rural poor are living on what is called "marginal" land. In addition to weather-related problems like erratic rainfall and sudden changes in growing conditions, marginal lands have poorer soils, more pests, and conditions like steep slopes that make cultivation more difficult.[1] The crops in many marginal areas fail two or three years out of every five because of drought, floods, poor timing of rain, pests and the like.

This constant uncertainty is often compounded by other factors. More frequent crop failures and low annual crop yields mean that it is difficult to store food for the future. Moreover, non-farm income sources are usually not enough to compensate for these losses, making it difficult to buy food out of season. As a result, hunger rates are high in marginal areas; and if rains are scarce, families face severe malnutrition.

Research shows that poverty is frequently concentrated in one geographic region in a country, such as northwestern China, east-central India, northeastern Brazil and northwestern Mozambique, where physical characteristics of the land contribute to a cycle of poverty. Many of the poorest regions of Latin America are at high altitudes or have low levels of rainfall. In these places, farmers face the double challenge of increasing the amount they grow on lands that need special treatment.

Growing Populations, Deteriorating Conditions

An estimated 1.3 billion people now live on marginal land, twice as many as 50 years ago. Half a billion of these people live in regions not served by irrigation systems. In Africa, only 4 percent of the arable land is irrigated.[2] Another 400 million people are on land with depleted or difficult soils, including people living in forests and mountainous areas with steep slopes.

For decades, policymakers have assumed that deteriorating conditions would lead farmers away from marginal land, either to

farm in more productive areas or by mobilizing them to work in cities. But people have not left. In fact, an assessment of the situation in 2002 and projections for 2015 suggest that populations are growing in marginal farming areas, especially in low-income countries, and that rural malnutrition is increasingly concentrated in these regions.[3]

More people also mean more intensive farming on the same land, so farmers have had to abandon traditional practices of fallowing (resting) the fields. In the Siaya district of Kenya, soils are so depleted of nutrients that even with good rains, many households are still unable to grow enough food to avoid hunger. One hectare of land produces only 1 ton of maize. In the United States, by contrast, USDA estimated a 2003 yield of more than 8 metric tons of maize per hectare.[4]

For decades, small-scale farmers have removed large quantities of nutrients from their soils without replenishing them well enough with manure or fertilizer. The expanding human population is reducing the land and fodder available to animals and thus the amount of manure fertilizer available for crops. The annual loss is estimated to be the equivalent of $4 billion worth of fertilizer.

In order to sustain intensive use of marginal lands, farmers must control erosion, invest more in soil quality and water systems, and carefully manage the entire growing cycle. While many technologies have been developed to address these problems, these unfortunately have not been made widely available to farmers, nor have farmers been taught how to use these technologies.

Lands of the Forgotten

In general, the more remote an area, the deeper the poverty faced by its residents. A 1999 study by IFPRI found that the incidence of poverty in rural Madagascar increased with remoteness. The least isolated fifth of the rural population had a poverty rate of 66 percent, while the most isolated fifth had a poverty rate of nearly 83 percent. IFAD estimates that

Case Study in Strengthening Rural Communities:

Vermiculture in Honduras

Bev Abma

Roman Sagastume, a coffee farmer in Zacatales, Honduras, practices vermiculture (worm farming) and cares for a nursery of worms. The hungry worms eat coffee hulls and the resulting compost is used to grow vegetables and organic coffee. As a result, coffee production in Zacatales has increased by nearly 40 percent.

Using this technology means that Roman no longer has to travel 14 kilometers to the nearest town to buy fertilizer, saving him not only the cost of these items but also the $2 fare to make the trip. The fertilizer his worms produce has become so valued that outsiders are willing to pay $5 for 100 pounds of it, and the same amount for one pound of worms to make their own compost.

Bev Abma

Ramon Sagastume at his nursery in Zacatales, Honduras.

Roman teaches others what he has learned. More than 325 people have come to Zacatales to learn about his use of vermiculture. They stay in a rural ecological hotel that the community has constructed with a demonstration center on their 30 *manzana* (about 52 acres) coffee plantation, where visitors pay for food, lodging and training. These visitors also buy vegetables and produce from the hotel, supplied by neighboring farmers. As a result, the community has reached a level of financial stability they have never known before.

Community members rejoice that daily life is no longer the drudgery of coffee monoculture. The small community of Zacatales is one example of how Foods Resource Bank supports the work of its members, in this case through Lutheran World Relief to the Mennonite Social Action Commission. This is part of a larger program to strengthen knowledge, attitudes and practices of 500 peasant families in eight rural communities about conservation, farming techniques and management of natural resources.

The program was born out of the havoc wrought by Hurricane Mitch in 1998. In addition to causing thousands of deaths, the hurricane changed the course of rivers and streams permanently in the municipality of Azacualapa, where Zacatales is located. Combined with deforestation and chemical-based farming practices accelerating soil erosion, the damage resulted in landslides, sediment build-up in rivers and creeks, and agricultural loss throughout the region.

As part of the program, people in the area are also developing retaining walls and parkland with trees that will soon become a place to take visitors from the "eco-hotel," which will be an additional source of income as people make the visit by horseback at a fee of $5 per hour.

Zacatales is a changed community that continues to improve the surrounding area, not only for today but for future generations.

***Bev Abma** is director of programming and administration for the Food Resource Bank. The program described here is part of a partnership between the Foods Resource Bank, Lutheran World Relief and the Mennonite Social Action Commission.*

Ending Food Wars in the 21st Century

Ellen Messer and Marc J. Cohen

In the developing world—and mainly Africa—armed conflicts, or so-called "food wars," destroy food systems and create hunger for tens of millions of people. Food insecurity is both an effect and a cause of these conflicts as warring parties often deliberately manipulate food supplies to reward friends and punish enemies.

U.N. agencies estimate that armed conflict cost Africa over $120 billion worth of agricultural output during the last third of the 20th century. The impact on rural well being has been devastating: malnutrition and illness were a direct result; and underinvestment in health, education, and nutrition relative to military spending further sapped human development.

The impact of conflict on food security is clear, but the ways in which food insecurity may contribute to conflict are perhaps less so. Analysts seldom directly investigate the role of food insecurity in conflict, although they often connect factors closely related to food insecurity such as high infant mortality and extreme poverty. Rising inequality, which restricts access to food, is identified as an important trigger and generally stems from some combination of perceived unfairness in resource distribution, insult and injury to group identity, and a precipitous decline in incomes and well being due to natural disaster or plunging export commodity prices.

The Role of Commodities

In the 1980s and '90s, scholars argued that wars were caused by political *grievances* based on identity politics and resource scarcities. More recent studies stress *greed,* i.e., competition for control over such primary commodities as oil or diamonds. In politically volatile settings characterized by poverty and inequality, global trade in these high-value products increases the likelihood of conflict because the revenues then fund military expenditures.

Coffee is the second-largest export commodity after petroleum in developing countries. Revenues from the "bitter brew" supported Idi Amin's bloody dictatorship in Uganda, rebels in Sierra Leone, and various Ethiopian governments. In some countries engaged in conflict, coffee accounts for a substantial share of export earnings: nearly 30 percent for Uganda, 50 percent for Ethiopia, and more than 60 percent for Burundi.

Among high-value commodities, agricultural resources may be implicated in two additional ways. First, competing groups may fight over access to the land, water and other inputs to produce cash crops such as coffee and cotton. Alternatively, a sudden decline in the price of cash crops may precipitate catastrophic household income losses, which force peaceful farmers to turn to more dangerous means of survival. In Colombia, for example, rock bottom coffee prices have made violence-prone narcotics crops ever more attractive. In Rwanda, competition over land and agricultural aid directly preceded the 1994 genocide; plummeting coffee prices likewise reduced incomes and contributed to conflict.

Price drops in high-value commodities and the resulting losses do not have to lead inevitably to conflict. Political stability depends largely on policy and socioeconomic factors. Consider the contrast between Central American nations El Salvador and Costa Rica. In El Salvador, policies disproportionately favoring large-scale landowners fueled decades of civil war, whereas Costa Rica's equitable land and coffee profit distribution established conditions more conducive to peace and stability.

Promoting Stability

To encourage greater political stability and discourage conflict, the international community might intervene in the following ways. International financial institutions—through their influence on national food, agriculture and trade policies—can pressure governments to use development loans and debt relief for food and nutrition programs, education, health care and broad-based agricultural development rather than arms. The international community also increasingly recognizes the need to monitor the impact of global commodity prices, particularly those of key agricultural exports such as coffee and cotton. The compensatory fund, for example, proposed by the World Bank, could mitigate the risk of conflict by assisting the "losers" from globalization in adjusting and diversifying income sources.

The international community can also try to regulate trade in arms and the high-value commodities sold for arms. The United Nations, for example, has stimulated the private sector to restrict trade in "conflict diamonds," which have energized the conflicts in Sierra Leone and the Democratic Republic of the Congo. Although there has been no effective effort to

Bev Abma

In politically volatile settings characterized by poverty and inequality, global trade in high-value commodities (like coffee, shown above) increases the likelihood of conflict because the revenues then fund military expenditures.

similarly restrict trade in "conflict coffee" or "conflict cotton," the international community has begun to organize to encourage purchases of "peace coffee"—produced, processed and marketed under equitable conditions.

International humanitarian relief and development operations can help build peace and create sustainable food security if they can identify and eliminate factors that may perpetuate or renew conflict. Donors seeking to restore livelihoods in post-conflict areas also have been paying greater attention to assuring that humanitarian or development assistance is inclusive and does not reinforce inequities that promise more conflict. They target assistance to promote and protect livelihoods, especially for those whose only other option is the war economy.

The "livelihood-security" approach to food security focuses on *access* to food and examines how households manage resources to secure livelihoods and obtain food during crises. It is closely related to "rights-based development" in which program implementers work closely with community members to help them understand their rights and articulate demands through program participation. These livelihood and rights approaches have generally focused on smaller-scale social units, rather than whole countries, but some aid donors and nongovernmental organizations have begun taking this tack in larger scale relief and development efforts.

National governments in developing countries, together with aid donors, are finding new ways to integrate conflict-prevention into their calculations of relief and development activities and criteria for success. What they have to show in savings from conflict avoidance can and should be factored into development spending.

In short, all of these new approaches can help break the links between conflict and hunger.

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in particularly isolated regions—such as northern Zambia, southern Tanzania and northern Mozambique—up to 90 percent of the population is chronically poor.

As a consequence of their geographic isolation, rural communities also feel the impact socially and politically. In West and Central Africa, for example, rural poor people have little or no political voice and there is a long history of neglect. More concentrated urban interest groups are better able to lobby effectively, causing a disproportionate share of government money to be invested in the cities.[5]

Despite the unique difficulties presented by rural life, it is not separate from urban life and urban poverty. There are thousands of urban centers in developing countries whose economic and employment base is strongly connected to agriculture. Also, rural and urban inhabitants increasingly rely on each other for trade. Falling crop prices mean fewer buyers for urban businesses that sell to rural households.[6]

Rising poverty in rural areas, then, is often felt in urban areas. Since remote and isolated communities clearly do not have enough resources to overcome their problems on their own, it is up to urban communities, national governments and the international community to help them. Since urban and rural areas need each other, doing so will benefit them both.

Across Africa and the world, there has been a decline in both national and international funding for agriculture. From 1990-2000, external assistance to agriculture and rural development in developing countries decreased from $3.7 billion to $2.4 billion (calculated in 1995 dollars). While the World Bank is the largest single provider of agricultural assistance, its investments have dropped markedly. In the 1980s, for example, 30 percent of World Bank lending went to agriculture; today, only 8 percent does. Despite the fact that the majority of poor people live in rural areas, only 25 percent of current World Bank lending is going to rural areas.[7]

By all appearances the governments of developing countries do not place a high priority on their agricultural sector. National policies are sometimes not merely neglectful but discriminatory.

Sometimes aid is well intentioned but its timing or focus is misplaced. The United States had been allocating a very modest $4 million per year for agricultural development in Ethiopia, but this turned out to be "penny wise, pound foolish" when the famine in 2003 required $500 million in U.S. emergency assistance. Similarly, in August 2004, the government of Mauritania said that locusts had consumed 90 percent of the country's harvest, putting 1 million people at risk. In October 2003, the FAO had appealed in vain for funds to spray the locusts' early-season breeding grounds, which would have destroyed many of the swarms that went on to engulf crops in Mali, Senegal, Niger, Mauritania and Chad.

Many donors have moved to demand-driven aid—they only fund projects and programs that the recipient country has requested. Since most developing countries still exhibit an urban bias, the "good news" that donors have gotten better at listening to their clients is also the "bad news" that international donor aid to rural development and agriculture has declined.

By all appearances, the governments of developing countries do not place a high priority on their agricultural sector. Recently in Africa, for example, most countries have been investing less than 5 percent of their annual budgets in any type of agricultural development, despite the reality that up to 75 percent of their populations depend on farming for a living. Of 16 countries that have gone through the lengthy process of formulating Poverty Reduction Strategy Papers (PRSPs), only two mention agriculture at all.

National policies are sometimes not merely neglectful but discriminatory. Between 1960 and 1984, the effect of state policy interventions in 18 developing countries was to transfer income out of the agricultural sector, averaging 46 percent of the agricultural gross domestic product per year. High taxes and strict price controls extract an enormous amount of money from farmers in more than a few countries.

Within the agricultural sector, even less attention has been paid to farmers working on lands not well suited to intensive agriculture, or marginal areas. The research and development funding available for such fragile lands is just 7-8 percent of the total, compared to 70 percent for temperate agriculture. These favored areas are the "breadbaskets" and "rice bowls" of the developing world, those farming areas that get reliable rainfall or are served by irrigation, whose people tend fertile soils and enjoy relatively easy access to inputs like seeds, tools and fertilizer and to markets to sell their products.[8] Yet hundreds of millions of people continue to live in and even relocate to marginal areas, and it is clear that these areas need outside help.

Marty Lueders

Of the 300 million children who go to bed hungry every night, only 8 percent are victims of famine and emergency situations. The majority suffer long-term malnourishment and micronutrient deficiency.

Rural Communities and the Global Economy

People in rural areas may feel like they have been forgotten by their own governments, but often global forces and decisions made in foreign capitals have as much or more impact on their lives as events at home.

Economists agree that agricultural policies in particular are biased against developing countries. Tariffs imposed by high-income countries on many agricultural goods from developing countries—especially meat, sugar and dairy—are almost five times those on manufactured goods. The agricultural sector has also proven resistant to change. According to the U.N. Development Program (UNDP), nearly 60 years after the first steps were taken in agricultural trade regulation, agriculture remains "among the most distorted merchandise sectors in the world."

Table 2.1 **Geographic Distribution of the Rural Poor in Developing Countries (in millions)**

Region (number of countries)	Total population	Total rural population	Rural population on favored lands	Rural population on marginal lands	Rural poor on marginal lands	Average rural poverty in marginal land	Rated proportion of rural poor in marginal lands
Sub-Saharan Africa (40)	530	375	101	274	176	64	0.73
Asia (20)	2,840	2,044	755	1,289	375	29	0.63
Central and South America (26)	430	117	40	77	48	61	0.65
West Africa and North Africa (40)	345	156	37	119	35	19	0.76
Total (105 countries)	41,451	2,693	933	1,759	633	36	0.65

Source: Millennium Project: Hunger Task Force

Agricultural Cooperative Development in Ethiopia (ACE) program

Susan G. Schram

In Ethiopia, the repressive Derg regime (1975-1991) established socialist agricultural cooperatives throughout the country to control agricultural prices, levy taxes and control peasant farmers. During those years, farmers came to view the cooperative model as a symbol of government oppression.

When the government was overthrown in 1991, the new Ethiopian government began an aggressive program of economic and political liberalization. This included promoting the development of democratic, free-market-oriented and professionally managed agricultural cooperatives.

In 1994, USAID recognized that the country had genuinely embraced the new approach to cooperatives and sent American volunteers to Ethiopia under ACDI/VOCA's Farmer-to-Farmer program. These efforts were followed with direct funding by USAID/Ethiopia for the Cooperative Union Project, followed by the Agricultural Cooperative Development in Ethiopia (ACE) program.

Since these programs began, ACDI/VOCA staff and more than 150 volunteers have helped revitalize Ethiopian cooperatives by providing technical advice and training to government officials, cooperative promoters, board members, managers and accountants. Training in cooperative organization, operation and business management has transformed agricultural cooperatives in Ethiopia into dynamic agribusiness enterprises.

Empowering smallholder coffee growers

Among its many accomplishments, the ACE project has helped local growers enter the high quality specialty coffee market by upgrading the quality of their product. The Oromia, Sidamo and Yirgacheffe Coffee Farmers' Cooperative Unions, representing approximately 150,000 smallholder coffee growers, have set up direct exporter-buyer linkages and received organic certification and registration with the Fair Trade Labeling Organization, both of which attract significant price premiums. In 2003, the unions exported 4,500 tons of coffee directly to buyers in Europe, the United States and Japan, and expected to export more than 7,000 tons in 2004.

USAID/Ethiopia and ACDI/VOCA also helped four cooperative unions acquire a $650,000 line of credit from the Bank of Abyssinia to finance grain-marketing activities. The Washington-managed Loan Portfolio Guarantee Program facilitated this first-ever credit to agricultural cooperatives by a private bank. In 2001 the credit line was expanded to more than $1.2 million, making credit available to 15 agricultural cooperative unions with more than 100,000 members.

These efforts have had dramatic impact on the rural poor. More than 1,400 agricultural cooperatives throughout Ethiopia have been reoriented, restructured and legally registered, and 14 cooperative unions (agricultural cooperatives whose shareholders are other agricultural cooperatives) have been established to take advantage of economies of scale.

Cooperatives have also become major players in agricultural input and output markets. For example, agricultural cooperatives increased agricultural input sales to their members from 3,500 metric tons (MT) in 1997 to 67,766 in 2000; they increased the amount of member produce marketed from 5,000 MT in 1997 to 27,360 in 2000; and they paid their members more than $1 million in dividends in 2000, a 10,000 percent increase from 1997.

Joining the fight against HIV/AIDS

Agricultural cooperatives are also uniquely positioned to play a critical role in the fight against HIV/AIDS. The productivity of the agricultural labor force is the lifeblood of developing countries, particularly in Africa. Broad-based food security and prospects for economic growth depend on the health of the agriculture sector. But in many developing countries, increases in HIV/AIDS are devastating smallholder farming systems.

Building on the success of the cooperative development program in Ethiopia, ACDI/VOCA's ACE program has undertaken a three-year awareness and prevention initiative to address the potential impact of HIV/AIDS on cooperatives. In Ethiopia, current infection rates are estimated at 7 percent of the total population, but in high-risk groups rates are as high as 50 percent.

To carry out this program, ACDI/VOCA Ethiopia has teamed with DKT, a social marketing organization with expertise in HIV/AIDS. The program is using a "train the trainer" approach, involving cooperative bureau promoters and key cooperative union staff. Twenty-five cooperative unions are receiving training. The unions will then implement a comprehensive HIV/AIDS awareness and prevention program in their respective 399 primary co-ops. The total membership reached will be 426,886 and ultimately serve a family-member population of 2.5 million.

Encouraging others to take charge of their own futures

The cooperative model has much to offer the developing world—as well as the developed world. Norway's Minister of International Development, Hilde Frafjord Johnson, puts it this way: "In an increasingly globalized world, cooperative organizations are needed more than ever as a balance to corporate power and an anchor to the grassroots level of society. . . . For the poor around the world, cooperatives can provide a much-needed opportunity for self-determination and empowerment."

In the developing world, the full potential of cooperatives has yet to be tapped. A majority of the world's rural poor work in agriculture, and agricultural cooperatives can be instrumental for rural economic and social development. Ethiopian cooperatives illustrate what can happen when the legal environment for cooperatives is transformed to enable success.

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Figure 2.1 **Rural-Urban Interface**

Rural	*Urban*
Livelihoods drawn from crop cultivation, livestock, forestry or fishing (i.e., key for livelihood is access to natural capital)	**Livelihoods** drawn from labor markets within non-agricultural production or making/selling goods or services
Access to land for housing and building materials not generally a problem	**Access to land for housing** very difficult; housing and land markets highly commercialized
More distant from government as regulator and provider of services	**More vulnerable to "bad" governance**
Access to infrastructure and services limited (largely because of distance, low density and limited capacity to pay?)	**Access to infrastructure and services** difficult for low-income groups because of high prices, illegal nature of their homes (for many) and poor governance
Less opportunities for earning cash; more self provisioning. Greater reliance on favorable weather conditions.	**Greater reliance on cash** for access to food, water, sanitation, employment, garbage disposal, etc.
Access to natural capital as the key asset and basis for livelihood	**Greater reliance on house as an economic resource** (space for production, access to income-earning opportunities; asset and income-earner for owners – including *de facto* owners)
Urban characteristices in rural locations (e.g. prosperous tourist areas, mining areas, areas with high value crops and mainly local multiplier links, rural areas with diverse non-agricultural production and strong links to cities).	Rural characteristics in urban locations (urban agriculture, "village" enclaves, access to land for housing through non-monetary traditional forms).

Source: United Nations

How does a "distorted" market harm poor farmers? One example is the effect of U.S. cotton subsidies on cotton farmers in West Africa. The West Africans' production costs are much lower: 21 cents per pound of cotton versus 73 cents in the United States. However, the U.S. farmers get a guaranteed price for their cotton. In 2001-2002, the subsidies on cotton were more than the total value of the crop produced. As long as they receive subsidies, U.S. farmers are likely to keep growing cotton, in spite of depressed world prices. Oversupply and "dumping" of U.S. cotton means that the prices West African farmers get for their cotton continue to fall. For many farmers in developing countries with high transportation costs, subsidies and tariff barriers translate into a difference in farm-gate prices of 50 percent or more.

Artificially low prices are especially hard on countries that primarily export one or two crops, for example, Benin, which earns 75 percent of its export revenues from cotton. Oxfam reported that in 2001-2002, U.S. cotton subsidies led to a loss of more than $300 million in potential revenue for West Africans. The 25,000 cotton farmers in the United States receive more in subsidies than the entire gross domestic product of Burkina Faso, where more than 2 million people depend on cotton for their livelihoods.

"Some of the results of subsidies are bizarre," said World Bank chief economist Nicholas Stern. "We see sugar beets grown in Finland while poor sugar cane producers and cutters in the tropics struggle to make a living."

According to the World Bank, if agricultural subsidies were removed, the number of people worldwide living on less than $2 per day would fall by 144 million, 67 million of them in Africa. The average European cow receives $2.50 per day in subsidies, while 75 percent of African people live on less than $2 per day.

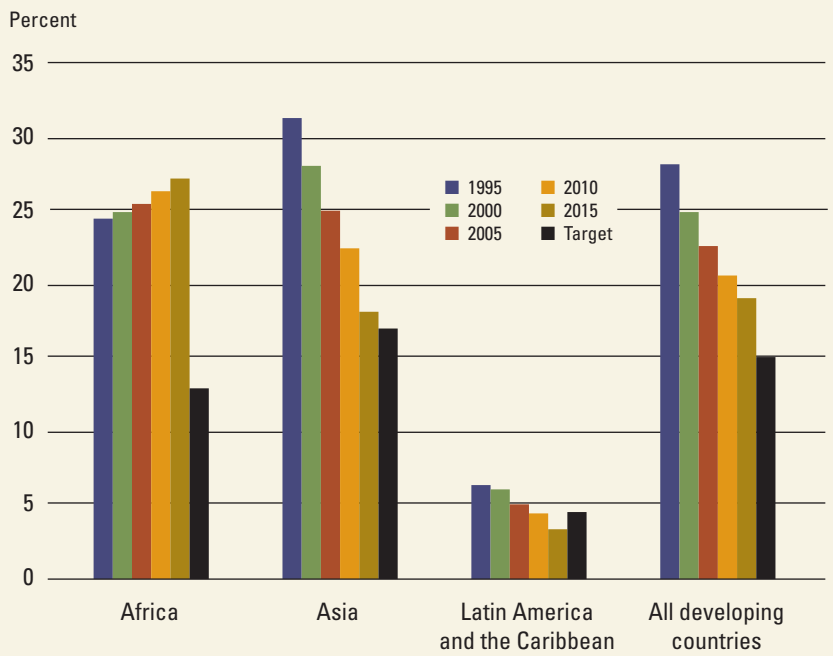
Distances to Cross

People in rural communities throughout the developing world find that their distance from the market is a central concern. Rural poor people, like other people, need access to competitive markets for their produce, inputs, technology, consumer goods, credit and labor.[9] Small farmers in particular have trouble earning a living when they cannot get their products to market efficiently. And when farmers do not prosper, neither does the rest of the local economy.

People with poor access to markets are forced into subsistence production. The only available food is what can be grown on their own farms or in the local community, so isolated households naturally devote more effort to growing staple foods. But this can result in poorly balanced diets and make residents more vulnerable to even small disruptions in food production. The emergency food aid needed at these times cannot easily reach them because the sheer physical difficulty of getting it to them can present a huge barrier.

Rural people also face problems getting credit. Banks generally do not reach into remote areas, and if there is someone willing or able to lend locally, interest rates tend to be exceptionally high.

Figure 2.2 **Prevalence of Underweight Children Under Age 5**



Source: WHO

The costs of transporting agricultural commodities to major market centers are, of course, much higher for more remote producers. The products that poor people produce and sell are often heavy but not very valuable, which makes transporting them to market difficult as well as expensive.[10] Because of these high costs, it is often cheaper for large buyers (such as maize mills) to buy from distant commercial growers than from small local farmers.[11]

The poor condition of most rural roads in the developing world—badly maintained and sometimes absent altogether—adds to the costs as well. By the same token, it is also difficult and expensive to transport agricultural inputs like fertilizer and seed from market centers to remote areas. Transportation costs may make them too expensive for most poor farmers even when they do arrive. In Mozambique, only 7 percent of farmers use fertilizer and even fewer use improved varieties of seed.[12] IFPRI's research in Madagascar found that in remote areas farmers were less likely to use these inputs. The yields of major staple crops also fell considerably in the most remote areas. For example, the yields of rice, cassava and maize in the most isolated quintile of farms were only half that of those in the least isolated quintile.[13]

Besides the difficulty of getting goods to and from market, people in remote areas also have a hard time getting timely and accurate information. Without telephones or access to the Internet, farmers have no independent way of learning the market prices of their produce. They must rely on traders to name the prices of both farm goods and any consumer goods the traders are selling. It is difficult for farmers to distinguish between valid charges based on the extra costs of transport and those simply added by unscrupulous traders. In the most remote areas, farmers cannot even be sure that more than one trader will arrive, so they must often take the first deal offered, no matter how bad it might be.[14]

Poor people in general often have not been able to form organizations to help give them the power and "leverage" they need to interact with traders and other market intermediaries, who are generally stronger and better-organized. Their lack of negotiating experience may also prevent them from using markets to combat their poverty.[15] Poor farmers in many areas do not understand how the market works or why prices fluctuate, and they have little or no information on market conditions. Without this knowledge, they are ultimately passive participants in the market, reacting to those with greater power.[16]

The Scourge of HIV/AIDS

The problems of rural transport combined with the dispersion of the population over a wide area make it difficult and expensive to provide services to rural communities. According to the World Bank, there are almost always fewer rural schools and clinics than in cities, and even these few are of poorer quality. The difficulties only worsen for the most remote communities.

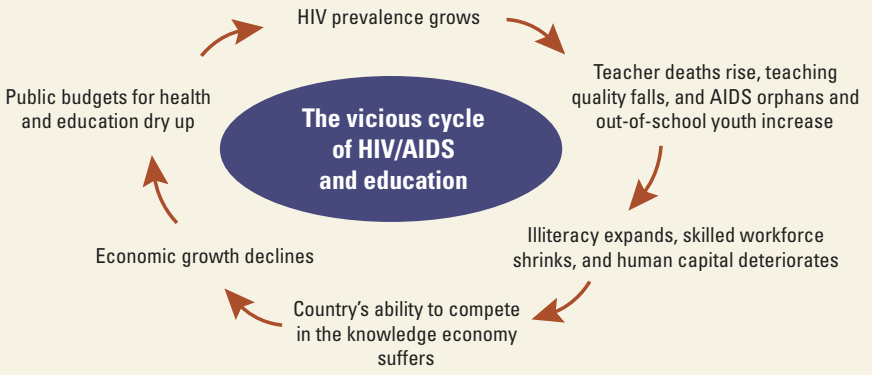
HIV/AIDS has decimated poor rural families. To cope with the loss of workers, households must reduce the amount of land they plant or cultivate less labor-intensive crops. Often, families must sell what assets they do have, like livestock, to pay for medicine or funerals.

Those who get sick and die are disproportionately people of prime working age who have young children. There are fewer people fit or able to work, since some are sick and others must take care of them. Less work means less income and less food. More and more African households are composed of elderly grandparents with a dozen or more orphaned grandchildren, or "sibling families" headed by a child. These "breadwinners" cannot get by without outside support.

The World Health Organization (WHO) is in the midst of a "3 by 5" campaign to make anti-retrovirals (ARVs) available to 3 million people by the end of 2005, but this is just a fraction of the number of people who are infected and need treatment—30 million in Africa alone.

UNAIDS estimates that Africa needs $12 billion in 2005 for a minimum package of prevention, care and ARV treatments.

Figure 2.3 **HIV/AIDS and Education**



Source: The World Bank Group

By 2007, "the basics" will cost $20 billion. The U.S. Congress has authorized an additional $15 billion for HIV/AIDS for the period 2004-2008, but so far, actual financial allocations are falling short of the authorized amount.

In some countries, 60 to 70 percent of farms have suffered labor losses as a result of HIV/AIDS.[17] Studies estimate that by 2020, Botswana's total labor force will have shrunk by nearly a third and its agricultural labor force by almost a quarter.[18] These grim statistics are multiplied all over Africa, where nearly 38 million people are living with HIV. Coupled with the loss of experienced farmers with a strong understanding of agriculture, this results in marked reductions in agricultural production. "Food shortages and agricultural decline are strongly influenced by HIV/AIDS," said Stephen Lewis, the U.N. Secretary-General's Special Envoy for HIV/AIDS in Africa.[19] One assessment in Zambia showed that households headed by a chronically ill person planted up to 53 percent less area than households without a chronically ill member.[20]

While Africa is the epicenter of the crisis, other parts of the developing world have also been hit hard by HIV/AIDS. Ninety-five percent of people living with the virus are in developing countries, and concern is growing about rising infection rates in Russia, India and China.

Inequalities Within Rural Communities

Inequalities exist within rural communities as they do elsewhere. Overcoming geographic barriers may be only half the battle for traditionally disadvantaged groups like women and indigenous peoples, whose plights are augmented by discrimination and by cultural and social norms that keep them from receiving equal education, securing jobs, starting businesses, accessing markets and building sustainable livelihoods.

The Plight of Women

Female literacy and girls' education at all levels lags behind rates for males,[21] and their lower social status makes it difficult to catch up. The second-class status of women in many countries mean they are vulnerable to violence and HIV. Discrimination may also be legal. In many countries, women are barred from land ownership either by law or custom. Without land, they cannot get credit for their businesses. Often when men migrate to work away from home, women are left in charge of farms to which they hold no legal title.[22]

Women actually do the majority of the work in growing and harvesting the staple crops that most rural people in developing countries depend on. In sub-Saharan Africa, women produce 80 percent of staple crops, both those eaten at home and those sold. Thus, efforts to combat hunger without explicit attention to the unique needs of women and the constraints they face will fail.

While women usually grow and sell food crops, including staples, men generally control cash crops like coffee and cocoa. Cash crops are often picked up from the farm where they are grown, while food crops must be taken to market. Studies in Ghana and Tanzania estimate that women spend triple the time men do in transporting goods to market.[23] This division of labor also means that men control most of the family income.

Worldwide, women own only a small fraction of the world's farmland and receive a barely larger share of agricultural extension services; FAO estimates that women own just 2 percent of the world's land and receive 5 percent of extension services. Even when women do own land, they often have problems accessing water and credit. Thus, they are prevented from fully exploiting the productivity of their land.

Uganda's Participatory Poverty Assessment Process (UPPAP) has recognized that one of the most basic barriers for Ugandan women is they are 'overburdened' with too much work and too little time. [24] This is equally true in most other developing countries. Studies in Asia and Africa have shown that rural women work up to 13 hours more per week than men. In Eritrea, women often work 15 hours per day during the planting season.[25] Such long days preclude women from spending more time finding new ways to earn money, participating in local government, and sometimes even breastfeeding.

Indigenous People

Indigenous peoples and ethnic minorities face extra barriers as well. Indigenous groups are the most isolated rural populations, living in the highlands and rainforests of Latin America and the Caribbean and the mountainous areas of the Near East/North Africa and Asia.[26] They have close attachments to their land as well as distinct languages and cultures. Most are considered "structurally" poor: that is, they have spent

Case Study in Strengthening Rural Communities:

Providing Opportunities to Women in Senegal

Rachel Heath

Mamadou Lamine Guèye works as a microfinance operations manager for Catholic Relief Services (CRS) in Sengal. He supervises the arm of CRS that seeks "to provide the self-employed poor, especially women, with access to reliable and permanent financial services," to quote the CRS mission statement.

Most CRS microfinance programs follow a similar implementation pattern. After selecting a village for implementing a program, the CRS staff first makes contact with the village chief. It would be difficult, if not impossible, to implement a microfinance program directed towards the women without the support of the village chief or other males, Mamadou explained.

Once it is clear that CRS is welcome, a meeting is held in the village to explain the program and begin to select volunteers. In Senegal, CRS works entirely with women, although CRS microfinance programs in other countries include men.

Once the women receive the loans, small by Western standards—the equivalent of about $60 U. S.—but still a greater amount than they've ever had at one time, they invest in small stores, farm implements or other purchases helping them to start small independent businesses.

The women also receive continued support from CRS staff in managing their new ventures. Although they do not have to pay back the loans on a strict schedule, they are asked to pay a minimum of 1000 francs (about $2) a month; those who are particularly successful and pay back more than the minimum are eligible for increased loans.

The women say that their increased autonomy as a result of the loans has made them less dependent on their husbands for money and has been a factor in reducing marital conflicts. This change is vital in improving their health and quality of life, and it has been good for their families as well. Research has shown that women with greater financial independence are less likely to suffer domestic violence or contract HIV and other STD's, and they are more likely to raise their families out of poverty.

CRS's approach in Senegal illustrates a growing trend in foreign aid work. Rather than proposing specific projects that may not be feasible or even desirable to local communities, CRS gives aid intended to be a starting point in allowing the poor to make their own economic decisions.

***Rachel Heath** was a Bread for the World intern in 2004.*

Celia Escudera-Espadas

little if any time in school, have few work skills or assets, and lack access to basic services.[27]

There are about 300 million indigenous peoples living in more than 70 countries worldwide, and they account for a third of the 900 million extremely poor rural people. Seventy percent of the world's indigenous people live in Asia and the Pacific,[28] while the largest group of poor rural people in Latin America is made up of indigenous people. They are fundamentally worse off than other groups of rural poor people. In Vietnam, poverty among ethnic minorities, mostly indigenous peoples, ranges from 66 to 100 percent, while the national average is 51 percent.[29]

Although indigenous peoples are extremely diverse, there are two characteristics that help define them as a group: historical continuity with societies that existed in their territories before the development of colonial societies and modern states, and social and cultural identities that are different from their countries' dominant groups.[30]

Indigenous groups face a long list of disadvantages. In the Near East and North Africa, they have little voice in government. In Latin America, they are constrained by lack of knowledge of official languages. They tend to be excluded from education, employment and health care and often face discrimination in competition for scarce rural employment. In many countries, governments have not done a good job of protecting these groups. The steady exclusion of indigenous minorities from good land is also associated with persistent rural poverty in parts of Asia.[31]

Overcoming Remoteness

Although distances cannot be decreased, the effect of them surely can be. Rural residents often point out that roads are important; in fact, people polled in Kenya's Central and Nyanza provinces named roads as the most useful government service. And in Ghana and Cote d'Ivoire, residents ranked rural roads higher than education, health and water supplies on a list of needs.[32]

Human Trafficking and the Exploitation of Women and Girls in Eastern and Central Europe

Ruth Pojman

Many poor people in Eastern and Central Europe live in stagnant rural areas where job opportunities are few. In Russia, Turkmenistan, Tajikistan, the Kyrgyz Republic and Moldova, more than 20 percent of their populations live on less than $2 a day. In Moldova, once part of the Soviet Union, estimates run as high as two-thirds of the population are currently living on less than $2 per day.

Tragically, Moldova has become infamous as a source country for human trafficking victims. A large number of Moldovan women and children are trafficked for the purpose of sexual exploitation to the Balkans and to other European and Middle Eastern countries. Poverty is not the only explanation, but it has provided a compelling supply side reason for the desperation of so many Moldovans seeking opportunities elsewhere.

Stories like that of 18-year-old Elena are common. A local man approached her offering an alternative to Elena's desperately poor future in a rural part of the country. She believed she was being offered a job as a waitress at a coastal resort in Montenegro. Instead, she was taken to the Serbian town of Novi Sad, where she was drugged, beaten and raped repeatedly. After weeks of relentless abuse, she was taken to northern Montenegro and sold as a sex slave.

Sadly, it is often people that victims know who recruit them. Many of the victims wind up in Italy, which is a common entry point for the smugglers. With the end of communism came much easier movement across borders as well as a proliferation of organized crime and corruption in Eastern and Central Europe. Organized crime syndicates now operate with relative impunity in the region and control most of the trafficking networks.

Fortunately there are dozens of programs to assist victims. Father Cesare Lodeserto, a Catholic priest in Rome, started New Wings to try to help the victims and to change the economic conditions in their home countries that make them vulnerable to the traffickers in the first place.

New Wings has spearheaded an economic development project in Moldova recently that includes support from several Italian textile, agricultural and industrial businesses. "In combating trafficking, we must confront the underlying problems that contribute to this situation," said Father Lodeserto. "We need to create incentives for the girls not to leave in the first place."

***Ruth Pojman** is a senior anti-trafficking advisor for the USAID Europe and Eurasia regional bureau.*

In Moldova, once part of the Soviet Union, estimates run as high as two-thirds of the population are currently living on less than $2 per day.

Research in Tanzania found that households within 100 meters of a gravel road that was passable year-round and offered bus service earned about one-third more than average. Another study found that across Africa, villages with stronger infrastructure had fertilizer costs 14 percent lower, wages 12 percent higher and crop production 32 percent higher than villages with poor infrastructure.[33] In India, road improvements during the 1970s contributed directly to increased use of fertilizer and higher agricultural production. This was because of lower "transaction" costs, such as transportation expenses.[34]

In Sobang, Indonesia—250 kilometers southwest of Jakarta—a new road has also helped lower transaction costs. According to the construction foreman, "Carriers had been asking up to 5,000 rupiah for each bag of rice that was brought from the fields to the market." With the new road, he says, the trip is much shorter and transport costs half as much. And without middlemen,

Margaret Nea

there's less opportunity for money to disappear into bribes.[35]

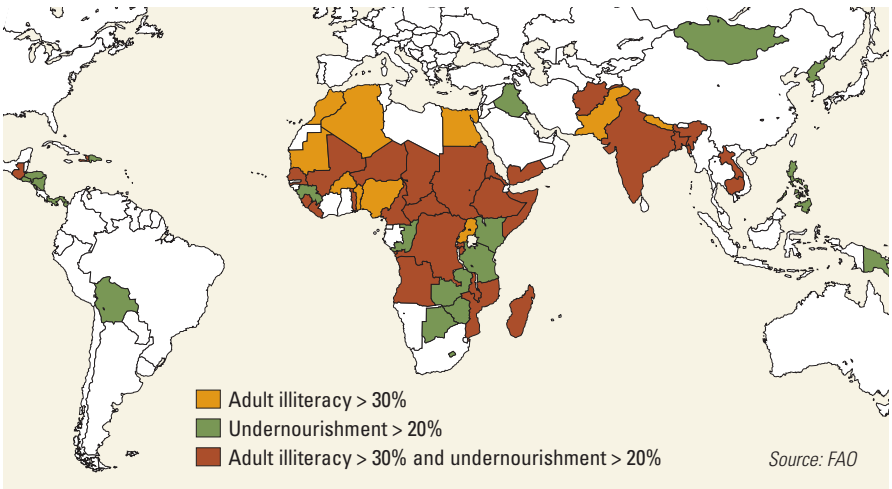
Good communications infrastructure also helps reduce the effect of distances and give rural residents sources of information other than the few traders who come to the village. For example, in 2001 ITC, an Indian industrial and technology conglomerate, started building a network of Internet-connected computers called "e-Choupals" in farming villages in India's rural state of Madhya Pradesh. Soy farmers were suddenly able to check fair market prices for their crops. Today, the growing e-Choupal network reaches almost 2 million farmers.[36]

Similarly, in rural Bangladesh, Grameen Bank, which provides micro-credit to poor people, established a program called Village Phone. Women in rural villages have been supplied with mobile phones. These women then resell phone services to others in their villages. As of June 2004, there were 60,000 "telephone-ladies" covering 80 percent of all Bangladeshi villages. Villagers use the phones mainly to discuss financial matters, notably remittances from family members working abroad, which reduces the risk involved in sending money home. Farmers can also check prices. Getting this information would previously have required a trip to town at many times the expense.[37]

Increasing the services available to people also helps to diversify the local economy. Basically, any strategy to reduce "remoteness" also allows people more flexibility in coping with poverty, for example, by having the option to relocate to places with more jobs.[38]

As World Bank President James Wolfensohn pointed out, "Many of the benefits of an increasingly interconnected and interdependent global economy have bypassed the least developed countries, while some of the risks—of financial instability, communicable disease and environmental degradation—have extracted a great price." The international community has a responsibility to reverse this course and help ensure that the benefits of globalization reach poor people in rural areas.

Figure 2.4 **Correspondence of High Rates of Illiteracy and Undernourishment**



Just Do the Math: How Agricultural Trade and Subsidy Policies in Rich Countries Harm Poor People in Developing Countries

Per Pinstrup-Andersen

Strengthening rural communities in low-income countries is extremely important to reduce poverty, hunger and related human misery. Three out of every four poor people live in rural areas and most of them depend on agriculture for their meager incomes, either as farmers with smallholdings, farm workers, or providers of goods and services purchased by farmers.

If farmers do not make money, neither does anybody else in rural communities. On the other hand, when farmers do make money, they spend it on things that generate employment and income throughout the economy. The economy grows and people in both rural and urban areas escape poverty. This so-called "multiplier effect" is much stronger in small-scale agriculture than in any other sector of a low-income country. There is no better illustration of the "multiplier effect" than the developments in China during the 1980s. While most countries are struggling to reach the Millennium Development Goals for poverty and hunger alleviation by 2015, China has already achieved them.

Towards the end of the 1970s, the Chinese government introduced a new set of policies that effectively gave Chinese farmers an opportunity to make more money. The opportunities were well received by the farmers, who increased their purchase of fertilizers, pesticides, and consumer goods such as bicycles, radios and a large number of other goods and services. Construction boomed in rural areas and employment and incomes rose rapidly in both rural and urban areas, resulting in the beginning of a long period of high economic growth and rapid reduction in poverty and hunger.

There are other success stories to show the importance of agricultural growth in alleviating poverty and hunger, including the impact of the Green Revolution in Indonesia, Korea, Taiwan and India to mention a few. Unfortunately, agricultural growth is limited in most low-income countries and, partly as a consequence, very little if any reduction in poverty and hunger is occurring.

The Big "Minus"

The agricultural trade and subsidy policies in the United States, European Union and Japan (hereafter called "the rich countries") are harming poor people in developing countries and making rural development difficult. The harm done by far exceeds the good done by development assistance.

A few numbers may illustrate the problem. The annual subsidy payment received by farmers in rich countries is about $280 billion. The total annual development assistance to developing countries is about $60 billion, or less than one quarter of the subsidies. A Japanese dairy cow receives about $3,000 in annual subsidy, and the dairy cow in the EU gets about $1,000. In comparison, the average annual income of citizens in Sub-Saharan Africa is about $500, and the development assistance from the EU and Japan to sub-Saharan Africa is about $10 per African.

If developing country farmers, who do not receive subsidies, cannot sell their products at a price above production costs, they cannot earn the incomes needed to escape poverty and they cannot generate the aforementioned multiplier effect that would help others out of poverty. The net result is continuation of poverty, hunger and related misery.

These policies are taking markets away from poor farmers, not because poor farmers are inefficient but because they cannot compete with highly subsidized farmers in rich countries who can sell below production costs. High import tariffs also keep low-cost developing country farmers out of rich countries' markets. Import tariffs on products that developing country farmers can produce cheaper than rich country farmers such as rice, sugar and cotton are high precisely to keep poor farmers out of the markets and protect high prices within the rich countries. Import tariffs and subsidized export of what cannot be sold in the rich country markets are the tools for maintaining these high domestic prices. The rich country consumers pay and poor country farmers are not given a chance.

Whether the consumer or the taxpayer pays, the consequences for poor countries and poor people within are severe. They depend directly or indirectly on agriculture. If they are unable to sell what they produce, they make no money and they continue to suffer from poverty and hunger, their children continue to be malnourished and many die.

So, why do such policies continue to exist? Partly because a small but politically powerful minority of the population in rich countries—the land owners—and agribusinesses would lose if the policies were changed, and partly because inertia in the policy process makes it difficult to change policies that in fact served a legitimate purpose when they were first introduced many years ago. Another reason is that rich societies wish to ensure that farmers have a reasonable income level relative to others in the society.

All of these reasons could be dealt with in a manner that would not penalize poor people. Landowners could be compensated for falling land prices, agribusiness could adjust to new opportunities, voters and politicians could be informed that the original purposes are no longer valid, and farmers could be paid an income supplement that would not require import tariffs and surplus production.

And Thanks for the Small Favors

In an effort to help the 49 least developed countries, the EU designed a program called Everything But Arms (EBA) which would permit these countries free access to the EU markets without paying tariffs for any products except arms. The major problem with the EBA is a safety clause that permits the EU to close imports of any product if it threatens domestic suppliers. In other words, imports coming from poor farmers in the least developed countries can be stopped if they threaten to be more competitive than what rich-country farmers produce. Is it a surprise that little import has occurred? The main value of the EBA appears to be public relations for the EU on the assumption that no one would be interested in reading the fine print.

Celia Escudero-Espadas

Poor countries must be able to trade what they produce in their agricultural sector. Otherwise "rural communities will not be strengthened and the Millennium Development Goals are a mere illusion," says Per Pinstrup-Andersen.

The United States has a similar provision that permits selected low-income African countries to export certain commodities into the United States without tariff. As in the case of the EBA, these countries have exported very little through that provision, with the exception of oil, which did not need the provision in the first place.

Preferential treatment given to some developing countries is much more valuable. The EU admits fixed amounts of sugar from selected developing countries without tariff and pays the high internal EU price. The downside of this arrangement is that the imported sugar adds to the sugar surplus that the EU then exports at prices below production costs with the negative impact mentioned above. One of the world's largest sugar exporters, the EU produces sugar at much higher costs than most poor countries.

Likewise, the United States is the world's largest exporter of cotton even though cotton is produced much cheaper by farmers in poor countries. But they do not get a chance. U.S. cotton producers receive very large subsidies. In response, they produce more than can be sold in the United States. The rest is exported at prices below cost of production taking the export opportunities away from farmers in poor countries.

Export of subsidized maize, wheat, rice, oilseed, dairy products and meat at prices below production costs and dumping of surpluses on poor country markets make life miserable for poor country farmers. But why do poor countries not protect themselves by implementing import tariffs and refuse to accept food at prices below production costs? For one thing, it is likely to be prohibited for countries that are members of the World Trade Organization. Furthermore, many poor countries are net importers of food. An import tariff would be a regressive tax on consumers.

Well-meaning development assistance from rich countries sometimes conflicts with the same countries' agricultural trade policies. EU development assistance to the Dominican Republic was successful in developing a small-scale dairy sector, helping poor farmers out of poverty. Unfortunately, soon after this development success, the EU decided to dump some of its surplus of milk powder resulting from EU dairy subsidies. A good bit of the milk powder ended up in the Dominican Republic and was reconstituted and sold at prices below the cost of production in both the EU and the Dominican Republic. The consequences for the Dominican dairy farmers were as could be predicted.

One way to help poor people out of poverty is to generate employment by adding value to agricultural commodities through processing. Development assistance agencies are fully aware of that opportunity and have provided funds for a variety of such activities, often with export in mind. At the same time, rich countries maintain the so-called tariff escalation, which increases the rate of import tariff along with increasing processing. Not exactly an incentive to developing countries to add value to agricultural commodities.

The reason for tariff escalation is clear. Rich countries want to create the employment and added value in their own countries. They want poor countries to export the raw materials such as green coffee in bulk instead of roasted coffee nicely packaged for the retail market. Sounds like a practice left over from colonial times.

Is Trade Liberalization the Answer?

Would poor countries really benefit from trade liberalization or would middle-income countries such as Brazil and Thailand reap the benefits? Could poor countries in fact end up losing out because preferential arrangements they now enjoy would be replaced by the removal of tariffs for all?

Countries with good infrastructure and appropriate policies will be the winners from trade liberalization. That means Brazil, Thailand and other middle-income countries and poor people within those countries. Poor countries with poor infrastructure and inappropriate policies are much less likely to gain.

Poor countries should prepare for the day when trade liberalization occurs by investing in roads and other rural infrastructure, appropriate institutions, market development, research to develop appropriate technology for small farmers, and primary health and education for rural areas. But these investments should be made anyway, irrespective of trade considerations. Without them, poverty, hunger, malnutrition and the related human suffering will continue. Rural communities will not be strengthened and the Millennium Development Goals are a mere illusion.

***Per Pinstrup-Andersen** is the recipient of the 2001 World Food Prize for his contribution to the improvement of agricultural research, food policy and the lives of the poor. He is also a senior research fellow with International Food Policy Research Institute (IFPRI), where he served as the director general from 1992 to 2002.*

CHAPTER 3

Rural America in Flux:

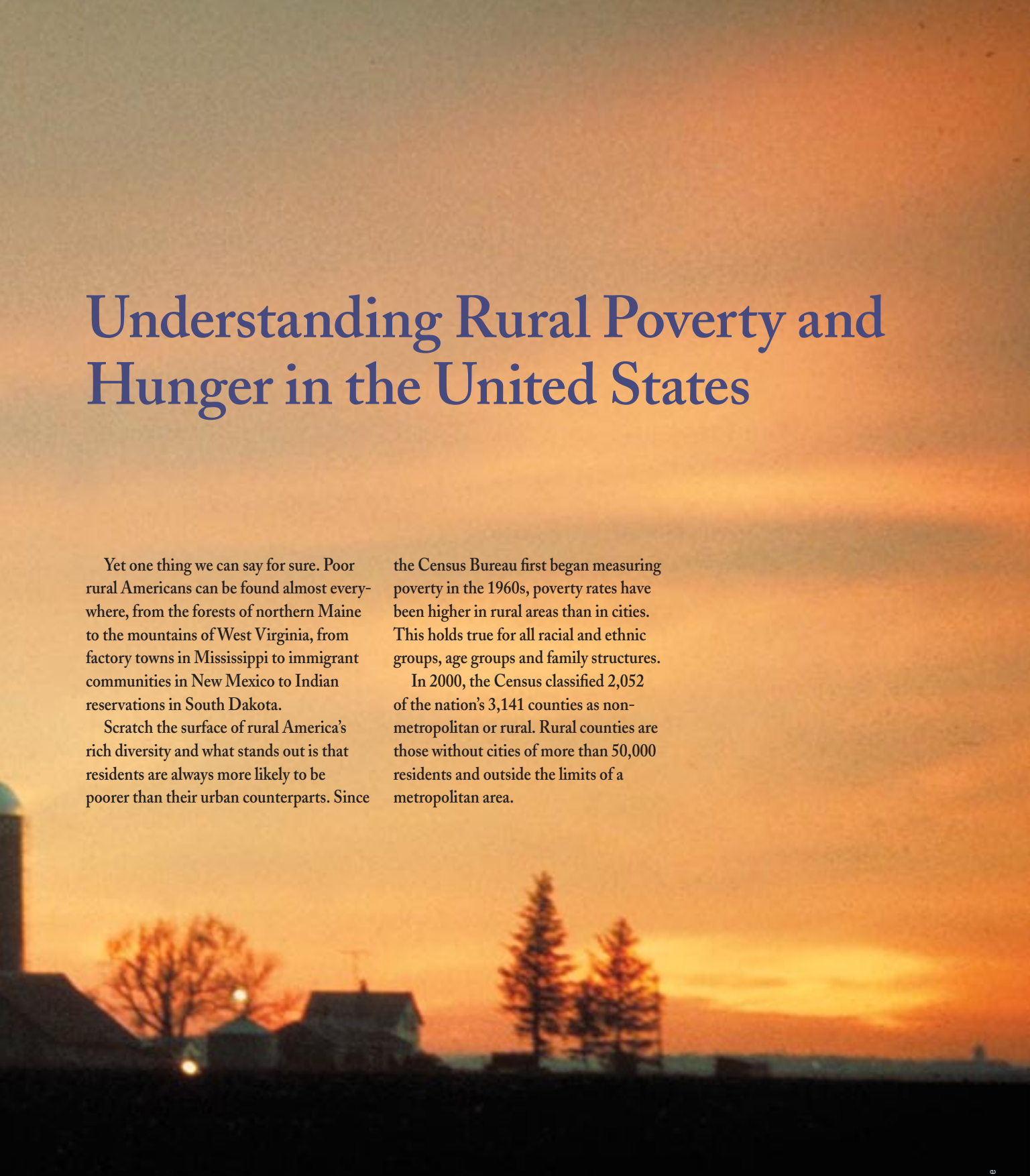
What we call "rural America" today is a complex amalgam. Besides farming communities, there are factory towns, resort towns, wide-open unsettled mesa land, casino towns in the desert, small mountain communities, fishing and logging villages, "whistle stops," commuter communities and more. Across rural America today we can find predominantly black communities and predominantly white, recent immigrants and families who have occupied the same land for generations. With such variety, it is difficult to make general statements. There is simply no one-size-fits-all description of "rural America."

Understanding Rural Poverty and Hunger in the United States

Yet one thing we can say for sure. Poor rural Americans can be found almost everywhere, from the forests of northern Maine to the mountains of West Virginia, from factory towns in Mississippi to immigrant communities in New Mexico to Indian reservations in South Dakota.

Scratch the surface of rural America's rich diversity and what stands out is that residents are always more likely to be poorer than their urban counterparts. Since the Census Bureau first began measuring poverty in the 1960s, poverty rates have been higher in rural areas than in cities. This holds true for all racial and ethnic groups, age groups and family structures.

In 2000, the Census classified 2,052 of the nation's 3,141 counties as non-metropolitan or rural. Rural counties are those without cities of more than 50,000 residents and outside the limits of a metropolitan area.



USDA, Tim McCabe

While there is plenty of poverty to go around both rural and urban America, rural people have fewer job opportunities, lower wages and longer periods of unemployment than metropolitan residents. They also are more likely to be underemployed, working fewer hours or at a lower wage or skill level than they would like. Because rural economies are frequently dominated by one sector, they are less elastic than metropolitan economies, meaning they are hit harder by recessions and other economic shocks and are slower to "bounce back."

Despite great progress over the last generation, on average, poor people in rural areas have less education, fewer job skills and lower incomes than their counterparts in metropolitan areas. In Nebraska, for instance, the average rural resident earned only 43 cents for every dollar earned by the average urban Nebraskan. A widely held myth in this respect is that the rural cost of living is lower, thus somehow justifying this earnings gap. In Nebraska, family income for the state's least populated county, Arthur, is 68 percent of the state's most populated county, Douglas. Assuming the wage gap outlined above, the relative cost of living does not fill the gap. The per capita income of Arthur County is only 33 percent of Douglas; to have a comparable cost of living, household costs would have to be 33 percent of Douglas County.

Children and the elderly are also poorer in rural areas. Two and a half million rural children, a fifth of all rural children, live in poverty, compared to 15 percent for children living in metropolitan areas. One in five rural children lived in food insecure households in 2000—food insecurity and hunger are more prevalent in rural America than in the nation as a whole. In regions where poverty is concentrated and persistent, as in central Appalachia and California's Central Valley, child poverty rates can be two or three times the national average.[1] Since 1985, the rural child poverty rate has never fallen below 18 percent.

The elderly are no better off. Poverty among elderly people increases with remoteness. Thirteen percent of elderly rural Americans in counties next to a metro area with at least 20,000 people were poor compared to 20 percent of those living in remote rural counties.[2]

Rick Reinhard

Rural residents are, on average, older than urbanites. Twenty percent of people in rural areas are 60 or older, compared to 15 percent in urban areas.

Gaining access to affordable health care is difficult everywhere in the United States, but rural Americans have more health problems and an even lower rate of medical insurance coverage than people in suburbs or cities. Distances and lack of transportation may also make medical care difficult to obtain. There simply are fewer doctors, nurses, pharmacies and hospitals within driving distance.

As people leave to look for better opportunities in the cities, many rural communities have lost population, driving up the costs of social services and challenging the prospects of economic development. This is a major barrier in many poor rural areas.

Population Changes

For most of the twentieth century, relocation within the United States had a predictable pattern: more people left rural areas than moved in. But population shifts during the past three decades have been more complicated.

In 1970, there were more new rural Americans than new urban Americans, the first time this happened in 150 years. This continued throughout the 1970s, when more than 3 million people left U.S. cities for the countryside.[3] Drawn by beautiful scenery and opportunities for outdoor recreation, many people have moved to these mostly Western recreational counties. So-called "amenity counties," which offer quality of life advantages, such as unspoiled nature or a good climate, fared better than those without these features, and this trend continues for the most part today.

In the 1980s, people returned to their earlier pattern with more leaving rural areas than arriving, but during the 1990s, rural America again grew more quickly than urban America. In fact, three quarters of all rural counties increased in population, and many counties that had lost people during the 1980s regained them in the 1990s.

Between 1990 and 2000, there was a net inflow of 3.5 million people to rural areas.[4] Of course, this process is not uniform, but these population trends point to a gradual decentralization of the U.S. population, as people leave crowded areas for more sparsely populated locations.

Areas popular with retirees (the country's 190 Sunbelt counties, which include coastal regions, parts of the West and the Upper Great Lakes) grew by more than a quarter during the 1990s, almost all from relocation.[5] As the baby boom generation reaches retirement age, it is likely these areas will continue to grow in population.

Rural residents are, on average, older than urbanites. Twenty percent of people in rural areas are 60 or older, compared to 15 percent in urban areas.[6] Nearly one in five residents of Niobrara County, Wyoming, for example, are over the age of 65, significantly higher than the state average of 36.

There are regional exceptions to this pattern, areas with large numbers of Hispanic immigrants, for example, which tend to be younger and have slightly higher fertility rates. The combination of older retirees and younger immigrants will pose a new challenge for rural America in the coming years.

Boom and Bust Cycles

Rural communities in the United States have a long history of weathering boom and bust times and undergoing change. From gold rushers and homesteaders to plant workers and call center employees, rural people have seen their town's economies transform and evolve.

Lexington, Nebraska, illustrates the flux that characterizes many rural communities. The town's first boom came in the 1970s when a combine plant arrived and offered its workers good wages. But when the farm equipment manufacturer closed its doors in 1986, the population of Lexington dropped from 10,000 to 6,600.

Four years later, in 1990, a slaughterhouse and meatpacking plant moved into the old combine factory and the town's population shot back up to 10,000. The packing plant paid much less and recruited workers from Mexico—3,500 of the town's new residents were Hispanic. The ethnic shift in Lexington's population was coupled with an age shift as older farmers and retirees moved 10 miles south to the recreational Johnson Lake.

Back in Lexington, the town's growing pains are most obvious in places where change is the greatest, such as inside the Lexington public school system whose students are now mostly Spanish-speaking.

Rick Reinhard

Mining towns like the one shown here in central Appalachia were also scenes of repeated boom and bust cycles during the 20th Century. Many of these towns are struggling with uncertain futures and what comes next.

Faces of Change

Just as economic and social evolution has been woven into the history of rural America, presently we find changes in the ethnic, racial, age and gender profiles of its inhabitants.

An important part of the current population changes in rural America has roots in Latin America. Immigration is now a nationwide rather than an urban phenomenon, with immigrants increasingly settling in rural areas. The fastest growth in rural areas has been in the South and Midwest, where the Latino population tripled and doubled respectively.

Rural Hispanics in the Midwest, Southeast and Northwest are growing faster than any other racial or ethnic group, driven in large part by demand for workers in the meatpacking industry. In fact, it was the growth of the Hispanic population in the 1990s that prevented net population loss in more than 100 rural counties in the Great Plains. While Hispanic immigration often helps stem the tide of population loss, many small rural communities are unprepared for significant numbers of low-wage workers.[7]

Rick Reinhard

Rural communities will continue to recruit, attract and depend heavily on the Latino workforce. Without Latinos, many of these communities would continue to face population declines.

In Perryton, Texas, for instance, a community of 8,000 just seven miles from the Oklahoma border, it is expected that Hispanics will outnumber the current white majority by 3-to-1 within a generation.[8] As the Hispanic population comes of age, Perryton's residents worry about the impact the demographic shift will have on their community and whether they are prepared for the stresses. Recruiting bilingual teachers has been especially difficult because of the town's remoteness and the low pay-scale that goes with this. Law enforcement faces similar challenges.

While there has been a great deal of variation among regions, minorities in general accounted for at least 40 percent of the wave of new rural residents between 1990 and 2000.[9] Though conventional wisdom has it that rural Latinos will ultimately move to urban areas, Rogelio Saenz and Cruz Torres, colleagues at Texas A&M University, predict that "rural communities will continue to recruit, attract, and depend heavily on the Latino workforce. Without Latinos, many of these communities would continue to face population declines."[10]

Although whites are still the overwhelming majority of rural poor people, other racial groups experience disproportionately higher levels of poverty. While 11 percent of rural whites live in poverty, the figures are more than twice that for rural African-Americans, Latinos and Native Americans: 31 percent, 25 percent and 28 percent respectively.[11]

Poor whites live all across the country, with concentrated pockets in Appalachia, while poor blacks are primarily located in the Southeast, mostly in the so-called Black Belt, which runs from Louisiana and the Mississippi Delta across Alabama and Georgia to South Carolina. Poor Native Americans are mostly on reservations in the Four Corners region—where Arizona, New Mexico, Colorado and Utah meet—and in the upper Great Plains states such as South Dakota. Most poor Latinos live in

Case Study in Strengthening Rural Communities:

Breaking the Cycle of Poverty in New Mexico's Colonias

For the *colonia* of Las Palmeras and 36 other communities within 150 miles of the Mexican border, safe water, adequate sewage systems and passable roads languish on various government agency to-do lists.

In the 1970s and '80s, when housing was in short supply, unscrupulous developers sold unimproved farmland to Mexican immigrants who proudly sank their modest earnings into the land. Most had only enough money left to plant secondhand trailers on their small plots.

Las Palmeras landowners were led to expect that when all the parcels were sold the basics would follow. Many dug their own crude wells—and waited. After all, they were citizens in the prosperous United States.

Tourists may call New Mexico the "Land of Enchantment," but for many residents like those in Las Palmeras it is also a land of poverty. The Catholic Campaign for Human Development (CCHD) is one group trying to help rural New Mexicans improve their living conditions.

For example, the Colonias Development Council, funded in part through a grant from CCHD, has helped Blanca Gonzalez through a lengthy application process to acquire her new three-bedroom home.

To live in Las Palmeras has been, for Blanca, "a beautiful experience, but difficult." Blanca ticked off a list of needs, starting with "natural gas, a drainage system, a park, a bus to pick up the children for school, a paved road."

Blanca and the 70-some other families who call Las Palmeras home are encouraged by current improvements. She, in turn, has intensified her activism for neighborhood improvement. Voter turnout is high here, because residents want officeholders who will help them.

Manuela Mendez, in Montana Vista, another *colonia,* hopes the power of the ballot box will help her community of 150 families. Montana Vista has no electricity, water, gas or improved roads, even though its legal residents "battle a lot," she says. "The county requires so much for so little." Sometimes the cooperation of several water associations is required just to get faucets flowing.

For now, Lorenzo, Manuela's husband, hauls a 50-gallon drum of water every day from his father's house. With four children in their home, that doesn't go very far.

Jim Stipe

Colonias, like the ones described here, have been springing up along the U.S.-Mexico border over the past two decades with the growth of entry-level jobs in the service and agricultural sectors of the Southwest economy.

"What about our children?" is a common question asked by the residents of these communities. In Columbus, New Mexico, national and diocesan CCHD grant monies and technical assistance from the Colonias Development Council have enabled *Mujeres en Progreso* (forward women) to find one solution: Columbus Child Development Center.

Five women were the original dreamers and their resolve was hardened by a real-life nightmare. Two young children in Columbus died in a house fire when they were locked in their home by desperate farm laborers who left them as they worked.

The women were horrified and wanted to ensure a safe, affordable and nurturing child-care alternative. Some husbands called the dreamers *mujeres in regreso* (backward women), but six years later 17 children are now enrolled in a clean, new, safe facility, with a capacity for 32. Husbands who doubted were won over and even dug the post-holes for the surrounding fence.

Groups like the Colonias Development Council and the Columbus Child Development Center with support from organizations like the CCDH can make a difference.

Adapted from "No More Poverty: What the Catholic Church is Doing," by Carol Ann Morrow, St. Anthony Messenger, November 2003.

communities along the Rio Grande River Valley, on the border between Texas and Mexico, or dispersed throughout the southwestern states and California. Increasing numbers, as described above, have moved elsewhere in recent years. Half of all rural Latinos now live outside the Southwest.[12]

Regional Challenges: The Geography of Poverty in Rural America

Most rural poverty in America is concentrated in four major areas of the country: Central Appalachia, the southern "Black Belt," the Rio Grande River Valley and the Great Plains. The poverty in each region is also concentrated among a particular group of people: whites in Appalachia; blacks in the Deep South; Hispanics in the border region; and Native Americans in the Plains. All of these regions have pockets of deep-seated, persistent poverty that have changed very little in the past 40 years, since poverty first began to be measured. These regions saw few signs of progress during the economic "boom" of the 1990s, when the total U.S. poverty rate was falling.

Central Appalachia

Roughly 7.5 million people call Appalachia home. Though the population as a whole grew over the 1990s, nearly a third of Central Appalachian counties lost population. Central Appalachia includes eastern Kentucky, northeastern Tennessee, western Virginia and southern West Virginia, and is the most rural and most impoverished of the Appalachian sub-regions.

High rugged mountains isolate the sparse population, making transportation both difficult and expensive and discouraging businesses from locating to the area. More than 40 percent of Central Appalachia's counties are persistent poverty counties. Most of these are in eastern Kentucky.[13] One in four in this area live below the poverty line.

Central Appalachia's historical dependence on mining and forestry is part of the problem. Eastern Kentucky, West Virginia, and western Virginia, all very isolated, are still largely dependent on coal mining.

Rick Reinhard

Since 1985, the rural child poverty rate has never fallen below 18 percent. In regions where poverty is concentrated and persistent, as in Central Appalachia, child poverty rates can be two or three times the national average.

Table 3.1 **Distinctive Characteristics of High-Poverty Counties**

		Nonmetro counties	
		High-poverty counties	**Not high-poverty counties**
Black high-poverty counties			
Female-headed households with children, no husband	*Percent*	32.7	16.8
Households with no vehicle	*Percent*	12.5	6.9
Hispanic high-poverty counties			
Do not speak English "very well"	*Percent*	21.7	2.7
Mean earnings of women with full-time, year-round work	*$U.S.*	16,900	29,000
Native American high-poverty counties			
Employees per 100 people	*Number*	35	47
Poor under age 18: poor age 65 and older	*Ratio*	5.9	2.6
Percent of poor in deep poverty (<75 percent)	*Percent*	20.5	8.4
Southern Highlands high-poverty counties			
Report disability, age 21-64	*Percent*	31.0	20.2
High school dropouts: college graduates	*Ratio*	3.5	1.3
Male adults working full-time, year-round	*Percent*	35.6	47.5

Source: U.S. Census Bureau, 2000

Inherently unstable as an economic base, mining has, over the past century, produced periods of rapid growth and expansion, followed by equally rapid decline and contraction. The wealth extracted from Appalachian mines has largely left the area forever, and very little has been reinvested in the development of the region.

The largest source of jobs today, services and retail, pay only a third of what coal mining did. Farming consolidation and the decline of the tobacco industry have compounded the problem. Not surprisingly, Appalachia is home to low incomes and high poverty, unemployment, and welfare use.[14] Nearly half of rural Appalachian counties are designated by the USDA as "transfer dependent," meaning that a quarter of the total personal income is derived from government assistance.

The "Black Belt," or Deep South

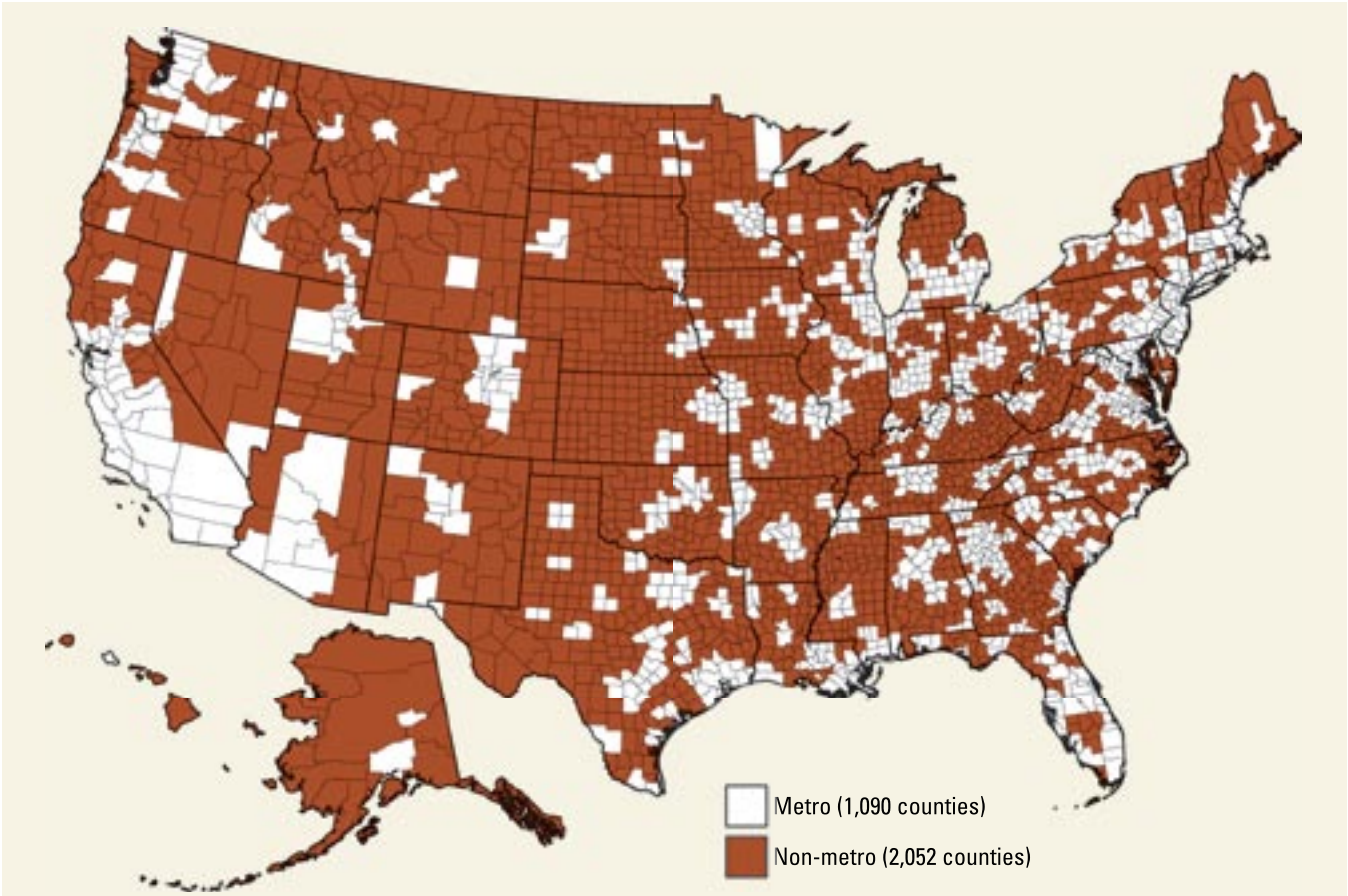
Forty percent of all African-Americans, and 84 percent of poor rural African-Americans, live in the Black Belt, a strip of counties stretching across several southern states known as the Deep South. Rural poverty in the Black Belt can be found all along the Mississippi Delta region, across northern Louisiana, throughout the state of Mississippi, and in southern sections of Alabama, Georgia and South Carolina.

Parts of the Deep South, mainly cities like Charlotte, North Carolina and Atlanta, Georgia, have experienced rapid growth and new prosperity over the past few decades. Some rural areas in the region have been able to capitalize on this growth, and yet the region is also home to some of the most entrenched rural poverty in the United States. Isolation and a history of racial discrimination are major factors.

Black Belt unemployment rates are high and have recently increased as more manufacturing firms have left. For generations, the Black Belt was the site of traditional plantation farming economies. Many Black Belt counties made the transition to low-wage, low-skill manufacturing in the 1960s and 1970s, especially textiles, when there was a manufacturing boom across the South. But today the trend in U.S. manufacturing is for higher-skilled workers. These counties do not have a demand for those types of workers, and so there have been job losses and these counties are suffering as a result.

While the South as a whole has seen tremendous economic growth over the past few decades, the rural South has some of

Figure 3.1 **Nonmetropolitan and Metropolitan Counties, 2003**



Source: Prepared by ERS using data from the Census Bureau

The New American Sustainable Agriculture Project (NASAP) in Lewiston, Maine

Jim Hanna

Lewiston, Maine, with a population of 36,000, is the second largest city in the state. Formerly a bustling mill town located along the banks of the Androscoggin River, it suffered a long and serious decline, when manufacturing moved south, idling mills and sending the community into decline. For many years, Lewiston stagnated as its main street became home to pawnshops and bars, vacant mills created urban blight and poverty climbed.

More recently, Lewiston and surrounding towns have seen the arrival of a large (by Maine standards) Hispanic community. Most are farm workers and their families who migrated over the past 20 years to work at the Decoster Egg Farm in nearby Turner. One-quarter of the approximatley 10,000 Hispanics in Maine live in the Lewiston area.

Decoster is one of the nation's largest egg producers. The managers of the farm have a long history of recruiting and exploiting workers who do not speak English. Former Secretary of Labor Robert Reich described it as being "as dangerous and oppressive as any sweat shop we have seen."

While many of these immigrants have moved on from Decoster, they consider Lewiston their permanent home. Some of them seasonally migrate or commute to other parts of Maine to make a living using their agricultural skills. These farmworkers have experienced many obstacles in their efforts to support their families and become residents of Maine and citizens of the United States. Many are migrant farm workers who traveled to Maine looking for a better opportunity to support their families. Most of them have chosen Maine as the place they intend to stay.

Esperanza Echeverria of Guatemala attends NASAP's stand at the Lewiston Farmers Market. Esperanza, along with her husband Dulian Estrada and daughter Margot, has grown a range of local crops, specialties like jalapeño peppers, cilantro and broccolini, and has experimented with seeds from her homeland in Guatemala.

"Who will grow our food?"

Maine residents who value local food and a healthy food system are concerned when they learn that half the farms and nearly half the farmland in the state are owned by people who are 60 years or older. At the same time, development pressures are taking some of the state's prime farmland out of production permanently. The total acreage of farmland in Maine declined by more than twice the national rate between the last two agricultural censuses.

New farmers with viable business plans are critical to keeping Maine's farmland producing food and maintaining minimal food self-sufficiency. Meanwhile many skilled farmers with a desire to grow food are stuck in low paying jobs and even unemployed. These farmers have arrived in Maine not only from Latin America, but also Africa and Asia.

In the past few years, for example, Lewiston has seen the influx of more than 1,600 African refugees and immigrants, primarily from Somalia. According to the 2000 census, Maine was the whitest state in the nation with a minority population of 2 percent. These African refugees are under intense scrutiny and pressure to demonstrate that they can contribute to the community, both economically and culturally. They bring a range of agrarian backgrounds. Some have shepherded livestock exclusively, including sheep, goats, cattle and camels. Others are agro-pastoralists cultivating vegetables and/or fruit orchards while maintaining small animal herds. Some have been commodity farmers growing cotton or sesame seeds for oil.

One characteristic all these diverse populations share is a culture and tradition that ties them to the land with intimate knowledge of where their food comes from. And whether from Africa, Asia or Latin America, these farmers all experience similar struggles in overcoming language and cultural barriers,

Bridget Huber

understanding production and marketing in a new country, and in gaining access to farming resources and agricultural support systems.

NASAP

The New American Sustainable Agriculture Project (NASAP) was established in the fall of 2002 in Lewiston partly in response to the incoming population of Somali refugees, and also as a way to help Latino farmworkers move into their own farm businesses. NASAP seeks to strengthen Maine's agriculture while creating opportunities for immigrant farmers through agricultural training, access to small parcels of land, and marketing outlets.

NASAP is a project of Coastal Enterprises, Inc. (CEI), a community development corporation with a mission to help create economically and environmentally healthy communities in which all people, especially those with low incomes, can reach their full potential. CEI has a long and successful history of using food and its production as innovative community development tools.

In addition to the Somali participants, the project has had involvement from African farmers from Ghana, Sudan, Kenya, Togo, Nigeria, and the Congo. Hispanic participants in the project include people from Honduras, Guatemala, Costa Rica, Puerto Rico, Mexico, Peru, Colombia and Venezuela.

These new farmers face many challenges: learning about technology and differences in climate, dealing with language and cultural barriers, and understanding how the U.S. agricultural support system functions. All of these are challenges that NASAP is trying to address.

Richard Brzozowski, extension educator for the University of Maine, is helping develop a training curriculum for NASAP. He spoke of the difficulties in obtaining basic farming resources, "Even for new farmers who are born in the United States, being able to access resources—whether it's land or capital—and understanding what's involved in accessing them is a challenge."

These challenges are faced by immigrant farmers all over the country, and projects like NASAP exist in many other states, with more emerging all the time. Many of these projects started for reasons similar to NASAP: the presence of an immigrant or refugee population with agrarian roots, and a need for future farmers to sustain the local agricultural community.

New immigrants are the fastest growing population of farmers in the United States. When refugee farmers migrate to this country, even if they can get a tentative foothold to attempt to resume their former agrarian lifestyle, there is no guarantee that they can sustain themselves with the work they have always known. But many people and organizations throughout the nation who care about local food production are finding ways to ensure that these farmers' knowledge and love of the land are not lost when they arrive in their new communities.

In the words of Rosendo Romero, an immigrant farmer who has been hired by NASAP to oversee a growing site, and whose aspirations reflect those of many of the farmers, "I want to grow things people want and have trouble getting now. I have the skills to run my own farm. Someday I want to be my own boss."

***Jim Hanna** is project director of NASAP. He was formerly the executive director of the Maine Coalition for Food Security. He was a co-founder of the Northeast Region Anti-Hunger Network and currently serves on the board of directors for Bread for the World, the steering committee of the Northeast Sustainable Agriculture Working Group and is co-chair of the Outreach and Diversity Committee of the Community Food Security Coalition.*

the highest and most persistent poverty rates in the country.[15]

The Rio Grande River Valley

The Rio Grande Valley region—the part of the United States on the border between Texas and Mexico—has one of the fastest-growing populations and economies in the country. At the same time, this growth has caused problems as new immigrant communities (*colonias*) spring up so quickly that many lack finished streets, safe drinking water or sanitation systems. Most *colonia* residents work in seasonal agricultural employment or in nearby cities in either low-wage service jobs or manufacturing.

Nearly half of the border counties are persistent poverty counties. Thirty-five percent of the population lives in poverty and half of all children are food insecure. Access to health care is a particular problem for several reasons: many people do not have health insurance or other means to pay for medical care; doctors and hospitals are unevenly distributed; and patients often do not have access to transportation.

The Rio Grande Valley has the lowest level of education in the United States. A combination of long commutes to school, the need for children to contribute to family income and health problems make it hard for many colonia children to go to school. Almost half of adult Hispanics in the region do not have a high school diploma.[16]

The Great Plains

The Great Plains region includes a wide vertical strip of the country, from Montana and North Dakota south to New Mexico and Texas. The area produces much of the country's food, as almost three-quarters of the land is farmed—but there are only half as many farms today as there were in 1930, and a third of those that remain are large commercial operations. An economic alternative to commodity agriculture has not emerged.

In many ways, this region has been the least able to move on from its agricultural past. With few natural amenities and great distances between cities, the Great Plains

is at a natural disadvantage in attracting people and enterprises. Many small towns are drying up, creating stress for the people who are left. As people leave, the cost of maintaining services rises.

In North Dakota during the 1990s, almost every rural county lost population, and was matched by gains in metro areas. Hundreds of counties had their highest population a hundred years ago. There are no jobs for the people who grow up there. Young people move to cities or leave the region altogether. Many of those who remain are poor and/or elderly. Businesses sometimes shy away from relocating near such workforces, and the local capital to start new businesses is often scarce.[17]

To Farm or Not to Farm: The Plight of the American Family Farmer

One of great demographic shifts of the 20th century was the move off the farm. Some communities have grown stronger as a result, but many have fallen behind as they fail to find an alternative to the lost farming economy.

Even for communities having success in finding new employers, the transition can be difficult and costly. It can take years for a community to attract a major new employer, much less the two or three to truly diversify its economy. During the meantime, families may be forced to commute long distances for work or survive long periods of unemployment and, often, poverty.

Mike Cothern, of Buhl, Idaho, typifies the challenges faced by many small farmers across America. In 2004, he abandoned farming for a job with the Natural Resources Conservation Service (NRCS), and now he commutes 80 miles one way to the NRCS offices in Mountain Home, Idaho.

Cothern had been farming since 1985, right out of college practically, but the difficulties of making a living off the 500-acre family farm, plus his deteriorating health from arthritis, forced him off.

He counts himself lucky to have landed the job with NRCS. Several of his neighbors have not been so lucky and are struggling to get by in farming. "Twenty years ago, it used to be people around here could live off of 50 acres," he says. "Today, 500 acres isn't even that much."

When Cothern talks about the onset of his arthritis in the late 1990s, he sounds almost as if it has given him reason to be thankful. "In a way, it helped focus me to make the decision. If it was just one, economics or health, it would have been harder to let go. It was hard to let go as it was."

Without his college education, he knows he would not have a shot at the NRCS job. His dad, like his dad before him, insisted on his son getting a college education in spite of his decision at a young age to pursue a life of farming.

Three generations of Cotherns have farmed their land. In Buhl, a community of approximately 3,000, there are hardly any young men he has heard who are going into farming. His son Keegan, who graduated high school in 2004, has no interest.

Mike Cothern of Buhl, Idaho, left farming in 2004 for a different career. He farmed his entire adult life and had intended to continue doing so but made the decision to leave based on financial considerations and for health reasons.

Barbara Cothern

Nourishing the "Other California"

Dennis Barrett and Laura Tatum

Tulare and Fresno counties rank first and second in the nation in agricultural output. They also rank first and second in California in food insecurity. Ironically, many people who pick the produce on the region's countless farms cannot afford to purchase it.

Our five-month field site project in the Central Valley focused on increasing the food stamp participation rate in these two agriculturally wealthy but economically impoverished counties. This project brought us through many of the small farming towns sprinkled throughout these two counties that comprise the heart of California's Central Valley, the 'Other California,' that "part of the state that becomes invisible, lost between north and south, part of an inland desert that doesn't seem to belong," in the words of local author David Mas Masumoto.

Food stamps are the logical solution to bridging the gap between the many farm workers in the area and the lack of resources to buy food for their families. However, several obstacles stand in the way. California's participation rate in the Food Stamp Program (FSP) is only 54 percent, one of the lowest in the United States. Furthermore, the Central Valley is often ignored both socially and politically, underrepresented in statewide task forces and undermined in discussions that divide the state solely into Northern and Southern California.

While millionaires were being made on a daily basis in Silicon Valley only a short time ago, the poverty rates in the Central Valley are among the highest in the nation. We met a woman in Fresno who laughed at the income limits for food stamp eligibility. She had thought she would not qualify for the program because she had a job, but was shocked to realize that her meager earnings placed her far below the income limit.

The state that is home to one of the largest and most respected systems of higher education in the United States is also home to a region that abounds in misinformation about the Food Stamp Program. Several people in Fresno and Tulare told us they did not want to apply for food stamps because it would endanger their ability to become a citizen (a common but erroneous belief), while one woman feared that her son would be drafted to fight in Iraq if she applied for food stamps.

Jim Stipe

"Lost between north and south, part of an inland desert that doesn't seem to belong," writes local author David Mas Masumoto—this is the "Other California," and where the authors spent five months on a project to increase food stamp participation rates among the local population.

While California is known for its physically fit population, from its sculpted governor to its famous lifeguards, the obesity rates in Fresno and Tulare counties are among the highest in the state. Malnutrition and a reliance on cheaper foods with more calories but less nutritious value have created a situation where nearly a quarter of the population of these two counties is considered to be obese.

The five-month field site placement in Fresno and Tulare counties taught us a great deal about the Central Valley and its unique personality. Without sufficient attention to the unique personality and circumstances of this region, its food insecurity and other issues cannot be resolved.

The project that we took on in California's Central Valley led us to use multiple approaches and enlist diverse groups in working to increase the area's food stamp participation rate. We worked to increase access to food stamps by empowering community-based organizations (CBOs) to assist clients in filling out Part I of the Food Stamp Application. On-site application assistance eliminates some of the barriers to accessing food stamps, such as the need for childcare, transportation, and time off from work.

We also worked with a Food Stamp Advocates Group in Fresno County and started a Food Stamp Task Force in Tulare County. These groups, comprised of CBOs, county officials and business and consulate representatives, address food stamp access issues in each of these counties. They have continued this work in the time since we left Central California.

Local media, particularly ethnic media that caters to the area's large Hispanic and Hmong populations, further enabled us to reach portions of the eligible population that were not being served by the Food Stamp Program. Other media outlets enabled us to seek a change in public opinion by highlighting the benefits and challenging widespread myths and assumptions about food stamps.

Our time in Fresno and Tulare showed us the stark contrasts between California's better-known areas like San Francisco and Los Angeles and the lesser-known Central Valley, the 'Other California.' Its culture is a rich mixture of diverse ethnic communities that is a 21st century embodiment of the classic American concept of the melting pot. Its people are hard-working individuals with tough spirits, struggling to turn their pursuit of the American dream into reality.

***Dennis Barrett** and **Laura Tatum** participated in the Bill Emerson National Hunger Fellows Program with the Congressional Hunger Center in Washington, DC. They did field work in California's Central Valley between September 2004 and March 2005.*

Rick Reinhard

When Cothern looks out across his land to his nearest neighbor, what he sees has become a familiar pattern in Buhl. Eighty acres once farmed by one family has been split into four separate parcels. "Ten years ago five acres were split off on one side, and then 40 acres on another, which has been split into another five. There is farming on some of that land, but no one who lives there anymore does it. The person doing the farming has other plots in other areas around Buhl."

Half of Cothern's own land is rented out, and the other half he is trying to sell. Like him, the four households on those 80 acres commute to work outside of Buhl—although none travel as far as he does. All four of these households derive their livelihoods from working in Twin Falls, 25 miles away, a bustling city that has become popular with retirees from out of the area as well as outdoor enthusiasts.

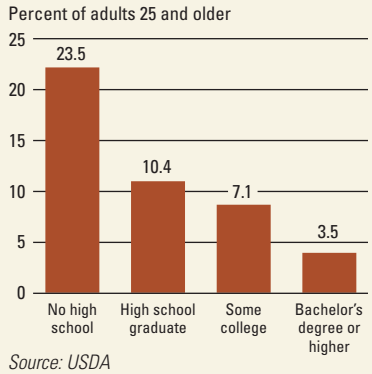
"Will he stay in Buhl?" This is a question Cothern asks himself. For now, at least he wants to stay. He grew up in Buhl, and has lived almost his entire life there, except the years he was away at college. His wife Beth and he have a house they built ten years ago, and they had hoped to spend the rest of their lives there—but nothing anymore feels certain.

Education: Means to Opportunity

What Mike Cothern has going for him that many of his neighbors do not is his college education. Rural college graduates on average earn more than twice as much as rural high school dropouts and have far lower unemployment rates. Rural Americans have more schooling than ever before, but college graduates still earn much more in cities, making it harder for rural counties to build their human capital base. Those who have a college education are able to use their diplomas as their ticket out if they so wish.[18]

Raising education levels and quality is essential to improving economic life in rural communities and the well-being of the rural population. Low college graduation rates often mean low skill levels, and even where this is not the case, having fewer college graduates presents an "image problem" when communities are trying to attract businesses and jobs. This is a major barrier to economic development and job creation in many poor rural areas.

Figure 3.2 Nonmetro Poverty Rates by Educational Attainment, 2000



Source: USDA

But problems with education in rural communities start much earlier than college. The quality of rural schools varies greatly from place to place, depending on the available federal, state and local funding and the size and stability of the community. Studies conducted in several states show that the smaller classes and increased teacher attention common in rural schools can go a long way toward bridging the achievement gap that frequently exists between poor and affluent students in the United States.[19] Children from poor families generally perform best in smaller, more personalized environments where they are less likely to fall through the cracks. Rural students also perform as well as or better than metropolitan students on assessments and standardized tests.

But these advantages are often undercut by difficulties in attracting and retaining teachers and securing sufficient funding. Declining enrollments and the frequent consolidation of districts and schools also pose problems. Communities shrink or vanish and schools are consolidated in larger towns. And though rural students do well in school, they are often not there long enough. The situation is especially bad among minorities. In 2000, half of rural Hispanic adults had not finished high school, compared with 20 percent of poor whites.[20]

Margaret Nea

Studies conducted in several states show that the smaller classes and increased teacher attention common in rural schools can go a long way toward bridging the achievement gap that frequently exists between poor and affluent students in the United States.

Remoteness, Persistent Poverty and Food Deserts

For more isolated rural counties, keeping young people and attracting new ones is a serious challenge.[21] Those far away from cities and without natural "amenities" have had a much more difficult time attracting and maintaining jobs and people. Whether they are farming areas or factory towns, communities that have easy access to urban areas and jobs in the large cities, or are home to nice scenery or climate attractive to vacationers and retirees, have been able to avoid economic stagnation.

Not surprisingly, most rural counties are also much more likely to be home to persistent poverty. Nearly 400 counties across the United States have experienced poverty rates of more than 20 percent for the past 30 years. Eighty-eight percent of these "persistent poverty counties" are rural. Counties with higher unemployment rates (fewer than 65 percent adults employed) are disproportionately located in the most rural areas.[22] The South, home to 40 percent of rural Americans, has the highest levels of poverty and persistent poverty. Nearly three-fourths of the persistent poverty counties are in the South. More than one in six rural Southerners is poor, and more than a quarter live in a persistent poverty county.[23]

People living in isolated rural communities are further from health care facilities, schools or even grocery stores. Rates of food insecurity and hunger in these most isolated communities are also higher than the national average. A USDA study of 36 counties in the Mississippi Delta found that 70 percent of low-income people had to travel more than 30 miles to reach a large grocery store. Food at smaller stores closer to home was typically more expensive, leaving large numbers of poor people in these communities with reduced access to lower cost foods.[24] Despite the greater need in these areas, the most remote rural counties often lack the resources to provide services that poor and food insecure people require.[25]

Finding quality food at fair prices may be something most Americans take for granted. Lest anyone forget, supermarkets are first businesses, and where businesses locate depends on where they have a market. In de-populated regions of the country, it has become increasingly more difficult to keep grocery stores operating at a profit. During the 1950s, half of all grocery stores were mom and pop operations. Today, it's just 17 percent.[26]

Researchers Troy Blanchard and Thomas Lyson in their study "Access to Low Cost Groceries in Nonmetropolitan Counties: Large Retailers and the Creation of Food Deserts," identify the burgeoning growth of superstores like Wal-Mart as a precipitating condition. Seventy percent of Wal-Mart supercenters are in nonmetropolitan areas, whereas almost all of Wal-Mart's competitors focus on urban areas.[27] When Wal-Mart superstores open, they draw customers from a wide range—and they also put pressures on smaller groceries. This has happened over and over again across rural America. Competition is what drives the food business like anything else, and the small stores can hardly compete with the volume Wal-Mart is able to carry.

In some rural areas around the country, and more often than not it is in an isolated region, simply trying to find healthy food at affordable prices can be a tremendous challenge.

Rick Reinhard

Persistent poverty is more prevalent in the most remote rural areas. Counties are persistently poor if 20 percent or more of their populations were living in poverty over the last 30 years (measured by the 1970, 1980, 1990 and 2000 decennial censuses).

Jim Stipe

The proliferation of supercenter retail stores has made it difficult for small groceries to compete in rural America. Access to affordable, nutritious food drops dramatically for counties of 2,500-resident or less and not adjacent to a major metropolitan area.

In some rural areas around the country, and more often than not it is in an isolated region, simply trying to find healthy food at affordable prices can be a tremendous challenge. These areas have come to be known as "food deserts," and they have nothing to do with the dry, wasted landscapes associated with the common image of a desert; rather, they exist across the country, even in areas where ironically the soil is rich with agricultural potential.

By region, the West experiences the highest level of inaccessibility, with the Midwest, South, and Northeast following in that order. But levels of inaccessibility become more universal as population is factored into the equation. Among nonmetropolitan counties, those with less than 2,500 persons, regardless of the region, have the highest proportion of people with low access to large food retailers.[28] Sometimes all that exists is a convenience store attached to a gas station, where the bounty runs a range of candy bars, chips and soft drinks.

The closest grocery store could be 20, 30, or even many more miles away than that. For people with access to transportation, living in a place like this can be an inconvenience. For those without transportation it might well be a crisis. In the case of the latter, living just 10 miles from the grocery can constitute being in a food desert.

Transportation issues, a symptom of both geographic scale and a lack of genuine economic opportunities in rural areas, eventually affect many aspects of rural life. For instance, the lack of high-quality, affordable child care in rural communities is exacerbated by rural parents forced to seek work outside their local communities. Volunteerism and community-involvement, the backbone of rural culture, is decreased by a shortage of community-based economic opportunities and the resulting deficit of family time.

As public offices are called upon to serve larger geographic areas, caseloads increase, offices and service providers are no longer community-based, and services are spread over both a larger area and a larger population. All these result in less available and less effective program services for low-income rural people. These considerations and the number of people that need services also bring into question the sufficiency of the level of investment in such rural development strategies. Obviously, at this point, the level of investment is insufficient for the need. Issues of geography and scale are generally lost in the discussion of rural development policy, but actually may be the most fundamental considerations in any policy discussion.

The Menace of Methamphetamine in Rural America

Methamphetamine, or meth, the "poor man's cocaine," is spreading across rural America at alarming speed, tearing apart families and sometimes whole communities wherever it slows long enough to sow damage.

"In one day, I lost my kids, I lost my home and I lost my husband," said Cookeville, Tennessee, resident Norma Barney. "It about killed me."

After losing her children to foster care and her husband to prison for "cooking" the meth they sold, Barney entered rehab, found a job and attended Narcotics Anonymous meetings. Now she has shaken her habit and has her kids back, but hers is a rare success story in beating the drug.

While meth was once exclusively an urban problem, this is no longer the case. The simplicity of meth production has led to a dramatic increase of small-scale laboratories in rural areas. For example, the number of meth labs seized by the federal government in Indiana rose from 3 seizures in 1999 to 500 in 2001.

Meth producers use readily available ingredients including pseudoephedrine in the form of cold medicine found at local pharmacies—or anhydrous ammonia, a type of fertilizer offered at local farm supply stores or stolen from tanks on farms.

Rural areas provide an attractive environment for meth producers because of the wide, open spaces. Cooking chemicals to create meth releases powerful odors that are more difficult to detect in sparser rural environments than in constricted urban spaces. Another reason why rural communities may be vulnerable to meth producers and traffickers is the limited resources for local law enforcement. Law enforcement personnel are often understaffed and have to patrol hundreds of square miles.

Meth has been associated with a drastic increase in cases of child abuse and neglect. For instance, more than 700 children were placed in foster care by the Tennessee Department of Children's Services after they were either abused or neglected by parents using meth.

There are also meth-related health risks connected to the production of the drug and problems associated with meth's intravenous use. Probably by no small coincidence, rural communities saw a rise of 82 percent in AIDS cases between 1994 and 1999.

Access to drug treatment facilities is sorely absent in most rural areas. Moreover, lengthy distances to treatment facilities and lack of transportation in rural communities are barriers for many people who need and want treatments.

SHH

A growing threat to rural communities across America is the escalating production and use of the narcotic methamphetamine, also known as "meth," "speed" and "ice."

Rural Welfare Reform

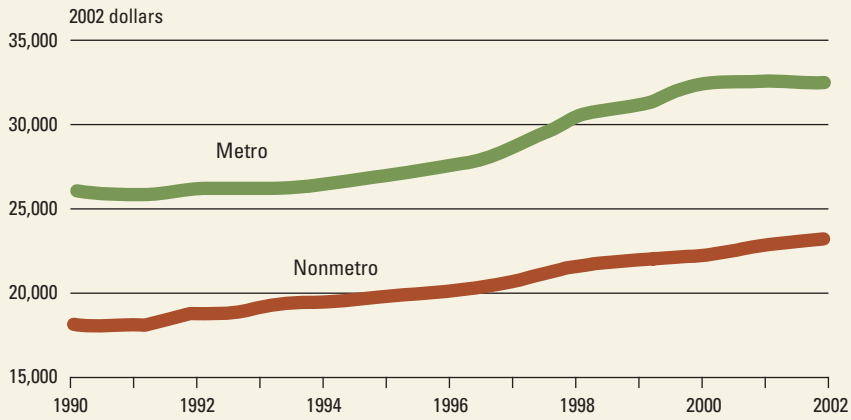
The difficulties many rural families face in escaping poverty are illustrated by their experience with welfare reform. The legislative overhaul of welfare in 1996, which also changed its name to Temporary Assistance for Needy Families (TANF), was designed to move families from dependence on government payments to self-sufficiency through work. But in rural communities where jobs are scarce and wages low, welfare recipients are finding it extremely difficult to obtain a job that will move them out of poverty.

Recent evidence suggests that the success of new welfare programs in getting people out of poverty through work varies by where recipients live. According to a study of seven communities in Iowa, a welfare family's success in leaving welfare hinges on the proximity of jobs and access to social support services.[29] In some states, like Mississippi, the number of families on welfare in urban areas fell much further than in rural areas. Not surprisingly, the most remote rural areas, which have fewer services and lower job growth, had the most difficulty reducing caseloads.[30]

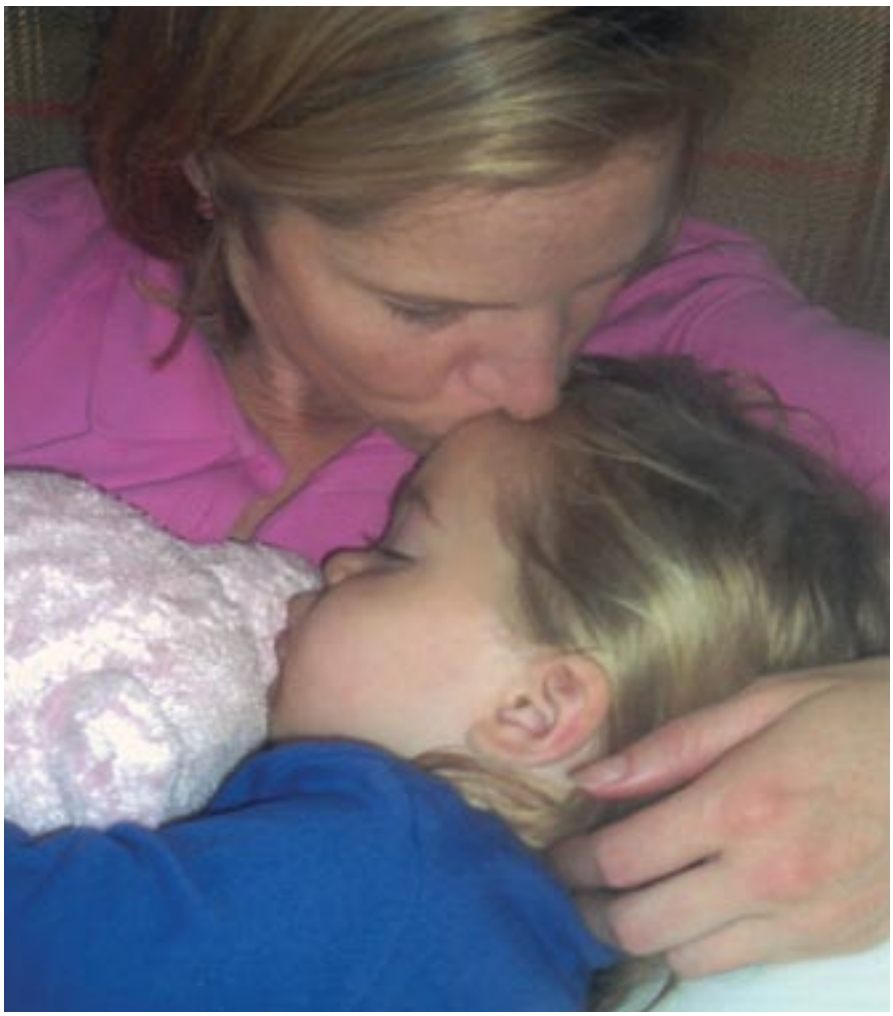
Persistent poverty counties, where a quarter of rural poor people live, have weak economies that do not generate jobs as well as other rural counties. The preponderance of low-skill, low-wage jobs means that even those who work full time cannot always make ends meet. The same factors to blame for higher unemployment, underemployment and persistent poverty in many rural areas become even starker when rural residents come up against the time limits on assistance imposed by TANF. The inherent disadvantages of these areas present significant obstacles to welfare reform efforts, but most important for TANF recipients is the lack of jobs—there are simply not enough jobs. Such remote areas have the poorest outlook for growth in unskilled jobs, low-paying service or retail jobs, the most likely employment for welfare recipients. Accordingly, there are more people competing for a comparatively smaller pool of low-paying jobs.

Figure 3.3 **Real Per Capita Income by Residence, 1990-2002**

The gap between nonmetro and metro incomes grew to nearly $10,000 by 2000, but metro income has fallen since then while nonmetro income has continued to grow modestly, shrinking the gap to near $9,000 in 2002.



Source: Calculated by ERS using data from the Bureau of Economic Analysis.



Margaret Nea

Welfare reform legislation enacted in 1996 dramatically altered the social safety net for poor Americans. Recent evidence suggests that the success of new welfare programs in getting people out of poverty through work varies by where recipients live.

Economic and Social Isolation Beget Political Isolation

For the rural poor, low and dispersed populations make harnessing any of the power they do have even more difficult to come by. The regional differences that characterize rural areas also present a barrier to building a "rural" constituency. Most rural constituencies are so fragmented that they may not even realize that they share mutual interests.

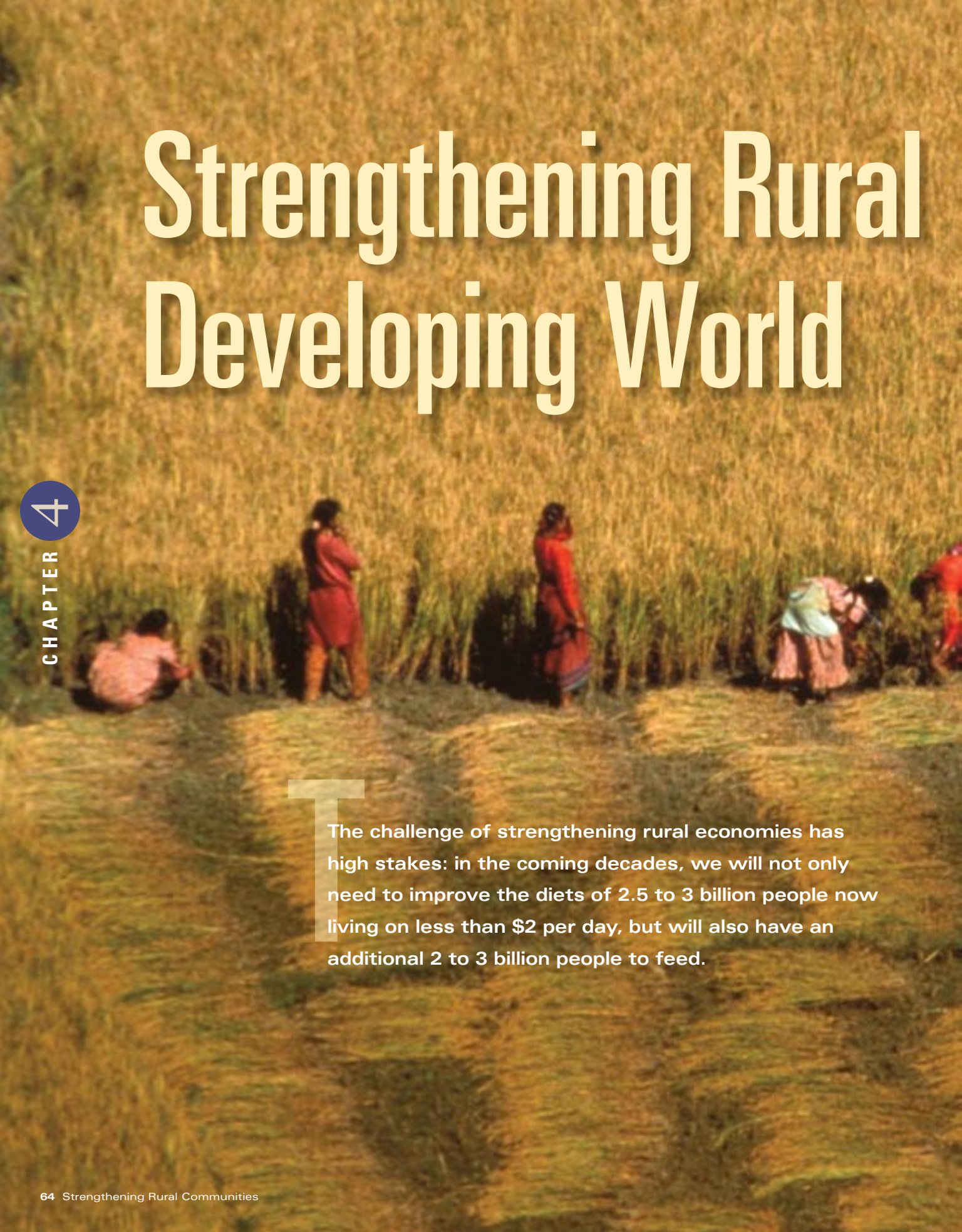
The organizations that serve agricultural interests in the U.S. have policy agendas that are generally too restrictive to serve a broader rural constituency. While large-scale commodity agriculture is represented in the halls of power by well-funded lobbying organizations, the rest of rural America is often underrepresented.

Small "family farmers" may have the sympathy of most Americans, but this sympathy is not being translated into effective provisions that address the unique needs of small and mid-size farmers. To some, the money being spent on agricultural subsidies may seem like an egregious example of urban taxpayers being forced to support rural livelihoods rather than the failure of federal policy to address the realities of rural life; therefore, urban allies may be difficult to come by.

Despite these difficulties, it is worth the effort to begin to address the question of economic development in rural America. A rural policy that embraces the full diversity of rural America will likely only come from stronger representation of all the groups of people that call rural America home.

CHAPTER 4

Strengthening Rural Developing World



The challenge of strengthening rural economies has high stakes: in the coming decades, we will not only need to improve the diets of 2.5 to 3 billion people now living on less than $2 per day, but will also have an additional 2 to 3 billion people to feed.

Communities in the

In this chapter, we focus on the knowledge that already exists of how to create strong and self-sufficient rural communities. The elements discussed here are not a one-size-fits-all package for worldwide rural development. The most workable and successful plans are those that have been carefully tailored to the specific resources and challenges of each community. Our discussion offers many examples of successful strategies used around the world and underscores a message of hope: with what we know now, there is strong potential to ease hunger and poverty in rural communities.

The U.N. Millennium Project's Hunger Task Force, charged with formulating a plan to meet the Millennium Development Goal (MDG) of cutting hunger in half by 2015, recently concluded that the necessary technology to achieve this goal has already been developed and tested. Now it must be "scaled up" to benefit large populations. We know what to do; we only require the will to do it.

Margaret Nea

Most people in developing countries depend on agriculture for their livelihoods, either directly or indirectly, and few developing economies have achieved broad-based economic growth without prioritizing agricultural growth. Agricultural growth "has a larger impact on hunger than would growth in industry or the service sector, and is a major factor in poverty reduction," remarked World Food Prize laureate M.S. Swaminathan.

It is especially true in Africa, where U.N. Secretary-General Kofi Annan recently called for a "twenty-first century African Green Revolution" to end chronic hunger on that continent. With nearly one third of Africa's entire population malnourished, he added, progress will require a multidisciplinary approach that incorporates agriculture, health, nutrition, fairer market conditions, infrastructure and environmental protection.

Margaret Nea

"Roads are essential for rural development," says Nobel Peace Prize winner Norman Borlaug. "Wherever a road is built there will soon be a school, and then a bus; and that bus breaks down ethnic and cultural barriers, and ultimately it breaks down fear; and then everything begins to change."

Key Elements of an Effective Rural Anti-Poverty Strategy

Hungry people are often concentrated on fragile lands that have significant constraints for agricultural use. Africa and Latin America contain 303 million hectares of "lost" land—land either consumed by urban sprawl or degraded beyond the point of rapid recovery.[5] Key to reducing rural poverty is increasing the amount that small farmers can grow on these lands.

Assumptions that people would abandon the least productive areas for better opportunities have turned out to be mistaken. But effective science and appropriate policies can yield dramatic improvements even on "marginal" lands. Considerable evidence shows that marginal land could potentially produce enough to feed farm families and, in most cases, allow them to sell surpluses. In the past, these areas have been largely ignored, a trend that must be reversed if we are to make progress against hunger.

Key to alleviating rural poverty is to improve farmers' incomes because, as the evidence shows, the outcome is to raise living standards for farmers and non-farmers alike. Sustained poverty reduction relies on increasing the amount that small farmers can grow and increasing their ability to sell what they grow; in other words, enhancing the ability of small farmers to use markets to their benefit.

Reclaim Fertile Soil

The first step in improving the food security of many of the poorest farm families is restoring the nutrients and fertility to their degraded lands. Fortunately, we are not starting from scratch. "In places where agricultural land has been severely degraded, we now have highly productive, environmentally-friendly techniques to bring the land back and make it productive," said Pedro Sanchez, one of the world's leading experts on tropical soils and a co-chair of the U.N. Millennium Project's Hunger Task Force.[6]

The most basic element of agricultural production is the soil. Without fertile soil not even the best seeds will grow to their potential. The International Center for Research in Agroforestry has developed an approach that uses a combination of fallowing (resting the land) and replenishing minerals such as phosphorus. This method of restoring soil fertility has been used by tens of thousands of farm families in East and Southern Africa with "consistently good results." [7]

In Southern Africa, using leguminous trees to restore soil fertility by taking nitrogen out of the air and putting it into the soil has proven highly successful. Sanchez estimates that 400,000 farm families will be using this strategy by the end of 2006.[8]

In Kenya, the Rehabilitation of Arid Environments Charitable Trust has led efforts to reclaim grasslands in the watershed of Lake Baringo. Sections of the area's desolate wasteland have become productive after three years of careful landscaping and planting with appropriate grasses. The revitalized land is resistant to drought and able to support trees.[9]

In Burkina Faso and Niger, large areas of topsoil had become solidly encrusted and thus unusable for crops. Some farm families responded by digging *zais,* holes filled with crop residue and household compost, as

many as 25,000 per hectare of land. The *zais* attract termites, whose underground tunnels increase water infiltration and revive the land. The technique has tripled yields in many cases, and other farmers have now begun digging *zais* after seeing their success in neighboring fields.[10]

Commercial mineral fertilizers also have an important role to play. Often a combination of organic and inorganic fertilizers is the best way to restore nutrients to the soil. Farmers must have affordable access to such inputs. The difficulty and expense of getting chemical fertilizers to rural areas are well documented.

Improving existing farmland so that it produces more has additional benefits. One such benefit keeps hungry farmers from expanding into more fragile areas, like forests or hillsides.

Technologies such as those described here have proven successful time and again, but many poor, isolated farmers do not know about them. Extension systems, which provide information and training to farmers, need serious improvement in many countries. Though there are important exceptions, most extension systems are underfunded, largely unavailable to women, poorly administered and too sparse to reach all those who need them.

Some countries have begun to work on this. The Ethiopian government, for example, has started a program to train secondary school graduates to be paraprofessional extension workers. Three extension workers, specializing in different aspects of agriculture, will be stationed in each of 15,000 villages. Such innovation is a big step forward, but only the beginning in what must be a major effort to establish more effective agricultural extension.

Increasing productivity is critical, but simply growing more food will not lift rural people out of poverty. Once a farm family is able to produce more than it needs to eat, income depends on the family's ability to sell its excess production. If there is nowhere to sell it, or no one able to buy it, more produce will not do anybody any good.

Case Study in Strengthening Rural Communities:

A Harvesting of Water and Hope in Rural Ethiopia

Fikru Abebe

Alemayehu Michael is a 46-year-old frontier farmer whose family depends entirely on agriculture. They live in the Borchota area of Ethiopia, which faces food shortages year after year. In spite of Alemayehu's hard work, life has become a struggle for sheer survival and a dependence on emergency aid.

Three years ago, Alemayehu's children once again needed emergency food assistance from Christian Children's Fund (CCF). As a result, the CCF parents' committee in the Borchota area decided to try something innovative as a way to stop this cycle of drought-induced famine and emergency relief: water harvesting.

The occurrence of drought in arid and semi-arid areas of Ethiopia has become commonplace—an annual phenomenon—resulting in recurring famine for the past two decades. CCF, like other NGOs, repeatedly responds to the human catastrophe caused by these recurring drought and famines. In 1999, 2000 and 2002, CCF saved the lives of more than 87,000 people in the Golan, Borchota and Shashemene areas by providing food and water relief.

Water is doubly crucial to the people of Golan, Borchota and Shashemene because they depend on rain-fed agriculture. However, this recurring cycle of drought, famine and emergency relief ensures continued poverty and prevents communities and families from becoming self-sufficient. That's why following the famine of 2002, CCF began working with parent committees to determine how to prevent a recurrence of drought-activated famine emergencies.

Water-harvesting seemed to be the way forward towards making optimal use of the region's erratic and uneven rainfall. CCF-Ethiopia introduced a technology to harvest runoff water during the major rainy season for use later during the dry spell months. This harvested water would be used for both human and livestock consumption and for small-scale irrigation for home vegetable and fruit gardens.

The primary water-harvesting structure, which CCF is using to capture surface runoff, includes community cisterns or underground reservoirs for the storage of rainwater. In the past two years, for supplementary irrigation purposes, CCF has constructed 90 cisterns in the Borchota, Shashemene and Buie areas. One cistern can serve 20 households for four consecutive dry spell months.

The water-harvesting program has made a big difference for Alemayehu and his family, who are now able to produce a variety of vegetables and fruits at least twice a year by using water from the cistern for drip irrigation. Farmers like Alemayehu, in addition to feeding their families, are generating significant income from the sale of their crops.

Christian Children's Fund

A community cistern is shared by 20 households and provides enough water for four consecutive months during a dry spell.

In a country where about half of the population is undernourished and 47 percent of the children are suffering from moderate to severe malnutrition, a climate of proactive innovation is essential to breaking the cycle of drought-fueled emergencies. And following the success of the water-harvesting efforts in Ethiopia, CCF is adopting the water-harvesting technology as a best practice to be replicated in other drought prone countries and shared with other NGOs.

***Fikru Abebe,** the national director of CCF-Ethiopia, is a specialist in agriculture and rural land use planning.*

Building Coalitions in Asia: ANGOC and the 200-Village Project

Myra Valenzuela

In spite of tremendous economic growth in Asia during the past few decades, there are still more than 500 million undernourished people in the region. How does one begin to solve a problem of such magnitude? One approach is to seek out likeminded partners and build a coalition. This was the thinking of the members of the Asian NGO Coalition for Agrarian Reform and Rural Development (ANGOC).

ANGOC was established in 1979 after the Rome World Conference on Agrarian Reform and Rural Development, and is composed of 21 national and regional non-governmental organization (NGO) networks from 11 Asian countries: Bangladesh, Cambodia, China, India, Indonesia, Japan, Malaysia, Nepal, Pakistan, Philippines and Sri Lanka. As a regional NGO association, ANGOC is actively engaged in issues concerning food security, agrarian reform, sustainable agriculture, people's participation and rural development.

In its focus on lobbying and advocacy, ANGOC has been involved in agrarian reform initiatives at the local level. For example, the ANGOC secretariat assisted 180 upland farming families in obtaining their legal rights to land in the southern Philippines. Successful negotiations with the Philippine government led to the awarding of 1,250 hectares (3,087.5 acres) to the farmers.

The ANGOC network believes that only local, community-based undertakings will sustain the food security initiatives of the communities. One of its most ambitious rural development efforts to date has been the 200-Village Project, which aims to address poverty and food insecurity at the grassroots level. ANGOC recognizes that assessing food security at the household and village levels is the foundation for community-level planning, as well as policy advocacy on a national and regional scale.

The 200-Village Project was formulated in 1997 when ANGOC members met in Bangkok, Thailand, to plan activities in follow-up to the 1996 World Food Summit (WFS). Close to 10,000 participants attended the 1996 WFS in Rome, Italy, which set as a goal cutting in half the estimated number of hungry people in the world by 2015. The 200-Village Project was created as a community-based regional program to monitor the extent to which food security status, especially the commitments of the WFS, has been achieved among 200 selected villages in 10 Asian countries. Through this project, governments of the participating countries can be held accountable to their commitments in the fight against hunger and food insecurity.

Currently, the 200-Village Project has been implemented in an estimated 5,640 households in 188 villages in eight countries of South and Southeast Asia, with two additional countries recently expressing interest in participating. There are three phases to the project. In the first two, data is gathered at the household, village and national levels, followed by preparation and creation of community projects that would address food security, based on the data gathered, and planning by the community. The third component, policy advocacy, includes case studies, publications, policy papers and the presentation of findings in relevant national and regional meetings. In this third phase, national and regional meetings will bring together relevant actors for policy dialogue, including governments, multilateral institutions and NGOs.

The 200-Village Project has aided local and national NGOs in gathering information to support their hunger and poverty advocacy work with hard facts on the food security situation in participating villages. With trends showing that a multi-stakeholder approach is necessary to tackle hunger and food insecurity, the 200-Village Project provides a framework for outside institutions to work with the local communities.

Celia Escudero-Espadas

The 200-Village Project is promoting food security in thousands of households throughout eight Asian countries.

***Myra Valenzuela** was the project assistant with the Bread for the World Institute on the 2005 Hunger Report.*

Manage Water Resources

Water is also critical to farmers' livelihoods. Developing better irrigation systems is vitally important to improving agricultural productivity. Few things are more uncertain than when and how long it will rain. Poor timing, or no rains at all, is a major cause of crop failure on marginal lands. For people at risk of hunger, this is often what pushes them over the edge. "Eighty percent of food emergencies are linked to water," notes FAO Secretary-General Jacques Diouf.[11]

Many areas of the world where hunger is worst are in dry areas. Only 7 percent of Africa's arable land is irrigated. Having more reliable access to water boosts the effectiveness of all the other things farmers do to make their land more productive.

The WHO and UNICEF warn that the world faces a "silent emergency" from a continuing lack of clean water and sanitation. More than 40 percent of the world's people lack access to even the most basic sanitation. More than 1 billion people do not have a source of clean water, and 1.8 million people die each year from diarrhea-related illnesses. In Africa alone, women and girls spend at least 40 billion work hours fetching drinking water.[12]

Agriculture is the major user of water, and getting "more crop per drop" is increasingly important as the population on marginal land increases. "Using" need not mean "using up" water. Appropriate drainage and recycling can conserve significant amounts.[13] Rather than large-scale irrigation projects, greater success may come from small-scale farm-by-farm water management strategies. Two strategies with a great deal of promise are collecting rainwater and low-tech irrigation methods such as drip irrigation that get water just to the roots of growing plants, losing less to evaporation.

A successful water-harvesting initiative in India helped farmers expand irrigation from 11 percent to 79 percent of their cultivated land. Average crop yields increased more than tenfold and enabled the farmers to grow high-yielding crops. The higher productivity helped boost farmers' incomes by more than 600 percent.[14]

Celia Escudero-Espadas

Around the world, women and girls spend billions of work hours fetching drinking water. More than 1 billion people do not have a source of clean drinking water.

Low-tech water retention methods have helped Burkina Faso recover from a two-decade drought in the 1960s and 1970s. In Sanmatenga Province, a series of small dams and lakes are helping communities cope with the smaller droughts that occur every few years.[15]

A similar concept is water parliaments, important in areas where many different groups claim rights to water. Mali, Mauritania and Senegal have come together in the Senegal River Basin Authority to improve access to basic water services for all who depend on the river.[16] The water parliaments represent all basin stakeholders so that the chances of achieving fair distribution are improved.

There have been some innovative efforts to ease conflicts over water. Grassroots communities in Burkina Faso have created associations that draw members from several villages to collectively manage economic and natural resources. The water committees resolve conflicts to access and management of water between farming villages and pastoralists. Successful water management in dry places must include community cooperation.

Diversify Crops and Sources of Income

Many farm families are looking at new ways to earn more. Rural farmers, especially women, depend heavily on staple crops such as maize, rice, wheat, barley, groundnuts, soybeans, sorghum, millet, pulses and cassava. These crops feed families and are also sold for cash income. Thus it is important to prioritize improvements in the quality and efficient production of

Case Study in Strengthening Rural Communities:

Self-Help Groups in West Bengal, India

Zelinda Welch

West Bengal, an Indian state bordered by Bangladesh, Nepal and Bhutan, is home to 82 million people. With 72 percent of the population living in rural areas, Catholic Relief Services (CRS) has focused on empowering small farmers through a grant funded by USAID. CRS, in partnership with Palli Unnayan Samiti, organizes Self Help Groups (SHGs) to build community capacity so that people can independently determine and address their own needs.

Margaret Nea

Self-help groups are flourishing in the Indian state of West Bengal, where 72 percent of the people live in rural areas. Currently there are 600 groups, each consisting of 10-20 women.

In one small rural town, most community members are small farmers living on marginal land, typically owning 1-5 acres and who've embraced the SHG model. CRS and Palli Unnayan Samiti act as a facilitator in the planning process, but do not make the decisions or solve the problems for the group. Instead, they train leaders, provide financial education, discuss business and marketing plans, and give examples of other projects. Such training and knowledge helps the groups find new ways to resolve long-standing issues.

Dipurani Chaule, a young woman with a glowing face, proudly explains about her group Saraswati Swanirbhar DaL, named after a Hindu Goddess. Her group identified problems in the community and determined that an income-generating project would best address their needs, ultimately choosing fisheries. Through a democratic process, Dipurani Chaule's group established monthly dues to the communal pot, supported a member who was unable to pay one month, and negotiated with another member's husband who wouldn't allow her to attend meetings. This style of decision-making gave many women their first chance to express opinions and have a say.

Saraswati Swanirbhar DaL has grown strong over the last three years. The fisheries project was so successful that they have already expanded. Chaule acknowledged that the SHG does mean more work in an already tireless schedule, but said she doesn't mind because, "I feel like I can finally capture my dreams." Their accomplishments have not gone unnoticed. The local government has approached the community asking the women to run the primary school's food program.

"When groups come to a decision by themselves, then they own it," explains Father Shyamal Base, Director of Palli Unnayan Samiti. "We know we have been successful once we can withdraw from a group and the group continues onward having their own mechanism to resolve their own problems and obstacles, never looking back. That is success, and that is long-term sustainable development."

When the women proved to be quite successful running fisheries, crafts and dairy production, men began demanding their own SHGs; then the youth got in on the movement. Currently in West Bengal there are 600 groups, each with 10-20 women, surpassing the project's goals. One of the most impressive aspects of this program is the cost: CRS spends 91cents per SHG.

From increasing incomes to empowering women to reducing domestic violence, the effects of SHGs have been remarkable. In building these communities' capacity to seize opportunities and hold hope for the future, CRS and Palli Unnayan Samiti have provided great examples of the successful and empowering nature of international development assistance.

***Zelinda Welch** works for Bread for the World as a regional organizer in Pasadena, California.*

staples. Africans produce staples worth $50 billion every year (compared to $14.6 billion in export crops).[17]

There is often strong potential to "add value" to staple crops. For example, cassava requires little or no fertilizer, can be inter-planted with other crops, and has a flexible harvest season. People in Nigeria and Ghana have also developed an array of simple processing technologies that help farmers produce cassava-based convenience foods such as gari (a flour used to prepare porridge) and kokonte (dry cassava chips).[18]

A new project in Uganda is addressing the problem of very low prices for bananas, a local staple crop. Low prices and spoilage have decimated rural incomes. Growers are now focusing on producing banana products such as flour, dried and deep-fried bananas, preserves, frozen starchy foods, animal feeds, beverages, and fortified flour for people with HIV.[19] Using the bananas immediately takes care of storage problems and vastly increases their shelf life, and turning them into more valuable products allows farmers to charge more for them.

Diversifying beyond staples also has important benefits. In a rural mountain community in Zambezia, Mozambique, one small group started a beekeeping program. Farmers were trained to safely handle the bees and establish the proper environment for honey production. Within six months, the group had its first harvest, and the project is now expanding as each keeper who builds a hive passes on a queen with her swarm to another farmer.[20] Diversifying into higher value crops like honey and vegetables can provide more consistent sources of income.

Margaret Nea

Ugandan growers have learned to diversify by using bananas to make fortified flour for people with HIV.

Research has linked growth in nonfarm activities to decreases in poverty, particularly in households headed by women.

Biotechnology, which includes a variety of technologies from tissue culture to genetic modification, is one possible new avenue. Biotechnology has barely begun to be used on crops grown by poor people. But it could potentially produce plants that are more resistant to pests, bacteria and fungi, or more tolerant of salts and aluminum in the soil, allowing poor farmers to expand the variety of the crops they grow.

Seeking opportunities outside of farming has become increasingly important in rural areas. As we saw in Chapter 1, most poor families combine several means of making a living. Research has linked growth in non-farm activities to decreases in poverty, particularly in households headed by women.

Not all rural people have the same opportunities to sell what they grow or the money to make initial investments. As discussed in Chapter 2, the more remote a community, the more difficult it is for residents to break out of a subsistence way of life.

Stronger Markets and Infrastructure

As Akin Adesina of the Rockefeller Foundation has pointed out, "Ask poor farmers today in Africa what their main problem is and they will always say 'bad markets,'" meaning they do not have access to seeds, fertilizers, venues to sell their produce, or infrastructure to help them become competitive.[21]

One way of "bringing customers closer" is to create cycles where poor people are easily able to access and buy each other's products. Boosting the incomes of poor farmers boosts incomes throughout rural

Jim Stipe

Ficus Dairies in western Kenya was started by three community-based organizations and provides jobs and milk for its surrounding community.

communities. It is estimated that an extra dollar of income in the hands of a poor farmer leads to 50 cents in purchases from other rural poor people, 40 cents in purchases from poor urban residents, and only 10 cents of demand for products that were produced in the formal urban sector or imported.[22]

One experiment in "bringing markets closer" is supported by the Rockefeller Foundation, which has provided funds to develop networks of "agro-dealers" in East and Southern Africa. So far 300 dealers have been trained in Malawi. The program still faces problems; for instance, continued high transportation costs mean that not all farmers can afford the products once they arrive in the local shop. But in less than two years, the dealers have become the major source of agricultural inputs to rural poor people.[23]

According to IFPRI, roads have been "the single most effective public goods investment in terms of poverty reduction" in China and India. Former director Per Pinstrup-Andersen pointed out, "If you invest in agriculture alone in a narrow sense, you won't do much because the infrastructure in Africa is so poor."[24] Road density in Africa is very low, averaging about 63km per 1,000 square km, which is about 40 times less than the density India had in 1970.[25]

Remoteness and lack of access in Malawi mean that farmers must travel an average of 7 km to get their products to a market, carrying heavy loads on their heads or using donkeys, bicycles or pushcarts. The lack of efficient transportation must be addressed, quickly yet carefully. New roads should be planned and built in consultation with all the relevant stakeholders in order to minimize negative impacts on the environment. Also, road location should mirror other new investments, like extension.

Many farmers are discovering that there is market strength in numbers. Developing collectives has helped to raise the prices that poor farmers can get for their products. Maize farmers in western Kenya faced low prices, exploitation by middlemen, and poor storage facilities. Nearly 335 farmers in one district organized into a collective to do their own storage, grain quality improvement, price negotiations and marketing. As a result, the district's farmers garnered an estimated $3.2 million in additional income.[26]

The Central Place of Women

Women produce much of the world's food. In Africa, where they perform 80 percent of the agricultural labor, equality for women is not simply socially desirable, it is a vital necessity in the fight against hunger. Women must have access to land, credit and technical advice, plus the right to make decisions about land and crops.

Development assistance frequently includes a "gender component" designed to ensure that women participate in and benefit from the projects funded. Policy experts have identified the many ways in which equality for women is necessary to combat hunger and poverty. In spite of this, progress has been disappointing. About 23 percent of the World Bank's rural portfolio in 2001 was composed of projects that addressed gender issues, but only 2.8 percent of the funds went to these initiatives.[27]

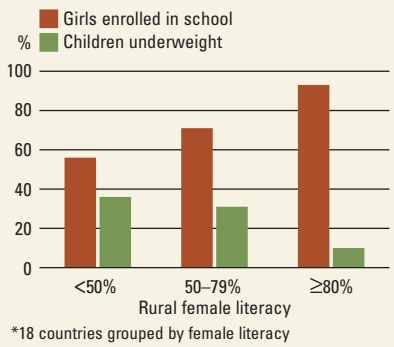
Table 4.1 The Challenge of Rural Infrastructure in Africa

Africa's lack of rural infrastructure severely constrains not only access to markets but also the ability to engage in production in the first place. Much of the region is landlocked with very poor road and rail infrastructure, resulting in extremely high transport costs. The lack of transport, energy, water supply, sanitation and telecommunications infrastructure is a substantial barrier to development, which if left unaddressed will constrain regional growth for decades. By contrast, improved infrastructure can be a springboard for growth: India's road density after independence, for example, was significantly higher than Africa's is now. A massive program of investment over several decades will be needed to close the gap.

	Road density (kilometers 1,000 square kilometers), early 1990s	Density required to match India in 1950
Benin	36	291
Cameroon	38	168
Côte d'Ivoire	94	258
Ghana	17	429
Mozambique	17	135
Nigeria	97	718
Sierra Leone	80	391
Tanzania	66	181
Zambia	36	110
Madagascar	67	137

Source: Millenniium Project: Hunger Task Force

Figure 4.1 Child Undernutrition and Rural Net Enrollment for Girls*



Source: UNICEF; WHO; UNESCO; FAO

Civil society and women's grassroots organizations, along with some national governments, are still working to improve conditions for women and address the legal, traditional and social forms of inequality that many still suffer. For example, in West and Central Africa, gender bias in access to land "is readily observed through quality, size and distance of individual's plots from the village."[28]

Some innovative efforts have been made to extend microcredit—small loans for very small amounts of credit—to poor women who want to start a small business like a shop or a restaurant. In the long run, women's rights will be won by creating opportunities for participation and leadership in politics and business. Expanding education for girls is one of the most powerful ways to fight hunger.

Progress may be slow, but the results demonstrate that the effort is worthwhile. BRAC, a Bangladeshi rural development organization, incorporated access to credit and training in various income-generating activities as key elements of its program aimed at ensuring sustainable livelihoods for ultra-poor women. To help participants work effectively and support their families while they were getting their businesses underway, the women also received monthly rations of wheat and basic preventive and curative health care.[29]

Kenya is among several African countries to launch a paralegal program to help create social and economic change in rural areas. The second-class status of women in Kenya has made them the most economically deprived group in the country and made them vulnerable to violence and HIV. The project trained and deployed several hundred paralegal educators, who helped women become aware of their rights and access the legal remedies available to them. The paralegals also broadcast a radio program on women's human rights issues and educate village elders about national laws. The program "has elicited an overwhelming response by the communities for more knowledge and greater paralegal services."[30]

Provide Safety Nets for Vulnerable People

Longer-term efforts to strengthen rural communities must be complemented by efforts to make sure hungry people have enough to eat in the short term. In poor communities, some people are more likely to be malnourished than others. The most

Margaret Nea

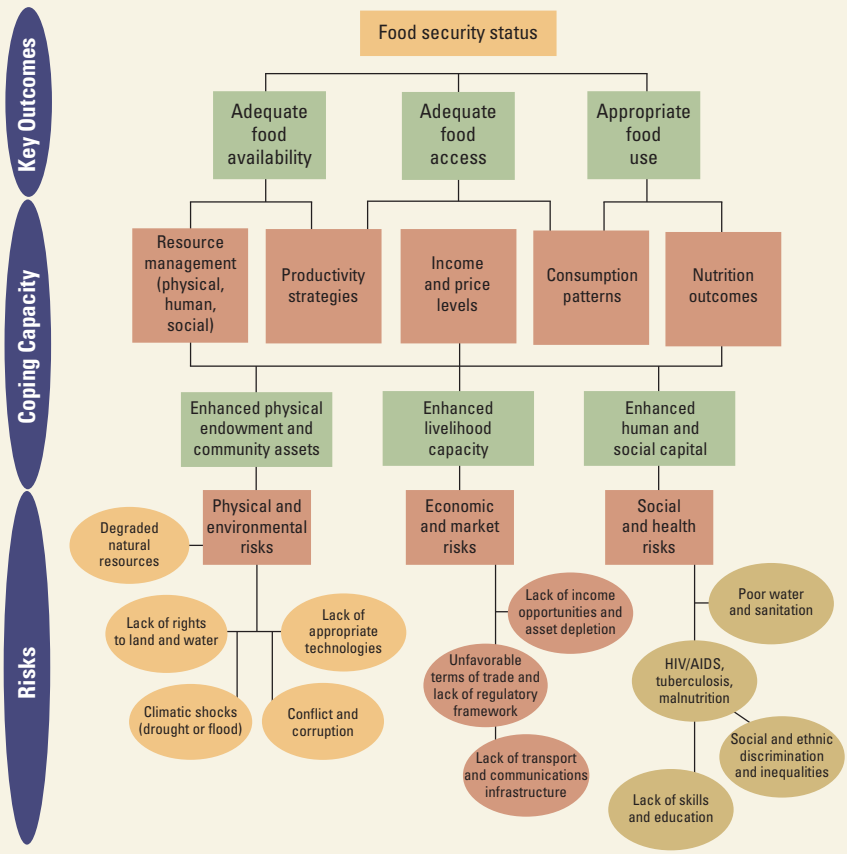
vulnerable groups are pregnant and nursing women, infants, young children and adolescent girls. Direct nutrition support for pregnant women and infants can save lives and prevent serious health and developmental problems caused by low birth weight or early nutritional deficiencies.

In Thailand, the Community Volunteer Corps for Household Nutrition Security has a personalized approach, with a volunteer assigned to every 10 households in participating villages. Volunteers monitor the growth of all preschool children and provide vitamins and extra food where necessary, promote exclusive breastfeeding for infants up to six months, provide extra protein to families that are malnourished, make suggestions on home gardening and nutrition, and offer information on food safety. The volunteers have made remarkable progress in reducing maternal mortality and low birth weights in their region.[31]

In developing countries, school meals programs can have many benefits such as strengthening the health of students, improving their ability to learn as well as contributing to the livelihoods of local farmers. Ghana is one of 10 countries in the New Partnership for Africa's Development (NEPAD) to pilot such a school feeding program. By 2009, Ghana plans to include 1.7 million students in its program while purchasing all commodities locally.

In the Nyanza Province of Kenya, farmers who donated free school lunches are credited with helping impoverished children—half of whom had lost parents to AIDS—pass their national exams. The farmers had increased their maize yields by using small trees as fertilizer. Some of the surplus, along with a cow to produce milk for the children, was given to the Bar Sauri Primary School in Yala. All 33 students who took the graduation exam passed. Such efforts go beyond giving food to making an investment in the future by building the human resource base of the community.[32]

Figure 4.2 **Vulnerability and Food Insecurity Framework**



Source: World Food Programme 2002

Many communities have informal or traditional safety nets that can adapt to new problems. For example, in Malawi, some women farmers work communally in response to HIV/AIDS, with their crops shared equally among healthy people and those infected with the virus.[33] Given the enormous tolls of HIV/AIDS, most local efforts to cope are simply not enough.

The HIV/AIDS pandemic has devastated Africa's rural communities. By 2001, roughly 7 million agricultural workers had died of AIDS, and a total of 27 million farmers may die from the disease by 2020.[34] There are good strategies for combating HIV/AIDS, even in the absence of a cure or vaccine, but they require financial commitments from the international community to Africa and increasingly to other poor regions as well.

Anti-retrovirals (ARVs) are effective HIV medications that can keep people feeling well and extend their lives by years, and their cost has come down considerably. It is urgent that these medications be made available to poor people who need them. In addition to programs that target HIV/AIDS directly, rural families need crops and technologies that are less labor-intensive as fewer healthy farmers are available.

The Leadership Factor: Putting Our Knowledge To Work

The world knows what to do to solve its hunger problems. "What is lacking, as ever," said U.N. Secretary-General Kofi Annan as recently as July 2004, "is the will to turn this knowledge into practice."[35]

Needed is the commitment of leaders at all levels to translate knowledge into effective programs, put supportive policies in

place, and provide the needed resources. In the remainder of this chapter, we consider actions for which committed leadership is paramount. Such action will go a long way towards lessening the suffering of millions upon millions of people and will have an immediate impact on improving their lives.

Clearly, the governments of poor countries bear principal responsibility for fighting hunger within their borders. They also need help from the international community to overcome huge barriers.

Equitable International Trade

International trade in agricultural products has become a high profile issue over the past few years. Indeed, agriculture has been the lynchpin of the ongoing Doha Round of the WTO negotiations. Developing countries want greater access to rich-country markets and an end to agricultural subsidies that distort trade. Industrialized powers, notably the United States and EU, have resisted.

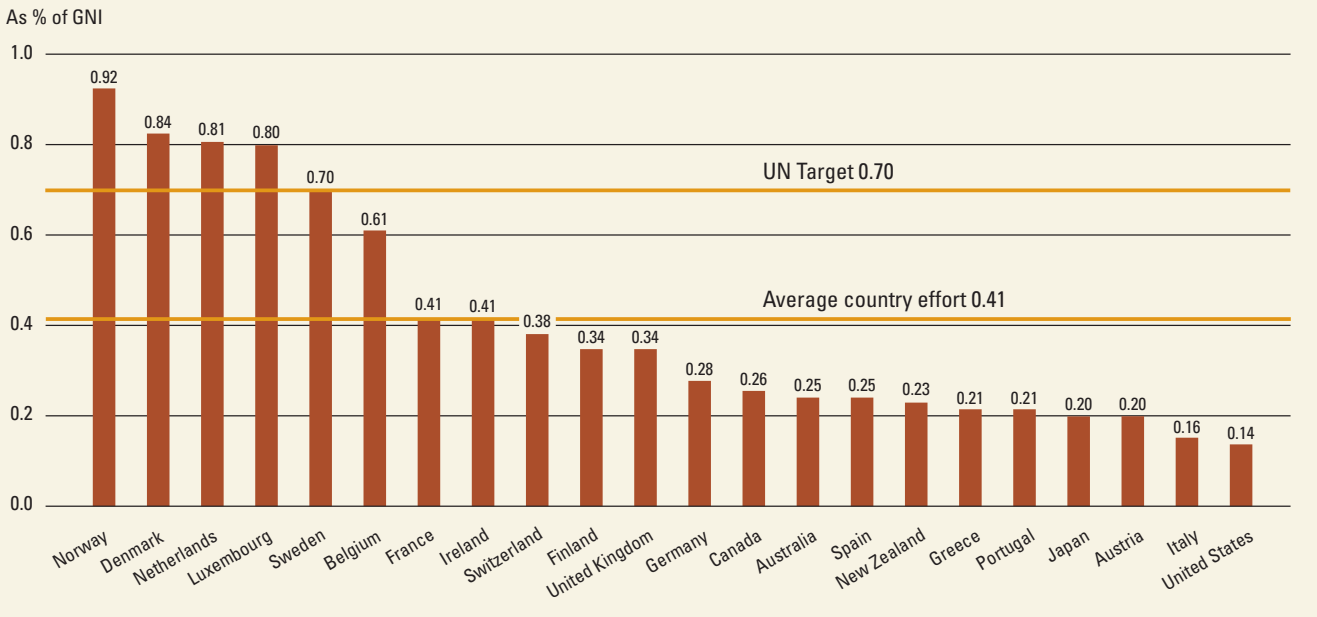
Analysts estimate that providing greater opportunities for developing countries to trade, especially in agriculture, would allow them to earn much more than they now receive in assistance, though development assistance is a vital part of the equation. Estimates of the likely impact of trade liberalization on poor countries vary, though nearly all agree developing countries have much to gain.

A recent study by William Cline at the Center for Global Development and Institute for International Economics found that trade liberalization worldwide would lift at least 500 million people out of poverty over 15 years, and that liberalization in agricultural trade is crucial for developing countries to reap significant gains. He also finds that eliminating barriers to imports from the poorest countries would make a significant contribution to poverty reduction.[36] In sub-Saharan Africa, where 80 percent of the population lives on less that $2 per day, income from farming and food processing could increase by $2 billion per year.[37]

Removing trade-distorting subsidies and granting developing countries unrestricted access to rich-country markets will not automatically produce development. The opportunity to trade does not necessarily mean the ability to trade. Estimates of the total gains from increased trade do not tell us who within a region or a country will benefit and how the gains will be distributed. The benefits of new trading opportunities will likely be captured by higher income developing countries, like Brazil and India, and the better-off farmers within countries unless national governments and international institutions take deliberate actions to ensure poor farmers have the means to compete.

In Chapter 2 we saw that remoteness is often a defining reality for rural poor people. They cannot get the seeds and fertilizer they need to grow more. And they are far away from markets where they can sell what they have grown. The priority in these areas is to bolster the ability of small farmers to produce enough to eat, with some leftover to sell, and to connect remote villages to each other and larger towns nearby. Also, more attention should be placed on helping

Figure 4.3 **Net Official Development Aid (ODA) in 2003 as a Percentage of Gross National Income (GNI)**



Source: OECD 2004

Case Study in Strengthening Rural Communities:

Vocational Education in Côte d'Ivoire

Robert Peck and Susan Smith

Cocoa is an engine for economic growth in West African nations like Côte d'Ivoire, where it supplies between 30-40 percent of foreign exchange earnings and about 56 percent of the household income for the 4.5 million people living on the country's small, family farms. In good years, cocoa generates not just cash but the underlying economic and social stability so important to developing nations.

But there are difficult problems with cocoa including disease and pests, the disappearance of the tropical environment and unsustainable cropping systems. That's why the World Cocoa Foundation (WCF) was formed in 2000, with the goal of strengthening cocoa sustainability in all cocoa growing regions.

West African cocoa farmers are competitive in the world market, but many lack the adequate support to overcome production and marketing constraints. Add to that news reports in 2001 claiming that some cocoa farmers in West Africa were violating internationally accepted labor practice, drawing the attention of policy makers and consumers who took an active interest in the issue.

In order to undertake a plan of action to deal with the multitude of issues, the cocoa industry realized that effective solutions would only come about with a better understanding of the farm-level conditions and constraints. This resulted in a 2002 survey of the West African cocoa community by the Institute for Tropical Agriculture to pinpoint labor, economic and environmental issues and agricultural constraints affecting the cocoa community, with the intention of rooting out the underlying causes.

The survey found that most children help out on family farms with age appropriate chores, but it was unclear if they were learning skills that would help them lead productive lives in their farming communities of West Africa. The survey also revealed concerns about poverty, lack of access to education and working conditions, including farm safety. And that's where the CLASSE Project comes in.

CLASSE: Child Labor Alternatives through Sustainable Systems of Education

CLASSE is a new vocational education initiative underway in the cocoa communities of Côte d'Ivoire, seeking to improve access to education at the farm village level. The project will reach 1,200 children ages 5-20 at four schools in the cocoa growing region of Agboville and Alepe. The students learn vocational skills, such as agro-forestry, while improving literacy rates. As part of the measures of effectiveness, CLASSE provides data on school retention, transition and completion, as well as best practices.

The project also entails a number of other strategies, from teacher training and curriculum improvements to building and expanding school facilities. The activities include adapting vocational education to community schools, including quality-farming practices, agro-marketing, functional literacy and leadership training for students and community members.

The cocoa industry already was involved in Farmer Field Schools in West Africa through the Sustainable Tree Crops Program (STCP), taking science into the field with the goal of increasing income for farm families through improvements in yield and quality. CLASSE focuses on enhancing educational systems and increasing public awareness of the value of education as well as teaching vocational skills that are needed in rural communities.

Implemented by Winrock International, and supported by the U.S. Department of Labor and WCF, CLASSE is an example of collaboration between industry and development organizations working together to strengthen rural communities.

"The chocolate and cocoa industry is proud to be associated with the Winrock vocational-education-in-schools program," says WCF President Bill Guyton. "Developing valuable vocational skills and improving literacy will help children living in cocoa farming communities in Côte d'Ivoire gain the skills and education necessary to lead fruitful and productive lives."

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Winrock

Students gain functional literacy skills as part of the CLASSE program run by Winrock International and the World Cocoa Foundation.

Rural Development in the Bolivian High Plain

Mette Karlsen

What could be so hard about getting a group of rural farmers together and then helping them to sell their products in the market? They make more money and you achieve your goal. Well, in rural development initiatives, few things are as easy as they seem.

Rural farmers are often considered the most challenging group to work with in an international development setting. They are usually conservative in their approaches to innovation because they have the least amount of resources to invest in new, unfamiliar production techniques. Add to this a general suspiciousness of outsiders and generations of local inter-familial politics and you have formidable hurdles to overcome.

Working with Save the Children, I participated in a pilot project with apricot farmers in the rural valleys of the Bolivian Altiplano (High Plain). Let me give you some examples of how complicated this process really was by highlighting just a few of the steps my project took to get from point A (getting the farmers together) to point B (selling their products in the marketplace).

Clarita

Many farmers are discovering that there is market strength in numbers. Developing collectives has helped to raise the prices that poor farmers can get for their products.

We began the process by selecting a farmer association that enjoyed a sizeable membership (approximately 140), a history (albeit short) of association-level activity, motivated leadership, and a location with the infrastructure to support such an activity. We met with the leaders of this association, along with any interested members, and the concepts, activities and goals of the pilot project were discussed and debated at great length.

The next few weeks were spent determining the following items:

Classification—no nationally established standards existed in the classification of apricots in Bolivia. As with all agricultural products, apricots come in varying shapes and sizes. We decided to concentrate on four categories of apricots and determined specific size parameters for each category.

Selection—what about quality standards? We agreed the product should be clean and free of dirt (which is traditionally used to ward off birds), at a certain stage of maturity, and without blemishes or evidence of pests.

Prices—as there were no established standards for the sale of apricots, we needed to determine acceptable prices. We conducted market research, discussed past sale prices and consumer spending practices, and set preliminary price levels.

Markets—four marketplaces were identified in the city of La Paz, marketplaces frequented by a demographic that were thought to value quality over price.

Presentation—we could hardly sell the apricots stacked on the ground or heaped in large wooden trunks as is traditionally done. We decided upon wooden crates with slats and lids, apricots placed stem side up, and pieces of tissue paper separating the neat rows. The apricots would be picked from the crates by rubber-gloved hands, and placed carefully in clear plastic bags at the time of sale.

Product Identification—we needed labels for the crates, business cards and a marketing pitch in the form of a slogan. Agreeing on a contact telephone number for the association to put on their labels and business cards was problematic in that there were only three phones in the village.

At this point, the excitement level was high. Now came the operational phase, when our planning and assumptions were challenged by the practical realities of association-level initiatives and the marketplace.

What's mine is mine. The participants were proud of their professionalism and were empowered by the thought that they, one day, might be a market force to be reckoned with—unfortunately the level of solidarity and common purpose did not go much deeper than this. Very few were in favor of consolidating their apricots because of the varying quality levels, and each was distrustful that they would be given the money that they had earned through the sale of their product.

All farmers are not created equally. Usually, those that had the bigger fruit with the least amount of blemishes were those with more resources to invest in cultivation and harvesting. The poorest farmers with the most inferior product are the ones that need support in commercialization the most; but they brought the overall quality of the product down and compromised the high standards that were being promoted by the association.

As it worked out, the best apricots (i.e. the biggest) were sold in the market where the customers were willing to pay more for a better

product, and the inferior apricots (small) were sold in the less profitable markets. Needless to say, this situation created a certain level of animosity among the participating farmers.

Politics, politics, politics. Getting permission from the city government was as bureaucratic as one would expect, but achievable nonetheless. Getting permission from the other vendors in the market was an entirely different story. Markets in La Paz, at least, are ruled informally by the vendors themselves, and they did not appreciate this new competition.

If we were not relegated to the least advantageous position in (or outside) the marketplace, we were threatened with physical violence, destruction of property and regular harassment. In more than one case, our products and property were outright stolen and never returned.

A woman's place is in the . . . market? Despite our efforts to include women in the planning and conceptualization phase of the project, it was not until it came to the physical classification and selection of the fruit that they began to get involved. Their interest in the project was no less than that of their husbands or fathers, but it was an unspoken truth (or so presented to us) that men are better at making decisions and determining what is worthwhile.

Women had the children to care for and household chores to do, so they couldn't attend the meetings earlier on. It did make sense that the women participate in the critical step of picking and choosing which fruit to sell, as women are traditionally the market vendors, but that did not save us from having to repeat the discussions and review and amend the decisions that had been made by the men weeks before. In short, women should have been there from the beginning.

My cousin's brother's sister's husband. A bitter pill to swallow was when my colleague and I realized that the farmers we had been working with, debating with and cheering on were all relatives of the president of the association. Apparently, participation in the project was never even presented as an option to those association members that did not share this privileged bloodline. This is not to say that the farmers who participated in the project were any less worthy of inclusion, but it did remind us, once again, that we probably missed working with farmers that were most needy in terms of this sort of opportunity.

The customer is always right. The need for training in customer service and marketing became strikingly apparent after the first day of sales. The traditional way of selling your wares in the marketplace is to confront a potential customer aggressively and persistently. A customer with a question is a pest and is answered begrudgingly, if at all. If the customer does not have exact change, the vendor either forsakes the sale entirely or, once again begrudgingly, goes scouting for change, leaving the customer hostage for her change for several minutes.

Allowing the customer to pick the apricots themselves, to exchange those that were bruised or in some way inferior, and to actually taste the product before purchasing took some cajoling of the vendors on our part, but ultimately the customer (and the association) won out.

In the end . . .

The apricot pilot project lasted three months, but we could have used a couple of growing seasons. The underlying point to be made here is that rural development takes time. Working with people takes time, and it requires a willingness to face up to the realities of human behavior. It is not a question of just promoting new standards or buying wooden crates—development is about people.

In our quest to produce quantifiable results, we, the development community, often lose sight of the complexities of the overall goals that we are trying to accomplish in the first place. This article hopefully communicates an underlying theme that nothing is as straightforward as it seems.

Until we accept that a modest initiative, like the commercialization of apricots, is not merely a process of going from Point A to Point B, but rather a lengthy and involved Point A to Point Z undertaking, then we will continue to achieve limited results and questionable levels of sustainability. This is not a new opinion, but one that we need to be reminded of regularly.

Dawn M. Turner

***Mette Karlsen** is a Mickey Leland International Hunger Fellow who worked on the commercialization and marketing project of the Integrated Food Security Initiative with Save the Children in Bolivia.*

Margaret Nea

Policy experts have identified the many ways in which equality for women is necessary to combat hunger and poverty. In spite of this, progress has been disappointing.

farmers produce higher-value goods to sell within their country.

Few of the poorest small farmers in Africa participate in the global market. Their ability to do so is dependent on the extent to which they get access to the things they need—education, health care, water, markets, technology. Public and private investment are needed to make this happen.

We must also remember that some vulnerable people stand to lose and guard against this. Those countries that purchase more food than they grow will probably pay higher grain prices. Poor consumers, especially in the cities, and those farm families that also buy a significant portion of their food could also pay more for their meals. Agricultural trade liberalization must be accompanied by assistance to those countries and people who will be hurt in the short-term. This is a long-standing concern.

WTO member countries pledged in the 1995 Marrakech Agreement to provide a safety net to protect least developed and net food-importing countries as they transitioned to a more liberal system. That pledge, however, was not accompanied by any resource commitments, and because it is difficult to prove that liberalization has caused increases in food insecurity, Marrakech has not been implemented. Developing countries would like to see this agreement given some teeth in the form of operational measures and binding commitments. Such a step is key to agricultural liberalization's success, certainly to its success as a tool in reducing world hunger.[38]

Ultimately for small farmers in poor countries to succeed, rich countries must curtail agricultural protection. Tariffs on developing country products must be lowered, and trade rules must prohibit dumping of subsidized agricultural products onto world markets. In the long run, rural people in developing countries have a great deal to gain from more equitable trade rules. National governments and international institutions must ensure the benefits of liberalization reach the poor and that those who might be harmed are shielded.

More and Better Investments in Agriculture

Despite the huge proportion of poor people that live in rural areas, external assistance to agriculture and rural development in developing countries decreased from $3.7 billion to $2.4 billion (calculated in 1995 dollars) between 1990 and 2000. The agricultural sector now represents just 7.9 percent of total World Bank lending, down from more than 30 percent in the early 1980s.[39] Developing countries are also spending little on agriculture given the large percentage of their populations that earn their living as farmers.

The results of agricultural neglect are worrisome: per capita agricultural production has remained stagnant or even declined in many African countries during the past 30 years.[40] Falling productivity and lack of investment in agriculture will become even more serious barriers to progress against hunger as the world's population increases and more people move to urban areas

There is growing **consensus** among anti-poverty advocates and researchers that **sustainable rural development** requires both economic **growth** and **investments** in the health, education, nutrition and security of **rural people.**

or marginal lands. Therefore, a renewed financial emphasis on rural and agricultural sectors is essential.

There are some hopeful signs. NEPAD, a two-and-a-half year-old initiative undertaken by African governments, has put together a Comprehensive Africa Agriculture Development Program. Formulated by African policymakers and intellectuals under the aegis of IFPRI, the plan emphasizes significantly increasing investments in three of the main pillars of agriculture: extending the area under sustainable management, improving rural infrastructure, and increasing food supply while reducing poverty. [41] Also, members of the African Union pledged in July 2003 to allocate 10 percent of their national budgets to agriculture and rural development.

There is new attention within some developing countries as well. For example, Ethiopia and its development partners have created the New Coalition for Food Security. Its five-year goal is to attain food security for 5 million chronically food-insecure people by increasing domestic agricultural production, scaling up a variety of affordable water-harvesting techniques, and helping farmers produce a wider variety of crops, such as vegetables, fruits and spices.

In addition, an international coalition of NGOs, the More and Better Campaign, has emerged to coordinate the work of national groups aimed specifically at increasing and improving aid for agriculture, rural development and food. Initiatives such as the U.S. Millennium Challenge Account (MCA), proposed by President Bush to award countries with aid for good governance, could bring new financial support to rural areas as they seek to reduce poverty.

Growth Plus Social Investments

There is growing consensus among anti-poverty advocates and researchers that sustainable rural development requires both economic growth and investments in the health, education, nutrition and security of rural people. Countries with strong social investment policies can achieve good results

Case Study in Strengthening Rural Communities:

Bearing the Fruits of Debt Relief in Madagascar

Karen Freudenberger

Four small boys race out from the coffee orchard as they hear the train whistle from the far side of the tunnel. The passage of the train through their remote community is a special event in their daily routine. The boys have a habit of meeting the train as it comes through the tunnel with a dance that matches the cadence of the speeding train traveling over the uneven rails. On a lucky day, a tourist will stick her head out the window and wave to the dancing boys. Today, there is another reason for happiness. As the train pulls out from the tunnel, one of the boys, Rivo, is the first to spot the newly painted freight wagon, full to overflowing with its load of bananas.

The Fianarantsoa-Côte Est. (FCE) train line passes through a remote area of highland Madagascar, bringing crops to market and people to medical and other services found only in the urban centers far from their homes. In 2000, two cyclones devastated the line. Donors, including USAID, responded with emergency funds to reopen the rail system and to begin its rehabilitation as needed to render the operation sustainable over the longer term.

A total of $14 million has now been committed to refurbishing the 163-kilometer rail spur that plays such a vital role in the local economy. Of these funds, approximately $2 million are debt relief funds that the government of Madagascar has committed to improving rail service. The government's intervention enabled the rehabilitation of 22 freight and six passenger cars in 2004, as well as the construction of 22 kilometers of drainage canals that have helped "vaccinate" the line against further cyclone damage.

For Rivo, the refurbished wagons and more regular train service means more than just entertainment. His father sells bananas from the hillsides around their homestead. When the train runs, he can sell his bananas and buy staple foods to feed his family. More wagons mean more bananas going to market. Villagers no longer have to fear the hunger they so recently knew on the days the train didn't run or the buyer turned away their bananas because the few available wagons were already full from the previous station.

Rivo may not have heard of debt relief but as his feet dance down the steep hillside, he knows that the whistling locomotive pulling a load of bananas means his rice bowl will not be empty today.

***Karen Freudenberger** is regional director of the FCE Railway Rehabilitation Project in Fianarantsoa, Madagascar.*

FCE

2005: Is the Time Right for 100 Percent Debt Cancellation?

Lenny Sapozhnikov

From 1970-2002, African countries received some $540 billion in development loans and paid back nearly $550 billion in principal and interest. Today, they carry a debt of more than $295 billion, according to a recent report from the United Nations Conference on Trade and Development (UNCTAD).

With pressure from academics, civil society and developing countries, international financial institutions have been forced to confront this crisis over the past decade. Several debt relief mechanisms have been implemented. However, UNCTAD's findings reconfirm what many in civil society have long been saying: more needs to be done.

Margaret Nea

The limited debt relief that has come to African countries has had impressive results on the ground.

The current debt relief mechanism known as the Highly Indebted Poor Country initiative (or HIPC for short) is not enough by itself to deal with the protracted crisis. After eight years, only 14 countries have graduated from the HIPC program. Half of these countries soon found themselves back at unsustainable debt levels. To keep HIPC graduates at sustainable levels cost almost $2 billion in 2004 alone.

Under HIPC, not all countries that clearly need debt relief have been able to qualify. Several countries with high levels of extreme poverty are not eligible.

Still, the limited debt relief that has come to African countries has had stellar results on the ground. In Benin, 43 percent of HIPC debt relief went to education in 2002, allowing the recruitment of teachers for empty posts in rural areas. More than 54 percent went to health with a large part used to recruit health staff for rural clinics, and the remainder was allocated to implement HIV/AIDS and anti-malarial programs, improve access to safe water and increase immunization. Similar results have been recorded in Malawi, Niger, Burkina Faso, and Mali. Luckily, there is now consensus that debt relief works, even if the current mechanism for it is not enough.

Calls for greater debt relief have grown as more attention has shifted to reaching the MDGs. Research from the United Nations and the World Bank has shown that great scale-ups in development assistance are needed over the next 10 years. Given the continuing financing gaps, it may be impossible to meet the MDGs without 100 percent multilateral debt cancellation for impoverished nations.

Given the pressures generated from all sides, even previously lukewarm donor countries are considering steps forward with 100 percent debt cancellation. For the first time ever at the 2004 Group of Seven (G-7) meeting, the U.S. and U.K. governments publicly committed themselves to the need for "up to 100 percent" multilateral debt cancellation for the poorest nations. Although they failed to reach an agreement, this is the closest countries have ever come to 100 percent debt cancellation.

If 2004 was an important year, 2005 promises to be even more so. After gaining much-needed attention, calls for 100 percent debt cancellation will be impossible to ignore at this year's G-7 meetings. As the United Kingdom takes over the presidency of the G-7, civil society groups are looking to Prime Minister Tony Blair and his Chancellor of the Exchequer Gordon Brown to honor their stated commitment to poor countries.

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against poverty even with more modest rates of growth. Conversely, a country that experiences fast growth, but maintains or increases inequality among its people, is unlikely to make great progress in reducing poverty and hunger.[42]

Growth needs to be rapid enough to improve the absolute condition of poor people *and* equitable enough to improve their relative position. To make sure economic growth benefits poor people, governments should direct resources disproportionately to the areas where poor people live and work.[43]

According to the U.N. Millennium Project Hunger Task Force, "The most important forces producing persistent hunger today tend to be national rather than global, and are best governed at the national level." But efforts to reduce hunger must also include people acting locally to solve problems. Because food systems are complex, the best chance of success will come through strong local motivation and capacity *combined with* an enabling national environment and strong, consistent funding.[44]

Debt Relief

Significant international attention has been refocused on the staggering levels of debt owed by developing countries in recent months. Despite the debt relief initiatives that resulted from the Jubilee Campaign, many poor countries are still facing "unsustainable" debt. Further reductions in debt are needed.

Servicing this debt often diverts money that could otherwise be spent on health, education or other development programs. In Ethiopia, for example, only one woman in six receives prenatal care, but debt repayments total four times as much as public spending on health.[45]

At the annual fall meetings of the World Bank and International Monetary Fund in October 2004, top U.S. and British officials said they were confident an agreement will be struck next year to dramatically expand debt relief for poor nations in sub-Saharan Africa, Latin America and Asia.[46] Gordon Brown, Great Britain's Chancellor of the Exchequer, has stressed that debt relief

Margaret Nea

Some people are more likely to be malnourished than others. The most vulnerable groups are pregnant and nursing women, infants, young children, and adolescent girls.

should be a major agenda item when heads of state meet in Scotland in July.

Creditor nations have proposed several alternatives. The United States has called for the cancellation of billions of dollars in poor-country debt owed to the World Bank. Cancellation would then be followed by switching future World Bank lending to the poorest countries from loans to grants to keep debt from building up again.

Critics worry that this could ultimately weaken the International Development Association, the part of the World Bank that gives loans on concessional terms to low-income countries. The British plan couples debt relief for all poor countries, including those that are not heavily indebted, with firm commitments by wealthy nations to ensure that the World Bank has the funds to keep providing aid.

Mobilizing the World Community Around the MDGs

At last anti-hunger advocates are working from a position of strength. Nearly every country in the world has committed itself to the MDGs. Developing countries have committed themselves to making serious efforts to improve governance at home, and industrialized countries have committed themselves to increasing development assistance.

The U.N. Millennium Project has been created to advise the United Nations and its members on how to fulfill the goals. Jeffrey Sachs, director of the U.N. Millennium Project, said that U.N. research shows that the MDGs can be achieved with "no new promises, just the fulfillment of those already long made."[47]

"There are proven techniques for hunger alleviation that, if implemented together . . . can dramatically reduce hunger within a short period of time," said Pedro Sanchez, co-chair of the U.N Millennium Development Hunger Task Force.[48] The Hunger Task Force is developing strategies to strengthen the international community's will to do what is needed.

Rural people face an array of obstacles as they work to provide for their families. They cannot solve their problems alone. Real leaders have to step up and drive the world community to focus on the plight of rural people whose needs are greatest. Otherwise the MDGs will be an unattainable dream.

***Michele Learner** of Bread for the World contributed to this chapter.*

CHAPTER 5

Strengthening Rural In the United States

Good rural development conserves the best in people—the resources they live from, the values that nourish them, and the institutions that sustain them. Good rural development should also shape change in ways that conserve the future of rural people and rural communities.

The rural decline in many parts of the nation—as demonstrated by declining populations, high poverty rates, low incomes and earnings—is the result of a failure of public policy at all levels to develop and implement a specific rural development agenda that corresponds with the evolving nature of rural economies.

Communities

In the late 1980s, Frank and Deborah Popper, Rutgers University geographers, suggested that the Great Plains will inevitably become depopulated and that the "wisest thing the federal government can do is start buying back great chunks of the Plains, replant the grass, reintroduce bison—and turn out the lights."[1] Thus was born the idea of the "Buffalo Commons" as a rural development model.

Naturally, the idea was ridiculed and denounced by public officials and residents of the area. Yet one wonders if the response—and responses to similar proposals relevant to other parts of the nation suffering similar demographic challenges—reflected embarrassment and concern over the lack of a better model for rural development.

The Poppers have spent most of the past two decades explaining the "Buffalo Commons" as a metaphor for the Great Plains and possibly for other areas of the nation experiencing depopulation and the lack of innovative and effective rural development.[2] Other reformers are now discussing the "Buffalo Commons" idea around rural development strategies that respect and accept the agricultural heritage found in many rural areas, and as a beginning to promote other means of developing the economies, communities and people of rural areas.

USDA, Charles Herron

Rural Development at a Crossroads: This Way or That

Any development model for rural communities must begin with a philosophy that the model will work toward sustaining these communities. Such a philosophy recognizes these communities are a significant portion of the nation in terms of culture, geography and population, and are worthy of policies that enhance the long-term well being of the people who live there.

Unfortunately, rural development policy in the United States has not worked for many rural communities. Rural development efforts and public policy have not been built on this ethic of conservation, as the data we have seen in this report clearly demonstrate.

The rural decline in many areas of the nation also suggests two types of rural economies. One economy is based on recreation, retirement, physical and climatological amenities; those rural areas are generally increasing in population and have higher incomes and lower poverty levels than other rural areas and many urban areas.

The other rural economy is based on a traditional economic structure of rural communities—agriculture, mining and fishing. These areas are declining in population and generally have higher poverty levels and lower income and earnings than any other part of the nation. These communities are based on a cyclical, low-income extraction economy in which fewer and fewer people are employed.

Yet these communities generally have strengths that provide the groundwork for revival—strong institutions, a strong sense of community and a strong entrepreneurial spirit. It is these strengths that should be the basis for a new rural development paradigm.

Even in some of the most distressed areas of this country, areas written off as basket cases, we can find potential for development. In the mountains of Central Appalachia, for example, one of the poorest areas of the country, as we saw in Chapter 3, the recreational and tourism industries already in place could be greatly expanded and used to leverage further economic development in the area.

Rick Reinhard

The only way to ensure that businesses are attracted to locate in rural communities is by cultivating the economic potential that exists there. Communities that survive and prosper will do so because they have harnessed their potential and have the ability to evolve in sustainable ways in the ever-changing economic landscape of rural America.

Another thing central Appalachia has going for it is the community development-focused Appalachian Regional Commission, which serves as a communications link among various federal, state and local government efforts to build the region's economy. It has already funded several economic development projects and coordinated the building and improvement of roads, and has the potential to make further significant contributions to Appalachia.

Rural people in the Black Belt face serious problems as we saw in Chapter 3, yet high-skill manufacturing jobs still exist in the region and their numbers could increase as manufacturing companies and universities form partnerships to upgrade their technology and become more competitive. With attention and resources focused on its schools and training programs, the southern Black Belt could become much better off economically and offer its children a brighter future.

The rural Great Plains also has great potential for economic development. Compared to other rural areas, Great Plains residents are well educated. The work ethic is strong, and those communities still intact are tight-knit. Despite declines in population, agriculturally based counties in the Great Plains witnessed job growth in nonfarm proprietorships equal to or exceeding metropolitan counties, both regionally and in every state.[3]

The Rio Grande Valley region has advantages too. The rapid growth of its economy shows that these advantages can be used effectively. The workforce is young, energetic and readily available. If investments are made in the region's promising business climate, the Rio Grande Valley could be an asset to the whole United States.

The needs of each of these distressed rural communities are distinctly different. The vast majority of people who lived there have neither been served well by traditional economic development strategies nor by rural development policy. For the

The Lake Apopka Health Project in Florida

Michael Williams

The Lake Apopka Health Project is helping to address serious health problem and raise awareness of a community of impoverished farmworkers in rural central Florida.

Lake Apopka is the most contaminated lake in Florida. Run-off from pesticides and fertilizers applied on nearby vegetable farms has been coursing into the lake for nearly 50 years. In 1998, the state government paid owners of these farms $90 million to shut down their operations—yet little was done for the more than 2,000 farmworkers who lost their jobs when the farms closed.

Not long after the farms closed, more than 1,000 fish-eating birds were found dead following flooding on the farms. The Lake Apopka Health Project seeks to document and call attention to the fact that the chemicals that killed the birds are the same ones to which farmworkers were exposed.

Right to Know

Many of the farmworkers who spent years of their lives working on these farms have suffered severe health problems as a result of prolonged exposure to the chemicals—including chronic skin disorders, reproductive abnormalities, birth defects, and autoimmune diseases such as lupus and rheumatoid arthritis.

Working with the Presbyterian Church and the Self Development of People (SDOP) ministry, the Farmworker Association of Florida (FWAF) are training farmworkers to document their health problems, improving access to health care appropriate to treatment of pesticide poisoning, and communicating the farmworkers' needs to the non-farmworker community and in effect giving them a voice.

SDOP has been successful in helping former Lake Apopka workers in nearby Zellwood, Apopka, Kissimmee and Lake Jem to secure needed health care at local clinics. The most difficult problem remains locating funds for farmworkers to attend vocational schools. When the farms closed, the state allocated only $1.5 million for retraining, re-employment and relocation assistance to the more than 2,000 workers who were laid off.

Jim Stipe

Being Heard

One of the outcomes of the project so far has been a growing sense of empowerment for the farmworkers. More are listening to the news and reading the newspapers concerning farmworker issues. Farmworkers are also participating—some for the first time—in talking to their legislators both at home and in Tallahassee, the state capital, learning about the legislative bills that affect them and their children. A good deal of time and energy has been spent pressing for a Right-to-Know pesticide bill. Farmworkers have made phone calls to legislative offices in Orlando, Apopka, and Altamonte Springs, and many are speaking out not only about the Pesticide Right-to-Know bill, but also the Student Tuition bill, the Anti-slavery bill, the Medically Needy bill and Kid Care.

In March 2004, more than 250 elected representatives of the FWAF and supporters gathered in Immokalee for the General Assembly of the association. Twenty of those members represented the Lake Apopka project from Central Florida. Lake Apopka leaders along with others were given special recognition.

Efforts continue to plan the next steps in the project in which the goal is to show people how important it is to develop their own leadership. Meetings will be held in the future for workers to speak out concerning training for jobs. Participation is expected to be strong.

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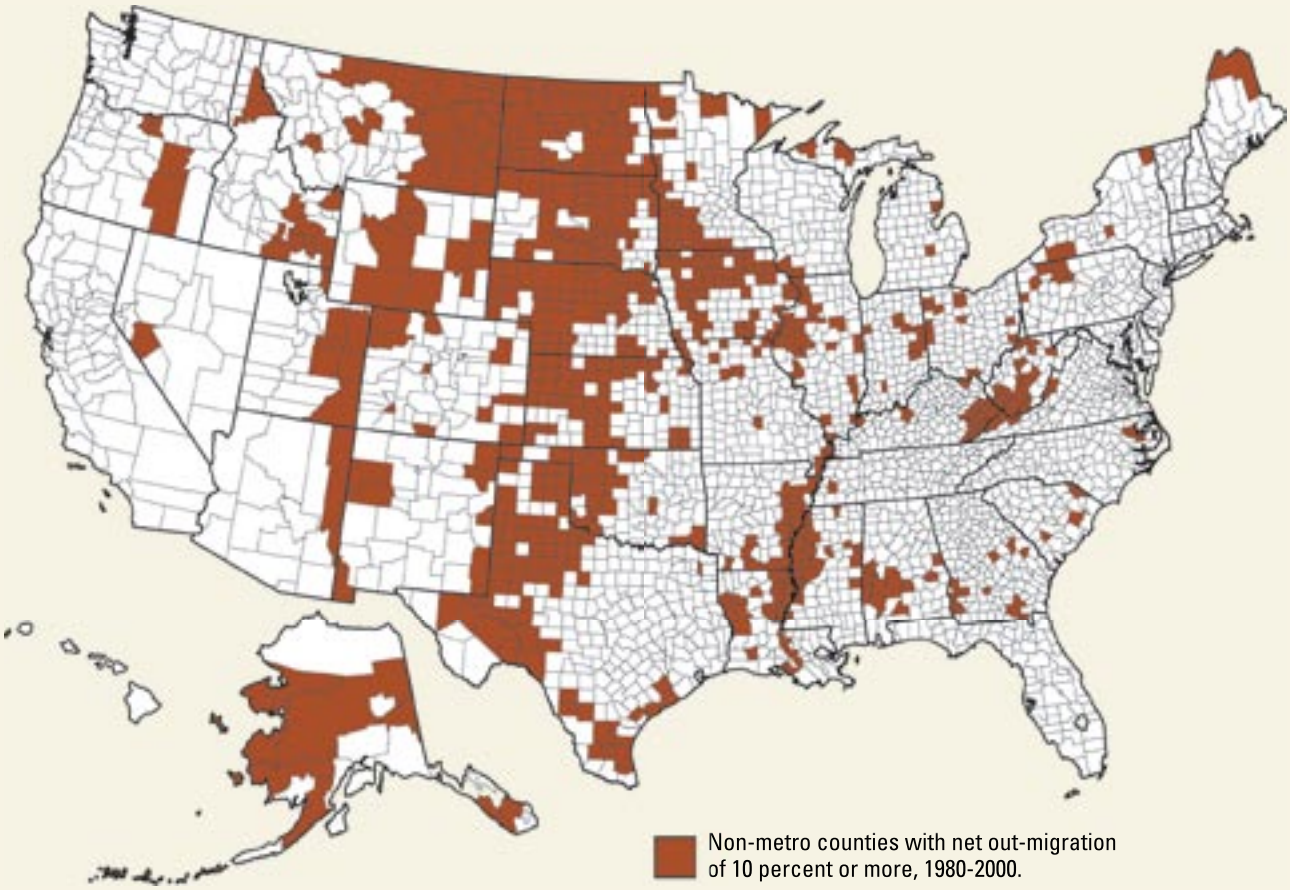
Figure 5.1 **Decimation of America's Heartland**



Source: Produced by Economic Research Service, USDA, using data from U.S. Census Bureau.

remainder of this chapter, we will discuss how public policy gaps can be filled and policy improved for the benefit of rural communities and rural people in all areas of the country.

Only concerted effort and cooperation between national government and local communities will result in rural development that allows poor people and poor communities to find a permanent way out of poverty. Healthy rural economies that provide jobs and pay a living wage form the foundation.

Trends in Rural Economic Development

Beginning with the Homestead Act in 1862, U.S. rural development policy has principally been about agriculture. The Homestead Act was used to populate the Midwest, the Great Plains and the nation's new frontiers, and homesteaders generally were agriculturalists (or hoped to be).

By 1935, the number of farms in the United States reached its peak with nearly 7 million, and the average size of a farm was about 180 acres. In 2002, there were 2.1 million farms, a 70 percent decrease since 1935, and the average farm was 441 acres, nearly a 150 percent increase.[4]

Expansion in farm size and technological innovation has meant explosive growth in agricultural production—but fewer people have remained on the land. For its part, the federal government encouraged this trend. Farm policy and resources have usually been aimed at promoting technological development and adoption, income support for farm families, and structural adjustment upwards in farm size—all policies that diminish agriculture as a source of employment in rural communities.

Despite the "save the family farm" rhetoric that comes up in any agricultural policy debate, federal farm policy has treated commercial agriculture as a source of increased food production efficiency, rather than as a source of rural economic development. Those remaining on the land will be more productive, more efficient, and wealthier—so the argument goes—and this wealth will spread to the surrounding rural communities.

But has it? It is clear that rural communities, especially those surrounded by commercial agriculture, are neither stronger nor wealthier. On the contrary, as discussed in Chapter 3, many are struggling to stay alive. Thus it should be clear that the viability of rural communities depends more on the

number of people than on the quantity of commodities they produce.

Commercial agriculture has ultimately weakened the rural communities that were founded to support it. The crops themselves—corn, cotton and soybeans among others—figure more prominently in the Farm Bill, the de facto means of administering rural policy, than those who grow them. Accordingly, federal money is allocated by what is grown rather than who grows it.

Some argue that the "Farm Bill" is not the appropriate place for non-farm rural development policy initiatives. However, it is the one major federal policy vehicle where rural issues gain center stage. Until that changes, issues concerning non-agricultural economic development should continue to be pushed through the Farm Bill.

Rural development policy is actually made at both the national and state level—and the two seem to have different priorities. While the federal role in agriculture has been increasing since the 1930s, the states have followed an interesting parallel, if divergent, policy track. In other words, states have accepted that the links between agriculture and economic development are not as strong as they once were and destined to become less important. If agriculture's declining importance is inevitable, agriculture cannot be a meaningful part of a state rural economic development strategy. Accordingly, states began to emphasize the non-farm aspects of rural development strategy.

USDA

Rural areas have barely begun to exploit the economic benefits of wildlife-related recreation. According to the U.S. Fish and Wildlife Service, wildlife recreational expenditures reached $108 billion in 2001.

As agriculture became less crucial to the economies of many rural communities, and as rural policymakers began to look for new ways to stimulate economic development, they followed the traditional route of economic development by using tax incentives to recruit outsiders in, generally manufacturers that export low-value products.[5]

These rural incentive programs took an urban-based model and simply reduced the qualifying thresholds for job creation and investment. There is one problem—they have not worked. Much large-scale manufacturing has moved from rural areas to low-income countries. Meanwhile strategies to recruit large retail employers have not proven a sustainable alternative. Retail and food service jobs often pay too little to keep a family out of poverty.

Another strategy in vogue for a while was to host a prison, exploiting the burgeoning number of America's incarcerated. But prisons have not been the job source they were hoped to be. Nor do they do much for the image of a community.

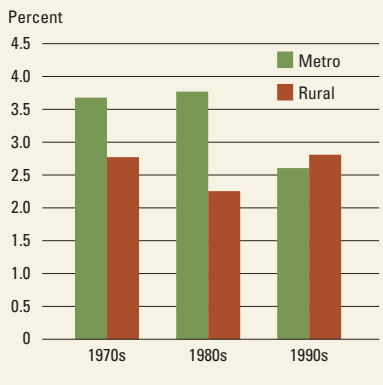
None of the strategies mentioned above have been viable alternatives for a sustainable rural development policy. In today's economy, something else is going to be necessary to succeed on a broad scale.

Critiquing the Current Policy Approach

The current federal approach to rural development can best be characterized as a patchwork and ill funded for the need. Based on 2004 direct appropriations to the USDA, rural development programs and expenses total $2.303 billion.[6] By contrast, USDA announced in October 2004 that farm program payments would total $12 billion for 2004.

In per capita terms, the USDA rural development budget provides about $55 per rural resident, based on 48.8 million rural residents. Farm programs provide $5,639 per farmer, based on 2,128,082 farms in the 2002 *Census of Agriculture* report, and the per capita figure rises to $9,801 when only those 1,224,246 farms with farming listed as the principal occupation are considered.

Figure 5.2 Rural and Metro Self-Employment Growth



Source: Department of Commerce

Getting Beyond the Numbers— To Where the Faces of Hunger Are

Dan Martin

Volunteering at a food bank in rural South Georgia opened my eyes to the faces of hunger.

As a member of Bread for the World for more than two years now, I know the facts and figures about hunger in America. I know the percentage of children who live in food insecure households and by how much that number has risen in recent years, and I can recite what groups of people are most at risk.

But on hot summer days, when temperatures soar into the upper 90s and you meet someone who has just walked several miles to pick up a sack of food to feed her family, sweat streaming down her face and staining her clothes, only to leave the building a few minutes later weighted down with a week's worth of canned goods—at that point, the numbers fade out of view and the raw power of one person's plight takes your breath away.

I had planned on volunteering one or two days a week, but soon found myself there Monday through Friday for three or four hours a day. I met young and old people, black, white and Hispanic, single people and families.

I met a mother of three who had the all-too-common experience of food stamps running out before the end of the month. She came in, children in tow, explaining that she was looking for work but it was so difficult to find childcare.

I met a couple that needed help because of an accident the man had suffered on the job and they were still waiting for his disability check to come through.

All had stories to tell, and I listened to them. Some were resentful of having to ask for help, some were embarrassed, and some just grateful that someone was willing to listen.

One of the most encouraging things about the experience for me was meeting the people who donated food and their time to make sure there was enough for those in need. I met a Girl Scout who planted a garden and donated all the vegetables to our food bank. I met an elderly farmer who regularly donated huge watermelons, squash, eggplant, onions, peaches or whatever else was in season. Local churches held canned food drives. A number of generous individuals brought in cans of soup or some badly needed cereal.

Despite efforts like these by people in the community, there remained many obstacles to overcome in getting people the food they needed. Transportation was the biggest problem. Because public transportation was lacking, many of the poorest in the community had a hard time even getting to the food bank. Some showed up on bicycles or in cars loaned by friends or relatives. Those who walked miles to get there were handed 10-15 pounds of food and then had to walk back home.

Some of the volunteers offered to drive people home after they had walked to the food bank. For all that showed up in spite of the obstacles, I can only imagine those who were too old, sick, or injured to make the trip. Previously, I lived in Washington, D.C., and for 14 months was without a car and had no problems—that would have been virtually impossible here in Bulloch County.

USDA, Ken Hammond

Food banks have had to fill the gap left since eligibility requirements for the Food Stamp Program were changed in 1996, leaving millions of poor people without a place to turn for food.

Yes, I'm glad for my experience at the food bank. I have a much greater understanding now of the need for urgency to end hunger in this country. I worked side by side with some people who truly care about the plight of the hungry, and it was refreshing to see real impact on the local level. Kindness and compassion go a long way, but more needs to be done at the federal level by our leaders in Washington, or else I fear we will never get ahead of this terrible problem.

***Dan Martin** is a member of Bread for the World and a former project assistant on the 2003 and 2004* Hunger Reports.

The comparative USDA budgets for rural development and farm programs lead to several conclusions about policymakers' priorities when it comes to rural America. For one thing, agriculture is clearly the core of USDA. While it is not fair to call rural development an after-thought to USDA, these numbers reflect it is not the agency's primary focus.

This imbalance needs to be adjusted. Federal funding for rural development initiatives must increase. One way to find the needed money in tight fiscal times would be to cap farm subsidy payments to the largest producers and divert the savings into programs to benefit rural communities and smaller farmers (See Chapter 6 for more on this).

Within the limited focus that is given to rural development, we are concerned about the government's approach. There are ways even the existing funds could be spent more effectively to strengthen rural communities. Below are issues that merit special attention.

Rural development is too narrowly defined

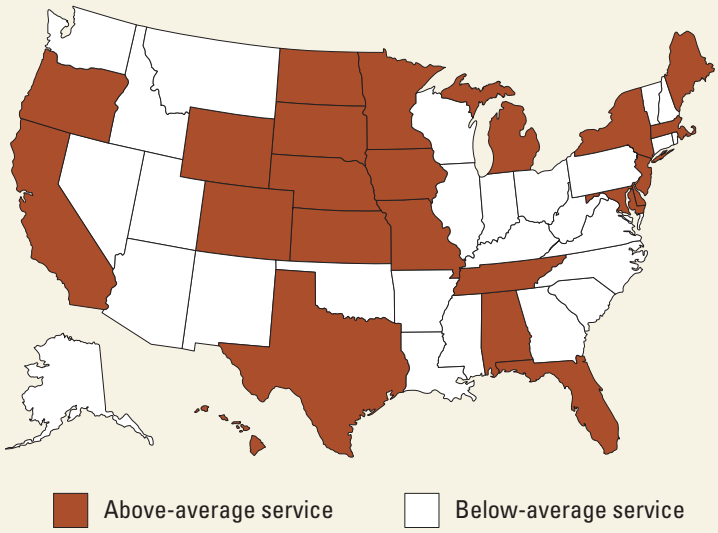
Rural development within USDA primarily involves resources to provide, maintain and upgrade rural community infrastructure (telecommunications and some community water projects) and rural housing, with a relatively minor amount for business development. While these are all important to rural communities, the federal government does not have a comprehensive focus on rural development.

Rural development is scattered among too many agencies and programs

A scatter-shot approach to rural development policy within the federal government causes a great deal of confusion and inefficiency among the thousands of rural communities served by these programs. Nearly every federal agency has a portion of their policy and operations devoted to rural development.

The Small Business Administration (SBA) provides resources for rural business development (as does USDA). The Department of Housing and Urban Development (HUD) has programs and resources devoted to rural housing (as does USDA) and funds the Community Development Grant Program for rural economic development and infrastructure needs (as administered by the states).

Figure 5.3 **Rural Areas that are Served by Public Transit**



Source: Community Transportation Association of America

Rural communities—especially very small ones—may have difficulty accessing these programs and resources since they often lack full-time grant writers and economic development professionals. As such, many communities often go lacking for valuable resources and programs.

Only concerted effort and cooperation between national government and local communities will result in rural development that allows poor people and poor communities to find a permanent way out of poverty.

The Department of Health and Human Services has rural health programs (as does USDA through funding to build, expand and upgrade rural medical facilities). The Department of Transportation funds rural highway and transportation initiatives. And the list goes on for nearly every federal agency.

Rural development is based on the wrong premise

Rural communities are not well served by the current environment in which competition dominates the current federal policy models for both rural development and traditional economic development. This is particularly true for small, agriculturally

Marty Lueders

Even with an expanded definition of "farm-related employment"—one which includes agricultural services, processing and marketing—agriculture accounts for only 23 percent of rural employment.

based communities that often lack the critical mass of people or infrastructure to legitimately compete for industry and business or the tools to be successful in a competitive federal granting process.

The competition model is essentially one of seeking to convince a business or industry or government agency that one community is better than another or more in need than another. Agriculturally based communities, despite their advantages and amenities, have a difficult time playing that game. Instead, rural development should be focused on a model of cooperation that recognizes there are numerous development strategies and only cooperation and collaboration can determine which are best for individual communities.

These communities are strengthened by their recognition of the need to cooperate and their ability to do so. Government should recognize and encourage this strength through public policy that recognizes cooperation rather than inter-community competition as the paradigm for rural development policy.

Federal policymakers should seriously consider reviewing and then changing programs that require small communities without professional grant writers and development directors to compete for funds, whereas larger communities receive automatic allocations. The Community Development Block Grant (CDBG) is one such example. Cities over 50,000 are provided automatic CDBG funding, while smaller municipalities have to compete with each other.

What Do Rural Communities Need?

Given the slow—but steady—disengagement between agriculture and rural communities, an important question becomes how to move rural development beyond agriculture for the vast majority of rural areas that are not agriculturally-dependent and the vast majority of rural people not directly involved in agriculture, particularly low-income rural people and families.

The federal government must play a pivotal role in providing structure that promotes economic development in rural regions. Rural policy should bolster the ability of rural communities to use the assets they have to create viable livelihoods and help rural people cope with the economic, demographic and social changes they face.

While agriculture is not disappearing in rural areas and remains a basic element of rural policy, the policy implications from the trends is inescapable. Agricultural policy is no longer equivalent to rural development policy. Moreover, traditional models of non-agricultural rural development seem to have outlived their usefulness for today's rural America. Policymakers and rural communities must begin to look beyond the usual suspects in designing rural economic development policy.

Entrepreneurship

One such alternative model to rural development is entrepreneurship, both on and off the farm. Entrepreneurship has been lifted up as an economic development model that will better serve rural people and rural places, and will potentially act as a balance for more traditional models of rural development, i.e. large-scale agriculture and industrial recruitment. Its strength lies in its reliance on the creativity and knowledge of those already in the community. Rural residents themselves are the agents of change rather than passive recipients.

A review of 2002 business and labor data show 16 percent of the nation's jobs are in businesses with five or fewer employees (commonly referred to as "microenterprises"). In predominantly rural states such as Maine, Wyoming, Vermont and Montana more than 20 percent of jobs are in such enterprises. Rural areas of Nebraska and South Dakota have 26 and 29 percent of employment respectively from such businesses.[7]

Even in agriculturally based communities facing population loss, non-farm self-employment and small business development have shown their strength. Counties that lost significant amounts of their population created non-farm self-employment jobs at a greater rate than did

Beyond Agriculture in Montana—What's Blowing with the Wind

The potential for using agriculture to develop alternative sources of fuel is tremendous—and remains largely untapped. Ethanol produced from corn has stolen most of the attention but research is underway on other "biomass" products like grasses, plant waste and fast growing trees that may prove even more cost effective and in the end more sustainable.

The Midwest and Plains states in particular offer vast stretches of renewable energy sources. With sufficient financial support from the government, these alternatives could one day help lessen U.S. dependence on foreign oil. What's more, these energy crops could provide economic development opportunities to rural America by attracting processing plants and research and development centers.

But perhaps even greater potential may come from another abundant energy source—wind. Again, the Midwest and Plains states could well generate enough cheap electricity with wind power to light the nation, or certainly large regions of the nation.

Right now in Montana there are several projects trying to capitalize on the state's interest in scoring big economic wins off the powerful winds blowing through its high prairie. By far, the biggest of these projects, and furthest along, is Bob Quinn's wind farm in Judith Gap.

"In Montana, a lot of people figure if the wind stops blowing for long the buildings would fall down," joked Quinn, a local boy who grew up and still lives in Big Sandy—and yet his point is quite serious. Montana is windy. "Raging rivers of wind run through this state" is how Quinn likes to describe it.

Quinn and his partners signed a contract in January to sell NorthWestern Energy up to 150 megawatts of power, and this is expected to yield a $150 million rural development project, including the construction of as many as 100 turbines spinning wind into dollars.

"Throughout Montana's history, people have been coming in, extracting what they want from the state, and then leaving things in just a terrible mess. The gold rush made all kinds of mess in the state—and then just picked up and left. Same thing with the oil booms. Boom and bust, boom and bust—that's been the history of the west.

"With wind we finally have an opportunity to break that cycle, because there's no reason for this to go bust. I expect the wind to blow through Montana until all is said and done."

For Quinn, an organic farmer, it was the cleanness of wind power—no greenhouse emission, no smoke and no pollutants—that motivated him as much as anything else. Quinn also sees renewable energy sources like this as a rich alternative to Montana's declining agricultural sector. "For me, sustainable agriculture and renewable energy go hand in hand."

With any new industry, progress includes a few steps backwards along the way, but Quinn has not been deterred. Realizing the potential of wind energy still has a long way to come, but he remains confident that others throughout the country will also see the promise of wind power.

Regardless of what areas of the country support the greatest opportunities, placement of "wind farms," or "parks" as they are sometimes called, need plenty of space and that's why rural areas will do well as the industry develops. There will be jobs to construct and maintain the turbines and transmission lines, plus income gained from leasing the land to investors.

"To the people reading this," said Quinn, "dreaming of ways to bring new opportunities to their communities, I say to them, don't get discouraged with roadblocks, because that's life and you just have them all the time. Keep your eye on the goal. That to me was all the motivation I needed."

Celia Escudero-Espadas

Unlike extraction industries that fueled the boom and bust cycles of earlier times, Montana may have found a more permanent economic resource in wind power—one of the most promising and cost-effective renewable energy technologies available today.

Rick Reinhard

counties that experienced rapid population growth. Nearly 60 percent of all jobs created in Great Plains rural counties during the 1990s are attributable to non-farm self-employment.[8]

Some of this job growth in non-farm self-employment is, in a sense, forced employment. Many of these enterprises likely began as off-farm enterprises to supplement declining farm or ranch incomes, or as a way to remain in a rural community when other economic opportunities became nonviable. Whatever the reason, these data show a remarkable entrepreneurial character among the people of agriculturally based communities.

Because of the failures of traditional economic development in many rural areas, policymakers and rural people now realize that entrepreneurs can generate new economic value for their communities. Small businesses and self-employment are now viewed as playing a crucial role in the economies of rural communities.[9] According to the Center for the Study of Rural America, "entrepreneurs add jobs, raise incomes, create wealth, improve the quality of life of citizens and help rural communities operate in the global economy."[10] State and federal policy should support this trend.

Marty Lueders

Entrepreneurs benefit rural communities by creating jobs, wealth and growth. Large or small, they add to a community's economic prosperity and generally improve the quality of life.

New Faces in Rural Entrepreneurship

An entrepreneurial spirit manifests and bears fruit in myriad ways. Creative solutions to local problems spring up out of what would seem like some of the most infertile soil. For lack of financial resources, many brilliant ideas have never materialized, and with this the chance to improve many people's lives have vanished like dreams.

Persistently poor communities often do not possess the resources internally to break out of poverty on their own. Money from outside is needed to break the cycle of low-skills/low-investment that plagues so many rural areas, especially the most impoverished. A combination of public and private money, allocated according to local priorities and realities, is central to the future success of rural communities.

The West Holmes Community Development Organization in West Holmes County, Mississippi, one of the poorest counties in the country, demonstrates how these two elements can translate into successful development. Using private grant funding and USDA funding, two men from a poor rural community used their unique knowledge of its realities and possibilities to make a real difference.

Calvin Head and Tom Collins returned to their hometown of Mileston after leaving the area to attend college. According to Head, "I knew I had to take what skills I had learned and implement and incorporate some of what I had learned into the region."

Driven by need to do something to keep young people from leaving, making sure they were assets to the community instead of liabilities, Head and Collins began to do some market research. "We knew there were no large manufacturing plants or any other type of industry. Yet at the same time we knew that we had available to us land, we had the expertise of farming, we had outside assistance from cooperative extension services from universities."

In 1996, after uncovering an untapped market for fresh fruits and vegetables, they began a small farming operation to supply fresh produce to people within the community and grocery stores farther away. Demand was so strong after the first year, they obtained a grant from the Kellogg Foundation to help grow and develop the business.

Today, the West Holmes Community Development Organization, in addition to its farming business, has opened a community store, restaurant, farmers' market, day care center and office facility, which serves as an information center for the whole community. These businesses employ scores of local youth and have created more than twenty permanent jobs in a region where few job opportunities exist.

In Head's words, "What is so significant and important about creating these businesses is that all of it was done from the grassroots level. . . . We had to train each of [the employees], people who didn't have jobs, didn't have very many skills, were limited in terms of their transportation. They are now people who are doing the day-to-day operations of all of these businesses."[11]

Building Blocks to a Sustainable Rural Development Model

If we look at small business and entrepreneurship as the future of rural economic development, then the SBA can play a major role in reviving rural communities. Similarly, federal programs like the Small Business Investment Company and the New Markets Venture Capital programs are already addressing business development in rural areas through partnerships between the USDA and SBA. Programs like this need to be strengthened and tailored not only to the needs of rural communities but to the different types of rural communities there are across rural America.

In the version of the 2002 Farm Bill adopted by the U.S. Senate,[12] a provision creating a new rural microenterprise program was included. Unfortunately, this provision was dropped in the House-Senate Conference Committee; however, it did represent a significant step in making the Farm Bill more amenable to non-farm rural economic development. The small progress made in the 2002 Farm Bill makes the debate on the next Farm Bill (2007) crucial for all of rural America.

This provision would have created and funded a program within USDA specifically for the development and expansion of small businesses within rural communities. It would have provided capital for business development and resources for technical assistance to such businesses. It also recognized that rural small business development is vital to the sustainable development of rural communities and that rural development is no longer synonymous with agriculture.

Through tax policy, the federal government can make it possible for businesses to get off the ground and succeed in a rural environment. The New Homestead Act of 2003, based on the 19th century Homestead Act, provides a comprehensive policy response for rural communities facing significant depopulation and out-migration,

Marty Lueders

and is primarily a collection of tax provisions that provide incentives and rewards for those who locate in or start businesses in distressed rural counties. The New Homestead Act recognizes the social and economic challenges facing those rural communities and creatively links the entrepreneurial character of the region with policy initiatives that would provide greater investment into those communities and their economies. Most importantly, it recognizes the worth of these communities and the need for a substantial federal response.[13]

An expanded version of the New Homestead Act will be reintroduced in the next Congress with a goal of getting 20 Senate cosponsors. Though it is unlikely the whole bill will be passed as is, there is a good chance that some provisions will be drawn from it and added to other larger legislation, like tax bills and education bills. One portion of it—microenterprise tax credits—was included in the Senate JOBS tax bill earlier this year, but dropped in conference committee.

The Rural Broadband Access Loan and Guarantee program is another important means by which the federal government can "level the playing field" to attract business investment. The program's goal is to ensure that rural consumers enjoy the same quality and range of telecommunications services that are available in urban and suburban communities. While this is a good start and will benefit the average rural household who can afford Internet access, stronger support will be needed for businesses whose broadband needs far exceed those of the average consumer.

Increased broadband access in rural communities also offers real promise to distance learning programs in rural communities where state universities and even community colleges are too far away for people to take advantage of these. States need to capitalize on this investment the federal government is making in the infrastructure of rural communities. To stay competitive in the global marketplace, as well as here at home, states must seize these opportunities and invest in their human capital.

Case Study in Strengthening Rural Communities:

Land-Grant Universities Have a Role to Play in Their Communities

At land-grant universities around the United States, there is much pride and satisfaction in being able to put state-funded research dollars back into the communities where these universities reside.

At the University of Maryland, for example, the College of Agriculture and Natural Resources has created a program called the Small Farm Institute (SFI), targeting socially disadvantaged and limited resource farmers. Started in 2000, SFI was fueled in part by two major changes in the Maryland farm economy.

For generations tobacco had been a rich crop to Maryland farmers, but a decline in tobacco production has created the need for farmers to develop alternatives. Secondly, there has been an extraordinary rise in Maryland—as well as throughout the mid-Atlantic region of the United States—in ethnic populations. These burgeoning ethnic populations have led to a growing market for ethnic products including African, Asian and Hispanic fruits, vegetables and specialty herbs. The university has provided the local farmers with training in production, pest management and marketing of these specialty products.

"Culturally based food habits are often one of the last traditions people change when they move to a new country," explained Dr. Stephan Tubene, SFI director in the university's College of Agriculture and Natural Resources.

"We invited the area farmers to the university to see what our researchers were doing. They knew they had to find an alternative to tobacco, so their enthusiasm to learn from us was high. They went back to their farms and tried out what we showed them. Many are now selling these products at farmers' markets and supermarkets around the area."

Partnerships like this between local farmers and researchers at land-grant universities are commonplace. Similar programs exist at dozens of universities and state colleges from Maine to California.

Land-grant universities came about in part because prior to the 1800s there were no public universities in America. In 1862, President Lincoln signed into law the Morrill Act, which gave 10,000 acres of federal government land to each state to sell and use the proceeds to create a public university to teach agriculture and the mechanic (engineering) arts.

Part of what has evolved out of the law is that these universities are playing a broader role in their communities than just educating students in the classroom. More should be done to expand this relationship—not only because enrollments are drawn mostly from the communities where these universities reside, but because as members of a community the universities have just as much responsibility as any other large institution with the resources to bring to bear on impacting the quality of life there.

Cooperation: A Key to Revitalizing Rural America

Jill Long Thompson

In the song "Little Man," country music star Alan Jackson laments the plight of rural America and its leaders when he sings "the people . . . seldom think 'bout the little man that built this town before the big money shut 'im down and killed the little man."

For those of us who live in, believe in and love our rural communities, these lyrics are more than a bit disconcerting. They ring a great deal of truth, as rural communities and small towns face unprecedented challenges to be relevant and prosperous in the economy of today and tomorrow. As goes the little man, so goes his community.

The facts are quite bothersome. Not only is the rural poverty rate higher than the metropolitan poverty rate, 340 of America's 386 persistent-poverty counties are rural. While rural areas experienced a net gain of 18,000 manufacturing jobs in the 1990's, they lost 573,000 such jobs between 2000 and 2003 and are losing them at a faster rate than urban areas.

Finding workable solutions is politically challenging, to say the least. In politics, money is a powerful tool. But, by its very nature, poverty has an extremely short supply of money. Additionally, as jobs leave rural communities, populations shift, leaving fewer and fewer policy makers who understand or have a commitment to these communities.

The solutions must begin within the communities themselves and must include proactive and strategic cooperation and coalition building. Cooperation within a rural community, across rural communities, and between rural and urban communities is essential.

For too long, rural communities have allowed themselves to be treated as an afterthought and have been content to merely fight for the leftovers of programs developed by urban policy makers to address urban needs. Rural America must instead identify the roles it will play in tomorrow's economy and work alongside urban neighbors to develop policy that will accomplish its goals.

A cooperative business model will be important to the rural economy because it allows individuals to join together and pool resources to create power, cost efficiency, and economies of scale. This can be especially valuable in more sparsely populated communities where capital is not as readily accessible.

Marty Lueders

A cooperative business model will be important to the rural economy because it allows individuals to join together and pool resources to create power, cost efficiency, and economies of scale. Farmer-owned cooperatives have long been a fixture in agricultural communities across the country.

While cooperatives have changed over the years, their significance has continued to grow. In the United States, more than 100 million people are members of cooperatives, including credit unions. Farmer-owned cooperatives have long been a fixture in agricultural communities across the country. Supply co-ops have contributed to lower input costs and elevator co-ops have improved the profitability of member grain producers.

A number of small towns and rural communities are beginning to show the payoff of cooperatives to address their local challenges. Two such Minnesota communities, Vesta and Echo, were recently featured in Minnesota Public Radio for their cooperative development.

When Echo lost its grocery store last year, a group of women in the town raised the money to build a new store, which they operate as a not-for-profit cooperative selling a limited inventory of staple items. Since the store has opened, they have received several inquiries about the potential for other new businesses.

In Vesta, when the only café in town closed, the residents pooled their resources to build a cooperative restaurant that in many ways is the focal point of the small community. Without the restaurant, people would have to drive 20 miles to another town to visit a café. Keeping business local enhances economic opportunity for other business, according to the local bank's loan officer. These two examples demonstrate how the cooperative model can be applied to address new problems facing rural communities.

When operating on a large scale, cooperation is important; on a small scale in sparsely populated communities, it is absolutely critical. The cooperative model of business holds great potential for rural communities across America.

***Jill Long Thompson** is the CEO and a senior fellow at the National Center for Food and Agricultural Policy. She is a former Undersecretary for Rural Development in the USDA and has also served in the U.S. Congress representing Indiana's Fourth Congressional District.*

Empowering Partnerships

The federal government has a strong role to play in partnering with state and local governments; indeed, it must be an engaged partner by enabling community and economic development projects to succeed; but the federal government does not need to micromanage rural development at the local level. One thing we have seen throughout this report is that major social transitions are underway in rural areas of the United States, and what we call rural America today is characterized as much by diversity as anything. Hardly does this mean the federal government has no role to play. On the contrary, federal (and state) policy will probably always be the catalyst for change at the local level.

At the end of the day, though, each community knows best what it needs to succeed. The USDA's Community Empowerment program of Empowerment Zones and Enterprise Communities (EZ/EC) provides a good model for a federal rural policy that supports local solutions. It addresses a comprehensive range of community problems and issues including many that have traditionally received little federal assistance, reflecting the reality that rural problems do not come in one-size-fits-all packages but can vary widely from one place to another.

East Prairie, Missouri (pop. 4,300), was designated an Enterprise Community in 1994 and given a 10-year grant by USDA. Through an extensive consultation process, including town meetings and surveys, the city administration put together a strategic plan to address the needs of residents. Housing, health care, education and jobs were central elements. Between 1994 and 2003, East Prairie received more than $16 million in additional funding for projects like a new nutrition center for senior citizens and an emergency storm warning siren system.[14] The city leaders have also found the Enterprise Community designation useful in leveraging other financing.

Since Congress created the empowerment program in 1993, there have been just 57 rural EZ/ECs, far too few.[15] East Prarie is the only one representing Missouri. Because of its success—East Prarie has met nearly every one of its benchmarks—it could provide useful lessons learned to neighboring communities.

Figure 5.4 Good Reasons to Scale-up Empowerment Zones and Enterprise Communities

There are many reasons we feel the EZ/EC program is good for rural America and why the program should be scaled-up. Here are six:

- It represents a **long-term** partnership between the federal government and rural communities—10 years in most cases—so that communities have enough time to implement a series of interconnected and mutually supporting projects and build the capacity to sustain their development beyond the term of the partnership.
- It is based on a comprehensive **strategic** plan that identifies and prioritizes the principal economic and social issues within the community.
- It places great emphasis on **partnerships** with federal and state agencies, local and tribal governments, private businesses, foundations and non-profits that engage the resources and commitments of these organizations to carry out portions of the community's strategic plan.
- It insists on broad-based citizen **participation** in planning, implementation and evaluation of the community's efforts to carry out its plan.
- It provides for **local self-determination** in setting priorities, and puts the federal government in the role of assisting communities with the priorities they have chosen and maintaining the integrity of the program's local implementation.
- It encourages **area-wide** approaches to local problem solving so that neighboring communities can benefit by pooling their limited resources of time, talent and funding.

Regional Development

Examples abound of partnerships created either through networks, cooperatives or clusters that extend across wide swaths of the country—the Dakota Growers Pasta Company, for instance, owned by more than a thousand wheat producers in North Dakota, Montana and Minnesota, has not only provided these growers with higher prices for their wheat but has created 300 new jobs in servicing the pasta company.[16] Solutions like this also prove that innovation is alive and well in rural America.

Building regional partnerships will be critical to the survival of rural communities. Regions will have to find their own competitive niche, and this may be product agriculture, advanced manufacturing or professional services—in whichever case, success will depend heavily on technology and knowledge, meaning access to higher education is critical.

The Appalachian Regional Commission, mentioned above, and the recently established Delta Regional Authority (DRA) are two other examples. The DRA is a federal-state partnership that includes 240-counties/parishes in eight Mississippi Delta states. Led by a federal co-chairman and the governors of each participating state, the DRA is designed to remedy severe and chronic economic distress by stimulating economic development. The DRA's mandate is to help economically distressed communities to leverage other federal and state programs that are focused on basic infrastructure development and transportation improvements, business development and job training services. At least 75 percent of funds must be invested in distressed counties and parishes and pockets of poverty.[17]

An example of a state agency dealing in a more comprehensive way with rural economic development issues is the Texas Office of Rural Community Affairs (ORCA). Created in 2001, ORCA is responsible for developing policy addressing economic and quality of life issues for Texas' rural communities. ORCA also administers

Rick Reinhard

A variety of efforts to forge new regional development strategies are underway in America today. But what exactly is a region? Like rural communities themselves, the answer varies but depends on the objectives of regional partners and how far or wide their mutual interest extends.

rural health care programs and the state CDBG for non-entitlement communities (municipalities under 50,000 people and counties under 200,000). While other state agencies still maintain jurisdiction over programs affecting rural communities, ORCA is an example of a coordinated agency focused on rural development.

Rural communities must beware, however, that a regional model of development has the potential to make their interests subservient to larger communities in the region or district. Therefore, policies or vehicles that allow rural communities to "cluster" together for development and planning activities that advocate and serve primarily the interests of rural communities would be more welcome for the long-term development of rural areas.

Safety Nets in Times of Transition and Beyond

Another role for a coordinated federal effort must be to ensure that support services are available to those struggling during economic and social transitions. Here again, decisions made below the federal level on a day-to-day basis may be more immediate to ensuring programs are implemented effectively. By training community leaders and creating opportunities for networking and knowledge sharing, the federal government has a critical role in helping distressed communities.

The Federal Emergency Management Agency (FEMA) is an excellent model for states and local policymakers to learn from. Like the federal government, most state rural development initiatives are scattered throughout state agencies—departments or commissions of agriculture, economic development, education, small business and commerce, health and human services. States would do well to move towards adopting "one-stop" models for providing services, and FEMA is an important example because it incorporates a single-point-of-contact approach. Temporary service centers connect people affected by natural disaster and other emergencies to a range of federal and state services.

Several examples exist where the FEMA model has been incorporated at the state level. In Virginia, for instance, Coordinated Economic Relief Centers provided dislocated workers and other low-income community members with a broad range of programs and services in one location including

access to food assistance, education services and heath services.[18] The convenience of one-stop service centers is especially important in remote areas where obtaining services is exacerbated by long distances and lack of public transportation. Clustering of services in one centralized location also strengthens relationships between different groups of providers.

One of the biggest health care issues in rural America is the short supply of physicians, nurses and other medical personnel. Some rural areas no longer have enough patients to support a medical practice or a provider, let alone a hospital or clinic. Telemedicine, the use of telecommunications technology to deliver health care services, is growing rapidly with the development of broadband technology and another reason the federal government should step up support for increased access.

Rural America must identify the roles it will play in tomorrow's economy and work alongside urban neighbors to develop policy that will accomplish its goals.

Georgia has been a leader in dealing with the challenges of delivering quality health care to its rural communities using telemedicine, and has allocated substantial funding to establish the formation of regional networks. The effort began by focusing on single-county health networks, but spread to 19 regional networks covering nearly two-thirds of Georgia's rural counties. The goal was to build new local and regional partnerships among health care providers and community leaders. The state served as the catalyst but the partnerships were built at the local level.[19]

While distances cannot be shortened, there are ways to make their effect less keenly felt. The Internet is an effective way of doing this, but is more helpful a tool in addressing some problems than others. Food deserts, for instance, merit more traditional and perhaps resource-intensive interventions. So far this problem has barely begun to be addressed on a wide scale. A market-oriented solution is unlikely for the short-term, as industry reaction to conditions in rural areas is what presaged "desertification" to begin with. Some form of public assistance is necessary through the short term, whether that be improved access to public transportation or increased funding for direct food assistance or some combination of approaches.

In the long run, the only way to ensure that businesses are attracted to locate in these communities is by cultivating the economic potential that exists there. Communities that survive and prosper will do so because they have harnessed their potential and have the ability to evolve in sustainable ways in the ever-changing economic landscape of rural America.

***Jon M. Bailey** of the Center for Rural Affairs contributed to this chapter.*

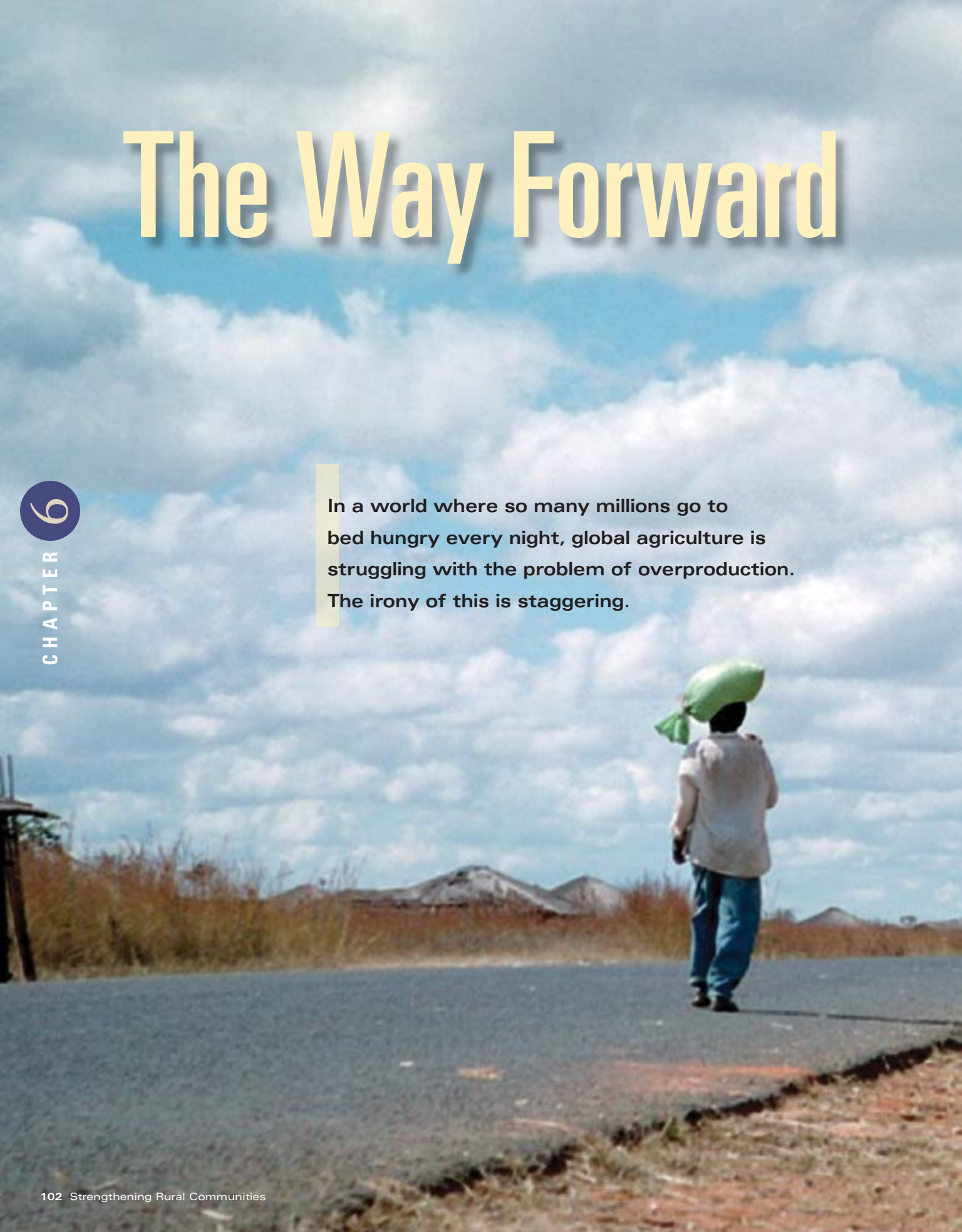
Jim Stipe

With the number of distance learning programs expanding every year, the Internet can serve as an important way to shrink the distances between rural residents and wider educational opportunities.

CHAPTER 6

The Way Forward

In a world where so many millions go to bed hungry every night, global agriculture is struggling with the problem of overproduction. The irony of this is staggering.



"The world in aggregate is getting wealthier and producing more than enough food," says Hartwig de Haen, assistant director general in the economic and social department of the FAO. "The problem is the access of people to jobs, to resources, to land and to money to buy food."[1]

This report has raised the question of the future of rural communities in the United States and around the world, and argues that the fix must include policies that address the struggles of millions of hungry and poor people who live in the rural areas where agriculture is a mainstay.

Attention to policies needed for rural development in the United States and abroad brings clarity to the way forward.

Rebecca Vander Meulen

Previous chapters of this report demonstrate clearly that greater investment in rural development is needed throughout the world, including in the United States. Chapters 4 and 5 set out recommendations for policies to address these challenges. The question that follows is—how can those recommendations be enacted?

In the United States, pressure is mounting on the current system of agricultural subsidies and for farm policy reform. Two landmark decisions by the WTO in 2004 set the stage for changes in the subsidy schemes of developed countries. In September, Brazil won the first step in its challenge against U.S. cotton subsidies. The Brazilians charged that U.S. subsidy payments to its cotton producers encourage overproduction and ultimately lower the world price for cotton, harming cotton farmers throughout the rest of the world. The panel appointed in the WTO's dispute settlement process agreed and awarded Brazil the right to retaliate.

A month earlier in August, the WTO ruled against the EU in a dispute brought by Australia, Brazil and Thailand over sugar subsidies. The arguments and deciding principles were essentially the same as the cotton case.

These rulings are significant. The cotton and sugar cases could represent only the beginning of a long line of other commodities that could face similar actions. But more to the point, these cases signal a seismic shift in global agriculture. Brazil, for example, over the past decade has dramatically increased its agricultural exports and its position in the global economy.

"In just a few years, Brazil has become a major producer of soybeans, corn and pork, challenging America's dominance in the global food trade," notes the *New York Times*.[2] Agriculture contributes $150 billion a year to Brazil's economy and represents 40 percent of its exports.

Brazil is not alone in its embrace of export agriculture. Other emerging market countries like India, China and South Africa are expanding their agricultural production and increasing their food exports, causing major reverberations throughout the global economy. In 2005, for the first time in more than 50 years, the United States will import more food than it exports. This is a remarkable turn of events for a country that had a $13.6 billion trade surplus in agriculture just four years ago.[3]

The WTO rulings and the huge changes in global agriculture have made the case for subsidies in the United States, Europe and Japan less defensible. With both the U.S. trade deficit and the federal budget deficit at record levels, pressure is building to reform the current system of agricultural subsidies.

Moreover, 2003 and 2004 were banner years for big U.S. farmers, who saw their incomes rise faster than the average American. These same big farmers are receiving the bulk of U.S. agricultural subsidies. The largest 25 percent of farms receive 89 percent of all support.[4]

With these developments come important opportunities to push for significant change in U.S. rural policy. Today, U.S. farm policy and U.S. rural policy are almost indistinguishable and are funded from the same pot of money: the Farm Bill. With the federal budget deficit large and growing, there is little chance the Farm Bill will get significantly more funding. Policymakers must find a way to use the same amount of money to meet the needs of American agriculture and rural development. If money is going to become available for rural development, it will need to come from a trade-off within the Farm Bill itself. Shifting money from subsidies to rural development makes sense.

But such reform is easier said than done. This chapter will discuss the politics of making the shift in resources from trade-distorting subsidies to U.S. rural development and development assistance to poor countries. The time is right to begin a new discussion of reform to improve the lives of rural people the world over.

What's Wrong with U.S. Farm Policy

The 2002 Farm Bill authorized about $180 billion over 10 years. Of that, some $11.5 billion in subsidies went to agricultural commodity producers in 2003.[5] Though the 2002 Farm Bill included sections on

Celia Escudero-Espadas

Rural poor people, like other people, need access to competitive markets for their produce, inputs, technology, consumer goods, credit and labor.

conservation, nutrition and rural development, commodity program payments comprised the lion's share of the subsidies paid out.

U.S. farm policy is focused on maximizing overseas markets and providing an income floor primarily for large commodity producers. Agricultural trade policy has sought to open markets abroad while protecting U.S. producers, and current wrangling within the WTO is largely a by-product of this policy.

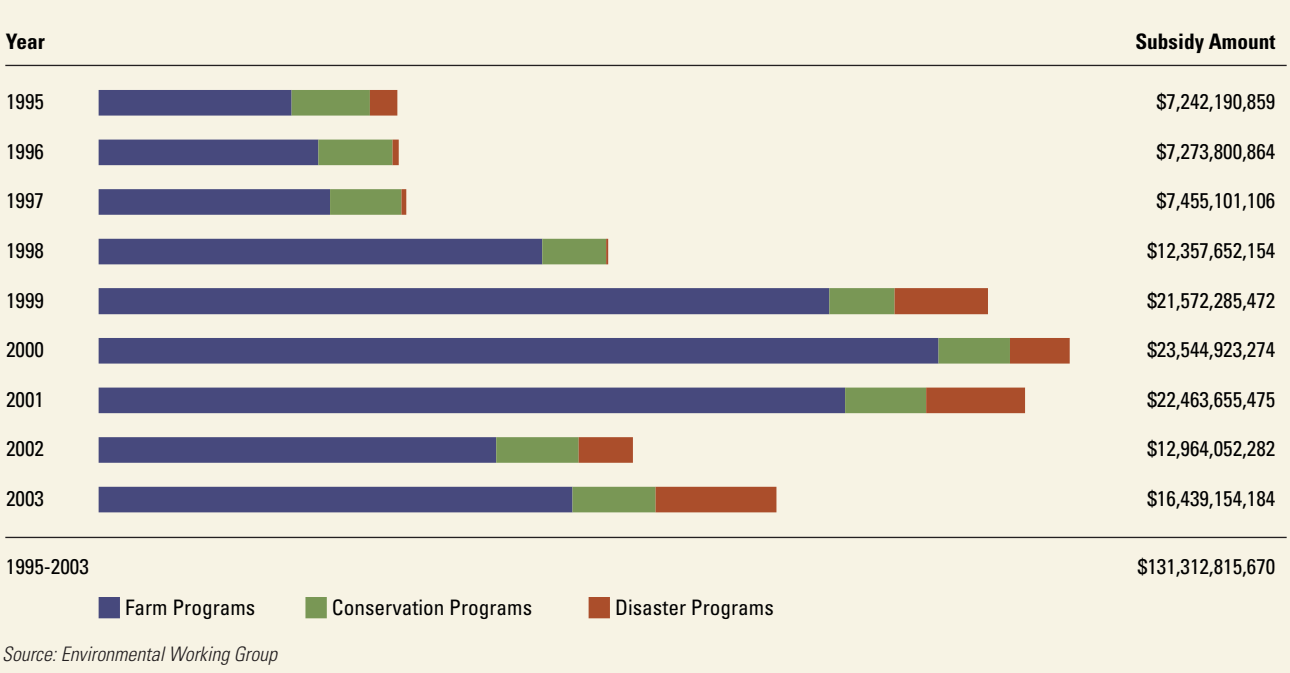
Meeting the challenges of global competition is the driver behind U.S. farm and, for better or worse, rural policy, but the policies now in place to give U.S. agriculture more of an edge in global markets are hurting rural communities here in the United States. Moreover, these policies are among the obstacles to development in poor countries, where 70 percent of the population rely on agriculture for their livelihoods, because they hurt the ability of developing countries to compete in the global marketplace.

The United States is hardly the only—or for that matter the worst—culprit. The EU and Japan pay out even more in

Margaret Nea

Approximately 60 percent of U.S. farmers receive no subsidies at all, and data compiled by the USDA suggests that farm households most in need are not receiving any subsidies.

Figure 6.1 **USDA Subsidy Payments by Year**



Source: Environmental Working Group

Alex S. Maclean/Peter Arnold, Inc.

Commodity agriculture in the United States is increasingly becoming a high-volume gambit with the choice being quite simple: get bigger or get out.

subsidies to their producers. Such protection on the part of rich countries perpetuates a system that ultimately hurts nearly all people who live and work in rural areas of the developing world.

In Burkina Faso, for example, one of the lowest cost cotton producing nations in the world, whole villages have been devastated by the subsidies paid to the 25,000 U.S. cotton farmers. Subsidies paid to U.S. cotton farmers are greater than the entire GDP for Burkina Faso and three times more than the entire USAID budget for Africa's 500 million people.[6] When U.S. cotton is dumped on the world market at prices that bear no relation to the costs of production, there is no way for the smallholder farmers of Burkina Faso to compete—and so whole communities face hunger.

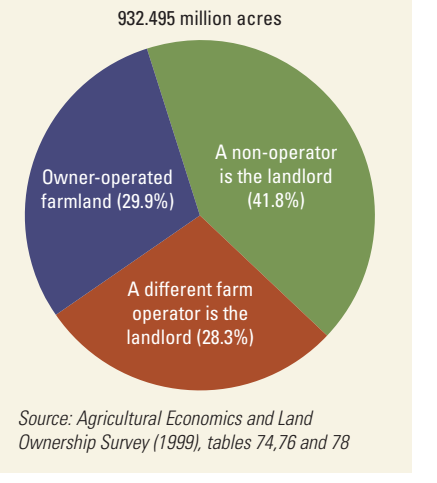
In the United States, the beneficiaries of the current system of subsidies have been mostly large-scale growers of commodity crops like corn, cotton, soybeans and wheat. Seventy percent of subsidies go to 10 percent of the largest growers.[7] Approximately 60 percent of U.S. farmers receive no subsidies at all,[8] and data compiled by the USDA suggests that farm households most in need are not receiving any subsidies.[9]

Many U.S. agricultural and commodity organizations and policymakers have lifted up agricultural trade as a cure to both the ills of U.S. agriculture and rural communities. Agricultural trade is not the economic savior of U.S. rural communities precisely for the reasons discussed throughout this report. Finding new export markets, though good for large commodity producers and trading companies, does not benefit non-agricultural rural America anywhere near as much as targeted investment in a sustainable rural development policy as outlined in Chapter 5.

While farming remains an important source of jobs and income in many rural areas, it is no longer the primary means of rural livelihood. Fewer than 10 percent of rural residents live on a farm or ranch.[10] Since the early 1980s, the percentage of the rural workforce employed in farming has dropped from 14.4 percent to 7.6 percent.[11] In most U.S. farm households, the main occupation is something other than farming.[12] In fact, most rural communities in the United States are substantially service economies, fortified to some extent by manufacturing.[13] Clearly, farm payments and commodity exports are doing little, if anything, for these communities.

Rhetoric often justifies Farm Bill expenditures with the argument that impoverished farmers are in need of governmental support to remain in business. Though

Figure 6.2 Farmland Tenure



Source: Agricultural Economics and Land Ownership Survey (1999), tables 74,76 and 78

this view seems to be pervasive in and out of Washington, it is hard to argue that subsidies are helping to save the family farm when most farmers get none, and most of those who do receive payments get a few hundred or thousand dollars per year.[14]

According to USDA, about 45 percent of U.S. farmland is worked by someone other than the owner. Contrary to conventional wisdom, more than half of agricultural landlords are non-farm corporations or individuals that work in or are retired from non-farm-related jobs. Almost half live in a city or town.[15] Between 1996 and 2000, subsidy checks were mailed to 803 addresses in Washington, DC and 752 addresses in Miami. It is primarily the landowner, rather than the farm operator, who benefits from farm payments.[16]

International trade and the corresponding domestic subsidy payments will continue to benefit the small and shrinking group in rural communities that can viably participate in the commodity production game. Commodity production in the United States is increasingly becoming a high-volume gambit. Since the prices farmers receive for their corn and soybeans often barely clear what it cost for them to grow such crops, the only way to stay afloat is to sell more and more.

Modern machinery, like GPS tractors, means most commodity growers can farm thousands of acres single-handedly. Small and mid-sized farmers, who often lack the capital to buy or rent more land, have a hard time competing in the high-volume system. The choice often becomes quite simple: get bigger or get out.

The Impact of Reform

Examples of how an industrialized country weans itself off subsidies may be few and far between, but the United States could do well to study New Zealand's experience with market reform in its agricultural sector. This was a political achievement of no small order given the importance of agriculture to New Zealand's overall economy. Trying to protect its farmers from cheaply produced foreign goods, New Zealand did what many

Eliminating Agricultural Subsidies—Lessons from New Zealand

Reforming an economy can be hard enough under centralized control—ask China if it's easy work—but in a democracy the politics of reform can be just as challenging as the economics. So how did New Zealand do it?

For one thing, a major economic crisis like the one New Zealand was facing in the early 1980s forced the two major political parties—the Labor Party and the National Party—to set aside partisan politics and agree that radical change was needed. Secondly, the reforms cut across every sector of the economy—so it wasn't like agriculture policy was singled out as the only reason for the country's woes. Every sector was expected to make sacrifices because every sector was considered part of the problem. As New Zealand's ambassador to the United States, John Wood, has described: "We were as tightly regulated, protected and centralized as any East European country, and performing about as well."

Trade liberalization was combined with the deregulation of financial markets including the floating of the exchange rate and a steep reduction of tariffs protecting all industries from industrial competition. Today, incomes in New Zealand may not be as high as some other industrialized countries (measured in GDP), but low living costs and competitive markets have more than made up for that. Productivity gains in agriculture have been running at four times the rate for the economy as a whole since the reforms were implemented.

industrialized countries continue to do—it paid out huge farm subsidies and complemented those with high tariffs.

But no matter how much the government increased subsidies the farmers' incomes kept falling. By the mid-1980s, the country found itself nearly bankrupt.

New Zealand's approach was to go cold turkey. Since abolishing farm subsidies more than a decade ago, agriculture has actually increased its share of New Zealand's GDP and the country's agricultural sector is once again competitive internationally.[17]

"Beating agricultural protectionism is on par with overcoming alcoholism or drug addiction," says Charlie Pederson, Manawatu farmer and vice president of New Zealand's federated farmers; but, he adds, "it was the best thing that could happen to us."[18]

Reforming U.S. farm policy will be difficult for some U.S. farmers in the short run. The hardest hit would be commodity farmers and farmers in specific regions of the United States that rely heavily on farm subsidy programs. Solutions must be found to ease the transition.

An important issue in shifting away from current forms of subsidies is what would happen to farmland values if payments suddenly, or even gradually, disappeared. As with all land, the value of farmland is predicated on future expected income. Because subsidy payment levels are known and relatively stable, the income from an acre of farmland can be predicted. The expected payment gets added to the value of what that piece of land is expected to produce, raising the price of the land. One group of analysts found that $1 per acre of farm payments tends to add $3.35 per-acre to the value of farmland.[19]

Based on survey data from 2000, analysts found that, nationwide, farm commodity payments account for roughly a fifth of the value of farmland used to grow subsidized crops; proportionally, farm programs have a greater effect on land values in the heartland region than anything else.[20]

In places where it would be very difficult or impossible to grow a certain crop without subsidies, for instance cotton in West Texas, most of the value of the farmland growing that crop can be attributed to federal farm payments. These are places where farming might stop altogether without farm payments that are tied directly to production.[21]

Since land rental or land payments can be a large portion of a farmer's expenses, and land is the principal asset keeping farm operator-owner's wealth at high levels, the immediate effect of depressed land prices due to lowered farm program payments would be a loss in farm wealth and/or income.[22]

A study in Illinois found that because the effect of federal payments on land prices was large, the risk associated with any change in commodity policy is also high. This is what the study's analysts refer to as the "bad news of today's commodity programs."[23]

Over time, though, as land prices begin to reflect more the market value of what is grown than the value of expected farm program payments, farmers, on the whole, could be better off than before. Rents will fall, translating into lower production costs. Ultimately, farmers should be better able to weather periods of low commodity prices. And, it would be easier for beginning farmers to get into farming.[24]

The challenge is to design a program with various safety nets—but not necessarily subsidies—for farmers in transition. Access

Table 6.1 Who's getting the subsidies?

From 1995 to 2003, the top 10 percent of Total USDA-Subsidies payment recipients were paid 72 percent of Total USDA-Subsidies payments.

Percent of Recipients	Percent of Payments	Number of Recipients	Total Payments 1995-2003	Payment per Recipient
Top 1%	23%	30,502	$30,545,197,439	$1,001,416
Top 2%	34%	61,004	$45,114,923,422	$739,540
Top 3%	43%	91,506	$55,954,020,772	$611,479
Top 4%	49%	122,009	$64,566,835,515	$529,197
Top 5%	55%	152,511	$71,664,948,825	$469,900
Top 6%	59%	183,013	$77,645,080,282	$424,260
Top 7%	63%	213,516	$82,762,225,322	$387,616
Top 8%	66%	244,018	$87,199,602,853	$357,349
Top 9%	69%	274,520	$91,080,247,867	$331,780
Top 10%	72%	305,023	$94,503,069,015	$309,823
Top 11%	74%	335,525	$97,541,863,077	$290,714
Top 12%	76%	366,027	$100,254,230,416	$273,898
Top 13%	78%	396,529	$102,688,162,664	$258,968
Top 14%	80%	427,032	$104,880,258,856	$245,603
Top 15%	81%	457,534	$106,863,893,145	$233,565
Top 16%	83%	488,036	$108,665,165,879	$222,658
Top 17%	84%	518,539	$110,305,092,786	$212,723
Top 18%	85%	549,041	$111,801,386,352	$203,630
Top 19%	86%	579,543	$113,172,360,900	$195,279
Top 20%	87%	610,046	$114,431,349,923	$187,578
Remaining 80% of recipients	13%	2,440,184	$16,881,465,748	$6,918

Source: Environmental Working Group

Marty Lueders

Developing countries with rising incomes have tended to embrace globalization. In recent decades, developing countries that were better prepared to take advantage of trade opportunities grew faster than those countries that were not.

to adequate health insurance and opportunities for education, skill retooling or job retraining would be important facets of such a safety net.

The overall gains to consumers will likely be higher than losses to farmers and other producers, with the United States gaining real income in the end. These net gains could be used to establish the programs needed to insure an adequate safety net for those who need to make a transition out of farming. The end result would be a system in which everyone is better off: consumers, farmers, and hungry and poor people.

Challenges to Reform

The 2002 Farm Bill included some positive provisions—expanded funding for conservation, restoration of food stamp benefits to certain legal immigrants, improvements in nutrition programs and a modest increase in attention to rural development. But its biggest shortcoming was its return to a system of trade-distorting subsidies that benefit the few at the expense of the many.

And yet, the 2002 Farm Bill saw more Midwest legislators calling for crop subsidy reforms, such as capping subsidies to the largest agribusinesses, than ever before. But the agribusiness lobbyists proved too powerful, and the leadership necessary to take on the special interests wilted under pressure. This is why the United States is often seen by other countries as speaking out of both sides of its mouth when it comes to trade. While it champions progress in the developing world, it continues to reinforce the status quo at home.

The question of subsidy reform often becomes one of "us versus them," based on the presumption that the welfare of American farmers will be sacrificed for that of farmers elsewhere. While some trade-off is inevitable, much of this fear may be unnecessary.

Developing countries offer U.S. producers the greatest potential for growing their markets. China, with more than a billion mouths to feed, is the most conspicuous example of where this potential lies. As the USDA itself notes, "Fast-growing developing countries are the prospective future markets for U.S. bulk crops and other farm exports. China, for example, is now the largest importer of U.S. soybeans, having surpassed the European Union."[25]

Strong economic gains over the previous decades have given Chinese consumers more purchasing power, and as incomes rise still higher a greater share of every new dollar will be spent on improving diets. It is estimated that roughly a third of every new dollar of income in China is spent on food, compared to something like 10 cents in the United States—and the same disparity would hold true with other developing nations.[26]

The catch is, you can't sell to people who are too poor to buy anything, which is why a more open trading environment will stimulate faster economic growth both within our own agricultural sector as well as in the developing world. But this can only come about if those countries are empowered to develop their economies, and

Table 6.2 **China's Per Capita Consumption Projections**
(Kilograms per year)

	2003	2013
Milk	5.6	8.2
Beef/Veal	4.7	6.5
Pork	34.1	39.6
Broilers	7.6	9.7
Veg. Oils	13	17.3
Wheat	77	71
Rice	97.1	89.6
Corn	27.4	25.8

Source: Food and Agricultural Policy Research Institute

that means being able to export agricultural commodities.

U.S. lawmakers should therefore pass a farm bill that fosters legitimate global competition and discourages both overproduction and protectionism. We called for these same measures in the 2003 Hunger Report, *Agriculture in the Global Economy,* and we find them just as valid today. Ultimately, the goal of U.S. farm policy must be to promote sustainable agriculture, reduce rural hunger and poverty, and eliminate food insecurity here in our own country and around the world. The measures listed above will go a long way towards achieving those goals.

The Way Forward on Reform

There are indeed trade policies that can benefit rural communities in the United States and small farmers in developing nations. Broadly, what needs to happen is that trade-distorting subsidies paid to the largest farms need to be reduced and eventually phased out. The money that is now going to these programs should be shifted into rural enterprise development.

A key reform is to promote trade rules that favor non-trade distorting support payments. Trade agreements should favor farm income support payments that discourage or at least do not encourage heavier production of price-suppressing surpluses of agricultural commodities. Analysts at Iowa State University's Center for Agriculture and Rural Development (CARD) found that by shifting from trade-distorting payments to non-trade distorting, most farm incomes would remain unchanged.

One way to accomplish this would be to favor income support programs that reward environmental stewardship. Payments to large farms should be capped and production-enhancing subsidies should be allowed only to the extent they are fully offset by production controls. This would not only enhance the protection of natural resources, it would level the playing field to allow small farmers in the United States and in developing nations a chance to compete against the large-scale producers.

Another key reform would be to impose strong limits on the amount of support a single farm can receive from farm programs. This could have multiple benefits for rural communities in the United States and in developing nations. First, payment limits would assist in the revival of family-scale agriculture in the United States in that it would prohibit large producers from using their payments to take land away from small- and mid-sized operations.

Secondly, firm payment limitations would change the policy paradigm that now allows American farmers to receive larger payments for increasing production, which just encourages heavier production of price-suppressing surpluses that harm farmers and rural communities in developing nations.

Finally, a strong payment limitation that cuts 15 percent of farm program costs would result in enough savings to nearly double the resources the federal government provides on the type of economic development needed in rural communities. According to the Center for Rural Affairs, a payment cap that cut 10 percent from farm program spending would free up enough money for a ten-fold increase in rural development spending—nearly $10 billion over the life of the farm bill. It would also improve the income of most farm operators by reducing the incentive for large expansion-oriented farms to drive up cash rents and land purchase prices.

Trade reform policies can and must be part of a package that liberalizes U.S. commodity agriculture and promotes a true domestic rural development model based on entrepreneurship. As argued in Chapter 5, the money saved by the gradual elimination of subsidies should go directly back into rural development projects, ensuring that communities can survive the transition.

Returning tax dollars to neighborhoods and communities to fund solutions for local problems is an appropriate use of money saved from curtailing farm subsidy payments. This will not only improve the quality of life for residents of rural communities, but it can also be used to make these areas attractive for rural development.

While trade may not be the silver bullet to resolve the economic and demographic ills of rural communities in the United States, reforming trade agreements and rules has the potential to provide multiple benefits to the rural communities in the United States and developing nations.

A Moment of Opportunity: The Doha Round

The Doha Round trade negotiations of the WTO provides a venue for addressing tough trade issues, but also for making progress in the effort to address the issues of hunger, health and poverty. The success of the current Doha trade round will hinge on its ability to resolve the thorny issues around agriculture—and, specifically, the reduction in domestic market support, increase in market access and reduction in export subsidies.

At least 80 percent of the world's chronically hungry people live in rural areas, and more than half of them are smallholder, subsistence farmers. The degree to which the Doha Round is able to achieve breakthrough reforms in agriculture that will improve the livelihoods of such farmers in poor countries is the degree to which it will live up to its billing and expectation as a development trade round.

It will take leadership by our policymakers to work with our peers in Europe and other industrialized countries, but the

"Trade-plus": Development and the Politics of the Doha Round

Susan Sechler and Joe Guinan

If the Doha Round at the WTO is to live up to its designation as a development round, much will have to happen that is beyond the WTO's usual scope. Trade alone will not do it.

"Trade-plus" is needed if there is to be any serious assault on global hunger and poverty. The challenge is to fill in the details of what "plus" entails, and then to build the understanding and the political coalitions necessary to drive a genuinely pro-poor liberalization agenda on trade. This agenda will have many components, but its central principle must be the mainstreaming of development issues into the processes and rules by which the world conducts international trade.

The Doha Part of the Equation

The 9/11 attacks on the United States stimulated urgent discussions in the advanced industrial countries about the need for genuine development, with pressure coming from the wider, non-agricultural business sector to deal with agriculture—read as: "get it out of the way"—so they could move forward on the broader trade liberalization agenda. The price of a new trade agreement was the creation of a "policy space" within the trading system to address the development needs of poor countries. Thus, the Doha "Development Round" was born in 2001.

But the developed world, mainly the United States and EU, had underestimated the anger in the developing countries at the outcome of the Uruguay Round (the final round of the General Agreement on Trade and Tariffs, or GATT, the WTO's predecessor). These countries felt that they were steamrolled in the Uruguay Round on agriculture and on some other issues such as intellectual property rights. Promises had been made and not kept; expected benefits did not materialize.

But the Uruguay Round (1986-94) made one change of great significance for the developing countries. It abandoned the old "two-tier" approach in which the significant negotiations—and resulting obligations—took place between developed countries. This left developing countries, whose markets were too small to matter to the industrial powers, largely out of the loop. The "Single Undertaking" of the WTO formally put all members on an equal footing and gave developing countries a voice in the system. Together, their numbers make them a potentially formidable bloc.

The EU and United States simply did not anticipate the effect this would have on negotiations. Their attempts to initiate a "Millennium Round" of talks given over exclusively to further liberalization were repeatedly blocked. Even once the Doha Round had been launched, the rich countries underestimated the effects of anger over what was seen as their hypocrisy in preaching free trade while maintaining their own agricultural subsidies. In fact, these subsidies have actually increased since the Uruguay Round.

At the ministerial meeting in Cancún, Mexico, in September 2003, an unlikely coalition of developing countries rallied against rich

Jim Stipe

The degree to which the Doha Round is able to achieve breakthrough reforms in agriculture that will improve the livelihoods of small farmers in poor countries is the degree to which it will live up to its billing and expectation as a development trade round.

countries—primarily the United States and the EU. This group, the G-20, included big, middle-income, new-market countries such as Brazil, India and South Africa, as well as the very poorest countries in Africa such as Benin, Mali, Chad and Burkina Faso. The Cancún meeting collapsed, and the Doha Round was stalemated until, in July 2004, the WTO General Council successfully negotiated a new framework agreement—the "July Package"—putting the Doha development agenda back on track.

Barriers to a Successful Doha Round

The truth is that despite the designation of the Doha Round as a "development round," no real political or substantive preparations were made to ensure that there would be a pro-development outcome. Neither policymakers nor countries nor international institutions were really prepared for it. Whether the players will adapt and the necessary pieces be assembled is now a matter of politics.

Trade delegations are typically made up of civil servants, trade lawyers and occasionally members of the business community, representatives of business interests and other top elites in their countries. The narrow scope of participation limits ideas, relationships and knowledge. These limitations are compounded by those of the WTO process itself. The negotiations are inordinately complex and arcane, and the size of the organization—with 148 member countries—makes it cumbersome and bureaucratic. Moreover, the practice of convening smaller groups of countries in the "Green Room" for side negotiations contributes to an atmosphere of suspicion and resentment.

Hovering over these problems are even larger questions of political authority and legitimacy. In the past, under the GATT, trade negotiations were largely confined to removing obstacles to trade at the borders such as tariffs and market access barriers. The WTO, created in 1995 after the completion of the GATT's Uruguay Round, broadened the mandate of the institutions of the global trading system. Today, in order to make trade work, it is necessary to reach past the border and go deep into issues of domestic politics. Trade has therefore become highly sensitive politically within member countries with decisions taken at the WTO having an impact on vital domestic interests such as employment, education, public health, technological development, flows of capital and labor, and, perhaps most important of all, national sovereignty and democratic self-governance.

Finally, there is the problem of leadership in the WTO. During the GATT—a much more mercantilist system—the United States and Europe worked together and, for better or for worse, showed the determination and leadership necessary to drive the process towards trade liberalization. In the current context, in which there has been progress toward a more rules-based multilateral trading system, there is a vacuum in leadership with the United States and EU either preoccupied with their own parochial interests or at odds over nuisance distractions such as beef hormones, Foreign Sales Corporations and the Boeing/Airbus dispute.

The G-20 now has the mantle of leadership by default, but the fault lines in that coalition are apparent: the interests of its leading members—big, middle-income developing countries with burgeoning markets—are far from identical with those of its small and poor members who do not have much to offer trading partners by way of market access concessions.

The timeframe for the WTO negotiations (as well as significant upcoming political events such as the debate over the U.S. Farm Bill) means that interventions that would have a chance for any kind of successful impact on the process need to happen very soon. The WTO Ministerial in Hong Kong in December 2005 may well be a make or break moment and much of the important political groundwork needs to have been laid beforehand.

Domestic Considerations

Some signs on the horizon suggest that powerful farm interests may be about to loosen their grip on U.S. politics and some real reform may become possible. First, there are more powerful constituencies that genuinely want reform. But the most significant pressures for driving farm policy reform may stem from the budget deficit and building fiscal crisis. Given the fiscal crunch making its way through the federal budget process, budget issues should play a role in the Farm Bill debate this time around.

Negotiations on the next Farm Bill are scheduled for 2007, but insiders believe that "field hearings" will be held in the spring of 2005. The reason for acceleration is the recent WTO ruling in favor of Brazil, which charged that U.S. cotton subsidies violate WTO rules.

U.S. Trade Promotion Authority (TPA) is up for renewal in 2005; if not renewed, it will expire in 2007 at the latest. TPA transfers the constitutional authority Congress has to set the terms of international trade over to the president. Last time around, TPA played a role in allowing politicians representing farm interests to pack the 2002 Farm Bill with ad hoc payments and then push it through by threatening to block TPA unless President Bush signed it into law. What gets included and excluded from the TPA package could make a big difference to the success of the development goals of the Doha Round.

The received wisdom is that the American public is anti-trade and anti-trade-liberalization. But the German Marshall Fund's 2004 survey, *Reconciling Trade and Poverty Reduction,* shows that the public actually dislikes "protectionism" and supports trade if part of the package is adequate "protection" for the losers. Thus far, however, "protection" has been largely inadequate: underfunded and badly conceived training programs set against a backdrop of limited unemployment benefits, no portable health insurance and poor secondary education systems in the rural areas hardest hit

Margaret Nea

by the loss of low-wage jobs. Add to the mix immigration policy, labor standards, the environment and anger at the WTO and NAFTA, and the debate over TPA could be a hot one.

Trade and Hunger

It is now widely agreed that trade is crucial to the fight against global poverty and hunger. The potential benefits to developing countries from increased trade far surpass anything possible through aid alone. Estimates vary but liberalizing global trade could generate $2.8 trillion dollars in new economic activity by 2015. The IMF has said that annual gains could be as high as $680 billion, two thirds of which would go to developed countries and one third to developing countries.

If trade is important for developing countries, agricultural trade is particularly important for the poor within those countries. More than two-thirds of the world's poor live in rural areas, and in many developing countries agriculture accounts for half of all employment. Increases in agricultural trade will feed multiplier effects throughout the rural economies of developing countries. Each additional dollar of rural income generates another $3 in economic activity through increased demand for goods and services across agricultural-related industries as well as in the non-farm sector. Thus, agriculture is at the heart of the Doha Round.

The Doha Round goal of enabling the rural poor to share in the benefits of expanding trade and integrated global markets is well aligned with the UN Millennium Development Goals. Increased trade is essential to both, but is not, by itself, sufficient. "Trade-plus" is needed.

At its most basic level in the multilateral trading system, "trade-plus" means continuing to take into account the needs and concerns of poor countries, a fairly standard approach to what is termed "special and differential treatment," involving technical assistance, capacity building and flexible implementation. At quite another level it may mean fundamental reform of the multilateral trading system—specifically the WTO—so that a comprehensive approach to development is woven into the fabric and development issues are mainstreamed into the rules and processes by which the world conducts its international trade.

With development and investment policies to help the poor in developing countries grow and purchase what they need, the huge latent demand in those countries could be unleashed. Economic growth under these conditions can set off a continuous loop in which increased trade raises incomes, increases productivity and fosters greater consumption, stimulating further effective demand for imports from the developed world.

To achieve this, political leaders—in particular those in the United States and EU—must be pressed to step in and move the politics of trade negotiations to the high table, away from trade functionaries and ministers of agriculture, to those who have the responsibility for the bigger picture and the longer term and have an understanding of what it is that is actually at stake.

How do we get there? Education, pressure, new ideas and making connections between people and organizations. Advocacy groups must pave the way, working first for a broader public understanding of the issues, and second, for the political coalitions that will move sound long-term solutions forward.

***Susan Sechler** is the U.S. Director of the Trade & Development Program at the German Marshall Fund of the United States, where Joe Guinan is a program associate.*

timing now may be fortuitous. Europe is also under pressure to reform its system of farm subsidies, the Common Agricultural Policy (CAP). Because the CAP accounts for half of the EU's annual budget,[27] the financial strain associated with adding new countries, especially Poland where agriculture represents 20 percent of the economy, is not lost on policymakers.

In September 2003, at the WTO Ministerial Meeting in Cancun, Mexico, a bloc of developing countries (the so-called G-20+) stood together in their insistence that agriculture subsidies by industrialized nations was the central issue to be addressed. The talks fell apart when the United States and the EU balked at discussing agricultural subsidies and tried to shift the agenda to foreign investment and other new issues.

This was a major setback, but it demonstrated that there are few incentives for smaller, poorer countries unless agricultural issues are central in WTO negotiations. The current trading system offers an intricate, somewhat vague and sometimes contradictory mix of preferences and concessions to the poorest countries. Unless the United States, EU and other rich countries agree to substantial, timely reductions in farm subsidies, little progress will occur.

That realization seemed to prompt the United States and EU to offer a vaguely worded "framework agreement" in Geneva in July 2004, which acknowledged that they had decided "in principle" to the reduction of trade-distorting subsidies. But the devil is in the details, and the actual reductions have yet to be negotiated. The next major focus is a ministerial meeting in Hong Kong in December 2005. If agreement on specific numbers can be reached in Hong Kong, the Round may be concluded some time in 2006. But considerable technical work will have to be done before December.

In the words of WTO Director General Supachai Panitchpakdi, "Eighty to 90 percent of the work has to be done in Geneva before we go to Hong Kong."[28] Accordingly, the WTO's 148 member states are expected to meet in Geneva in spring 2005, and a

ministerial conference has been planned on the sidelines of the World Economic Forum in Switzerland at the end of January. Also, in November 2004, the WTO set up a subcommittee to deal specifically with the trade and development aspects of cotton. The subcommittee will report periodically to the WTO's agriculture negotiations group.

The United States, as the world's largest agricultural exporter, needs to shoulder the responsibility of leading. Plus, it may have no choice but to lead or *be led.* The groundbreaking decision by the WTO that cotton subsidies to U.S. farmers were harmful to Brazilian cotton producers requires U.S. policymakers to rethink its support for cotton producers. It would make sense for policymakers to reconsider the issue of subsidies for a range of crops at the same time.

Trade + Aid

The changes in trade policy we have called for in this chapter will go far toward strengthening rural communities in the developing world—but unfortunately not all the way. To some extent, liberalizing trade is the lesser part of the equation. Improving the livelihoods of hungry and poor people in rural areas around the world requires development assistance to take advantage of trading opportunities.

For just as rural communities here in the United States need improvements in infrastructure, so do communities in sub-Saharan Africa, Latin America, Asia and elsewhere. The scale of problems may be vastly different in Malawi than in Missouri, but prescriptions for rural development are hardly dissimilar. Farmers in Kenya, like farmers in Kansas, need good roads to get their products to market, good communications networks, fertilizer, equipment and other inputs.

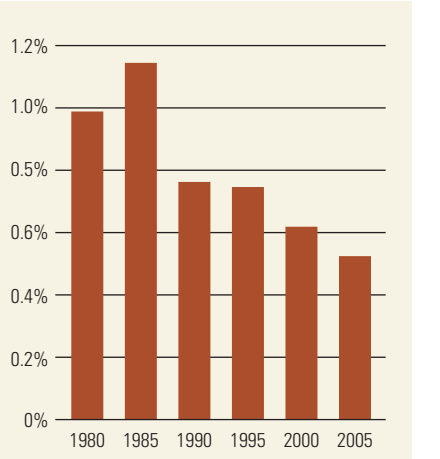
Development assistance must target sectors that can address the needs of hungry and poor people, especially programs that help smallholder farmers raise their productivity. Development assistance must target women, too, because as we have seen in this report, women bear much of the burden in holding rural communities together.

Foreign assistance targeted effectively is essential—and the United States needs to do its share. More and better development aid from wealthy countries like the United States is essential to cutting poverty and hunger in the developing world.

The ONE Campaign, a new effort to win stronger U.S. government action aimed at helping poor countries reach the Millennium Development Goals, has made one of its main goals increasing U.S. poverty-focused development assistance by an additional 1 percent of the federal budget by 2010. This represents roughly a four-fold increase over current levels.

Presently, U.S. development assistance is smaller in relation to its national income than that of any other industrialized country. In 2002, President Bush proposed that the United States should increase its development assistance to poor countries by $5 billion starting in 2006, a sum that would reflect a 50 percent expansion in existing aid programs. The money would go to poor countries with governments that demonstrate good governance, invest in the health and education of their people and follow sound economic policies. This is an important step forward and, along with trade reforms, could signal the start of a better future for the hungry and poor around the world.

Figure 6.2 **U.S. Development Aid as a Percentage of the Budget**



Source: Center on Budget and Policy Priorities

Jim Stipe

Development assistance must target women, because as we have seen in this report, women bear much of the burden in holding rural communities together.

Trade and Totomoxtle: Coping with NAFTA in the Totanacan Region of Veracruz

Amanda King

Many parts of rural Mexico have experienced the upheavals anticipated before implementation of the North American Free Trade Agreement (NAFTA). One expectation of NAFTA that has not come to pass is the disappearance of small-scale maize production. Today, despite rock-bottom prices for maize grain, and the options afforded by migration, many farmers continue to grow maize as they have for centuries. What ties these farmers to their traditions, and how do they cope with the changing economic conditions?

These are some of the questions I explored during the past year as a Mickey Leland International Hunger Fellow based at the International Center for Maize and Wheat Improvement. My research took me to Zona Totonaca, an area of Veracruz with a large indigenous population and poverty levels that can be severe by Mexico's standards.

In the Zona Totanaca, as in most of Mexico, maize production is more than just a source of livelihood—it is a way of life. According to one creation myth, the gods created humans from a mixture of blood and maize dough. Maize is a staple food and consumed daily basis in the form of tortillas, which provide much of the caloric intake in rural areas. In addition, maize is the basis of foods such as *elotes,* the Mexican version of corn-on-the-cob, and *tamales* which are a mixture of ingredients incorporated into maize dough and steamed in the maize husk.

Maize also plays an important ecological role. Mexico is a center of maize diversity, home to hundreds of folk or *criollo* varieties created through farmer management and natural selection. Maize diversity is essential because it provides farmers and plant breeders with the means of adapting crops to changing environments and resistance to pests and diseases. With growing incentives to switch to new export crops and hybrid maize varieties, many researchers feared that NAFTA reforms would threaten Mexico's maize diversity by undermining the demand for folk varieties and the cultural and agricultural practices that maintain them.

Following the implementation of NAFTA, Mexican markets opened to a flood of U.S. exports. From 1994 to 1996, maize grain prices dropped by as much as 48 percent. Farmers all over Mexico scrambled to respond to the rapid erosion of their livelihoods. Many left their towns and migrated to work in cities or in *maquiladoras* along the U.S. border. Increasing numbers also left to seek employment within the U.S. In addition to migrating, branching out from staple crops helped some farmers to cope with economic change. In Zona Totonaca, for example, wealthier farmers began to produce chilies and tomatoes for export.

Farmers lacking the financial assets to diversify their harvests hit upon a different solution to the evolving economic crisis by making use of a resource they already had in abundance. Maize husks, a byproduct of maize production, are used throughout Mexico for making tamales. Since NAFTA, increasing migration has fueled the demand for Mexican food products in the United States. Communities throughout the Zona Totonaca are taking advantage of this and becoming involved in the production for export of maize husks, called *totomoxtle* in the Nahuatl language.

Totomoxtle production provides employment at various stages of its preparation. Men, women and children are involved in the production process, and while many of the tasks pay relatively little, the sale of the *totomoxtle* combined with the labor provide an important source of added income for families. In some areas, husk production is now even more important than grain, earning farmers about 10 times the price per kilo as grain.

From the perspective of one farmer, the business is profitable because, "there is maize husk all year, the harvest is twice a year, and people remove husks little by little. Selling the husks helps farmers—they buy fertilizer with the extra money."

While husk production has provided an important source of labor and added income in the communities where it is produced, it has also provided additional incentive for farmers to continue to grow their *criollo* varieties. These varieties yield superior husks for tamales than does hybrid maize, even though *criollo* grain typically fetches a poor price in both local and regional markets.

Because of the growing economic importance of *totomoxtle,* farmers have even started to change their maize selection practices, looking for varieties with greater yields and better husk cover. The new economic incentive to continue producing maize is not only helping to ensure local food security, but is giving hope that the genetic diversity which is represented by these varieties will be conserved for future generations.

© Amanda King

Totomoxtle, or maize husks, a byproduct of maize production, provide poor farmers in rural Mexico with an added source of income as their American neighbors discover a taste for tamales.

Even while trade liberalization has hurt many communities in rural Mexico, small-scale farmers have been surprisingly resilient in their coping strategies and their ability to seek out new opportunities. For the farmers in the Zona Totonaca of Veracruz, Mexico, this required looking at familiar resources from a new perspective.

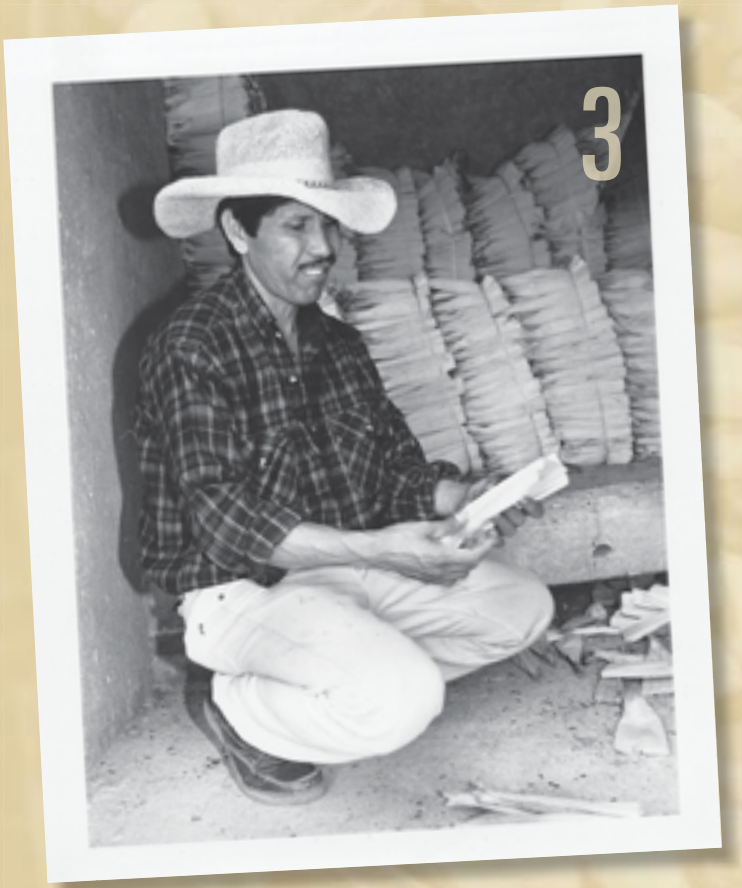
Mexico's often bitter experience with NAFTA indicates that the rise of international trade does not necessarily signal the demise of rural communities altogether. As the switch to *totomoxtle* production in the Zona Totonaca demonstrates, communities are redefining themselves as they draw upon both traditional and experimental strategies in their struggle to cope with the landscape of change.

***Amanda King** conducted her research on the impact of NAFTA on Mexican maize farmers from July 2003 to June 2004. Her work was made possible through the Mickey Leland International Hunger Fellows Program of the U.S. Congressional Hunger Center.*

Trade and Totomoxtle: The Production Process

1. Maize husk production currently provides much needed employment for men, women and children.
2. Disking, or trimming the bottom of the husk, separates the husk cleanly from the ear and leaves it ready for packing.
3. In order to meet U.S. export standards, the maize husks are carefully inspected after they have been bleached in an oven.
4. The girls sorting, weighing and packaging disked husks earn 7 pesos (U.S. $0.62) per bag.
5. Once the husk has been processed, producers face the task of finding a market.

Photos © Amanda King

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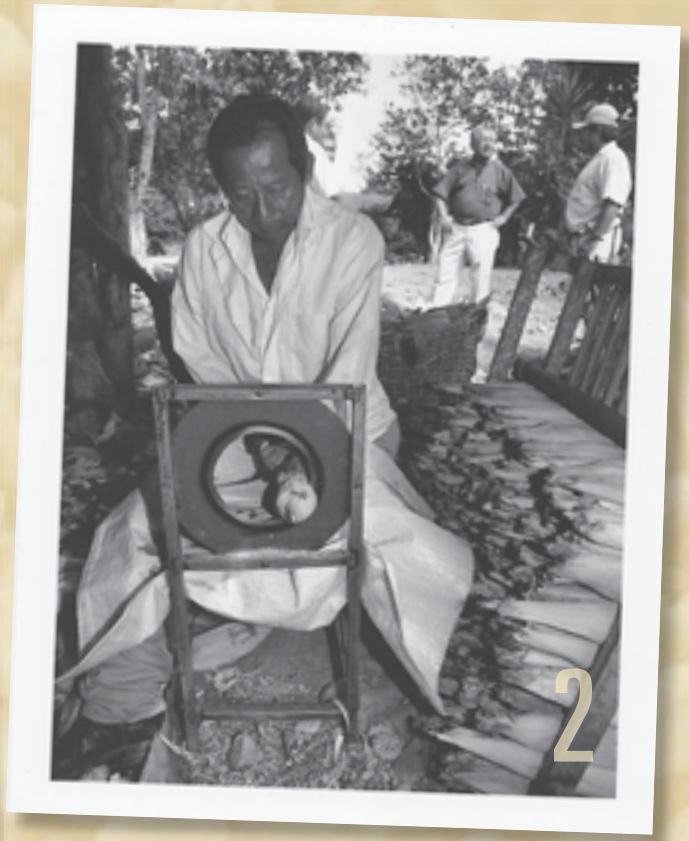
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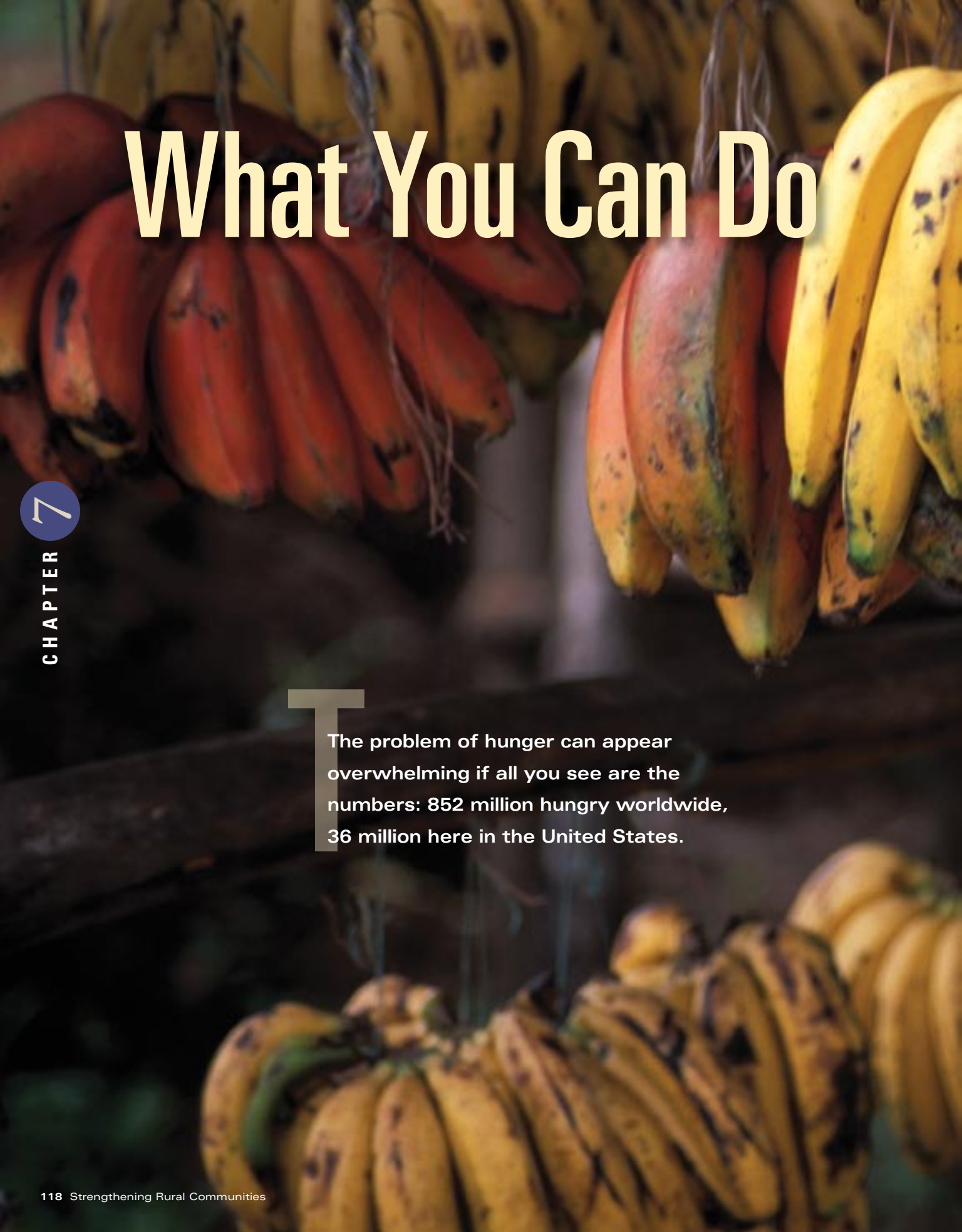

CHAPTER 7

What You Can Do

The problem of hunger can appear overwhelming if all you see are the numbers: 852 million hungry worldwide, 36 million here in the United States.

After reading this report, we expect you can also see there are manifold ways to strengthen rural communities. Knowledge exists to increase the capacity of land to produce more food in areas where scarcity has seemed intractable. We know that technology exists to connect people in rural America to college and university classrooms hundreds of miles apart, providing rural residents with access to knowledge they need to compete in the twenty-first century economy. We know that a network of roads in sub-Saharan Africa could prevent tragedies where food rots in storage facilities while in other parts of the same country people go hungry.

Knowing what we do, it is also fair to ask those in positions of leadership why are so many people in rural communities still suffering from hunger and poverty.

Photos by Margaret Nea

Bread for the World members do ask this question of leaders. Empowered by their knowledge, and committed to changing this world for the better, members have had many successes. Since 1974, Bread for the World members have been urging policymakers to bring resources to bear on alleviating hunger and poverty around the country and throughout the world.

Most recently, Bread for the World members worked hard to encourage Congress to support the Millennium Challenge Account (MCA). The MCA directs aid to countries to improve education, health care and employment for people who desperately need help. Money invested in the MCA does exactly what we have argued throughout this report needs to be done to free countries from the yoke of poverty and hunger.

For two years, Bread for the World members have kept MCA funding on the front burner with letters, meetings and calls to legislators and administration officials, with media attention, and by building support from influential organizations such as the major Christian churches. Efforts by Bread for the World members have also contributed to significant improvements in child nutrition programs.

Bread for the World has had many successes, and so its reputation as a leader in the fight to end hunger is taken seriously by Congress and the president. These successes have benefited hundreds of millions of hungry people.

Here are a few examples of what Bread for the World members have accomplished in the last year:

Karen Fitzpatrick, a Bread for the World member in Minnesota, with a small cadre of others, helped register hundreds of people to vote in Washington County. They went door to door in federally subsidized apartments for seniors and to mobile-home parks, domestic violence shelters and food pantries. These new voters, mostly low-income people registering for the first time in their lives, got to exercise one of the most valuable tools against hunger, political participation.

In Alabama, longstanding members Pat Pelham and Elaine Van Cleave were so pumped up about Bread for the World joining the ONE Campaign, they decided to educate their fellow citizens in the Birmingham area. They organized a meeting with more than 300 people, many of them college students from six universities in the Birmingham area, and shared the goals of the ONE Campaign and encouraged them to join.

For more than 30 years, Bread for the World has reached out to people and taught them about how they too can make a difference in the fight against hunger.

Jim Stipe

Cost estimates for ending hunger in America range from $6 billion to $10 billion per year in additional federal funding—or roughly between a nickel and a dime per American per day.

"Most people are aware there are problems, but they also think there isn't anything that can be done," said Kathy Pomroy, director of organizing for Bread for the World. "Most people think hunger is intractable. I tell them stories of how regular people have made a difference and I see the lights flash in their eyes.

"These are people who want to make a difference in the world—and Bread is an organization that has made a difference. What gets these people excited is knowing they will be working with a group that understands how to make a difference. They realize they can bring their energy to this organization, and they know they will get energy back."

In earlier chapters of this report, we have included stories, or case studies, by or about other individuals—some of them Bread for the World members, others affiliated with different groups—involved in the fight to end hunger, doing what they can at a grassroots level. These stories should be inspiration to anyone trying to understand what they can do in their communities.

One such story is on page 54, told by Bread for the World member Jim Hanna about a program in Maine to help Hispanic and African immigrants use their expertise in farming to serve a local community and also help themselves achieve a better life in America.

Another is on page 123. This is a strong reminder that faith-based choices do not have to end where business begins. On their apple orchards in eastern Washington, Bread for the World members Cheryl and Ralph Broetje show how their Christian faith has informed the way they run their business.

"The social justice component is a strong motivating factor in these people's lives," says Kathy Pomroy, referring not just to the Broetjes, but to most of Bread for the World's 54,000 members. "The fact that Bread is a faith-based organization gives them inspiration. They hear their faith pointing them in the direction of action, and Bread is there as a means for them to achieve that."

Grace Changes Things

Jaime Steiert

The choir at the Berean Baptist Church, the largest African American church in Marion, Alabama, sang joyfully, and the music struck a chord deep inside me. The choir loft rose above the congregation on each side of the pulpit, full of swaying, clapping and smiling faces.

Uncertain of the environment at first, I allowed the vibrations to scatter my fears. I was in my first week of a summer mission assignment with the Cooperative Baptist Fellowship program Sowing Seeds of Hope, assigned to Perry County, whose greatest distinction so far in my mind was being labeled "one of the five poorest counties in the United States."

The rich tones of "Let us break bread together on our knees" echoed throughout the church. Within the walls of the church, we were all on level ground. No matter what or where we came from outside this sanctuary, inside "we was all the same."

On the leveling surface of the communion table, we were all invited to partake of the fullness of Christ together. I thought of the Scripture so many of us claim when working with *the poor:* "Whatever you did for the least of these, you did to me."

Unity comes when we are willing to be real about the poverty of the soul that plagues all of us. It is easy to say God is at work on poverty, racism, and injustice and picture missionaries flooding in to enlighten, inspire and "fix things." But we all come as paupers, and we all come to the table of Christ as people in need. To work beside the poor is to confess this together and join in the unity that Christ desires for his church.

I had to wonder were the people in this church tired of the labels they've been assigned. How long have we been telling them that they are poor and needy without confessing the impoverished condition of our own lives?

What is the agent of change in areas of poverty like Perry County? My good friend Rev. John Fender reminds us that the real change agent for anything is the Gospel, carried and lived out by the most ordinary of people. This Gospel works by way of its own logic, and yet through every system, task force and group of volunteers there are people—people who are living houses for the presence of Christ.

Poverty has a way of holding a mirror up to you. The faith of these people I was going to talk with over kitchen tables, meet at the grocery store, restore houses and pray with could move mountains, and it has. And as the presence of Christ, which is love itself, lives and moves and acts through the people of Perry County, then I believe hope is alive here.

Broetje Orchards

Lives are being changed in Perry County. I am just not sure it is always the ones we think are changed. Perhaps the greatest lesson I learned during my summer in Perry County was that grace could overcome the most insurmountable challenges. The voice that calls us all heavenward to the same home unites us by grace.

As I think of the seeds of hope that are being planted daily through construction and school enrichment programs, clothes banks, and worship celebrations, I am reminded of something more amazing. The grace that transforms is not confined to a building, education system, or county—it is the grace that changes our own lives.

I claim the words sang on my first Sunday in the Berean Baptist church: "Grace changes things. Grace is changing me."

***Jaime Steiert** is a student at Texas A&M and participated in the Sowing Seed of Hope program in the summer of 2004.*

Every year Bread for the World members organize offerings of letters in support of anti-hunger legislation. For example, members of a church congregation will write letters to Congress in support of hunger-fighting legislation during the coffee hour following their Sunday service.

In Sunday school classrooms, both adults and children watch a short video about a family struggling with hunger. Afterwards, everyone—even the kids—writes to a senator or representative, asking them to keep their promises and support legislation increasing funding to fight hunger, poverty and disease in some of the poorest countries in the world.

On a college campus, student leaders encourage their peers to write letters to Congress after a hunger awareness event or a group meeting.

These examples are just a few of the forms an offering of letters can take. But all offerings serve the same purpose: using the gift of citizenship to take steps toward ending hunger. You, too, can organize an offering of letters in your church or community.

Bread for the World's 2005 offering, *Make Hunger History,* is urging Congress and President Bush to begin a national effort to cut U.S. hunger in half by 2010.

During the 1960s and early 1970s, under both Democratic and Republican administrations, the Untied States undertook initiatives and put in place programs that substantially reduced the number of people who struggle to feed their families in our nation. For 30 years, the percentage of hungry people in our country remained largely unchanged. But in recent years, the numbers have begun to go up. While government programs keep the numbers from expanding faster, they obviously aren't reaching all the people who need help. The *Make Hunger History* campaign will call on Congress and the president to develop specific plans for ending hunger.

Make Hunger History will also seek to deepen anti-hunger advocacy, expand research on hunger, and take steps to strengthen and improve our national nutrition programs.

With hunger, poverty and disease rampant in our world, the United States needs to step up the effort to provide assistance focused on helping hungry and poor people improve their lives. That's why Bread for the World has joined with other organizations in the ONE Campaign, a coalition of anti-poverty advocates as well as hundreds of thousands of people across the United States, coming together as ONE to fight global AIDS, extreme poverty and hunger. This coalition is calling for an additional 1 percent of the U.S. budget to help poor countries fight poverty. An additional 1 percent is a mere fraction of what this country spends on arms each year.

You can support these efforts by signing a declaration on the Bread for the World website at www.bread.org and by ordering resources such as the *Power of ONE,* a Bread for the World campaign handbook.

There are a variety of ways you can get involved. Most citizens want tragic injustices like hunger corrected. Year after year, when the public is asked how important is ending hunger, it never ceases to be a cause people say should be of primary importance.

Out of despair, perhaps, people feel like one person's contribution is insignificant in the face of such huge numbers like 852 million. Their hearts harden to hope. Don't think this way, please. Hearts are powerful and the will to act on them fills the emptiness of despair with a whole new vision of the future. You can make a difference. To each what he or she can contribute, but all who want to contribute should know, to be sure, all contributions matter.

Some Other Voices for Hungry People:

America's Second Harvest: America's Second Harvest is the nation's largest domestic hunger relief organization. Through a network of more than 200 food banks and food-rescue programs, America's Second Harvest provide emergency food assistance to more than 23 million hungry Americans each year, 8 million of whom are children. Last year, America's Second Harvest distributed 1.7 billion pounds of food to needy Americans, serving all 50 states and Puerto Rico. Second Harvest

World Vision

In 2004, Bread for the World members helped organize 1,100 offerings of letters, generating at least 134,000 letters to Congress and the president urging them to increase poverty-focused development assistance around the world.

Business as Ministry

Roger Bairstow

Cheryl Broetje often describes the Bible as a book of migrations. "God uses migrants to move history, while calling people of faith to action," she says.

As Christians contemplating the needs of their employees, Cheryl and her husband Ralph clearly felt called to understand their employees' plight and stand with them in their struggle to meet the needs of their families.

While many other businesses, particularly family-owned agricultural operations, are fighting to survive, Ralph and Cheryl Broetje are using their proceeds for ministry. Broetje Orchards in eastern Washington, one of the largest privately owned apple orchards in the world, manages more than 5,300 acres of Fuji, Gala, Braeburn, Granny Smith, Red and Golden Delicious apples, as well as 115 acres of cherries. The Broetjes' business-as-ministry model involves the dedication of over 900 people, primarily Latinos, working year-round in the fields and the warehouse.

Broetje Orchards

Cheryl and Ralph Broetje, owners of Broetje Orchards in eastern Washington, have committed themselves to the belief that faith and business can thrive together.

Perspectives

In 1983 the Broetje family went to Mexico on a "trip of perspective," as Cheryl likes to call it. They saw first-hand what their workers had left. They met families living on barren land alongside mosquito-infested riverbanks in active garbage dumps and in cardboard boxes the size of clothes dryers.

The Broetje family went to Mexico hoping to learn why so many Mexicans lived as migrants, leaving their families, their communities and the country they love behind to seek a better life north in the United States. They learned that the reasons were quite simple—economics. At the conclusion of their trip, the Broetjes understood that the people working in their apple fields are largely economic refugees, without access to health care, education and a place of social belonging.

Hearing their need and understanding God's call to serve the most vulnerable, the Broetjes built the New Horizon Preschool to "house" their employees' children during the day. Once New Horizon was built and occupied, Ralph and Cheryl began to hear stories about the lack of decent, adequate and affordable housing in the surrounding communities where the families were staying—stories about children being bitten by rats at night, leaky and broken plumbing and roofing, and outrageous rents. These hardships led Ralph and Cheryl to further action.

"Vista Hermosa," meaning Beautiful View, was designed to be transitional housing, where workers coming from a migrant lifestyle have the opportunity to become part of a safe, nurturing community and gain additional skills through various educational programs offered after-hours. Vista Hermosa provides housing for 600 people, including 285 children.

In addition to the housing, the community includes a chapel, pre-school, post office, laundry facilities, the Orchard View market store, a gymnasium, soccer field, playground and garden plots. The average home provides approximately 1,400 square feet of living space and comes with a family room, kitchen, two bathrooms and an attached garage.

The rental cost structure is designed so that the cost of renting a house at Vista Hermosa equates to approximately 60 percent of comparable housing elsewhere in the area, and is balanced to ensure that it does not exceed 30 percent of a family's monthly income. Because of the low rental fees and reduced cost of childcare, many families are able to save money and move out of Vista Hermosa to purchase their own homes

Because many Vista Hermosa families came to the United States as economic refugees, making enough money to pay for food, rent and transportation is their primary focus. Meeting the educational needs of their children is not always possible. Thus an on-going task is showing children how to be change agents in their own lives and ultimately be responsibile for their learning, personal development and achievement.

A Fruitful Harvest

The Broetjes know that their success and prosperity are gifts of God, not given in order to line their personal pockets; rather, given so that they might be shared with those around them.

Recognizing the Christian mandate to serve the common good, especially the "least of these," the Broetjes have committed themselves to the belief that faith and business can thrive together. Business as much as any other institution has the obligation to serve.

***Roger Bairstow** is currently an executive of two Broetje Orchard-affiliate organizations. He is chair of Snake River Housing, an affordable farmworker housing organization, and director of Mano à Mano, a non-profit dedicated to asset building for low-income and disadvantaged populations.*

Case Study in Strengthening Rural Communities:

Push-and-Pull Politics to End Hunger: The More and Better Campaign and the International Alliance to End Hunger

Richard A. Hoehn

It takes push-and-pull politics to end hunger—pushing by grassroots organizations and pulling by legislators. The more people push and the more legislators pull together, the more likely it is that the first Millennium Development Goal of cutting hunger and poverty in half by 2015 will be achieved.

The More and Better Aid Campaign and the International Alliance Against Hunger are recent examples of push and pull efforts to fighting hunger and poverty.

Early in 2003, David Beckmann, president of Bread for the World, and Jacques Diouf, director-general of the FAO, conceived the idea of an international campaign of NGOs to lobby governments to increase aid for agriculture. Today, the More and Better Campaign for agriculture, rural development and food aid includes 77 organizations in 42 countries from five continents with hundreds of affiliates. Under this one umbrella, they advocate for increases in both the quantity and quality of assistance to cut extreme poverty and hunger.

The NGOs range from farmer organizations such as the International Federation of Agricultural Producers to Via Campesina, a movement of peasant organizations, to international lobbying organizations such as Action Aid International. Even though they may disagree about various policy issues, they share information, build national campaigns and explore ways to work together across national boundaries.

While Bread for the World members are lobbying the U.S. Congress, activists in other developed countries are doing much the same. NGOs in Canada and Norway, for example, have convinced their governments to commit to an increase in aid for agriculture and rural development.

In the developing world, grassroots organizations such as the Green Movement of Sri Lanka, the Christian Relief and Development Association of Ethiopia and ROPPA, an umbrella organization of West African NGOs, are lobbying their governments to be more responsive to the needs of hungry and poor people within their borders.

The idea of an International Alliance Against Hunger was proposed by Johannes Rau, president of the Federal Republic of Germany, on World Food Day in 2001. Rau urged the formation of an alliance to counter the faltering political will that prevented nations from allocating adequate resources to fight hunger and poverty. FAO asked Eva Clayton, a former member of Congress and Bread for the World's board of directors, to come to Rome to promote the idea.

More than 80 nations have expressed an interest in forming their own national alliances. In Brazil, for example, the Zero Hunger Project (Programa Fome Zero), launched by President Luiz Inàzio Lula da Silva in 2003, has established a wide network of alliances among public sector institutions and civil society organizations.

Although More and Better and the International Alliance Against Hunger had separate origins, both rose at a time when there is increasing awareness of the need for individuals and governments to band together across national lines to achieve the Millennium Development Goals.

The 180+ nations that signed onto the Millennium Development Goals would like to see all the goals achieved. Cutting hunger and poverty is only the first goal.

***Richard A. Hoehn** works in the church relations department at Bread for the World and is former director of Bread for the World Institute (1992-2001).*

World Vision

has developed an important program of public-policy advocacy. Its goals is to end hunger in America.

35 East Wacker Drive, Suite 2000
Chicago, IL 60601
Phone: (312) 263-2303
Fax: (312) 263-5626
Web site: www.secondharvest.org

Center for Rural Affairs: The Center for Rural Affairs is committed to policies that strengthen family farms and rural communities. Begun by two ex-VISTA volunteers in 1973, the Center for Rural Affairs is committed to building communities that stand for social justice, economic opportunity and environmental stewardship. They work on issues ranging from environmental conservation and problems facing rural schools to market access for farmers. In order to keep in touch with the rural communities they assist, the Center for Rural Affairs is located in Walthill, Neb., population 900.

Center for Rural Affairs
101 S. Tallman St.
P.O. Box 406
Walthill, NE 68067
Phone: (402) 846-5428
Fax: (402) 846-5420
Web site: www.cfra.org

Community Food Security Coalition (CFSC): CFSC is "dedicated to building strong, sustainable, local and regional food systems that ensure access to affordable, nutritious and culturally appropriate food for all people at all times." CFSC helps develop self-reliance among all communities in obtaining their food by creating a system of growing, manufacturing, processing, marketing and selling food that is regionally based and grounded in the principles of justice, democracy and sustainability.

CFSC actively promotes local farmers' markets and local buying programs to help both local farmers sell their produce and low-income areas obtain fresh fruits and vegetables. They have more than 250 member organizations in the United States where members are active.

Community Food Security Coalition
P.O. Box 209
Venice, CA 90294
Phone: (310) 822-5410
Web site: www.foodsecurity.org

DATA (Debt, Aid, Trade for Africa): DATA is a new organization that is being spearheaded by rock star Bono of the Irish group U2. DATA seeks to help Africa through pressuring developed country governments to cancel unpayable debt, fight HIV/AIDS, and reduce trade barriers. Bono is using his status as a public figure to bring attention specifically to Africa and some of the major problems troubling the continent. In addition to talking to developed countries, DATA also is encouraging African governments to practice democracy and be accountable to the poor in their respective countries. DATA hopes to help by "working to bring people and organizations from all around the United States and the world together to stop the spread of AIDS and extreme poverty in Africa."

DATA
1400 Eye St., NW Suite 1125
Washington, DC 20005
E-mail: data@data.org
Web site: www.data.org

Food Research and Action Center (FRAC): FRAC is a national organization working to improve public policies to eradicate hunger and undernutrition in the United States. Founded in 1970 as a public interest law firm, FRAC is a nonprofit and non-partisan research and public policy center and hub of an anti-hunger network of thousands of individuals and agencies across the country.

1875 Connecticut Ave. NW, Suite 540
Washington, DC 20009
Phone: (202) 986-2200
Fax: (202) 986-2525
Web site: www.frac.org

Heifer Project: Begun in Spain in the 1930s, Heifer International is based on the idea that to become self-reliant, people need not a cup of milk but a whole cow. Since then, it has grown into a worldwide organization that seeks to help poor farmers by providing them with animals to raise in environmentally friendly ways. In return for the animals, families then pass on some of the offspring to other farmers nearby, thus making it a gift that keeps on giving.

Selected by *Worth* magazine as one of the 100 best charities in the United States, this organization gives tangible help to those in need all around the globe by connecting sponsors with farmers and their families.

Heifer International
P.O. Box 8058
Little Rock, AR 72203
Phone: (800) 422-0474
Web site: www.heifer.org

InterAction: InterAction is the largest alliance of U.S.-based international development and humanitarian NGOs. With more than 160 members operating in every developing country, it works to overcome poverty, exclusion and suffering by advancing social justice and basic dignity for all.

1717 Massachusetts Ave. NW, Suite 701
Washington, DC 20036
Phone: (202) 667-8227
Fax: (202) 667-8236
Web site: www.interaction.org

MAZON: A Jewish Response to Hunger has granted more than $28 million since 1986 to nonprofit organizations confronting hunger in the United States and abroad. MAZON (the Hebrew word for "food") awards grants principally to programs working to prevent and alleviate hunger in the United States. Grantees include emergency and direct food assistance programs, food banks, multiservice organizations, anti-hunger advocacy/education and research projects, and international hunger relief and agricultural development programs in Israel and impoverished countries.

1990 South Bundy Drive, Suite 260
Los Angeles, CA 90025
Phone: (310) 442-0020
Fax: (310) 442-0030
Web site: www.mazon.org

NETWORK: A Catholic social justice organization, NETWORK has been a persistent voice for economic justice on Capitol Hill for 30 years. Through lobbying and grassroots work, NETWORK encourages both Congress and the president to bring about a more fair and equitable world. Its issues range from domestic concerns, such as welfare, housing and health care, to international concerns, such as sustained peace and international trade and investment. NETWORK draws from Catholic social teachings to influence the U.S. government to make just decisions.

NETWORK
801 Pennsylvania Ave. SE, Suite 460
Washington, DC 20003-2167
Phone: (202) 547-5556
Web site: www.networklobby.org

ONE Campaign: A diverse coalition of anti-poverty groups, including Bread for the World and World Vision, celebrity spokespeople and hundreds of thousands of individuals across the United States, the ONE Campaign has come together to fight global AIDS, extreme poverty and hunger. This is a new effort to rally people in the United States—one by one. Sign the ONE Campaign Declaration at www.theonecampaign.org.

Oxfam's "Make Trade Fair" Campaign: Oxfam International has long been a leader in seeking justice for poor and oppressed people around the world. Through grassroots efforts and activities in more than 100 countries, Oxfam seeks to work with poor people and influence powerful people in order to bring about a better world.

Oxfam has launched a Make Trade Fair campaign, which aims to give a "voice to the farmers, laborers and factory workers who are being cheated by the blatantly unfair rules of world trade." The campaign also provides you, the consumer, a voice in calling for fairer trade.

Oxfam America
26 West St.
Boston, MA 02111
Phone: (617) 728-2594
Web site: www.oxfamamerica.org or
www.maketradefair.com

UNICEF: Begun in the aftermath of World War II, UNICEF is committed to helping children in developing and impoverished regions. Through working with governments and nongovernmental organizations, UNICEF strives to reduce hunger and malnutrition, promote education of girls and boys, decrease illness and child mortality, and protect children from the hardships of war and natural disaster.

The U.S. fund for UNICEF is one of 37 regional offices set up to support UNICEF through financial contributions, advocating for the world's children and raising awareness among the U.S. public.

U.S. Fund for UNICEF
333 East 38th St.
New York, NY 10016
Phone: (800) FOR-KIDS (367-5437)
Web site: www.unicefusa.org

U.S. Conference of Catholic Bishops: The Department of Social Development and World Peace is the national public policy agency of the U.S. Catholic Bishops. The department of Social Development and World Peace works on behalf of the Catholic bishops to advocate effectively for poor and vulnerable people, genuine justice and peace in the public policy arena, and to build the capacity of the Church to act effectively in defense of human life, human dignity, human rights and the pursuit of justice and peace.

Office of Social Development &
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U.S. Conference of Catholic Bishops
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Endnotes

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Table 1: Global Hunger—Life and Death Indicators

	Population						Life expectancy at birth		Infant mortality rate (under 1)	% of low birth weight infants	% of 1-year-old children immunized (measles)	Under-5 mortality rate per 1,000 live births		Maternal mortality rate per 100,000 live births	Refugees as of Dec. 31, 2003	
	Total (millions) mid-2004	Projected (millions) 2025	Projected population change (%) 2004-2050	Total fertility rate 2002	% below age 15 2004	% urban 2002	Male	Female	2002	1998-2002[y]	2002	1960	2002	1985-2002[y] reported[ß]	Country of origin	Country of asylum
Developing Countries	**5,190.0[aa]**	**6,677.0**	**55**	**3.0**	**33**	**41**	**63**	**67**	**62**	**17**	**73**	**216**	**90**	**..**	**..**	**..**
Africa (sub-Saharan)	**733.0**	**1,120.0**	**132**	**5.5**	**44**	**35**	**48**	**50**	**106**	**14**	**58**	**261[e]**	**174[e]**	**..**	**..**	**..**
Angola	13.3	23.8	206	7.2	48	36	39	42	154	12	74	345	260	..	323,000[w]	13,000
Benin	7.3	11.8	148	5.7	45	44	50	52	93	16	78	296	156	500	..	5,000
Botswana	1.7	1.1	-43	3.7	39	50	35	36	80	10	90	173	110	330	..	4,500
Burkina Faso	13.6	22.5	191	6.7	49	17	44	46	107	19	46	315	207	480	..	..
Burundi	6.2	10.1	147	6.8	45	10	42	44	114	16	75	250	190	..	355,000	42,000
Cameroon	16.1	22.4	92	4.7	42	51	47	49	95	11	62	255	166	430	..	25,000
Cape Verde	0.5	0.7	74	3.4	38	65	66	73	29	13	85	..	38	76	..	..
Central African Republic	3.7	4.8	65	5.0	43	42	41	44	115	14	35	327	180	1,100	41,000	51,000
Chad	9.5	16.7	206	6.7	47	25	47	51	117	17[x]	55	325	200	830	3,000	156,000
Comoros	0.7	1.1	181	4.9	42	35	54	59	59	25	71	265	79	..	..	..
Congo, Dem. Rep. of	58.3	104.9	211	6.7	47	31	46	51	129	12	45	302	205	950	440,000	241,000[w]
Congo, Republic of	3.8	6.8	179	6.3	47	67	47	50	81	..	37	220	108	..	20,000	91,000
Côte d'Ivoire	16.9	22.1	63	4.8	41	45	42	43	102	17	56	290	176	600	55,000	74,000[w]
Djibouti	0.7	1.0	96	5.7	43	84	45	48	100	..	62	289	143	74	..	36,000
Equatorial Guinea	0.5	0.8	132	5.9	44	51	47	50	101	13	51	316	152	..	..	..
Eritrea	4.4	7.0	137	5.5	45	20	52	55	47	21[x]	84	..	89	1,000	280,000[w]	4,000
Ethiopia	72.4	117.6	139	6.2	45	16	45	47	114	15	52	269	171	870	19,000	112,000[w]
Gabon	1.4	1.9	84	4.0	40	83	56	58	60	14	55	..	91	520	..	19,000
Gambia	1.5	2.7	169	4.8	40	32	52	56	91	17	90	364	126	..	..	10,000
Ghana	21.4	30.6	85	4.2	39	37	57	59	57	11	81	215	100	210[x]	12,000	48,000[w]
Guinea	9.2	16.2	231	5.9	44	28	48	50	109	12	54	380	169	530	..	223,000[w]
Guinea-Bissau	1.5	2.8	207	7.1	47	33	43	47	130	22	47	..	211	910	..	10,000
Kenya	32.4	39.9	54	4.1	41	35	48	53	78	11	78	205	122	590	..	219,000[w]
Lesotho	1.8	2.1	23	3.9	39	30	37	38	64	14	70	203	87	..	..	..
Liberia	3.5	6.1	182	6.8	47	46	41	43	157	..	57	288	235	580	384,000[w]	60,000
Madagascar	17.5	33.0	274	5.7	44	31	53	58	84	14	61	186	136	490	..	..
Malawi	11.9	23.8	296	6.1	47	16	42	45	114	16	69	361	183	1,100	..	12,000
Mali	13.4	25.7	243	7.0	49	32	48	49	122	23	33	500	222	580	..	7,000
Mauritania	3.0	5.0	152	5.8	43	61	53	55	120	42	81	310	183	750	23,000	26,500[w]
Mauritius	1.2	1.4	22	2.0	25	42	68	75	17	13	84	92	19	21	..	..
Mozambique	19.2	25.4	63	5.7	44	35	38	42	125	14[x]	58	313	197	1,100	..	8,000
Namibia	1.9	2.1	35	4.6	43	32	48	46	55	16[x]	68	206	67	270	..	15,000
Niger	12.4	25.7	327	8.0	50	22	45	46	156	17	48	354	265	590	..	..
Nigeria	137.3	206.4	124	5.5	44	46	52	52	110	12	40	207	183	..	39,000	10,000
Rwanda	8.4	11.7	104	5.8	45	6	39	41	96	9	69	206	183	1,100	46,000[w]	37,000
Senegal	10.9	17.1	126	5.0	43	49	55	57	79	18	54	300	138	560	13,000	23,000[w]
Sierra Leone	5.2	7.6	100	6.5	44	38	34	36	165	..	60	390	284	1,800	68,000	70,000[w]
Somalia	8.3	14.9	207	7.3	48	29	45	48	133	..	45	..	225	..	277,000	..
South Africa	46.9	44.6	-11	2.6	33	58	49	57	52	15	78	..	65	150	..	104,000
Sudan	39.1	61.3	115	4.4	39	38	56	58	64	31	49	208	94	550	600,000	280,000[w]
Swaziland	1.2	1.1	-2	4.6	43	27	45	42	106	9	72	225	149	230	..	..
Tanzania	36.1	52.1	105	5.2	45	34	44	46	104	13	89	241	165	530	..	480,000[w]
Togo	5.6	7.6	74	5.4	43	35	53	56	79	15	58	267	141	480	4,000	12,000
Uganda	26.1	47.5	217	7.1	50	15	43	46	82	12	77	224	141	510	28,000	231,500[w]
Zambia	10.9	14.4	70	5.7	47	40	35	35	108	10	85	213	192	650	..	239,000[w]
Zimbabwe	12.7	12.8	15	4.0	42	37	43	40	76	11	58	159	123	700	2,500	8,000
South Asia	**..**	**..**	**..**	**3.4**	**..**	**28**	**..**	**..**	**70**	**30**	**67**	**239**	**97**	**..**	**..**	**..**
Afghanistan	28.5	50.3	187	6.8	43	23	42	43	165	..	44	360	257	..	2,500,000[w]	..
Bangladesh	141.3	204.5	98	3.5	37	26	60	60	51	30	77	247	77	380	..	119,900[w]
Bhutan	1.0	1.5	113	5.1	41	8	66	66	74	15	78	300	94	260	128,700	..
India	1,086.6	1,363.0	50	3.1	32	28	61	63	67	30	67	236	93	540	35,800	316,900
Maldives	0.3	0.4	69	5.4	42	29	73	74	58	22	99	300	77	350	..	..
Nepal	24.7	37.8	105	4.3	40	13	59	58	66	21	71	297	91	540	..	134,600
Pakistan	159.2	228.8	85	5.1	41	34	60	62	83	19[x]	57	226	107	530	21,000	1,219,000[w]
Sri Lanka	19.6	21.9	10	2.0	24	23	70	74	17	22	99	133	19	92	105,700	..

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	Population						Life expectancy at birth		Infant mortality rate (under 1) 2002	% of low birth weight infants 1998-2002[y]	% of 1-year-old children immunized (measles) 2002	Under-5 mortality rate per 1,000 live births		Maternal mortality rate per 100,000 live births 1985-2002[y] reported[z]	Refugees as of Dec. 31, 2003	
	Total (millions) mid-2004	Projected (millions) 2025	Projected population change (%) 2004-2050	Total fertility rate 2002	% below age 15 2004	% urban 2002	Male	Female				1960	2002		Country of origin	Country of asylum
East Asia and the Pacific	..	..	..	**2.0**	..	**40**	..	..	**33**	**8**	**80**	**201[f]**	**43**	..	..	..
Brunei	0.4	0.5	85	2.5	30	73	74	79	6	10	99	87	6	0	..	..
Cambodia	13.1	19.8	104	4.8	41	18	55	59	96	11	52	..	138	440	16,100	100
China	1,300.1	1,476.0	11	1.8	22[m]	38	70	73	31	6	79	225	39	53	157,500	396,000[w]
Hong Kong[c]	6.8	8.4	38	..	15	..	79	84	..	..	..	..	..	..	..	..
Fiji	0.8	1.0	18	2.9	32	51	65	69	17	10	88	97	21	38	..	..
Indonesia	218.7	275.5	41	2.4	29	43	66	70	33	10[x]	76	216	45	380	23,600	300
Korea, DPR (North)	22.8	24.7	10	2.0	25	61	61	66	42	7	..	120	55	110	101,700[w]	..
Korea, Rep. of (South)	48.2	50.6	-8	1.4	20	83	73	80	5	4	97	127	5	20	..	1,700
Laos, PDR	5.8	8.6	98	4.8	41	20	52	55	87	14	55	235	100	530	15,000	..
Malaysia	25.6	36.0	83	2.9	33	59	71	76	8	10	92	105	8	30	..	75,700
Mongolia	2.5	3.4	72	2.4	31	57	63	68	58	8	98	..	71	160	..	..
Myanmar (Burma)	50.1	59.8	29	2.9	32	29	54	60	77	15	75	252	109	230	586,000[w]	..
Papua New Guinea	5.7	8.2	90	4.1	41	18	57	59	70	11[x]	71	214	94	370[x]	..	7,800
Philippines	83.7	118.4	76	3.2	36	60	67	72	29	20	73	110	38	170	58,500	2,200
Singapore	4.2	4.8	6	1.4	20	100	77	81	3	8	91	40	4	6	..	..
Solomon Islands	0.5	0.7	112	4.5	42	21	61	62	20	13[x]	78	185	24	550[x]	..	..
Thailand	63.8	70.2	15	1.9	25	20	68	75	24	9	94	148	28	36	..	421,500
Vietnam	81.5	102.9	41	2.3	30	25	70	73	30	9	96	105	39	95	307,200	16,000
Latin America and the Caribbean	**549.0[d]**	**685.0[d]**	**42[d]**	**2.6**	..	**76**	**69[d]**	**75[d]**	**27**	**10**	**91**	**153[g]**	**34[g]**	..	..	..
Argentina	37.9	45.9	40	2.5	27	88	71	78	16	7	97	72	19	41	..	2,300
Belize	0.3	0.4	102	3.2	37	48	67	74	34	6	89	104	40	140	..	900
Bolivia	8.8	12.2	75	3.9	38	64	61	64	56	9	79	255	71	390	..	500
Brazil	179.1	211.2	24	2.2	28	82	67	75	30	10[x]	93	177	36	160	..	3,900
Chile	16.0	19.5	39	2.4	27	86	73	79	10	5	95	155	12	23	..	500
Colombia	45.3	58.1	48	2.6	31	76	69	75	19	9	89	125	23	78	233,600	200
Costa Rica	4.2	5.6	49	2.3	29	60	76	81	9	7	94	123	11	29	..	13,600
Cuba	11.3	11.8	-2	1.6	19	76	74	78	7	6	98	54	9	30	28,200[w]	800
Dominican Republic	8.8	11.1	52	2.7	32	67	67	70	32	14	92	149	38	230[x]	..	500
Ecuador	13.4	17.3	54	2.8	32	64	68	74	25	16	80	178	29	160	..	16,500
El Salvador	6.7	8.5	48	2.9	34	63	67	73	33	13	93	191	39	120	4,500	200
Guatemala	12.7	19.8	115	4.5	42	40	63	69	36	13	92	202	49	190	11,600	800
Guyana	0.8	0.7	-34	2.3	29	37	60	67	54	12	95	126	72	190	..	..
Haiti	8.1	11.7	97	4.0	38	37	50	53	79	21	53	253	123	520	25,800	..
Honduras	7.0	10.7	109	3.8	40	55	67	74	32	14	97	204	42	110	..	..
Jamaica	2.6	3.3	39	2.4	30	57	73	77	17	9	86	74	20	97	..	..
Mexico	106.2	131.7	41	2.5	32	75	73	78	24	9	96	134	29	79	20,700	2,900
Nicaragua	5.6	8.3	93	3.8	41	57	66	71	32	13	98	193	41	120	2,600	300
Panama	3.2	4.2	58	2.7	31	57	72	77	19	10[x]	79	88	25	70	..	2,000
Paraguay	6.0	9.2	101	3.9	38	57	69	73	26	9[x]	82	90	30	190	..	..
Peru	27.5	35.7	55	2.9	33	74	66	71	30	11[x]	95	234	39	190	..	800
Suriname	0.4	0.4	-19	2.5	30	75	67	72	31	13	73	..	40	110	..	..
Trinidad and Tobago	1.3	1.3	-7	1.6	22	75	68	73	17	23	88	73	20	70	..	..
Uruguay	3.4	3.8	24	2.3	24	92	71	79	14	8	92	56	15	26	..	100
Venezuela	26.2	35.3	59	2.7	32	87	70	76	19	7	78	75	22	60	..	182,300
Middle East and North Africa	..	..	..	**3.5**	..	**57**	..	..	**46**	**15[h]**	**87**	**250[h]**	**58**	..	..	..
Algeria	32.3	40.5	37	2.8	32	58	73	74	39	7	81	280	49	140	..	170,000[w]
Bahrain	0.7	1.0	76	2.7	29	93	73	75	13	8	99	160	16	46	..	..
Cyprus	0.9	1.1	14	1.9	21	71	75	80	5	..	86	36	6	0	..	5,300
Egypt	73.4	103.2	74	3.3	34	43	66	70	35	12	97	282	41	84	..	69,000[w]
Iran	67.4	84.7	43	2.4	31	65	68	70	35	7[x]	99	281	42	37	35,000	1,335,000[w]
Iraq	25.9	41.7	124	4.8	41	68	58	61	102	15	90	171	125	290	280,600[w]	131,500[w]
Jordan	5.6	8.1	80	3.6	37	79	71	72	27	10[x]	95	139	33	41	..	163,700[w]
Kuwait	2.5	4.6	182	2.7	26	96	77	79	9	7	99	128	10	5	..	65,000
Lebanon	4.5	5.7	53	2.2	28	90	72	75	28	6	96	85	32	100[x]	..	256,000[w]

Table 1: Global Hunger—Life and Death Indicators

	Population						Life expectancy at birth		Infant mortality rate (under 1)	% of low birth weight infants	% of 1-year-old children immunized (measles)	Under-5 mortality rate per 1,000 live births		Maternal mortality rate per 100,000 live births	Refugees as of Dec. 31, 2003	
	Total (millions) mid-2004	Projected (millions) 2025	Projected population change (%) 2004-2050	Total fertility rate 2002	% below age 15 2004	% urban 2002	Male	Female	2002	1998-2002[y]	2002	1960	2002	1985-2002[y] reported[z]	Country of origin	Country of asylum
Libya	5.6	8.3	92	3.1	30	88	74	78	16	7[x]	91	270	19	77	..	..
Morocco	30.6	39.2	47	2.8	31	57	68	72	39	11[x]	96	211	43	230	..	..
Oman	2.7	4.0	93	5.0	37	77	..	..	11	8	99	280	13	23	..	..
Qatar	0.7	1.0	67	3.3	26	93	70	75	11	10	99	140	16	5	..	..
Saudi Arabia	25.1	40.1	120	4.6	39	87	71	73	23	11[x]	97	292	28	..	..	240,900
Syria	18.0	27.6	95	3.4	37	52	69	71	23	6	98	201	28	110[x]	4,000[w]	497,000[w]
Tunisia	10.0	11.6	22	2.0	27	67	71	75	21	7	94	254	26	69	..	..
Turkey	71.3	88.9	37	2.5	30	67	66	71	36	16	82	219	42	130[x]	40,000	9,500
United Arab Emirates	4.2	5.4	35	2.9	25	88	73	77	8	15[x]	94	223	9	3	..	..
West Bank and Gaza[a]	3.8	7.4	211	5.6	46	67	71	74	23	9	94	..	25	..	3,000,000[w]	1,588,000
Yemen	20.0	39.6	255	7.0	48	25	58	62	79	32[x]	65	340	107	350	..	75,000[w]
Countries in Transition[b]	**..**	**..**	**..**	**1.7**	**..**	**64**	**..**	**..**	**33[i]**	**9[i]**	**92[i]**	**112[i]**	**41[i]**	**..**	**..**	**..**
Albania	3.2	3.7	15	2.3	27	44	72	76	26	3	96	151	30	20	..	100
Armenia	3.2	3.0	-24	1.2	19	67	70	76	30	7	91	..	35	22	..	11,000
Azerbaijan	8.3	9.7	40	2.1	28	52	69	75	74	11	97	..	105	25	..	10,300
Belarus	9.8	9.4	-13	1.2	16	70	63	75	17	5	99	47	20	14	..	3,400
Bosnia and Herzegovina	3.9	3.9	-15	1.3	16	44	71	76	15	4	89	160	18	10	142,200	22,500
Bulgaria	7.8	6.5	-38	1.1	14	68	69	75	14	10	90	70	16	15	..	800
Croatia	4.4	4.3	-14	1.6	17	59	71	78	7	6	95	98	8	2	209,100	4,200
Czech Republic	10.2	10.1	-10	1.2	15	75	72	79	4	7	..	25	5	3	..	3,900
Estonia	1.3	1.2	-23	1.2	15	69	65	77	10	4	95	52	12	46	..	..
Georgia	4.5	4.0	-32	1.4	18	57	68	75	24	6	73	70	29	67	25,000	3,900
Hungary	10.1	8.9	-25	1.2	16	65	68	75	8	9	99	57	9	5	..	1,500
Kazakhstan	15.0	15.8	-1	2.0	24	56	58	70	61	8	95	..	76	50	..	15,300
Kyrgyzstan	5.1	6.7	62	2.7	31	34	65	72	52	7[x]	98	180	61	44	..	8,200
Latvia	2.3	2.2	-24	1.1	15	60	65	77	17	5	98	44	21	25	..	..
Lithuania	3.4	3.5	-9	1.3	18	69	66	78	8	4	98	70	9	13	..	100
Macedonia, Republic of	2.0	2.2	3	1.9	21	60	71	75	22	5	98	177	26	15	..	2,300
Moldova	4.2	3.9	-28	1.4	20	42	65	72	27	5	94	88	32	44	..	100
Poland	38.2	36.6	-15	1.3	17	63	70	79	8	6	98	70	9	4	..	1,500
Romania	21.7	18.1	-27	1.3	16	55	68	75	19	9	98	82	21	34	..	200
Russian Federation	144.1	136.9	-17	1.2	15	73	58	72	18	6	98	64	21	37	49,000	161,300[w]
Slovakia	5.4	5.2	-13	1.3	17	58	70	78	8	7	99	40	9	16	..	4,700
Slovenia	2.0	2.0	-15	1.2	14	49	72	80	4	6	94	45	5	17	..	100
Tajikistan	6.6	8.6	52	3.1	35	28	66	71	53	15	84	140	72	45	59,800	3,200
Turkmenistan	5.7	7.6	53	2.7	33	45	63	70	76	6	88	..	98	9	..	14,100
Ukraine	47.4	45.1	-19	1.2	15	68	62	74	16	5	99	53	20	18	11,200	3,100
Uzbekistan	26.4	36.9	84	2.5	33	37	68	73	52	7	97	..	68	34	..	41,700
Yugoslavia, FR[v]	10.7	10.7	-4	1.7	19	52	70	75	16	4	92	120	19	7	70,100	291,100
Industrial Countries	**..**	**..**	**..**	**1.7**	**..**	**78**	**..**	**..**	**5**	**7**	**90**	**39**	**7**	**..**	**..**	**..**
Australia	20.1	24.2	31	1.7	20	92	77	83	6	7	94	24	6	..	..	22,800
Austria	8.1	8.4	1	1.3	16	68	76	82	5	7	78	43	5	..	..	17,600
Belgium	10.4	10.8	5	1.7	17	97	75	82	5	8[x]	75	35	6	..	..	33,000[s]
Canada	31.9	36.0	16	1.5	18	79	77	82	5	6	96	33	7	..	..	70,200
Denmark	5.4	5.4	-3	1.8	19	85	75	79	4	5	99	25	4	10	..	2,800
Finland	5.2	5.3	-8	1.7	17	59	75	82	4	4	96	28	5	6	..	2,300
France	60.0	63.4	7	1.9	18	76	76	83	4	7	85	34	6	10	..	34,900
Germany	82.6	82.0	-9	1.3	15	88	75	81	4	7	89	40	5	8	..	90,800
Greece	11.0	10.4	-12	1.3	14	61	76	81	5	8	88	64	5	1	..	5,200[w]
Ireland	4.1	4.5	16	1.9	21	60	75	80	6	6	73	36	6	6	..	5,800
Israel	6.8	9.3	56	2.7	28	92	77	81	6	8	95	39	6	5	..	1,000
Italy	57.8	57.6	-10	1.2	14	67	77	83	4	6	70	50	6	7	..	5,600
Japan	127.6	121.1	-21	1.3	14	79	78	85	3	8	98	40	5	8	..	7,900
Luxembourg	0.5	0.6	56	1.7	19	92	75	81	5	8	91	41	5	0	..	..

Table 1: Global Hunger—Life and Death Indicators

	Population						Life expectancy at birth		Infant mortality rate (under 1) 2002	% of low birth weight infants 1998-2002[y]	% of 1-year-old children immunized (measles) 2002	Under-5 mortality rate per 1,000 live births		Maternal mortality rate per 100,000 live births 1985-2002[y] reported[t]	Refugees as of Dec. 31, 2003	
	Total (millions) mid-2004	Projected (millions) 2025	Projected population change (%) 2004-2050	Total fertility rate 2002	% below age 15 2004	% urban 2002	Male	Female				1960	2002		Country of origin	Country of asylum
Netherlands	16.3	17.4	8	1.7	18	90	76	81	5	..	96	22	5	7	..	14,600
New Zealand	4.1	4.7	26	2.0	22	86	76	81	6	6	85	26	6	15	..	1,200
Norway	4.6	5.1	22	1.8	19	75	77	82	4	5	88	23	4	6	..	11,000
Portugal	10.5	10.4	-11	1.5	17	67	74	81	5	8	87	112	6	8	..	..
Spain	42.5	43.5	-3	1.2	14	78	76	83	4	6[x]	97	57	6	0	..	200
Sweden	9.0	9.9	18	1.6	17	83	78	82	3	4	94	20	3	5	..	25,600
Switzerland	7.4	7.4	-3	1.4	16	67	77	83	5	6	79	27	6	5	..	38,300
United Kingdom	59.7	64.0	10	1.6	18	90	76	80	5	8	83	27	7	7	..	55,700[s]
United States	293.6	394.4	43	2.1	21	78	75	80	7	8	91	30	8	8	..	244,200[s]
World	**6,396.0**	**7,934.0**	**45**	**2.8**	**..**	**48**	**65**	**69**	**56**	**16**	**75**	**196**	**82**	**..**	**..**	**11,852,900[z]**

.. Data not available.
a Palestinian Territory.
b Central and Eastern Europe/Commonwealth of Independent States (the newly independent states of the former Soviet Union).
c Special administrative region, data exclude China.
d Data include Antigua and Barbuda, Bahamas, Barbados, Dominica, French Guiana, Grenada, Guadeloupe, Martinique, Netherland Antilles, Puerto Rico, St. Kitts-Nevis, Saint Lucia, and St.Vincent and the Grenadines.
e Data include São Tomé and Principe and Seychelles. Data exclude Djibouti and Sudan.
f Data include Cook Islands, Kiribati, Marshall Islands, Micronesia, Nauru, Niue, Palau, Samoa, Tonga, Tuvalu and Vanautu. Data exclude Hong Kong.
g Data include Antigua and Barbuda, Bahamas, Barbados, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines.
h Data include Djibouti and Sudan. Data exclude Turkey and the West Bank and Gaza.
i Data include Andorra, Holy See, Monaco and San Marino. Data exclude Slovenia.
m For statistical purposes the data for China do not include Hong Kong and Macao Special Administrative Regions.
s Where cases only were reported, U.S. Committee for Refugees (USCR) approximates the number of individuals represented per case.
t The maternal mortality data in this column are reported by national authorities.
v Sometimes listed as Serbia and Montenegro.
w Sources vary significantly.
x Data refer to a period other than the one specified in the column heading, differ from standard deviation, or refer to only part of a country.
y Data refer to most recent year available.
z Table does not include all countries represented in this total.
aa Refers to "Less Developed" countries as defined by the World Population Data Sheet of the Population Reference Bureau.

Table 2: Global Food, Nutrition and Education

	Food supply		Vitamin A supplementation coverage rate (6 to 59 months) 2001	Adult literacy rate (% age 15 and above) 2002			Educational enrollment (% of relevant age group)				
	Per capita dietary energy supply (DES) (calories/day) 2002	Food production per capita 2003		Total	Female	Male	Total primary school (net) 2001-02[d]	Primary school (net) 1997-2000[m]		Primary, secondary, tertiary (gross %) 2001-02[f]	
								Female	Male	Female	Male
Developing Countries	**2,666**	**..**	**59**	**76.7**	**..**	**..**	**..**	**77**	**84**	**..**	**..**
Africa (sub-Saharan)	**2,207**	**97.4[cc]**	**75**	**63.2**	**..**	**..**	**..**	**58**	**63**	**..**	**..**
Angola	2,083	104.1	75	..	..	..	30.0[h]	35	39	27[h]	32[h]
Benin	2,548	99.0	95	39.8	25.5	54.8	71.0[c]	57	83	41[c]	64[c]
Botswana	2,151	100.4	85	78.9	81.5	76.1	81.0	86	83	71	70
Burkina Faso	2,462	108.6	97	12.8[j,k]	8.1[j,p]	18.5[j,p]	35.0[c]	29	42	18[c]	26[c]
Burundi	1,649	98.8	95	50.4	43.6	57.7	53.0	49	59	29	38
Cameroon	2,273	105.0	100	67.9[r]	59.8[l]	77.0[l]	..	71[x]	81[x]	51[c]	61[c]
Cape Verde	3,243	87.5	..	75.7	68.0	85.4	101.0[f]	99	98	72[c]	73[c]
Central African Republic	1,980	101.5	90	48.6[r]	33.5[l]	64.7[l]	..	45	64	24	38
Chad	2,114	101.4	91[t]	45.8	37.5	54.5	58.0	47	70	25[f]	44[f]
Comoros	1,754	94.6	..	56.2	49.1	63.5	55.0[c]	52	60	41	50
Congo, Dem. Rep	1,599	89.6	98	..	51.8[r]	74.2[r]	35.0[i]	32	33	24[i,s]	30[i,s]
Congo, Republic	2,162	97.6	100	82.8	77.1	88.9	..	93[x]	99[x]	44[c]	52[c]
Côte d'Ivoire	2,631	91.8	97	..	38.4[r]	60.3[r]	63.0	55	73	34	50
Djibouti	2,220	94.3	..	..	55.5[r]	76.1[r]	34.0	28	37	20	28
Equatorial Guinea	..	90.4	..	..	76.0[r]	92.8[r]	85.0	68	76	52	64
Eritrea	1,513	74.6	61	..	45.6[r]	68.2[r]	43.0	38	44	28	39
Ethiopia	1,857	99.6	16	41.5	33.8	49.2	46.0	41	53	28	41
Gabon	2,637	95.4	89	..	..	..	78.0[d]	87	89	70[h]	74[h]
Gambia	2,273	65.5	91	..	30.9[r]	45.0[r]	73.0[f]	66	71	41[c]	49[c]
Ghana	2,667	107.6	100[t]	73.8	65.9	81.9	60.0	57	60	43	50
Guinea	2,409	103.6	93	..	..	..	61.0	42	52	21[i]	37[i]
Guinea-Bissau	2,024	93.6	100	..	24.7[r]	55.2[r]	45.0[h]	45	63	29[h]	45[h]
Kenya	2,090	94.2	90	84.3	78.5	90.0	70.0	69	68	52	54
Lesotho	2,638	104.2	..	81.4[r]	90.3[l]	73.7[l]	84.0	82	75	66	64
Liberia	1,900	84.8	100[t]	..	..	..	..	71	96	..	..
Madagascar	2,005	94.0	73	..	60.6[r]	74.2[r]	69.0	68	67	44	46
Malawi	2,155	79.5	63	61.8	48.7	75.5	81.0[c]	100	97	71[c]	77[c]
Mali	2,174	96.3	74	19.0[j,k]	11.9[j,p]	26.7[j,p]	38.0[i]	36	51	21[i]	31[i]
Mauritania	2,772	97.6	98	41.2	31.3	51.5	67.0	62	66	42	46
Mauritius	2,955	102.8	..	84.3[j]	80.5[j]	88.2[j]	93.0	95	95	68	70
Mozambique	2,079	98.1	71	46.5	31.4	62.3	60.0	50	59	35	46
Namibia	2,278	90.7	84	83.3	82.8	83.8	78.0	85	79	72	70
Niger	2,130	99.8	89[t]	17.1	9.3	25.1	34.0	24	36	16	23
Nigeria	2,726	97.0	77	66.8	59.4	74.4	..	33[x]	38[x]	41[h,n]	79[h,n]
Rwanda	2,084	103.4	94	69.2	63.4	75.3	84.0	98	97	50	56
Senegal	2,279	86.0	85[t]	39.3	29.7	49.0	58.0[f]	60	66	35[c]	41[c]
Sierra Leone	1,936	96.6	91[t]	..	..	..	..	63	68	38[f]	52[f]
Somalia	..	..	62	..	..	..	..	7[x]	13[x]	..	..
South Africa	2,956	100.1	..	86.0	85.3	86.7	90.0	88	90	77	78
Sudan	2,228	102.0	92[t]	59.9	49.1	70.8	46.0[c]	42	51	34[f]	39[f]
Swaziland	2,322	97.8	..	80.9	80.0	82.0	77.0	94	92	59	62
Tanzania	1,975	97.3	93[t]	77.1	69.2	85.2	54.0	48	46	31[f]	32[f]
Togo	2,345	96.2	77	59.6	45.4	74.3	95.0	83	100	55	78
Uganda	2,410	99.1	37	68.9	59.2	78.8	..	100	100	68	73
Zambia	1,927	102.7	83[t]	79.9	73.8	86.3	66.0	65	66	43	47
Zimbabwe	1,943	85.1	..	90.0	86.3	93.8	83.0[f]	80	80	57[c]	60[c]
South Asia	**..**	**98.3[dd]**	**46**	**57.6**	**..**	**..**	**..**	**65**	**80**	**..**	**..**
Afghanistan	..	..	84[t]	..	..	..	..	15[x]	42[x]	..	..
Bangladesh	2,205	97.8	90[t]	41.1	31.4	50.3	87.0	90	88	54	53
Bhutan	..	76.2	..	..	..	..	..	47	58	..	..
India	2,459	98.4	25	61.3[j]	46.4[j]	69.0[j]	83.0[d]	64	78	48[f]	62[f]
Maldives	2,548	103.8	..	97.2	97.2	97.3	96.0	99	99	78	78
Nepal	2,453	99.3	98[t]	44.0	26.4	61.6	70.0[d]	67	77	55	67
Pakistan	2,419	97.9	100[t]	41.5[j,h]	28.5[j,p]	53.4[j,p]	..	48	83	31[f]	43[f]
Sri Lanka	2,385	100.1	..	92.1	89.6	94.7	105.0[f]	97	97	66[j]	64[j]

Table 2: Global Food, Nutrition and Education

	Food supply		Vitamin A supplementation coverage rate (6 to 59 months) 2001	Adult literacy rate (% age 15 and above) 2002			Educational enrollment (% of relevant age group)				
	Per capita dietary energy supply (DES) (calories/day) 2002	Food production per capita 2003		Total	Female	Male	Total primary school (net) 2001-02[d]	Primary school (net) 1997-2000[m]		Primary, secondary, tertiary (gross %) 2001-02[f]	
								Female	Male	Female	Male
East Asia and the Pacific	..	**106.0**[ee]	..	**90.3**	..	..	..	**92**[q]	**93**[q]	..	..
Brunei	2,855	105.9	..	93.9[j]	91.4[j]	96.3[j]	..	91[x]	90[x]	75	72
Cambodia	2,046	99.9	57	69.4	59.3	80.8	86.0	90	100	53	64
China	2,951	109.1	..	90.9[j]	86.5[j]	95.1[j]	93.0[d]	93	93	64[h]	69[h]
Hong Kong[a]	..	..	..	..	89.6[r]	96.9[r]	98.0	..	..	70	73
Fiji	2,894	96.1	..	92.9[j,k]	91.4[j,p]	94.5[j,p]	100.0[f]	100	99	73[c]	73[c]
Indonesia	2,904	104.2	61	87.9	83.4	92.5	92.0[c]	92	93	64[c]	66[c]
Korea, DPR (North)	2,142	106.0	99[t]	..	..	..	..	..	..	..	..
Korea, Rep. (South)	3,058	92.4	..	..	96.6[e,r]	99.2[e,r]	101.0[f]	100	99	85[c]	98[c]
Lao, PDR	2,312	112.6	70[t]	66.4	55.5	77.4	83.0	78	85	53	65
Malaysia	2,881	108.4	..	88.7[j]	85.4[j]	92.0[j]	95.0[c]	99	98	72[c]	69[c]
Mongolia	2,249	95.8	93	97.8[j]	97.5[j]	98.0[j]	87.0	91	87	76	64
Myanmar (Burma)	2,937	116.2	97[t]	85.3	81.4	89.2	82.0	83	84	48[f]	47[f]
Papua New Guinea	..	98.0	..	..	57.7[r]	71.1[r]	77.0	80	88	40	42
Philippines	2,379	106.1	84[t]	92.6[j]	92.7[j]	92.5[j]	93.0[f]	93	92	82[c]	81[c]
Singapore	..	71.0	..	92.5[j]	88.6[j]	96.6[j]	..	92[x]	93[x]	75[h,n]	76[h,n]
Solomon Islands	2,265	96.7	..	..	..	..	..	..	..	..	..
Thailand	2,467	103.2	..	92.6[j]	90.5[j]	94.9[j]	86.0	84	87	72[f]	74[f]
Vietnam	2,566	113.8	59	90.3[j,h]	86.9[j,p]	94.0[j,p]	94.0	92	98	61	67
Latin America and Caribbean	..	**105.9**[aa]	..	**88.6**	..	..	..	**94**	**96**	..	..
Argentina	2,992	99.6	..	97.0	97.0	97.0	108.0[c]	100	100	98[c]	90[c]
Belize	2,869	94.0	..	76.9[j]	77.1[j]	76.7[j]	96.0[d]	100	98	72[f]	71[f]
Bolivia	2,235	110.0	31	86.7[j]	80.7[j]	93.1[j]	94.0[f]	97	97	82[c]	89[c]
Brazil	3,049	114.2	..	86.4[j]	86.5[j]	86.2[j]	97.0[f]	94	100	94[c]	90[c]
Chile	2,863	102.0	..	95.7[j]	95.6[j]	95.8[j]	89.0[d]	88	89	79[f]	80[f]
Colombia	2,585	98.7	..	92.1	92.2	92.1	87.0	88	89	70	67
Costa Rica	2,876	88.5	..	95.8	95.9	95.7	91.0	91	91	70	69
Cuba	3,152	107.9	..	96.9	96.8	97.0	96.0	97	98	78	77
Dominican Republic	2,347	102.6	35	84.4	84.4	84.3	97.0[f]	93	92	81[c]	73[c]
Ecuador	2,754	103.5	50	91.0[j]	89.7[j]	92.3[j]	102.0	100	99	71[f,s]	73[f,s]
El Salvador	2,584	95.1	..	79.7	77.1	82.4	89.0	88	75	65	66
Guatemala	2,086	95.5	..	69.9	62.5	77.3	85.0[f]	82	86	52[c]	59[c]
Guyana	2,692	105.2	..	..	98.2[r]	99.0[r]	98.0[c]	97	99	75[h]	75[h]
Haiti	2,086	98.8	..	51.9	50.0	53.8	..	83	78	51[h,n]	53[h,n]
Honduras	2,356	101.1	62	80.0[j]	80.2[j]	79.8[j]	87.0	88	87	61[f,s]	64[f,s]
Jamaica	2,685	97.8	..	87.6	91.4	83.8	95.0[f]	95	95	78[c]	72[c]
Mexico	3,145	100.8	..	90.5[j]	88.7[j]	92.6[j]	101.0[f]	100	100	74[c]	73[c]
Nicaragua	2,298	110.7	..	76.7[r]	76.6[l]	76.8[l]	82.0[f]	81	80	66[c]	63[c]
Panama	2,272	98.5	..	92.3	91.7	92.9	99.0	100	100	75[h]	71[h]
Paraguay	2,565	107.4	..	91.6[r]	90.2[l]	93.1[l]	92.0[f]	93	92	72[c]	72[c]
Peru	2,571	105.7	6	85.0[r]	80.3[l]	91.3[l]	100.0[f]	100	100	88[c]	88[c]
Suriname	2,652	104.1	..	..	..	..	97.0[c]	90	94	79[c]	69[c]
Trinidad and Tobago	2,732	114.3	..	98.5	97.9	99.0	94.0	92	93	65	63
Uruguay	2,828	101.8	..	97.7	98.1	97.3	90.0[f]	91	90	90[c]	81[c]
Venezuela	2,336	91.6	..	93.1	92.7	93.5	92.0	89	87	74	69
Middle East and North Africa	..	**99.0**[bb]	..	..	..	..	..	**75**[u]	**83**[u]	..	..
Algeria	3,022	109.7	..	68.9	59.6	78.0	95.0[l]	97	100	69[c]	72[c]
Bahrain	..	84.2	..	88.5	84.2	91.5	91.0	97	95	82	77
Cyprus	3,255	93.2	..	96.8[j]	95.1[j]	98.6[j]	95.0[d]	95	95	75[f]	74[f]
Egypt	3,338	95.7	..	55.6[j,h]	43.6[j,p]	67.2[j,p]	90.0	90	95	72[h,n]	80[h,n]
Iran	3,085	106.7	..	..	70.4[l,p,r]	83.5[l,p,r]	87.0	73	74	65	72
Iraq	..	..	..	..	..	..	..	86	100	..	..
Jordan	2,673	121.9	..	90.9	85.9	95.5	91.0[f]	94	93	77[c]	76[c]
Kuwait	3,010	103.9	..	82.9	81.0	84.7	85.0	65	68	81[h]	71[h]
Lebanon	3,196	96.1	..	..	81.0[r]	92.4[r]	90.0	74	74	79	77

Table 2: Global Food, Nutrition and Education

	Food supply		Vitamin A supplementation coverage rate (6 to 59 months) 2001	Adult literacy rate (% age 15 and above) 2002			Educational enrollment (% of relevant age group)				
	Per capita dietary energy supply (DES) (calories/day) 2002	Food production per capita 2003		Total	Female	Male	Total primary school (net) 2001-02[d]	Primary school (net) 1997-2000[m]		Primary, secondary, tertiary (gross %) 2001-02[f]	
								Female	Male	Female	Male
Libya	3,320	95.4	..	81.7	70.7	91.8	..	96[x]	97[x]	100[c,d]	93[c]
Morocco	3,052	116.7	..	50.7	38.3	63.3	88.0	74	82	52	61
Oman	..	86.7	..	74.4	65.4	82.0	75.0	65	65	63	62
Qatar	..	112.8	..	84.2[j,h]	82.3[j,p]	84.9[j,p]	94.0	96	95	84	79
Saudi Arabia	2,844	100.7	..	77.9	69.5	84.1	59.0	56	60	57	58
Syria	3,038	112.5	..	82.9	74.2	91.0	98.0	94	99	57	62
Tunisia	3,238	89.2	..	73.2	63.1	83.1	97.0[f]	99	100	75[c]	74[c]
Turkey	3,357	95.2	..	86.5[j]	78.5[j]	94.4[j]	88.0[f]	82	93	62[c]	74[c]
United Arab Emirates	3,225	52.5	..	77.3	80.7	75.6	81.0	87	86	72	65
West Bank and Gaza[g]			..	..			95.0	98	96	81	78
Yemen	2,038	98.9	100	49.0	28.5	69.5	67.0[d]	49	84	37[f]	66[f]
Countries in Transition[b]	**..**	**103.0**	**..**	**..**	**..**	**..**	**..**	**84**	**88**	**..**	**..**
Albania	2,848	105.0	..	98.7[j]	98.3[j]	99.2[e,j]	97.0[f]	97	98	70[f]	67[f]
Armenia	2,268	114.6	..	99.4[j,h]	99.2[e,j]	99.7[e,j]	85.0	70	69	75	69
Azerbaijan	2,575	118.3	..	..	..	..	80.0	93	90	67	70
Belarus	3,000	110.9	..	99.7	99.6[e]	99.8[e]	94.0	100	100	90	86
Bosnia and Herzegovina	2,894	83.8	..	94.6	91.1	98.4	..	100	100	..	..
Bulgaria	2,848	101.0	..	98.6	98.1	99.1[e]	93.0[f]	93	95	77[f]	75[f]
Croatia	2,799	92.6	..	98.1[j]	97.1[j]	99.3[e,j]	88.0	72	72	74	72
Czech Republic	3,171	90.5	..	..	..[e]	..[e]	88.0[f]	90	90	79[c]	78[c]
Estonia	3,002	107.5	..	99.8[j]	99.8[e,j]	99.8[e,j]	98.0[d]	97	98	101[d,f]	92[f]
Georgia	2,354	112.3	..	..	..	..	91.0	95	95	70	68
Hungary	3,483	95.3	..	..	99.2[e]	99.5[e,j]	91.0[c]	90	91	89[c]	84[c]
Kazakhstan	2,677	107.5	..	99.4	99.2[e]	99.7[e]	90.0	88	89	82	80
Kyrgyzstan	2,999	99.0	..	..	..	..	90.0	81	84	81	80
Latvia	2,938	111.0	..	99.7[j]	99.7[e,j]	99.8[e,j]	91.0[d]	92	92	92[f]	83[f]
Lithuania	3,324	109.6	..	99.6[j]	99.6[e,j]	99.6[e,j]	97.0[d]	94	95	93[f]	87[f]
Macedonia, Republic of	2,655	91.1	..	..	..	..	93.0[f]	92	92	70[f]	70[f]
Moldova	2,806	102.8	..	99.0	98.6	99.6[e]	78.0	78	79	63	60
Poland	3,374	97.5	..	..	99.7[e,r]	99.8[e,r]	98.0[c]	98	98	93[c]	87[c]
Romania	3,455	106.2	..	97.3[j]	96.3[j]	98.4[j]	93.0[d]	93	93	70[f]	67[f]
Russian Federation	3,072	110.4	..	99.6	99.5[e]	99.7[e]	..	93[x]	93[x]	92[c]	85[c]
Slovakia	2,889	91.0	..	99.7[j]	99.7[e,j]	99.7[e,j]	87.0[f]	90	89	75[c]	73[c]
Slovenia	3,001	106.4	..	99.7	99.6[e]	99.7[e]	93.0[d]	93	94	94[f]	86[f]
Tajikistan	1,828	120.6	..	99.5[j]	99.3[e,j]	99.7[e,j]	105.0	99	100	67	80
Turkmenistan	2,742	98.1	..	98.8[j,h]	98.3[j,p]	99.3[e,j,p]	..	..	..	81[h,n]	81[h,n]
Ukraine	3,054	95.6	..	99.6	99.5[e]	99.8[e]	82.0	71	72	86	83
Uzbekistan	2,241	103.4	..	99.3	98.9	99.6[e]	..	89	87	75	78
Yugoslavia, FR[v]	2,655	97.7	..	..	..	..	..	51	50	..	..
Industrial Countries	**..**	**97.1[ff]**	**..**	**..**	**..**	**..**	**..**	**97[o]**	**96[o]**	**..**	**..**
Australia	3,054	95.9	..	..	..[e]	..[e]	96.0[f]	96	95	114[c,d]	111[c,d]
Austria	3,673	91.7	..	..	..[e]	..[e]	91.0[d]	92	90	92[f]	91[f]
Belgium	..	96.8	..	..	..[e]	..[e]	101.0[d]	100	100	115[c,d]	107[c,d]
Canada	3,589	95.2	..	..	..[e]	..[e]	100.0[d]	99	99	96[f]	93[f]
Denmark	3,439	101.4	..	..	..[e]	..[e]	99.0[c]	99	99	99[h]	92[h]
Finland	3,100	101.6	..	..	..[e]	..[e]	100.0[d]	100	100	111[d,f]	102[d,f]
France	3,654	93.0	..	..	..[e]	..[e]	100.0[f]	100	100	93[f]	90[f]
Germany	3,496	93.2	..	..	..[e]	..[e]	83.0[f]	88	86	88[c]	89[c]
Greece	3,721	95.9	..	..	96.1[e]	98.6[e]	95.0[d]	97	97	88[f]	84[f]
Ireland	3,656	92.4	..	..	..[e]	..[e]	94.0[d]	90	90	94[f]	87[f]
Israel	3,666	99.2	..	95.3	93.4	97.3	100.0	100	100	94	89
Italy	3,671	91.4	..	..	98.1[e]	98.9[e]	100.0[d]	100	100	84[f]	81[f]
Japan	2,761	95.7	..	..	..[e]	..[e]	101.0[f]	100	100	83[c]	85[c]
Luxembourg	..	94.6	..	..	..[e]	..[e]	96.0[d]	97	96	75[f,gg]	74[f,gg]

Table 2: Global Food, Nutrition and Education

	Food supply		Vitamin A supplementation coverage rate (6 to 59 months) 2001	Adult literacy rate (% age 15 and above) 2002			Educational enrollment (% of relevant age group)				
	Per capita dietary energy supply (DES) (calories/day) 2002	Food production per capita 2003		Total	Female	Male	Total primary school (net) 2001-02[d]	Primary school (net) 1997-2000[m]		Primary, secondary, tertiary (gross %) 2001-02[f]	
								Female	Male	Female	Male
Netherlands	3,362	92.6	..	..	..[e]	..[e]	100.0[d]	100	100	99[f]	100[d,f]
New Zealand	3,219	110.4	..	..	..[e]	..[e]	98.0[f]	99	99	107[c,d]	96[c]
Norway	3,484	97.5	..	..	..[e]	..[e]	101.0[d]	100	100	102[d,f]	94[f]
Portugal	3,741	97.4	..	..	90.3[e]	95.2[e]	..	100	100	97[f]	90[f]
Spain	3,371	106.5	..	..	96.9[e]	98.7[e]	104.0[f]	100	100	95[c]	89[c]
Sweden	3,185	99.7	..	..	..[e]	..[e]	102.0[f]	100	100	124[c,d]	104[c,d]
Switzerland	3,526	99.2	..	..	..[e]	..[e]	99.0[d]	99	99	86[f]	90[f]
United Kingdom	3,412	96.8	..	..	..[e]	..[e]	101.0[d]	99	99	119[d,f]	107[d,f]
United States	3,774	97.8	..	..	..[e]	..[e]	93.0[f]	96	94	96[c]	89[c]
World	**2,804**	**101.4**	**59**	**..**	**..**	**..**	**..**	**79**	**85**	**..**	**..**

.. Data not available.
a Special Administrative Region, data exclude China.
b Central and Eastern European countries and newly independent states of the former Soviet Union.
c Preliminary UNESCO estimate and subject to further revision.
d For purposes of calculating the GDI, a value of 100% was applied.
e For purposes of calculating the GDI, a value of 99.0% was applied (UN Human Development Report 2004).
f Data refer to the 2000/01 school year (UN Human Development Report 2004).
g Palestinian Territory.
h Data refer to the 1999/2000 school year (UN Human Development Report 2004).
i Data refer to the 1998/9 school year (UN Human Development Report 2004).
j Census data (UN Human Development Report 2004).
k Data refer to a year between 1995 and 1999 (UN Human Development Report 2004).
l Survey data (UN Human Development Report 2004).
m Data refer to the most recent year available during the period specified in the column heading.
n Data provided by the UNESCO Institute for Statstics for Human Development Report 2001 (see UNESCO Institute for Statistics 2001).
o Data include Andorra, Holy See, Ireland, Liechtenstein, Malta, Monaco, San Marino and Slovenia.
p Data refer to a year between 1995 and 1999 (UN Human Development Report 2004).
q Data exclude Hong Kong.
r UNESCO Institute for Statistics 2003a (UN Human Development Report 2004).
s UNESCO Institute for Statistics 2003b (UN Human Development Report 2004).
t Identifies countries that have achieved a second round of vitamin A coverage greater than or equal to 70%.
u Data exclude Turkey.
v Sometimes listed as Serbia and Montenegro.
x Data refer to a period other than specified in the column heading.
aa Data include Antigua and Barbuda, Bahamas, Barbados, Dominica, Falkland Island, French Guiana, Grenada, Guadeloupe, Martinique, Puerto Rico, St. Kitts and Nevis, St. Lucia, and St. Vincent/Gernadines.
bb Data include the Occupied Territories of Palestine and Sudan. Data exclude Algeria, Iraq and Morocco.
cc Data include São Tomé and Principe and Seychelles. Data excludes South Africa and Somalia.
dd Data exclude Afghanistan.
ee Data exclude China, Hong Kong, Fiji, Papua New Guinea and Solomon Islands.
ff Data include Iceland, Malta, and South Africa.
gg The ratio is an underestimate, because many students pursue studies in nearby countries.
The number '0' (zero) means zero or less than half the unit shown.

Table 3: Hunger, Malnutrition and Poverty

	Undernourished population		% under-5 (1995-2002[m]) suffering from:				% Population using improved drinking water sources 2000			Population in Poverty (%)			
			Underweight		Wasting	Stunting				Below national poverty line 1989-2002[p]			Below international poverty line $1 a day 1983-2002[p,q]
	Proportion of the population undernourished (%) 2000-2002	Number of undernourished people (millions) 2000-2002	Moderate & severe	Severe	Moderate & severe	Moderate & severe	Total	Urban	Rural	National	Urban	Rural	
Developing Countries	**17**	**814.6**	**27**	**10**	**10**	**32**	**78**	**92**	**69**	**..**	**..**	**..**	**..**
Africa (sub-Saharan)	**33**	**203.5**	**29[h]**	**8[h]**	**9[h]**	**38[h]**	**57**	**83**	**44**	**..**	**..**	**..**	**..**
Angola	40	5.1	31	8	6	45	38	34	40	..	..	..	..
Benin	15	0.9	23	5	8	31	63	74	55	33.0	..	..	..
Botswana	32	0.6	13	2	5	23	95	100	90	..	..	..	23.5
Burkina Faso	19	2.3	34	12	13	37	42	66	37	45.3	16.5	51.0	44.9
Burundi	68	4.4	45	13	8	57	78	91	77	..	43.0	36.0	58.4
Cameroon	25	3.9	21	4	5	35	58	78	39	40.2	22.1	49.9	17.1
Cape Verde	..	..	14[x]	2[x]	6[x]	16[x]	74	64	64	..	..	..	..
Central African Republic	43	1.6	24	6	9	39	70	89	57	..	..	..	66.6
Chad	34	2.7	28	9	11	29	27	31	26	64.0	63.0	67.0	..
Comoros	..	..	25	9	12	42	96	98	95	..	..	..	..
Congo, Dem. Rep.	71	35.5	31	9	13	38	45	89	26	..	..	..	..
Congo, Rep.	37	1.3	14	3	4	19	51	71	17	..	..	..	..
Côte d'Ivoire	14	2.2	21	5	8	25	81	92	72	..	..	..	15.5
Djibouti	..	..	18	6	13	26	100	100	100	45.1	..	86.5	..
Equatorial Guinea	..	..	19	4	7	39	44	45	42	..	..	..	..
Eritrea	73	2.8	44	17	16	38	46	63	42	53.0	..	..	..
Ethiopia	46	31.3	47	16	11	52	24	81	12	44.2	37.0	45.0	26.3
Gabon	6	0.1	12	2	3	21	86	95	47	..	..	..	..
Gambia	27	0.4	17	4	9	19	62	80	53	..	48.0	61.0	59.3
Ghana	13	2.5	25	5	10	26	73	91	62	39.5	18.6	49.9	44.8
Guinea	26	2.1	23	5	9	26	48	72	36	40.0	..	..	..
Guinea-Bissau	..	..	25	7	10	30	56	79	49	48.7	..	..	..
Kenya	33	10.3	21	6	6	35	57	88	42	52.0	49.0	53.0	23.0
Lesotho	12	0.2	18	4	5	46	78	88	74	..	..	..	36.4
Liberia	46	1.4	26	8	6	39	..	..	..	..	..	..	..
Madagascar	37	6.0	33	11	14	49	47	85	31	71.3	52.1	76.7	49.1
Malawi	33	3.8	25	6	6	49	57	95	44	65.3	54.9	66.5	41.7
Mali	29	3.6	33	11	11	38	65	74	61	63.8	30.1	75.9	72.8
Mauritania	10	0.3	32	10	13	35	37	34	40	46.3	25.4	61.2	25.9
Mauritius	6	0.1	15	2	14	10	100	100	100	..	..	..	..
Mozambique	47	8.5	26	..	6	44	57	81	41	69.4	62.0	71.3	37.9
Namibia	22	0.4	24	5	9	24	77	100	67	..	..	..	34.9
Niger	34	3.8	40	14	14	40	59	70	56	63.0	52.0	66.0	61.4
Nigeria	9	11.0	36[x]	12[x]	9[x]	43[x]	62	78	49	34.1	30.4	36.4	70.2
Rwanda	37	3.0	27	7	6	41	41	60	40	51.2	..	..	35.7
Senegal	24	2.3	23	6	8	25	78	92	65	33.4	..	40.4	26.3
Sierra Leone	50	2.3	27	9	10	34	57	75	46	68.0	53.0	76.0	57.0
Somalia	..	..	26	7	17	23	..	..	..	..	..	..	..
South Africa	..	..	12	2	3	25	86	99	73	..	..	..	7.1
Sudan	27	8.5	17	7	..	..	75	86	69	..	..	..	..
Swaziland	19	0.2	10	2	1	30	..	..	..	40.0	..	..	..
Tanzania	44	15.6	29	7	5	44	68	90	57	35.7	..	38.7	19.9
Togo	26	1.2	25	7	12	22	54	85	38	32.3	..	..	..
Uganda	19	4.6	23	5	4	39	52	80	47	44.0	..	..	..
Zambia	49	5.2	28	7	5	47	64	88	48	72.9	56.0	83.1	63.7
Zimbabwe	44	5.6	13	2	6	27	83	100	73	34.9	7.9	48.0	36.0
South Asia	**22[y]**	**301.1[y]**	**46**	**17**	**15**	**44**	**85**	**94**	**80**	**..**	**..**	**..**	**..**
Afghanistan	..	..	48	..	25	52	13	19	11	..	..	..	..
Bangladesh	30	42.5	48	13	10	45	97	99	97	49.8	36.6	53.0	36.0
Bhutan	..	..	19	3	3	40	62	86	60	..	..	..	..
India	21	221.1	47	18	16	46	84	95	79	28.6	24.7	30.2	34.7
Maldives	..	..	30	7	13	25	100	100	100	..	..	..	..
Nepal	17	4.0	48	13	10	51	88	94	87	42.0	23.0	44.0	37.7
Pakistan	20	29.3	38	12	13	37	90	95	87	32.6	24.2	35.9	13.4
Sri Lanka	22	4.1	29	..	14	14	77	98	70	25.0	15.0	27.0	6.6

Table 3: Hunger, Malnutrition and Poverty

	Undernourished population		% under-5 (1995-2002[p]) suffering from:				% Population using improved drinking water sources 2000			Population in Poverty (%)			
			Underweight		Wasting	Stunting				Below national poverty line 1989-2002[p]			Below international poverty line $1 a day 1983-2002[p,q]
	Proportion of the population undernourished (%) 2000-2002	Number of undernourished people (millions) 2000-2002	Moderate & severe	Severe	Moderate & severe	Moderate & severe	Total	Urban	Rural	National	Urban	Rural	
East Asia and the Pacific	**..**	**..**	**17[i]**	**..**	**..**	**20[i]**	**76[i]**	**93[i]**	**67[i]**	**..**	**..**	**..**	**..**
Brunei	..	..	..	..	..	..	..	..	..	..	..	..	..
Cambodia	33	4.4	45	13	15	45	30	54	26	36.1	21.1	40.1	34.1
China	11	142.1	11	..	..	16	75	94	66	4.6	<2.0	4.6	16.6
Hong Kong[a]	..	..	..	..	..	..	..	..	..	..	..	..	..
Fiji	..	..	8[x]	1[x]	8[x]	3[x]	47	43	51	..	..	..	..
Indonesia	6	12.6	26	8	..	..	78	90	69	27.1	..	..	7.5
Korea, DPR (North)	36	8.1	21	..	8	42	100	100	100	..	..	..	..
Korea, Rep. (South)	..	0.7	..	..	..	..	92	97	71	..	..	..	<2.0
Lao, PDR	22	1.2	40	13	15	41	37	61	29	38.6	26.9	41.0	26.3
Malaysia	..	0.6	12	1	..	..	..	..	94	15.5	..	..	<2.0
Mongolia	28	0.7	13	3	6	25	60	77	30	36.3	38.5	33.1	13.9
Myanmar (Burma)	6	2.8	35	8	9	34	72	89	66	..	..	..	..
Papua New Guinea	..	..	35[x]	..	..	..	42	88	32	37.5	16.1	41.3	..
Philippines	22	17.2	28	..	6	30	86	91	79	36.8	21.5	50.7	14.6
Singapore	..	..	14[x]	..	4[x]	11[x]	100	100	..	..	..	..	..
Solomon Islands	..	..	21[x]	4[x]	7[x]	27[x]	71	94	65	..	..	..	..
Thailand	20	12.2	19[x]	..	6[x]	16[x]	84	95	81	13.1	10.2	15.5	<2.0
Vietnam	19	14.7	33	6	6	36	77	95	72	50.9	25.9	57.2	17.7
Latin America and the Caribbean	**10**	**52.9**	**8[j]**	**1[j]**	**2[j]**	**16[j]**	**86[k]**	**94[k]**	**66[k]**	**..**	**..**	**..**	**..**
Argentina	..	0.6	5	1	3	12	..	..	..	..	29.9	..	13.3
Belize	..	..	6[x]	1[x]	..	..	92	100	82	..	..	..	..
Bolivia	21	1.8	10	2	2	26	83	95	64	62.7	..	81.7	14.4
Brazil	9	15.6	6	1	2	11	87	95	53	17.4	13.1	32.6	8.2
Chile	4	0.6	1	..	0	2	93	99	58	17.0	..	..	<2.0
Colombia	13	5.7	7	1	1	14	91	99	70	64.0	55.0	79.0	8.2
Costa Rica	4	0.2	5	0	2	6	95	99	92	22.0	19.2	25.5	2.0
Cuba	3	0.4	4	0	2	5	91	95	77	..	..	..	..
Dominican Republic	25	2.1	5	1	2	6	86	90	78	28.6	20.5	42.1	<2.0
Ecuador	4	0.6	15	2	..	27	85	90	75	35.0	25.0	47.0	17.7
El Salvador	11	0.7	12	1	1	23	77	91	64	48.3	43.1	55.7	31.1
Guatemala	24	2.8	24	5	3	46	92	98	88	56.2	27.1	74.5	16.0
Guyana	9	0.1	14	3	11	11	94	98	91	35.0	..	..	<2.0
Haiti	47	3.8	17	4	5	23	46	49	45	..	..	66.0	..
Honduras	22	1.5	17	..	1	29	88	95	81	53.0	57.0	51.0	23.8
Jamaica	10	0.3	6	..	3	6	92	98	85	18.7	..	25.1	<2.0
Mexico	5	5.2	8	1	2	18	88	95	69	10.1	..	..	9.9
Nicaragua	27	1.4	10	2	2	20	77	91	59	47.9	30.5	68.5	45.1
Panama	26	0.8	7	..	1	14	90	99	79	37.3	15.3	64.9	7.2
Paraguay	14	0.8	5	..	1	11	78	93	59	21.8	19.7	28.5	14.9
Peru	13	3.4	7	1	1	25	80	87	62	49.0	40.4	64.7	18.1
Suriname	11	0.0	13	2	7	10	82	93	50	..	..	..	..
Trinidad and Tobago	12	0.2	7[x]	0[x]	4[x]	5[x]	90	..	..	21.0	24.0	20.0	12.4
Uruguay	4	0.1	5	1	1	8	98	98	93	..	..	..	<2.0
Venezuela	17	4.3	5[x]	1[x]	3[x]	13[x]	83	85	70	31.3	..	..	15.0
Middle East and North Africa	**10[z]**	**39.2[z]**	**14[m]**	**4[m]**	**6[m]**	**22[m]**	**87[m]**	**95[m]**	**77[m]**	**..**	**..**	**..**	**..**
Algeria	5	1.7	6	1	3	18	89	100	82	12.2	7.3	16.6	<2.0
Bahrain	..	..	9	2	5	10	..	..	..	..	..	..	..
Cyprus	..	..	..	..	..	..	100	100	100	..	..	..	..
Egypt	3	2.4	11	3	5	21	97	99	96	16.7	..	..	3.1
Iran	4	2.7	11	2	5	15	92	98	83	..	..	..	<2.0
Iraq	..	..	16	2	6	22	85	96	48	..	..	..	..
Jordan	7	0.4	5	1	2	8	96	100	84	11.7	..	..	<2.0
Kuwait	5	0.1	10	3	11	24	..	..	..	..	..	..	..
Lebanon	3	0.1	3	0	3	12	100	100	100	..	..	..	..

Table 3: Hunger, Malnutrition and Poverty

	Undernourished population		% under-5 (1995-2002[m]) suffering from:				% Population using improved drinking water sources 2000			Population in Poverty (%)			
			Underweight		Wasting	Stunting				Below national poverty line 1989-2002[p]			Below international poverty line $1 a day 1983-2002[p,q]
	Proportion of the population undernourished (%) 2000-2002	Number of undernourished people (millions) 2000-2002	Moderate & severe	Severe	Moderate & severe	Moderate & severe	Total	Urban	Rural	National	Urban	Rural	
Libya	..	0.0	5	1	3	15	72	72	68	..	..	..	..
Morocco	7	2.0	9	2	4	24	80	98	56	19.0	12.0	27.2	<2.0
Oman	..	..	24	4	13	23	39	41	30	..	..	..	..
Qatar	..	..	6	..	2	8	..	..	..	..	..	..	..
Saudi Arabia	3	0.8	14	3	11	20	95	100	64	..	..	..	..
Syria	4	0.6	7	1	4	18	80	94	64	..	..	..	..
Tunisia	..	0.1	4	1	2	12	80	92	58	7.6	3.6	13.9	<2.0
Turkey	3	1.8	8	1	2	16	82	81	86	..	..	..	<2.0
United Arab Emirates	..	0.1	14	3	15	17	..	..	..	..	..	..	..
Yemen	36	6.7	46	15	13	52	69	74	68	41.8	30.8	45.0	15.7
Countries in Transition[b]	**7**	**28.3**	**7[n]**	**1[n]**	**4[n]**	**16[n]**	**91**	**95**	**82**	**..**	**..**	**..**	**..**
Albania	6	0.2	14	4	11	32	97	99	95	25.4	..	29.6	<2.0
Armenia	34	1.1	3	0	2	13	..	..	..	53.7	60.4	44.8	12.8
Azerbaijan	15	1.2	7	1	2	13	78	93	58	49.6	..	..	3.7
Belarus	..	0.2	..	..	..	..	100	100	100	41.9	..	..	<2.0
Bosnia and Herzegovina	8	0.3	4	1	6	10	..	..	..	19.5	13.8	19.9	..
Bulgaria	11	0.8	..	..	..	..	100	100	100	12.8	..	..	4.7
Croatia	7	0.3	1	..	1	1	..	..	..	..	..	..	<2.0
Czech Republic	..	0.2	1[x]	0[x]	2[x]	2[x]	..	..	..	..	..	..	<2.0
Estonia	5	0.1	..	..	..	..	..	..	..	8.9	6.8	14.7	<2.0
Georgia	27	1.4	3	0	2	12	79	90	61	11.1	12.1	9.9	2.7
Hungary	..	0.0	2[x]	0[x]	2[x]	3[x]	99	100	98	17.3	..	..	<2.0
Kazakhstan	13	2.0	4	0	2	10	91	98	82	34.6	30.0	39.0	<2.0
Kyrgyzstan	6	0.3	11	2	3	25	77	98	66	64.1	49.0	69.7	<2.0
Latvia	4	0.1	..	..	..	..	..	..	..	..	..	..	<2.0
Lithuania	..	0.0	..	..	..	..	..	..	..	..	..	..	<2.0
Macedonia, Republic of	11	0.2	6	1	4	7	..	..	..	..	..	..	<2.0
Moldova	11	0.5	3	..	3	10	92	97	88	23.3	..	26.7	22.0
Poland	..	0.3	..	..	..	..	..	..	..	23.8	..	..	<2.0
Romania	..	0.2	6[x]	1[x]	3[x]	8[x]	58	91	16	21.5	20.4	27.9	2.1
Russia	4	5.2	3	1	4	13	99	100	96	30.9	..	..	6.1
Slovakia	5	0.3	..	..	..	..	100	100	100	..	..	..	<2.0
Slovenia	..	0.0	..	..	..	..	100	100	100	..	..	..	<2.0
Tajikistan	61	3.7	..	..	..	..	60	93	47	..	..	..	10.3
Turkmenistan	9	0.4	12	2	6	22	..	..	..	..	..	..	12.1
Ukraine	3	1.5	3	1	6	15	98	100	94	31.7	..	..	2.9
Uzbekistan	26	6.6	19	5	12	31	85	94	79	27.5	22.5	30.5	21.8
Yugoslavia[v]	11	1.1	2	0	4	5	98	99	97	..	..	..	..
Industrial Countries	**..**	**..**	**..**	**..**	**..**	**..**	**100**	**100**	**100**	**..**	**..**	**..**	**..**
Australia	..	..	..	..	..	..	100	100	100	..	..	..	..
Austria	..	..	..	..	..	..	100	100	100	..	..	..	..
Belgium	..	..	..	..	..	..	..	..	..	..	..	..	..
Canada	..	..	..	..	..	..	100	100	99	..	..	..	..
Denmark	..	..	..	..	..	..	100	100	100	..	..	..	..
Finland	..	..	..	..	..	..	100	100	100	..	..	..	..
France	..	..	..	..	..	..	..	..	..	..	..	..	..
Germany	..	..	..	..	..	..	..	..	..	..	..	..	..
Greece	..	..	..	..	..	..	..	..	..	..	..	..	..
Ireland	..	..	..	..	..	..	..	..	..	..	..	..	..
Israel	..	..	..	..	..	..	..	..	..	..	..	..	..
Italy	..	..	..	..	..	..	..	..	..	..	..	..	..
Japan	..	..	..	..	..	..	..	..	..	..	..	..	..
Luxembourg	..	..	..	..	..	..	..	..	..	..	..	..	..

Table 3: Hunger, Malnutrition and Poverty

	Undernourished population		% under-5 (1995-2002[p]) suffering from:				% Population using improved drinking water sources 2000			Population in Poverty (%)			
			Underweight		Wasting	Stunting				Below national poverty line 1989-2002[p]			Below international poverty line $1 a day 1983-2002[p,q]
	Proportion of the population undernourished (%) 2000-2002	Number of undernourished people (millions) 2000-2002	Moderate & severe	Severe	Moderate & severe	Moderate & severe	Total	Urban	Rural	National	Urban	Rural	
Netherlands	..	..	..	..	..	..	100	100	100	..	..	..	..
New Zealand	..	..	..	..	..	..	..	100	..	..	..	..	..
Norway			..	..	..	..	100	100	100	..	..	..	..
Portugal	..	..	..	..	..	..	..	..	..	..	..	..	<2.0
Spain	..	..	..	..	..	..	..	..	..	..	..	..	..
Sweden	..	..	..	..	..	..	100	100	100	..	..	..	..
Switzerland	..	..	..	..	..	..	100	100	100	..	..	..	..
United Kingdom	..	..	..	..	..	..	100	100	100	..	..	..	..
United States	..	..	1[x]	0[x]	1[x]	2[x]	100	100	100	..	..	..	..
World	**..**	**..**	**27**	**10**	**10**	**31**	**82**	**95**	**71**	**..**	**..**	**..**	**..**

.. Data not available.
a Special Administrative Region, data exclude China.
b Central and Eastern European countries and the newly independent states of the former Soviet Union.
c Estimates of the proportion of undernourished for 1999-2001 are not available; estimates for 1998-2000 published in FAO's State Of Food Insecurity in the World: 2002 were used instead.
d Includes Taiwan Province of China.
h Data include São Tomé and Principe and Seychelles. Data exclude Djibouti and Sudan.
i Data include the Cook Islands, Kiribati, Marshall Islands, Micronesia, Nauru, Nieu, Palau, Samoa, Tonga, Tuvalu and Vanuatu. Data exclude Hong Kong.
j Data include Antigua and Barbuda, Bahamas, Barbados and Dominica.
k Data include Bahamas, Barbados, Dominica, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines.
m Data include Djibouti, West Bank and Gaza, and Sudan. Data exclude Turkey.
n Data include Turkey. Data exclude Slovenia.
p Data refer to the most recent year available during the period specified in the column heading.
q Measured in 1985 international prices and adjusted to local currency using purchasing power parities. Poverty rates comparable across countries, but revisions in PPP exchange rates prevents comparing this data to previous rates reported.
v Sometimes listed as Serbia and Montenegro.
x Indicates data that refer to years or periods other than those specified in the column heading, differ from the standard definition or refer to only part of a country.
y Data exclude Afghanistan.
z Data include Afghanistan.
The number '0' (zero) means zero or less than half the unit of measure.

Table 4: Economic and Development Indicators

	GNI per capita		GDP per capita	Human Development Index (HDI) rank 2002	Distribution of income or consumption by quintiles[k] 1983-2000[t]						Total central government expenditure (% of GDP) 2001	Public education expenditure (% of GNP) 1999-2001[t]	Military expenditure (% of GDP) 2002	Per capita energy consumption (kg. of oil equivalent) 2001	Average Annual deforestation[m] (% of total forest) 1990-2000
	US$ 2002	Purchasing Power Parity (PPP) per capita ($) 2000	% growth 2001-02		Lowest 20%	Second quintile	Third quintile	Fourth quintile	Highest 20%	Ratio of highest 20% to lowest 20%[e]					
Developing Countries	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Africa (sub-Saharan)	**450[p]**	**1,700[p]**	**0.5**	..	..	..	..	..	..	..	**25.9**	..	..	**661[p]**	**0.8**
Angola	710	1,840[c]	12.0	166	..	..	..	..	..	..	..	2.8[s]	3.7	663	0.2
Benin	380	1,060	3.3	161	..	..	..	..	..	..	..	3.3[s]	..	318	2.3
Botswana	3,010	7,740	2.1	128	2.2	4.9	8.2	14.4	70.3	31.90	..	2.1	4.0	..	0.9
Burkina Faso	250	1,090[c]	2.1	175	4.5	7.4	10.6	16.7	60.7	13.49	..	..	1.8	..	0.2
Burundi	100	630[c]	1.7	173	5.1	10.3	15.1	21.5	48.0	9.41	26.1	3.6	7.6	..	9.0
Cameroon	550	1,910	2.3	141	5.6	9.3	13.7	20.4	50.9	9.09	15.5	5.4	1.4	417	0.9
Cape Verde	..	..	..	105	..	..	..	..	..	..	..	..	0.7	..	..
Central African Republic	250	1,170[c]	-2.2	169	2.0	4.9	9.6	18.5	65.0	32.50	..	..	1.0	..	0.1
Chad	210	1,010[c]	6.7	167	..	..	..	..	..	..	..	2.0[s]	1.4	..	0.6
Comoros	..	..	..	136	..	..	..	..	..	..	..	..	..	..	..
Congo, Dem. Rep.	100	630[c]	0.0	168	..	..	..	..	..	..	0.1	..	..	300	0.4
Congo, Republic	610	710	0.6	144	..	..	..	..	..	..	25.7	3.2	..	262	0.1
Côte d'Ivoire	620	1,450	-3.8	163	5.5	9.6	13.6	20.1	51.1	9.29	16.5	4.6	..	402	3.1
Djibouti	..	..	..	154	..	..	..	..	..	..	..	..	..	..	..
Equatorial Guinea	..	..	..	109	..	..	..	..	..	..	..	0.5	..	..	..
Eritrea	190	1,040[c]	-0.5	156	..	..	..	..	..	..	..	2.7	23.5	..	0.3
Ethiopia	100	780[c]	0.5	170	9.1	13.2	16.8	21.5	39.4	4.33	26.6	4.8	5.2	291	0.8
Gabon	3,060	5,530	0.8	122	..	..	..	..	..	..	..	3.9[s]	..	1,322	0.0
Gambia	270	1,660[c]	-5.7	155	4.0	7.6	12.3	20.8	55.2	13.80	..	2.7[s]	0.9	..	-1.0
Ghana	270	2,080[c]	2.7	131	5.6	10.1	14.9	22.8	46.6	8.32	..	4.1[s]	0.6	410	1.7
Guinea	410	2,060	2.0	160	6.4	10.4	14.8	21.2	47.2	7.38	21.0	1.9[s]	2.9	..	0.5
Guinea-Bissau	130	680[c]	-9.8	172	5.2	8.8	13.1	19.4	53.4	10.27	..	2.1	..	..	0.9
Kenya	360	1,010	-0.9	148	5.6	9.3	13.6	20.2	51.2	9.14	..	6.2[s]	1.7	500	0.5
Lesotho	550	2,970[c]	2.8	145	1.5	4.3	8.9	18.8	66.5	44.33	..	10.0	2.7	..	0.0
Liberia	140	..	0.8	..	..	..	..	..	..	..	..	..	..	..	2.0
Madagascar	230	730	-15.2	150	4.9	8.5	12.7	20.4	53.5	10.92	17.1	2.5	..	..	0.9
Malawi	160	570	-0.2	165	4.9	8.5	12.3	18.3	56.1	11.45	..	4.1[s]	..	..	2.4
Mali	240	860	1.9	174	4.6	8.0	11.9	19.3	56.2	12.22	..	2.8[s]	..	..	0.7
Mauritania	280	1,790[c]	0.8	152	6.2	10.6	15.2	22.3	45.7	7.37	..	3.6[s]	1.9	..	2.7
Mauritius	3,860	10,820	3.4	64	..	..	..	..	..	..	24.5	3.3	0.2	..	0.6
Mozambique	200	990[c]	5.6	171	6.5	10.8	15.1	21.1	46.5	7.15	..	2.4[s]	2.4	425	0.2
Namibia	1,790	6,880[c]	0.6	126	..	..	..	..	..	..	35.9	7.9	2.9	596	0.9
Niger	180	800[c]	-0.1	176	2.6	7.1	13.9	23.1	53.3	20.50	..	2.3	1.1	..	3.7
Nigeria	300	800	-3.1	151	4.4	8.2	12.5	19.3	55.7	12.66	..	..	1.1	735	2.6
Rwanda	230	1,260[c]	6.3	159	9.7	13.2	16.5	21.6	39.1	4.03	..	2.8[s]	3.3	..	3.9
Senegal	470	1,540[c]	-1.2	157	6.4	10.3	14.5	20.6	48.2	7.53	21.8	3.2[s]	1.5	325	0.7
Sierra Leone	140	500	4.2	177	1.1	2.0	9.8	23.7	63.4	57.64	20.9	..	2.2	..	2.9
Somalia	..[d]	..	..	..	..	..	..	..	..	..	..	..	..	..	1.0
South Africa	2,500	9,810[c]	1.8	119	2.0	4.3	8.3	18.9	66.5	33.25	28.8	5.7	1.6	2,404	0.1
Sudan	370	1,740[c]	3.3	139	..	..	..	..	..	..	8.5	..	2.8	421	1.4
Swaziland	1,240	4,730	1.7	137	2.7	5.8	10.0	17.1	64.4	23.85	30.1	5.5	..	..	-1.2
Tanzania	290[n]	580	4.1	162	6.8	11.0	15.1	21.6	45.5	6.69	..	..	1.5	404	0.2
Togo	270	1,450[c]	2.4	143	..	..	..	..	..	..	..	4.8	..	305	3.4
Uganda	240	1,360[c]	3.8	146	5.9	10.0	14.0	20.3	49.7	8.42	21.4	2.5[s]	2.4	..	2.0
Zambia	340	800	1.6	164	3.3	7.6	12.5	20.0	56.6	17.15	..	1.9	..	638	2.4
Zimbabwe	..[d]	2,180	-6.7	147	4.6	8.1	12.2	19.3	55.7	12.11	..	10.4[s]	3.2	769	1.5
South Asia	**460**	**2,460**	**2.6**	..	..	..	..	..	..	..	**18.3**	..	..	**469**	**0.1**
Afghanistan	..[d]	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bangladesh	380	1,770	2.6	138	9.0	12.5	15.9	21.2	41.3	4.59	12.7	2.3	1.1	153	-1.3
Bhutan	..	..	..	134	..	..	..	..	..	..	..	5.2	..	..	..
India	470	2,650[c]	3.0	127	8.9	12.3	16.0	21.2	41.6	4.67	17.3	4.1	2.3	515	-0.1
Maldives	..	..	..	84	..	..	..	..	..	..	..	..	..	..	..
Nepal	230	1,370	-2.7	140	7.6	11.5	15.1	21.0	44.8	5.89	18.0	3.4	1.4	357	1.8
Pakistan	420	1,960	0.4	142	8.8	12.5	15.9	20.6	42.3	4.81	21.6	1.8[s]	4.7	456	1.1
Sri Lanka	850	3,510	2.7	96	8.0	11.8	15.8	21.5	42.8	5.35	26.1	1.3	3.1	423	1.6

Table 4: Economic and Development Indicators

	GNI per capita		GDP per capita	Human Development Index (HDI) rank 2002	Distribution of income or consumption by quintiles[k] 1983-2000[l]						Total central government expenditure (% of GDP) 2001	Public education expenditure (% of GNP) 1999-2001[t]	Military expenditure (% of GDP) 2002	Per capita energy consumption (kg. of oil equivalent) 2001	Average Annual deforestation[m] (% of total forest) 1990-2000
	US$ 2002	Purchasing Power Parity (PPP) per capita ($) 2000	% growth 2001-02		Lowest 20%	Second quintile	Third quintile	Fourth quintile	Highest 20%	Ratio of highest 20% to lowest 20%[e]					
East Asia and the Pacific	**960[q]**	**4,280[q]**	**5.8[q]**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**15.0**	**..**	**..**	**854[q]**	**0.2**
Brunei	..	..	..	33	..	..	..	..	..	..	..	..	7.0	..	..
Cambodia	300	1,970[c]	3.6	130	6.9	10.7	14.7	20.1	47.6	6.90	..	2.0	2.7	..	0.6
China	960	4,520[g]	7.3	94	4.7	9.0	14.2	22.1	50.0	10.64	10.9	..	2.5	896	-0.9
Hong Kong[a]	24,690	27,490	1.3	23	5.3	9.4	13.9	20.7	50.7	9.57	..	4.1	..	2,421	..
Fiji	..	..	..	81	..	..	..	..	..	..	..	5.5[s]	1.8	..	..
Indonesia	710	3,070	2.3	111	8.4	11.9	15.4	21.0	43.3	5.15	24.8	1.3	1.2	729	1.2
Korea, DPR (North)	..[d]	..	..	..	..	..	..	..	..	..	..	..	..	914	0.0
Korea, Rep. (South)	9,930	16,960	5.7	28	7.9	13.6	18.0	23.1	37.5	4.75	..	3.6	2.7	4,114	0.1
Lao, PDR	310	1,660	2.6	135	7.6	11.4	15.3	20.8	45.0	5.92	..	3.2	..	..	0.4
Malaysia	3,540	8,500	1.9	59	4.4	8.1	12.9	20.3	54.3	12.34	..	7.9	2.4	2,168	1.2
Mongolia	430	1,710	2.8	117	5.6	10.0	13.8	19.4	51.2	9.14	30.7	6.5[s]	2.3	..	0.5
Myanmar (Burma)	..[d]	..	..	132	..	..	..	..	..	..	8.7	1.3	..	252	1.4
Papua New Guinea	530	2,180[c]	-2.8	133	4.5	7.9	11.9	19.2	56.5	12.56	31.4	2.3[s]	..	..	0.4
Philippines	1,030	4,450	2.3	83	5.4	8.8	13.1	20.5	52.3	9.69	19.2	3.2	1.0	538	1.4
Singapore	20,690	23,730	1.4	25	5.0	9.4	14.6	22.0	49.0	9.80	22.2	..	5.2	7,058	0.0
Solomon Islands	..	..	..	124	..	..	..	..	..	..	..	3.5[s]	..	..	..
Thailand	2,000	6,890	4.7	76	6.1	9.5	13.5	20.9	50.0	8.20	19.7	5.0	1.4	1,235	0.7
Vietnam	430	2,300	5.8	112	8.0	11.4	15.2	20.9	44.5	5.56	24.3	..	..	495	-0.5
Latin America and the Caribbean	**3,280**	**6,950**	**-2.2**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**1,151**	**0.5**
Argentina	4,220	10,190	-12.0	34	3.1	7.2	12.3	21.0	56.4	18.19	17.1	4.6[s]	1.2	1,593	0.8
Belize	..	..	..	99	..	..	..	..	..	..	..	6.2	..	..	..
Bolivia	900	2,390	0.5	114	4.0	9.2	14.8	22.9	49.1	12.28	26.6	6.0	1.7	496	0.3
Brazil	2,830	7,450	0.3	72	2.0	5.7	10.0	18.0	64.4	32.20	..	4.0	1.6	1,074	0.4
Chile	4,250	9,420	0.9	43	3.3	6.6	10.5	17.4	62.2	18.85	23.1	3.9	3.9	1,545	0.1
Colombia	1,820	6,150[c]	0.0	73	2.7	6.6	10.8	18.0	61.9	22.93	18.8	4.4	4.2	680	0.4
Costa Rica	4,070	8,560[c]	1.2	45	4.2	8.9	13.7	21.7	51.5	12.26	23.6	4.7	0.0	899	0.8
Cuba	..[h]	..	..	52	..	..	..	..	..	..	..	8.5	..	1,216	-1.3
Dominican Republic	..[h]	6,270[c]	2.5	98	5.1	8.6	13.0	20.0	53.3	10.45	16.0	2.4	..	921	0.0
Ecuador	1,490	3,340	1.8	100	3.3	7.5	11.7	19.4	58.0	17.58	..	1.0[s]	2.8	692	1.2
El Salvador	2,110	4,790[c]	0.4	103	2.9	7.4	12.4	20.2	57.1	19.69	2.5	2.5[s]	0.8	677	4.6
Guatemala	1,760	4,030[c]	-0.4	121	2.6	5.9	9.8	17.6	64.1	24.65	..	1.7	0.6	626	1.7
Guyana	..	..	..	104	4.5	9.9	14.5	21.4	49.7	11.04	..	4.1[s]	..	..	..
Haiti	440	1,610[c]	-2.7	153	..	..	..	..	..	..	10.5	..	..	257	5.7
Honduras	930	2,540[c]	0.0	115	2.7	6.7	11.8	19.9	58.9	21.81	..	..	0.8	488	1.0
Jamaica	2,690	3,680	0.3	79	6.7	10.7	15.0	21.7	46.0	6.87	38.8	6.3	..	1,545	1.5
Mexico	5,920	8,800	-0.5	53	3.1	7.2	11.7	19.0	59.1	19.06	15.9	5.1	0.5	1,532	1.1
Nicaragua	710	2,350[c]	-1.6	118	3.6	7.2	11.3	18.3	59.7	16.58	27.3	..	1.4	536	3.0
Panama	4,020	6,060[c]	-0.7	61	2.4	6.5	11.2	19.6	60.3	25.13	23.5	4.3	..	1,098	1.6
Paraguay	1,170	4,590[c]	-4.4	89	2.2	6.5	11.5	19.5	60.2	27.36	18.5	4.7[s]	0.9	697	0.5
Peru	2,020	4,880	3.3	85	2.9	8.3	14.1	21.5	53.2	18.34	18.5	3.3	1.5	460	0.4
Suriname	..	..	..	67	..	..	..	..	..	..	..	..	..	..	..
Trinidad and Tobago	6,750	9,000	2.1	54	5.5	10.3	15.5	22.7	45.9	8.35	..	4.0	..	6,708	0.8
Uruguay	4,340	7,710	-11.3	46	4.8	9.3	14.2	21.6	50.1	10.44	31.2	2.5	1.7	809	-5.0
Venezuela	4,080	5,220	-10.5	68	3.0	8.4	13.7	21.6	53.4	17.80	25.1	..	1.4	2,227	0.4
Middle East and North Africa	**2,240[r]**	**5,670[r]**	**1.0[r]**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**1,383[r]**	**-0.1**
Algeria	1,720	5,530[c]	2.5	108	7.0	11.6	16.1	22.7	42.6	6.09	31.2	..	3.7	955	-1.3
Bahrain	..	..	..	40	..	..	..	..	..	..	..	..	3.9	..	..
Cyprus	..	..	..	30	..	..	..	..	..	..	..	5.6	1.6	..	..
Egypt	1,470	3,810	1.1	120	8.6	12.1	15.4	20.4	43.6	5.07	..	..	2.7	737	-3.4
Iran	1,720	6,690	5.1	101	5.1	9.4	14.1	21.5	49.9	9.78	21.9	5.0	4.0	1,860	0.0
Iraq	..[h]	..	..	..	..	..	..	..	..	..	..	..	..	1,202	0.0
Jordan	1,760	4,180	2.0	90	7.6	11.4	15.5	21.1	44.4	5.84	32.4	4.6	8.4	1,017	0.0
Kuwait	16,340	17,780[c]	-3.3	44	..	..	..	..	..	..	44.2	..	10.4	7,195	-5.2
Lebanon	3,990	4,600	-0.3	80	..	..	..	..	..	..	35.7	2.9	4.7	1,239	0.3

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	US$ 2002	Purchasing Power Parity (PPP) per capita ($) 2000	% growth 2001-02		Lowest 20%	Second quintile	Third quintile	Fourth quintile	Highest 20%	Ratio of highest 20% to lowest 20%[e]					
Libya	..[j]	..	..	58	..	..	..	..	..	..	..	2.7	2.4	2,994	-1.4
Morocco	1,170	3,730	1.6	125	6.5	10.6	14.8	21.3	46.6	7.17	32.5	5.1	4.3	377	0.0
Oman	7,830	13,000	-2.3	74	..	..	..	..	..	..	29.9	4.2[s]	12.3	4,029	0.0
Qatar	..	..	..	47	..	..	..	..	..	..	..	..	..	..	..
Saudi Arabia	8,530	12,660[c]	-1.8	77	..	..	..	..	..	..	..	..	9.8	5,195	0.0
Syria	1,130	3,470	0.3	106	..	..	..	..	..	..	23.2	4.0	6.1	841	0.0
Tunisia	1,990	6,440	0.6	92	6.0	10.3	14.8	21.7	47.3	7.88	32.0	6.8[s]	..	852	-0.2
Turkey	2,490	6,300	6.1	88	6.1	10.6	14.9	21.8	46.7	7.66	49.5	3.7	4.9	1,057	-0.2
United Arab Emirates	..[l]	24,030[c]	-5.0	49	..	..	..	..	..	..	9.9	..	3.7	10,860	-2.8
Yemen	490	800	0.5	149	7.4	12.2	16.7	22.5	41.2	5.57	26.7	10.0[s]	7.1	197	1.8
Countries in Transition[b]	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Albania	1,450	4,960	4.1	65	9.1	13.5	17.3	22.8	37.4	4.11	..	..	1.2	548	0.8
Armenia	790	3,230	13.6	82	6.7	11.3	15.4	21.6	45.1	6.73	..	3.2	2.7	744	-1.3
Azerbaijan	710	3,010	9.8	91	7.4	11.5	15.3	21.2	44.5	6.01	22.6	3.5	2.0	1,428	-1.3
Belarus	1,360	5,500	5.2	62	8.4	13.0	17.0	22.5	39.1	4.65	29.6	6.0	1.4	2,449	-3.2
Bosnia and Herzegovina	1,310	..	2.5	66	9.5	14.2	17.9	22.6	35.8	3.77	..	..	..	1,074	0.0
Bulgaria	1,770	7,030	5.5	56	6.7	13.1	17.9	23.4	38.9	5.81	34.4	..	2.7	2,428	-0.6
Croatia	4,540	10,000	5.2	48	8.3	12.8	16.8	22.6	39.6	4.77	45.3	4.2[s]	2.5	1,771	-0.1
Czech Republic	5,480	14,920	2.1	32	10.3	14.5	17.7	21.7	35.9	3.49	38.2	4.4	2.1	4,049	0.0
Estonia	4,190	11,630	6.5	36	6.1	12.1	15.9	22.0	44.0	7.21	29.9	7.4	1.9	3,444	-0.6
Georgia	650	2,270[c]	6.6	97	6.4	11.4	16.1	22.6	43.6	6.81	10.9	2.5	0.9	462	0.0
Hungary	5,290	13,070	3.6	38	7.7	13.4	18.0	23.4	37.5	4.87	41.5	5.1	1.8	2,487	-0.4
Kazakhstan	1,520	5,630	10.1	78	8.2	12.5	16.8	22.9	39.6	4.83	14.6	..	1.0	2,705	-2.2
Kyrgyzstan	290	1,560	-1.5	110	9.1	13.2	16.9	22.5	38.3	4.21	17.7	3.1	1.5	451	-2.6
Latvia	3,480	9,190	7.0	50	7.6	12.9	17.1	22.1	40.3	5.30	29.1	5.9	1.8	1,822	-0.4
Lithuania	3,670	10,190	7.1	41	7.9	12.7	16.9	22.6	40.0	5.06	26.6	..	1.8	2,304	-0.2
Macedonia, Republic of	1,710	6,420	0.6	60	8.4	14.0	17.7	23.1	36.7	4.37	..	4.1[s]	2.8	..	0.0
Moldova	460	1,600	7.6	113	7.1	11.5	15.8	22.0	43.7	6.15	22.8	4.0	0.4	735	-0.2
Poland	4,570	10,450	1.4	37	7.3	11.8	15.5	21.9	42.5	5.82	35.1	5.4	1.9	2,344	-0.1
Romania	1,870	6,490	4.8	69	8.2	13.1	17.4	22.9	38.4	4.68	30.4	3.5[s]	2.3	1,644	-0.2
Russian Federation	2,130	8,080	4.8	57	4.9	9.5	14.1	20.3	51.3	10.47	24.4	3.1	4.0	4,293	0.0
Slovakia	3,970	12,590	4.4	42	8.8	14.9	18.7	22.8	34.8	3.95	39.1	4.1	1.9	3,480	-0.3
Slovenia	10,370	18,480	3.6	27	9.1	14.2	18.1	22.9	35.7	3.92	38.9	..	1.5	3,459	-0.2
Tajikistan	180	930	8.5	116	8.0	12.9	17.0	22.1	40.0	5.00	11.6	2.4	1.4	487	-0.5
Turkmenistan	..[h]	4,780	13.1	86	6.1	10.2	14.7	21.5	47.5	7.79	..	..	..	3,244	0.0
Ukraine	780	4,800	5.6	70	8.8	13.3	17.4	22.7	37.8	4.30	28.9	4.2	2.9	2,884	-0.3
Uzbekistan	310	1,640	2.9	107	..	..	..	..	..	..	..	..	..	2,029	-0.2
Yugoslavia, FR[v]	1,400[o]	..	35.7	..	..	..	..	..	..	..	..	..	..	1,508	0.0
Industrial Countries	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Australia	19,530	27,440	1.4	3	5.9	12.0	17.2	23.6	41.3	7.00	23.5	4.6	1.9	5,956	0.0
Austria	23,860	28,910	0.8	14	8.1	13.2	17.3	22.9	38.5	4.75	40.3	5.9	0.8	3,825	-0.2
Belgium	22,940	28,130	0.2	6	8.3	14.1	17.7	22.7	37.3	4.49	..	5.8[s]	1.3	5,735	-0.2[f]
Canada	22,390	28,930	2.3	4	7.0	12.7	17.0	22.9	40.4	5.77	19.8	5.2	1.2	7,985	0.0
Denmark	30,260	30,600	1.8	17	8.3	14.7	18.2	22.9	35.8	4.31	35.4	8.3	1.6	3,692	-0.2
Finland	23,890	26,160	1.4	13	9.6	14.1	17.5	22.1	36.7	3.82	..	6.3	1.2	6,518	0.0
France	22,240[z]	27,040	0.7	16	7.2	12.6	17.2	22.8	40.2	5.58	..	5.7	2.5	4,487	-0.4
Germany	22,740	26,980	0.0	19	8.5	13.7	17.8	23.1	36.9	4.34	..	4.6	1.5	4,264	0.0
Greece	11,660	18,770	3.6	24	7.1	11.4	15.8	22.0	43.6	6.14	..	3.8	4.3	2,710	-0.9
Ireland	23,030	29,570	5.4	10	7.1	11.8	15.8	22.0	43.3	6.10	..	4.3	0.7	3,876	-3.0
Israel	16,020	19,000	-2.7	22	6.9	11.4	16.3	22.9	44.3	6.42	47.3	7.3	9.2	3,291	-4.9
Italy	19,080	26,170	0.4	21	6.5	12.0	16.8	22.8	42.0	6.46	41.9	5.0	2.1	2,981	-0.3
Japan	34,010	27,380	0.2	9	10.6	14.2	17.6	22.0	35.7	3.37	..	3.6	1.0	4,099	0.0
Luxembourg	..	..	..	15	8.4	12.9	17.1	22.7	38.9	4.63	..	4.1	0.9	..	..

Table 4: Economic and Development Indicators

	GNI per capita		GDP per capita	Human Development Index (HDI) rank	Distribution of income or consumption by quintiles[k] 1983-2000[t]						Total central government expenditure	Public education expenditure	Military expenditure	Per capita energy consumption	Average Annual deforestation[m]
	US$ 2002	Purchasing Power Parity (PPP) per capita ($) 2000	% growth 2001-02	2002	Lowest 20%	Second quintile	Third quintile	Fourth quintile	Highest 20%	Ratio of highest 20% to lowest 20%[e]	(% of GDP) 2001	(% of GNP) 1999-2001[t]	(% of GDP) 2002	(kg. of oil equivalent) 2001	(% of total forest) 1990-2000
Netherlands	23,390	28,350	-0.4	5	7.3	12.7	17.2	22.8	40.1	5.49	..	5.0	1.6	4,814	-0.3
New Zealand	13,260	20,550	2.8	18	6.4	11.4	15.8	22.6	43.8	6.84	29.1	6.6	1.1	4,714	-0.5
Norway	38,730	36,690	0.4	1	9.6	14.0	17.2	22.0	37.2	3.88	35.4	6.8	2.1	5,896	-0.4
Portugal	10,720	17,820	0.2	26	5.8	11.0	15.5	21.9	45.9	7.91	..	5.8	2.1	2,435	-1.7
Spain	14,580	21,210	1.6	20	7.5	12.6	17.0	22.6	40.3	5.37	..	4.4	1.2	3,127	-0.6
Sweden	25,970	25,820	1.5	2	9.1	14.0	17.6	22.7	36.6	4.02	37.9	7.6	1.9	5,740	0.0
Switzerland	36,170	31,840	-0.7	11	6.9	12.7	17.3	22.9	40.3	5.84	26.6	5.6	1.1	3,875	-0.4
United Kingdom	25,510	26,580	1.5	12	6.1	11.4	16.0	22.5	44.0	7.21	35.9	4.6	2.4	3,982	-0.8
United States	35,400	36,110	1.4	8	5.4	10.7	15.7	22.4	45.8	8.48	19.5	5.6	3.4	7,996	-0.2
World	**5,120**	**7,820**	**0.7**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**..**	**1,686**	**0.2**

.. Data not available.
a Special Administrative Region, data exclude China.
b Central and Eastern European countries and the newly independent states of former Soviet Union.
c Estimate based on regression; others are extrapolated from the latest International Comparison Program benchmark estimates.
d Estimated to be low-income ($735 or less).
e Bread For the World Institute estimate.
f Includes Luxembourg.
g Estimate based on bilateral comparison between China and the United States.
h Estimated to be lower middle income ($736-$2,935).
j Estimated to be upper middle income ($2,936-$9,075).
k Income shares by percentiles of population, ranked by per capita income, except as noted.
l Estimated to be high income ($9,076 or more).
m Positive data indicate loss of forest; negative data indicate gain in forest.
n Data refer to mainland Tanzania only.
o Excludes data for Kosovo.
p Data include São Tomé and Principe and Seychelles. Data exclude Djibouti.
q Data exclude Hong Kong, Sinapore and Brunei.
r Data include West Bank and Gaza. Data exclude Kuwait, Qatar, Turkey and United Arab Emirates.
s Date refer to UNESCO Institute for Statistics estimate when national estimate is not available.
t Data refer to most recent year available during the period specified in the column heading.
v Sometimes listed as Serbia and Montenegro.
x Data refer to a period other than specified in the column heading.
z Data include French Guiana, Guadeloupe, Martinique and Reunion.
The number '0' (zero) means zero or less than half the unit of measure.

Table 5: Economic Globalization

	Trade 2002						Investment 2002						Debt 2002	
	Exports of goods and services (% of GDP)		Manufactured exports (% of merchandise exports)	Food Trade		Imports of goods and services (% of GDP)	Gross capital formation (% of GDP)	Net private capital flows[c] ($ millions)	Foreign direct Investment ($ millions)	Aid (% of gross capital formation)	Foreign direct investment (% of gross capital formation)	Foreign direct investment, gross (% of GDP)	Total external debt (US $ millions)	Debt service (% of exports of goods, services and income)
	1990	2002		Food exports (% of merchandise exports)	Food imports (% of merchandise imports)									
Developing Countries	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Africa (sub-Saharan)	**27**	**33**	**35**	**17**	**10**	**34**	**18**	**6,968**	**7,822**	**32.2**	**12.8**	**2.2**	**210,350**	**6.5**
Angola	39	77	..	..	..	70	32	1,420	1,312	11.6	36.2	22.7	10,134	9.8
Benin	14	14	6	23	20	26	18	41	41	45.9	8.5	3.9	1,843	8.5
Botswana	55	51	91	3	14	37	25	35	37	2.9	2.8	..	480	2.0
Burkina Faso	13	9	19	22	15	22	18	8	8	82.8	1.4	0.4	1,580	14.8
Burundi	8	7	1	88	13	19	8	-2	0	303.8	0.0	0.0	1,204	47.1
Cameroon	20	27	7	21	18	28	19	38	86	37.6	4.8	..	8,502	..
Cape Verde	..	..	..	..	..	..	..	..	..	..	11.5	..	..	..
Central African Republic	15	12	..	..	..	17	15	4	4	38.6	2.8	..	1,066	..
Chad	13	12	..	..	..	65	59	900	901	19.8	76.4	..	1,281	..
Comoros	..	..	..	..	..	..	..	..	..	..	4.7	..	..	..
Congo, Dem. Rep.	30	18	..	..	..	21	7	32	32	199.5	7.9	..	8,726	..
Congo, Republic	54	81	..	..	..	54	23	331	331	59.7	47.1	19.4	5,152	0.5
Côte d'Ivoire	32	48	21	59	23	30	10	117	230	87.4	18.8	2.3	11,816	8.6
Djibouti	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Equatorial Guinea	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Eritrea	20	29	..	..	..	85	26	21	21	135.6	12.4	4.4	528	4.5
Ethiopia	8	16	14	69	11	34	21	71	75	105.2	6.0	..	6,523	8.9
Gabon	46	59	2	1	18	39	28	139	123	5.1	8.7	..	3,533	11.0
Gambia	60	54	17	81	35	72	21	42	43	79.0	55.8	..	573	..
Ghana	17	43	16	45	20	55	20	27	50	53.8	3.6	0.8	7,338	6.6
Guinea	31	24	28	2	23	30	17	0	0	46.4	0.0	0.0	3,401	12.4
Guinea-Bissau	10	45	..	..	..	77	15	1	1	198.7	3.3	..	699	..
Kenya	26	27	24	32	12	30	14	39	50	23.5	3.0	0.0	6,031	10.4
Lesotho	17	51	..	..	..	107	40	73	81	26.7	28.3	10.3	637	11.0
Liberia	..	..	..	..	..	..	..	-65	-65	..	..	..	2,324	..
Madagascar	17	16	..	..	..	23	14	8	8	59.4	1.3	0.2	4,518	9.1
Malawi	25	25	10	87	12	43	12	6	6	160.0	2.5	0.3	2,912	5.7
Mali	17	32	..	..	..	41	20	102	102	69.1	15.0	12.2	2,803	5.8
Mauritania	46	39	..	..	..	68	31	16	12	116.5	3.9	..	2,309	..
Mauritius	65	61	73	26	19	57	22	-43	28	2.4	2.8	0.6	1,803	6.3
Mozambique	8	24	8	23	14	38	45	381	406	127.9	25.2	7.4	4,609	2.9
Namibia	47	48	52	36	13	49	24	..	..	19.3	..	4.8	..	..
Niger	15	16	3	38	44	25	13	0	8	107.7	2.9	..	1,797	..
Nigeria	43	38	0	0	20	44	23	639	1,281	3.1	12.6	..	30,476	8.2
Rwanda	6	8	3	56	16	25	19	3	3	109.2	0.8	0.2	1,435	13.2
Senegal	25	31	51	16	26	41	20	94	93	45.3	9.4	..	3,918	11.4
Sierra Leone	24	18	..	..	..	40	9	5	5	514.7	6.8	..	1,448	..
Somalia	10	..	..	..	..	..	..	0	0	..	..	..	2,688	..
South Africa	24	34	63[d]	11[d]	5[d]	31	16	783	739	4.0	4.5	1.4	25,041	4.2
Sudan	..	15	3	18	19	13	20	633	633	13.3	21.1	4.6	16,389	0.0
Swaziland	76	91	76	15	20	100	18	45	45	11.6	21.2	8.5	342	1.6
Tanzania	13	17[e]	17	61	15	24	17	214	240	78.7	15.3	2.6	7,244	7.8[e]
Togo	33	33	43	23	22	50	22	75	75	17.0	24.9	6.2	1,581	0.2
Uganda	7	12	8	73	14	27	22	149	150	50.7	11.9	2.6	4,100	7.6
Zambia	36	29	14	10	14	42	17	186	197	99.4	30.6	3.8	5,969	19.9
Zimbabwe	23	24	38	26	11	22	8	-3	26	29.2	3.8	..	4,066	..
South Asia	**9**	**17**	**77**	**13**	**8**	**18**	**22**	**5,697**	**4,164**	**4.9**	**2.9**	**0.7**	**168,349**	**14.5**
Afghanistan	..	57	..	..	..	89	..	..	..	..	..	..	..	..
Bangladesh	6	14	92	7	16	19	23	132	47	8.3	0.4	0.1	17,037	8.9
Bhutan	..	..	..	..	..	..	..	..	..	..	..	..	..	
India	7	15	75	12	6	16	23	4,944	3,030	1.3	2.6	..	104,429	..
Maldives	..	..	..	..	..	..	..	..	..	..	7.2	..	..	..
Nepal	11	16	67	10	13	29	25	9	10	26.8	0.7	0.0	2,953	9.8
Pakistan	16	19	85	11	12	19	15	379	823	24.7	9.4	1.4	33,672	16.8
Sri Lanka	29	36	74	21	14	43	21	206	242	9.9	6.9	1.5	9,611	8.7

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	Trade 2002						Investment 2002						Debt 2002	
	Exports of goods and services (% of GDP)		Manufactured exports (% of merchandise exports)	Food Trade		Imports of goods and services (% of GDP)	Gross capital formation (% of GDP)	Net private capital flows[c] ($ millions)	Foreign direct Investment ($ millions)	Aid (% of gross capital formation)	Foreign direct investment (% of gross capital formation)	Foreign direct investment, gross (% of GDP)	Total external debt (US $ millions)	Debt service (% of exports of goods, services and income)
	1990	2002		Food exports (% of merchandise exports)	Food imports (% of merchandise imports)									
East Asia and the Pacific	**26[g]**	**41[g]**	**79[g]**	**7[g]**	**6[g]**	**37[g]**	**32[g]**	**47,524[g]**	**54,834[g]**	**1.2[g]**	**8.8[g]**	**4.1[g]**	**499,133[g]**	**5.5[g]**
Brunei	..	..	..	..	..	..	..	..	..	..	18.0	..	..	..
Cambodia	6	59	..	..	..	67	22	54	54	54.7	6.0	1.6	2,907	0.3
China	18	29	90	5	3	26	40	47,107	49,308	0.3	9.6	4.7	168,255	3.5
Hong Kong[a]	134	151	95	2	4	142	23	..	12,794	0.0	25.6	29.6	..	..
Fiji	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Indonesia	25	35	54	12	11	29	14	-6,966	-1,513	5.3	-5.6	2.1	132,208	9.8
Korea, DPR (North)	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Korea, Rep. (South)	29	40	92	2	6	39	26	..	1,972	-0.1	1.2	1.0	..	..
Lao, PDR	..	..	..	..	..	..	22	25	25	..	..	1.4	2,664	..
Malaysia	75	114	79	8	5	97	24	4,807	3,203	0.4	14.3	5.8	48,557	5.1
Mongolia	24	67	36	6	18	81	31	78	78	60.8	22.7	6.8	1,037	6.1
Myanmar (Burma)	3	..	..	..	..	..	12	69	129	..	..	..	6,556	..
Papua New Guinea	41	..	2	15	18	..	..	-46	50	..	..	2.2	2,485	..
Philippines	28	49	50	5	8	49	19	3,549	1,111	3.7	7.4	1.5	61,121	12.3
Singapore	202	..	85	2	4	..	21	..	6,097	0.0	32.6	11.7	..	..
Solomon Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Thailand	34	65	74	15	5	57	24	-1,992	900	1.0	3.0	0.8	59,212	8.9
Vietnam	26	56	..	..	..	60	32	759	1,400	11.3	12.4	4.0	13,349	5.5
Latin America and the Caribbean	**14**	**21**	**48**	**22**	**9**	**19**	**19**	**34,544**	**44,682**	**1.6**	**13.5**	**4.0**	**727,944**	**16.1**
Argentina	10	28	31	46	5	13	12	681	785	0.0	6.4	9.0	132,314	12.8
Belize	..	..	..	..	..	..	..	..	..	..	11.3	..	..	..
Bolivia	23	22	17	34	13	27	15	601	677	59.2	58.8	8.7	4,867	13.1
Brazil	8	16	54	28	7	14	20	9,861	16,566	0.4	18.0	4.4	227,932	29.4
Chile	35	36	18	26	8	32	23	2,781	1,713	-0.2	11.6	5.5	41,945	6.3
Colombia	21	20	38	19	12	21	15	947	2,023	3.6	16.5	3.6	33,853	33.4
Costa Rica	35	42	63	31	8	47	22	602	662	0.1	18.0	4.8	4,834	8.2
Cuba	..	16	10	59	18	18	10	..	..	..	..	..	..	..
Dominican Republic	34	26	34	41	12	35	23	1,351	961	3.1	19.2	4.6	6,256	6.6
Ecuador	33	24	10	43	9	31	28	2,103	1,275	3.2	18.9	5.2	16,452	20.9
El Salvador	19	27	58	33	18	41	16	1,419	208	10.0	8.9	1.6	5,828	9.5
Guatemala	21	16	35	53	13	28	19	61	110	5.7	2.5	9.8	4,676	9.0
Guyana	..	..	..	..	..	..	..	..	..	..	30.2	..	..	..
Haiti	16	13	..	..	..	36	21	6	6	22.1	0.8	..	1,248	..
Honduras	36	37	26	64	16	53	28	100	143	23.8	13.6	2.2	5,395	6.5
Jamaica	52	39	64	23	15	60	34	540	481	0.9	17.7	7.1	5,477	22.9
Mexico	19	27	84	5	6	29	20	10,261	14,622	0.1	10.9	2.4	141,264	10.7
Nicaragua	25	23	19	72	15	49	32	206	174	40.3	13.5	4.3	6,485	10.7
Panama	38	28	12	79	13	29	25	180	57	1.1	1.9	7.4	8,298	16.4
Paraguay	33	31	15	75	12	43	20	34	-22	3.8	-2.0	8.3	2,967	6.2
Peru	16	16	21	30	13	17	18	3,131	2,391	4.7	23.0	4.2	28,167	31.7
Suriname	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trinidad and Tobago	45	47	46	5	9	43	16	736	736	-0.5	46.9	11.6	2,672	4.7
Uruguay	24	22	37	49	14	20	12	107	177	0.9	11.7	1.7	10,736	33.7
Venezuela	39	29	13	2	13	17	17	-1,639	690	0.4	4.3	3.1	32,563	20.5
Middle East and North Africa	**33[h]**	**34[h]**	**19[h]**	**4[h]**	**16[h]**	**29[h]**	**23[h]**	**5,359[h]**	**2,653[h]**	**4.3[h]**	**..**	**0.9[h]**	**189,010[h]**	**..**
Algeria	23	36	2	0	28	26	31	1,023	1,065	2.1	6.2	..	22,800	..
Bahrain	..	..	..	..	..	..	..	..	..	..	16.3	..	..	..
Cyprus	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Egypt	20	16	35	9	28	23	17	437	647	8.5	4.3	0.8	30,750	10.6
Iran	22	31	9	4	11	29	35	816	37	0.3	0.1	0.0	9,154	3.6
Iraq	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jordan	62	46	68	15	17	67	23	-31	56	25.0	2.6	0.9	8,094	10.1
Kuwait	45	48	..	..	..	40	9	..	7	0.1	0.2	0.5	..	..
Lebanon	18	14	69	19	18	41	18	4,803	257	14.7	8.3	..	17,077	51.8

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	Trade 2002						Investment 2002						Debt 2002	
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	1990	2002		Food exports (% of merchandise exports)	Food imports (% of merchandise imports)									
Libya	40	48	..	..	..	36	14	..	..	0.4	..	..	..	..
Morocco	26	32	66	21	14	37	23	15	428	7.8	5.2	1.4	18,601	23.9
Oman	53	57	15	6	21	35	13	-1,131	40	1.6	1.5	0.2	4,639	..
Qatar	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Saudi Arabia	46	41	10	1	16	23	20	..	..	0.1	..[k]	0.5	..	..
Syria	28	37	7	13	16	28	22	224	225	1.8	..	1.5	21,504	1.9
Tunisia	44	45	82	7	10	49	25	1,625	795	9.0	15.0	3.8	12,625	14.1
Turkey	13	30	84	10	4	30	16	7,582	1,037	2.1	2.6	0.7	131,556	17.7
United Arab Emirates	65	..	4	1	11	..	..	..	..	..	..	..	..	..
Yemen	14	38	..	..	..	39	17	114	114	35.1	6.9	1.1	5,290	3.5
Countries in Transition[b]	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Albania	15	19	86	4	20	43	23	136	135	28.8	12.3	2.8	1,312	3.4
Armenia	35	30	61	16	21	47	21	108	111	59.2	22.3	4.7	1,149	6.3
Azerbaijan	..	44	6	3	14	51	33	1,313	1,392	17.5	69.8	49.0	1,398	3.4
Belarus	46	70	64	8	11	74	22	227	247	1.3	7.9	3.2	908	1.7
Bosnia and Herzegovina	..	26	..	..	..	59	20	299	293	53.4	26.7	5.2	2,515	6.6
Bulgaria	33	53	61	10	5	60	20	808	600	12.5	26.7	4.1	10,462	6.8
Croatia	78	46	73	11	9	55	27	3,604	980	2.7	16.2	6.7	15,347	14.0
Czech Republic	45	65	89	3	4	67	28	10,382	9,323	2.0	47.6	13.8	26,419	3.0
Estonia	60	84	72	12	12	94	31	1,586	285	3.4	13.9	8.1	4,741	1.7
Georgia	40	27	35	26	19	39	21	149	165	43.6	23.1	5.0	1,838	6.2
Hungary	31	64	86	7	3	67	24	221	854	3.0	5.4	3.9	34,958	4.9
Kazakhstan	74	47	19	5	8	46	27	4,431	2,583	2.8	38.4	12.3	17,538	7.4
Kyrgyzstan	29	39	33	18	13	43	19	-54	5	62.7	1.7	1.4	1,797	7.0
Latvia	48	45	59	10	13	56	27	496	382	3.8	16.6	5.0	6,690	2.4
Lithuania	52	54	58	12	9	60	22	760	712	4.7	23.0	5.3	6,199	7.4
Macedonia, Republic of	26	38	70	16	14	57	20	113	77	37.0	10.3	2.0	1,619	10.5
Moldova	49	54	31	64	13	79	23	77	111	38.4	30.8	6.8	1,349	9.4
Poland	29	28	82	8	6	31	19	5,075	4,131	3.2	11.4	3.7	69,521	6.3
Romania	17	35	81	3	6	41	23	3,173	1,144	6.6	10.8	2.5	14,683	11.0
Russian Federation	18	35	22	2	23	24	21	8,011	3,009	1.8	4.1	1.9	147,541	7.1
Slovakia	27	73	85	4	5	80	31	5,460	4,012	2.6	56.7	11.8	13,013	5.0
Slovenia	84	58	90	4	6	56	23	..	1,865	3.3	36.2	10.2	..	..
Tajikistan	28	58	13	4	10	72	23	-10	9	61.2	4.0	3.0	1,153	2.5
Turkmenistan	..	47	7	0	12	47	37	..	100	1.7	8.1	..	..	..
Ukraine	28	56	67	13	6	52	19	-576	693	6.1	8.8	1.7	13,555	4.9
Uzbekistan	29	38	..	..	..	34	20	-11	65	11.8	3.2	..	4,568	20.2
Yugoslavia, FR[v]	..	21	..	..	..	44	16	507	475	..	18.8	..	12,688	3.1
Industrial Countries	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Australia	17	20	29	22	5	22	24	..	16,622	n/a	16.6	6.3	..	..
Austria	40	52	82	6	7	51	22	..	886	n/a	2.0	3.8	..	..
Belgium	71[j]	82[j]	79[j]	9[j]	9[j]	78	19	..	..	n/a	..	10.7	..	..
Canada	26	44	63	7	6	39	20	..	20,501	n/a	..	7.3	..	..
Denmark	36	45	66	19	12	39	20	..	6,410	n/a	18.6	6.7	..	..
Finland	23	38	85	2	6	30	20	..	8,156	n/a	31.6	13.4	..	..
France	21	27	81	11	9	25	19	..	52,020	n/a	18.9	8.0	..	..
Germany	29	35	86	4	7	32	18	..	37,296	n/a	9.9	5.4	..	..
Greece	18	21	52	24	12	27	23	..	53	n/a	0.2	1.0	..	..
Ireland	57	98	88	7	7	83	24	..	24,697	n/a	..	47.1	..	..
Israel	35	37	93	4	6	46	18	..	1,649	4.0	8.8	3.0	..	..
Italy	20	27	88	7	9	26	20	..	14,699	n/a	6.2	2.7	..	..
Japan	10	10	93	1	13	10	26	..	9,087	n/a	..	1.4	..	..
Luxembourg	..	..	..	..	..	..	..	..	..	n/a	3,020.7	..	..	..

Table 5: Economic Globalization

	Trade 2002						Investment 2002						Debt 2002	
	Exports of goods and services (% of GDP)		Manufactured exports (% of merchandise exports)	Food Trade		Imports of goods and services (% of GDP)	Gross capital formation (% of GDP)	Net private capital flows[c] ($ millions)	Foreign direct Investment ($ millions)	Aid (% of gross capital formation)	Foreign direct investment (% of gross capital formation)	Foreign direct investment, gross (% of GDP)	Total external debt (US $ millions)	Debt service (% of exports of goods, services and income)
	1990	2002		Food exports (% of merchandise exports)	Food imports (% of merchandise imports)									
Netherlands	59	62	74	19	12	56	20	..	28,534	n/a	33.5	15.0	..	..
New Zealand	28	33	28	49	9	32	20	..	823	n/a	7.0	4.0	..	..
Norway	41	41	22	7	7	27	19	..	1,008	n/a	1.4	5.2	..	..
Portugal	33	31	86	7	13	41	28	..	4,235	n/a	..	7.1	..	..
Spain	16	28	78	15	10	30	26	..	21,284	n/a	21.6	6.2	..	..
Sweden	30	43	81	3	8	37	17	..	11,828	n/a	28.6	14.5	..	..
Switzerland	36	44	93	3	6	38	17	..	3,599	n/a	7.7	9.2	..	..
United Kingdom	24	26	79	5	8	28	16	..	28,180	n/a	11.9	23.8	..	..
United States	10	10	81	8	5	14	18	..	39,633	n/a	2.1	2.4	..	..
World	**20**	**24**	**78**	**7**	**8**	**23**	**20**	**..**	**630,827**	**1.0**	**10.9**	**6.0**	**..**	**..**

.. Data not available.
a Special Administrative Region, data exclude China.
b Central and Eastern European countries and the newly independent states of the former Soviet Union.
c Net private capital flows consist of private debt flows (commercial bank lending, bonds and other private credits) and nondebt private flows (foreign direct investment and portfolio equity investment).
d Data on export commodity shares refer to the South African Customs Union, which comprises Botswana, Lesotho, Namibia and South Africa.
e Mainland Tanzania only.
f World Bank estimate.
g Data exclude Hong Kong and Singapore.
h Data exclude Kuwait, Turkey and United Arab Emirates.
i Data include Iceland. Data exclude Israel.
j Data include Luxembourg.
k Foreigners are barred from investing directly in the Saudi stock market, but they may invest indirectly through mutual funds.
v Sometimes listed as Serbia and Montenegro.
The number '0' (zero) means zero or less than half the unit of measure.
n/a Not applicable.

Table 6: United States—National Hunger and Poverty Trends

	1970	1980	1990	1995	2000	2001	2002	2003
Total population (millions)	**205.1**	**227.8**	**249.4**	**262.9**	**281.4**	**284.8[d]**	**288.0[d]**	**290.8[d]**
Food insecurity prevalence estimates								
All U.S. households—food insecure (%)	..	..	..	10.3	10.5	10.7	11.1	11.2
Without hunger	..	..	..	6.4	7.3	7.4	7.6	7.7
With hunger	..	..	..	3.9	3.1	3.3	3.5	3.5
Adult members (total)—food insecure (%)	..	..	..	9.5	10.1	10.2	10.5	10.8
Without hunger	..	..	..	6.1	7.3	7.3	7.5	7.7
With hunger	..	..	..	3.4	2.8	3.0	3.0	3.1
Child members (total)—food insecure (%)	..	..	..	17.4	18.0	17.6	18.1	18.2
Without hunger	..	..	..	11.6	13.9	16.9	17.3	17.6
With hunger	..	..	..	5.8	4.1	0.6	0.8	0.6
Percent of federal budget spent on food assistance[a]	**0.5**	**2.4**	**1.9**	**2.48**	**1.83[e,f]**	**1.83[e,f]**	**1.93[e,f,i]**	**2.00[e,f,i]**
Total infant mortality rate (per 1,000 live births)	**20.0**	**12.6**	**9.1**	**7.6**	**6.9**	**6.9**	**7.0**	**..**
White	17.8	11.0	7.7	6.3	5.7	..	5.8	..
White, non-Hispanic	..	..	..	..	5.7[c]	..	..	..
African American	32.6	21.4	17.0	15.1	14.1	..	14.4	..
Hispanic	..	..	7.8	..	5.6[c]	..	..	..
American Indian	..	..	..	..	7.4[c]	..	..	..
Asian or Pacific Islander	..	..	..	..	4.1[c]	..	..	..
Total poverty rate (%)	**12.6**	**13.0**	**13.5**	**13.8**	**11.3**	**11.7**	**12.1**	**12.5**
Northeast	..	..	10.2	12.5	10.3	10.7	10.9	11.3
Midwest	..	..	11.9	11.0	9.5	9.4	10.3	10.7
South	..	..	15.9	15.7	12.5	13.5	13.8	14.1
West	..	..	11.6	14.9	11.9	12.1	12.4	12.6
White	9.9	10.2	10.7	11.2	9.4	9.9	10.2	10.6
Non-Hispanic	..	..	..	..	7.5	7.8	8.0	8.2
African American	33.5	32.5	31.9	29.3	22.1	22.7	24.1	24.3
Hispanic	..	25.7	28.1	30.3	21.2	21.4	21.8	22.5
American Indian/Alaskan Native	..	..	..	..	25.9[b]	..	..	20.0[h]
Asian and Pacific Islander	..	..	..	..	10.8	10.2	10.2	11.8
Elderly (65 years and older)	24.6	15.7	12.2	10.5	10.2	10.1	10.4	10.2
Female-headed households	38.1	36.7	33.4	32.4	24.7	26.4	26.5	28.0
Total child poverty rate (%) (18 years and under)	**15.1**	**18.3**	**20.6**	**20.8**	**16.2**	**16.3**	**16.7**	**17.6**
White	..	13.9	15.9	16.2	13.0	13.4	13.6	14.3
non-Hispanic	..	..	..	..	9.4	9.5	9.4	9.8
African American	..	42.3	44.8	41.9	30.9	30.2	32.3	34.1
Hispanic	..	33.2	38.4	40.0	28.0	28.0	28.6	29.7
Asian and Pacific Islander	..	..	17.6	19.5	14.5	11.5	11.7[g]	12.7
Unemployment rate (%)	**4.9**	**7.1**	**5.6**	**5.6**	**4.0**	**4.8**	**5.8**	**6.0**
White	4.5	6.3	4.8	4.9	3.5	4.2	5.1	5.2
African American	..	14.3	11.4	10.4	7.6	8.7	10.2	10.8
Hispanic	..	10.1	8.2	9.3	5.7	6.6	7.5	7.7

Table 6: United States—National Hunger and Poverty Trends

	1970	1980	1990	1995	2000	2001	2002	2003
Household income distribution (per quintile in %)								
All races								
Lowest 20 percent	4.1	4.2	3.9	3.7	3.6	3.5	3.5	3.4
Second quintile	10.8	10.2	9.6	9.1	8.9	8.7	8.8	8.7
Third quintile	17.4	16.8	15.9	15.2	14.8	14.6	14.8	14.8
Fourth quintile	24.5	24.8	24.0	23.3	23.0	23.0	23.3	23.4
Highest 20 percent	43.3	44.1	46.6	48.7	49.6	50.1	49.7	49.8
Ratio of highest 20 percent to lowest 20 percent[e]	10.6	10.5	11.9	13.2	13.8	14.3	14.2	14.6
White								
Lowest 20 percent	4.2	4.4	4.2	4.0	3.7	3.7	3.7	3.6
Second quintile	11.1	10.5	10.0	9.3	9.0	8.9	9.0	8.9
Third quintile	17.5	17.0	16.0	15.3	14.9	14.7	15.0	14.8
Fourth quintile	24.3	24.6	23.9	23.3	22.9	22.9	23.2	23.2
Highest 20 percent	42.9	43.5	46.0	48.1	49.4	49.8	49.2	49.4
Ratio of highest 20 percent to lowest 20 percent[e]	10.2	9.9	11.0	12.0	13.4	13.5	13.2	13.7
African American								
Lowest 20 percent	3.7	3.7	3.1	3.2	3.2	3.0	2.9	2.9
Second quintile	9.3	8.7	7.9	8.2	8.6	8.6	8.2	8.2
Third quintile	16.3	15.3	15.0	14.8	15.2	15.0	14.5	14.7
Fourth quintile	25.2	25.2	25.1	24.2	23.8	24.2	23.3	24.0
Highest 20 percent	45.5	47.1	49.0	49.6	49.3	49.2	51.1	50.2
Ratio of highest 20 percent to lowest 20 percent[e]	12.3	12.7	15.8	15.5	15.4	16.4	17.6	17.3
Hispanic origin								
Lowest 20 percent	..	4.3	4.0	3.8	4.3	4.0	3.9	3.9
Second quintile	..	10.1	9.5	8.9	9.8	9.4	9.4	9.4
Third quintile	..	16.4	15.9	14.8	15.7	15.2	14.8	15.0
Fourth quintile	..	24.8	24.3	23.3	23.8	23.2	22.9	23.1
Highest 20 percent	..	44.5	46.3	49.3	46.4	48.3	49.0	48.6
Ratio of highest 20 percent to lowest 20 percent[e]	..	10.3	11.6	13.0	10.8	12.1	12.6	12.5

.. Data not available.
a Data refer to fiscal year.
b 3-year average, 1998, 1999 and 2000.
c Preliminary
d U.S. Census estimate
e Bread for the World Institute estimate.
f "Food Assistance" includes the following programs: Food stamp-related, Child nutrition, Supplemental food (including WIC), Food donations, Nutrition for the elderly, and Administrative costs.
g Data for 2002 is "Asian alone," or "people who reported Asian and did not report any other race category." (U.S. Census Bureau, Poverty in the United States: 2002, 32).
h 3-year average, 2001, 2002 and 2003.
i Estimate was made by adding the budgets of USDA Food and Nutrition programs and the budget of Senior Nutrition Programs under Health and Human Services (HHS). The total budget for food assistance programs was then divided by the federal budget. All figures taken from US Budget.

Table 7: United States—State Hunger and Poverty Statistics

	Total population (millions) July 2003	Food insecure (% of house holds) 2001-2003	Food insecure with hunger (% of house holds) 1999-2001	Infant mortality rate per 1,000 live births 2002			% Population in poverty 2001-2003	Unemployment rate (%) 2003
				All races	White	African American		
Alabama	4.50	12.5[b]	3.2	9.1	7.1	13.9	15.1	5.8
Alaska	0.64	11.5	4.1	5.5	4.2	..	9.0	8.0
Arizona	5.58	12.3	3.8	6.4	6.2	13.0	13.9	5.6
Arkansas	2.72	15.5[b]	4.7[b]	8.3	6.9	13.9	18.5	6.2
California	35.48	12.2[b]	3.6	5.5	5.2	12.9	12.9	6.7
Colorado	4.55	9.7[b]	3.0	6.1	5.5	21.1	9.4	6.0
Connecticut	3.48	8.0[b]	3.0	6.5	5.5	14.2	7.9	5.5
Delaware	0.81	6.7[b]	1.8[b]	8.7	7.3	12.9	7.7	4.4
District of Columbia	0.56	9.0[b]	2.4[b]	11.3	..	14.5	17.3	7.0
Florida	17.01	11.7	3.7	7.5	5.8	13.6	12.7	5.1
Georgia	8.68	12.9[b]	3.6	8.9	6.6	13.7	12.0	4.7
Hawaii	1.25	9.9	3.3	7.3	..	..	10.7	4.3
Idaho	1.36	13.7[b]	3.9	6.1	6.1	..	11.0	5.4
Illinois	12.65	7.9[b]	2.5[b]	7.4	5.6	16.3	11.8	6.7
Indiana	6.19	9.9	3.4	7.7	6.8	15.3	9.2	5.1
Iowa	2.94	9.5[b]	3.0	5.3	5.1	..	8.5	4.5
Kansas	2.72	11.7	4.4[b]	7.1	6.5	15.2	10.3	5.4
Kentucky	4.11	11.2	3.3	7.2	6.6	14.2	13.7	6.2
Louisiana	4.49	12.3[b]	2.6[b]	10.3	6.9	15.0	16.9	6.6
Maine	1.30	9.2[b]	2.9	4.4	4.3	..	11.8	5.1
Maryland	5.50	7.7[b]	2.9	7.5	5.3	12.3	7.7	4.5
Massachusetts	6.43	6.2[b]	2.3[b]	4.9	4.5	9.1	9.7	5.8
Michigan	10.07	10.1[b]	3.4	8.1	6.0	18.5	10.8	7.3
Minnesota	5.05	7.1[b]	2.2[b]	5.4	5.0	10.3	7.1	5.0
Mississippi	2.88	14.9[b]	4.0	10.3	6.9	14.8	17.9	6.3
Missouri	5.70	10.4	3.6	8.5	7.1	17.1	10.1	5.6
Montana	0.91	12.5[b]	4.0	7.5	7.1	..	14.0	4.7
Nebraska	1.73	10.4	3.0	7.0	6.1	20.8	9.9	4.0
Nevada	2.24	9.2[b]	3.4	6.0	5.1	18.4	9.0	5.2
New Hampshire	1.28	6.4[b]	2.1[b]	5.0	5.3	..	6.0	4.3
New Jersey	8.63	8.6[b]	3.1	5.7	4.5	12.8	8.2	5.9
New Mexico	1.87	14.8[b]	4.4[b]	6.3	5.7	..	18.0	6.4
New York	19.19	10.0[b]	3.1	6.0	5.4	9.9	14.2	6.3
North Carolina	8.40	13.7[b]	4.5[b]	8.2	5.9	15.6	14.2	6.5
North Dakota	0.63	6.9[b]	2.0[b]	6.3	5.6	..	11.7	4.0
Ohio	11.43	10.9	3.6	7.9	6.2	17.7	10.4	6.1
Oklahoma	3.51	14.1[b]	5.2[b]	8.1	7.1	17.2	14.0	5.7
Oregon	3.55	12.9[b]	4.3[b]	5.8	5.6	..	11.7	8.2
Pennsylvania	12.36	9.5[b]	2.6[b]	7.6	6.6	15.1	9.9	5.6
Rhode Island	1.07	11.1	3.6	7.0	6.4	..	10.7	5.3
South Carolina	4.14	13.5[b]	4.9[b]	9.3	6.0	15.8	14.0	6.8
South Dakota	0.76	8.9[b]	2.4[b]	6.5	4.9	..	10.9	3.6
Tennessee	5.84	10.9	3.3	9.4	7.0	18.3	14.3	5.8
Texas	22.11	14.9[b]	4.1[b]	6.4	5.6	13.5	15.8	6.8
Utah	2.35	14.6[b]	4.4[b]	5.6	5.5	..	9.8	5.6
Vermont	0.61	8.9[b]	3.0	4.4	4.5	..	9.4	4.6
Virginia	7.38	8.4[b]	2.2[b]	7.4	5.5	14.6	9.3	4.1
Washington	6.13	11.6	3.9	5.8	5.5	12.7	11.4	7.5
West Virginia	1.81	8.9[b]	2.7[b]	9.1	8.5	..	16.9	6.1
Wisconsin	5.47	9.0[b]	3.2	6.9	5.6	18.9	8.8	5.6
Wyoming	0.50	10.1	4.2	6.7	6.8	..	9.1	4.4
Puerto Rico	3.87	..	..	9.7	10.4	..	..	12.0
United States	**290.80**	**11.0**	**3.4**	**7.0[a]**	**5.8[a]**	**14.4[a]**	**12.1**	**6.0**

.. Data not available.

a Excludes data for Puetro Rico, Virgin Islands, Guam, American Samoa, and Northern Marianas.

b Difference from U.S. total was statistically significant with 90 percent confidence (t > 1.645).

Table 8: United States—Nutrition and Assistance Programs

	Food stamp participation: monthly average by state								
	1995[e]	1996[e]	1997[e]	1998[e]	1999[e]	2000[e]	2001[e]	2002[e]	2003[e]
Alabama	524,522	509,214	469,268	426,819	405,273	396,057	411,292	443,547	472,066
Alaska	45,448	46,233	45,234	42,451	41,262	37,524	37,897	46,165	50,687
Arizona	480,195	427,481	363,779	295,703	257,362	259,006	291,372	378,722	466,153
Arkansas	272,174	273,900	265,854	255,710	252,957	246,572	256,441	283,909	310,359
California	3,174,651	3,143,390	2,814,761	2,259,069	2,027,089	1,831,697	1,668,351	1,710,306	1,708,354
Colorado	251,880	243,692	216,748	191,015	173,497	155,948	153,952	178,490	208,053
Connecticut	226,061	222,758	209,529	195,866	178,168	165,059	157,031	168,591	180,512
Delaware	57,090	57,836	53,655	45,581	38,571	32,218	31,886	39,628	46,027
District of Columbia	93,993	92,751	90,391	85,396	84,082	80,803	73,494	74,271	81,777
Florida	1,395,296	1,371,352	1,191,664	990,571	933,435	882,341	887,256	985,130	1,041,315
Georgia	815,920	792,502	698,323	631,720	616,600	559,468	573,537	645,633	750,208
Hawaii	124,575	130,344	126,901	122,027	125,155	118,041	108,313	106,370	100,382
Idaho	80,255	79,855	70,413	62,393	57,201	58,191	59,667	69,998	81,524
Illinois	1,151,035	1,105,160	1,019,600	922,927	820,034	779,420	825,295	886,344	953,929
Indiana	469,647	389,537	347,772	313,116	298,213	300,314	346,551	410,884	470,182
Iowa	184,025	177,283	161,184	141,067	128,790	123,322	126,494	140,729	153,816
Kansas	184,241	171,831	148,734	119,218	114,875	116,596	124,285	170,403	160,705
Kentucky	520,088	485,628	444,422	412,028	396,440	403,479	412,680	450,102	502,677
Louisiana	710,597	670,034	575,411	536,834	516,285	599,851	518,384	588,458	655,300
Maine	131,955	130,872	123,767	115,099	108,749	101,598	104,383	111,147	132,582
Maryland	398,727	374,512	354,436	322,653	264,393	219,180	208,426	228,329	252,294
Massachusetts	409,870	373,599	339,505	292,997	261,021	231,829	219,223	242,542	292,200
Michigan	970,760	935,416	838,917	771,580	682,680	602,857	641,269	750,037	837,629
Minnesota	308,206	294,825	260,476	219,744	208,062	196,050	197,727	216,960	234,631
Mississippi	479,934	457,106	399,062	329,058	288,057	275,856	297,805	324,852	355,783
Missouri	575,882	553,930	477,703	410,966	408,331	419,959	454,427	515,006	591,532
Montana	70,873	70,754	66,605	62,328	60,898	59,466	61,957	63,347	71,320
Nebraska	105,133	101,625	97,176	94,944	92,404	82,414	80,652	88,459	99,243
Nevada	98,538	96,712	82,419	71,531	61,673	60,905	69,396	97,035	111,352
New Hampshire	58,353	52,809	46,000	39,578	37,438	36,266	35,554	41,053	44,783
New Jersey	550,628	540,452	491,337	424,738	384,888	344,677	317,579	319,799	339,047
New Mexico	238,854	235,060	204,644	174,699	178,439	169,354	163,245	170,457	194,795
New York	2,183,101	2,098,561	1,913,548	1,627,170	1,540,784	1,438,568	1,353,542	1,346,644	1,435,986
North Carolina	613,502	631,061	586,415	527,790	505,410	488,247	493,672	574,369	649,426
North Dakota	41,401	39,825	37,688	33,801	33,442	31,895	37,755	36,781	39,663
Ohio	115,490	1,045,066	873,562	733,565	639,786	609,717	640,503	734,679	855,401
Oklahoma	374,893	353,790	321,894	287,577	271,351	523,287	271,001	316,684	380,299
Oregon	288,687	287,607	258,615	238,446	223,978	234,387	283,705	359,138	398,377
Pennsylvania	1,173,420	1,123,541	1,008,864	906,735	834,898	777,112	748,074	766,615	822,696
Rhode Island	93,434	90,873	84,627	72,301	76,394	74,256	71,272	71,933	74,068
South Carolina	363,822	358,341	349,137	333,017	308,570	295,335	315,718	379,310	450,556
South Dakota	50,158	48,843	46,901	45,173	44,065	42,962	44,594	47,663	51,176
Tennessee	662,014	637,773	585,889	538,467	510,828	496,031	521,510	598,012	728,305
Texas	2,557,693	2,371,958	2,033,750	1,636,175	1,400,526	1,332,785	1,360,642	1,554,428	1,872,473
Utah	118,836	110,011	98,338	91,764	88,163	81,945	79,716	89,899	105,630
Vermont	59,292	56,459	53,005	45,702	44,287	40,831	38,874	39,914	41,333
Virginia	545,829	537,531	476,088	396,581	361,581	336,080	332,312	352,172	393,911
Washington	476,019	476,391	444,800	364,418	306,654	295,061	308,589	350,373	403,992
West Virginia	308,505	299,719	287,035	269,140	247,249	226,897	221,361	235,736	246,890
Wisconsin	320,142	283,255	232,103	192,887	182,206	193,021	215,786	262,310	296,719
Wyoming	35,579	33,013	28,584	25,452	23,477	22,459	22,539	23,530	25,306
Guam	..	..	17,783	25,249	19,758	22,234	22,723	24,457	23,934
Puerto Rico	n/a	n/a	n/a	n/a	n/a	n/a	..	..	..
United States	**26,618,773**	**25,540,331**	**22,854,273**	**19,788,115**	**18,182,595**	**17,155,093**	**17,312,974[g]**	**19,093,798[h]**	**21,260,293[h]**

Table 8: United States—Nutrition and Assistance Programs

	WIC[a] Annual participation by state								
	1995[e]	1996[e]	1997[e]	1998[e]	1999[e]	2000[e]	2001[e]	2002[e]	2003[e]
Alabama	121,979	118,163	118,899	117,319	115,172	103,930	111,049	118,616	120,377
Alaska	19,235	22,410	23,537	23,829	26,131	24,395	23,628	25,094	25,512
Arizona	122,179	141,466	145,849	142,000	142,488	145,544	147,285	151,186	156,353
Arkansas	87,362	90,662	87,310	82,939	82,882	82,131	79,826	84,153	85,607
California	1,003,611	1,141,598	1,224,224	1,216,253	1,229,495	1,219,430	1,243,509	1,266,542	1,274,489
Colorado	70,617	70,523	75,068	74,679	74,801	71,967	72,124	77,501	81,196
Connecticut	63,625	62,520	59,368	60,267	58,299	50,867	49,252	51,329	51,721
Delaware	15,444	15,831	15,581	15,635	15,274	15,844	16,568	17,241	17,839
District of Columbia	17,368	16,116	16,747	16,593	16,406	15,060	15,204	15,117	15,572
Florida	317,095	332,130	354,971	345,150	337,559	296,298	316,758	340,954	354,568
Georgia	217,207	223,746	230,153	232,258	224,069	216,319	226,365	237,124	246,296
Hawaii	25,410	27,466	30,807	34,098	34,137	32,080	32,467	32,986	32,788
Idaho	31,120	31,085	31,475	31,678	31,543	31,286	32,641	33,448	34,754
Illinois	244,661	244,223	236,068	237,262	241,016	243,655	251,329	260,080	266,975
Indiana	132,621	132,532	132,700	131,099	128,269	120,648	117,880	124,462	124,683
Iowa	65,260	66,020	66,293	65,885	63,996	60,793	60,664	63,010	64,585
Kansas	55,890	54,377	54,754	52,896	52,345	52,773	53,260	57,898	61,229
Kentucky	118,198	119,457	122,948	122,910	122,056	112,182	111,004	113,112	113,109
Louisiana	133,992	139,603	139,223	136,866	135,430	130,042	125,916	129,200	133,403
Maine	26,905	26,300	26,663	25,786	24,646	22,073	20,962	21,470	21,743
Maryland	86,349	87,961	91,412	92,744	93,338	94,194	93,829	96,153	101,283
Massachusetts	113,605	115,942	118,818	117,681	115,042	113,842	112,623	113,176	113,957
Michigan	209,272	212,270	218,371	217,924	215,138	213,049	214,951	215,989	216,684
Minnesota	90,979	93,971	94,807	95,101	90,101	90,093	96,192	102,008	110,117
Mississippi	102,718	102,532	100,124	99,097	96,863	95,836	98,874	102,272	103,244
Missouri	127,005	129,245	131,638	128,176	126,640	123,738	125,144	128,029	129,961
Montana	20,889	22,155	21,679	21,428	21,346	21,288	21,413	21,402	21,320
Nebraska	35,715	36,101	33,041	31,770	33,047	32,793	34,427	37,074	38,286
Nevada	31,053	36,310	37,324	37,972	37,415	38,781	40,646	41,297	44,551
New Hampshire	19,423	19,342	19,179	18,678	18,100	17,049	16,507	16,894	16,701
New Jersey	141,962	137,988	141,514	140,732	129,603	127,013	128,577	133,946	136,272
New Mexico	53,816	56,131	54,040	56,183	56,494	57,802	59,464	59,914	62,253
New York	452,997	466,185	478,980	482,882	476,563	466,818	460,252	454,577	458,177
North Carolina	182,264	188,828	194,566	1,979,544	196,389	190,258	200,678	208,377	211,574
North Dakota	17,754	17,484	16,868	15,810	14,930	14,303	14,053	13,823	13,969
Ohio	259,121	258,400	254,668	250,815	245,994	242,921	247,092	253,923	256,095
Oklahoma	95,964	103,373	108,348	109,581	108,485	108,375	105,907	109,391	111,688
Oregon	82,212	86,048	89,299	31,341	92,831	86,061	93,246	97,058	96,457
Pennsylvania	260,544	262,111	257,018	246,337	235,526	230,914	226,434	222,879	229,628
Rhode Island	21,450	22,382	22,596	22,768	22,454	21,783	21,925	22,451	22,739
South Carolina	124,252	123,669	118,966	118,556	110,850	108,204	111,408	109,575	104,967
South Dakota	22,397	22,439	21,945	20,507	20,445	20,409	20,505	20,278	20,631
Tennessee	137,280	144,174	150,289	148,692	148,824	148,662	149,490	153,212	152,828
Texas	637,229	641,150	683,583	691,292	707,872	737,206	750,122	786,530	824,449
Utah	53,287	54,893	57,511	57,391	59,592	57,549	58,928	61,445	64,070
Vermont	16,140	16,061	16,133	16,308	16,051	16,401	15,966	15,903	16,201
Virginia	126,882	126,760	129,520	132,317	131,304	128,163	130,094	129,103	5,491
Washington	112,915	129,256	145,147	144,052	141,089	145,850	150,138	152,055	152,520
West Virginia	51,890	54,173	55,065	53,962	52,335	50,996	50,064	50,265	49,837
Wisconsin	109,151	109,712	108,886	108,352	104,041	100,574	100,128	102,776	105,702
Wyoming	11,745	11,965	12,447	11,789	11,583	10,907	11,103	11,353	12,037
Guam	..	..	..	..	..	..	..	6,208	5,382
Puerto Rico	182,795	204,717	211,454	206,968	205,228	214,651	219,620	209442	207,838
United States	**6,894,413**	**7,187,831**	**7,406,866**	**7,367,397**	**7,311,206**	**7,192,604**	**7,305,577**	**7,490,841[h,i]**	**7,631,8008[h]**

Table 8: United States—Nutrition and Assistance Programs

	TANF[b] Individual recipients: monthly average by state[f]								
	1995[e]	1996[e]	1997[e]	1998[e]	1999[e]	2000[e]	2001[e]	2002[e]	2003[e]
Alabama	113,971	101,772	77,096	54,164	49,470	55,858	49,100	42,706	44,704
Alaska	36,257	36,532	34,434	29,599	25,221	22,425	16,997	17,623	15,190
Arizona	185,282	166,865	140,161	100,216	88,665	84,458	82,595	94,279	112,952
Arkansas	61,631	57,231	49,156	32,633	29,023	28,704	27,751	27,731	25,425
California	2,674,971	2,592,547	2,318,036	1,997,709	1,661,769	1,283,356	1,228,605	1,160,882	1,111,558
Colorado	105,921	95,858	71,088	53,089	35,207	27,880	27,132	31,491	35,391
Connecticut	169,358	159,736	151,801	115,941	77,947	63,903	59,566	53,102	44,964
Delaware	24,097	23,314	21,139	10,547	16,613	15,338	12,355	12,357	12,697
District of Columbia	71,950	69,668	64,663	55,949	50,035	45,748	43,425	42,159	42,342
Florida	606,490	540,667	403,838	252,257	184,486	143,078	124,586	123,247	120,013
Georgia	377,630	338,830	254,243	182,274	147,581	137,782	120,501	128,177	133,772
Hawaii	65,963	66,375	60,593	46,724	44,069	42,306	40,645	30,466	25,715
Idaho	23,967	22,173	12,277	4,059	2,545	2,333	2,246	2,374	3,124
Illinois	684,438	642,465	563,129	474,976	335,395	246,469	182,673	133,708	98,049
Indiana	176,939	140,514	119,429	109,114	107,688	101,380	115,519	138,885	140,302
Iowa	97,331	86,311	75,864	66,212	57,539	52,363	51,392	53,434	52,170
Kansas	77,030	65,201	49,463	34,718	33,912	35,300	32,967	35,808	39,745
Kentucky	184,482	172,003	150,900	119,161	95,488	86,501	81,750	77,658	76,963
Louisiana	250,865	229,097	166,395	134,370	101,257	82,934	65,504	60,704	57,775
Maine	58,746	54,801	46,944	39,537	33,757	27,506	26,134	26,039	27,091
Maryland	220,148	195,287	153,367	115,728	81,736	71,326	68,221	65,565	61,789
Massachusetts	262,646	229,777	199,403	167,315	121,784	98,144	95,057	108,068	109,093
Michigan	578,463	510,409	428,622	332,240	243,818	199,185	195,369	201,695	200,557
Minnesota	178,260	168,672	151,907	139,993	120,788	123,838	112,688	94,584	94,605
Mississippi	140,454	124,248	92,211	52,667	36,191	34,013	35,710	40,434	45,743
Missouri	249,254	224,880	186,396	147,035	128,703	124,535	121,364	118,753	101,893
Montana	33,376	30,214	24,326	17,727	13,618	14,230	15,401	16,440	17,294
Nebraska	41,496	38,966	37,439	35,657	31,838	27,183	23,802	25,500	26,876
Nevada	40,808	35,444	28,787	25,472	18,203	16,438	19,461	27,640	25,256
New Hampshire	26,859	23,306	19,248	16,045	15,203	13,739	13,501	14,499	14,152
New Jersey	309,556	279,515	242,285	189,418	155,753	125,050	113,481	102,657	102,564
New Mexico	103,051	99,119	71,573	75,237	79,183	68,986	56,105	47,338	44,081
New York	1,240,825	1,157,503	1,017,878	908,776	793,366	694,950	613,353	412,530	338,668
North Carolina	305,240	269,841	230,819	172,813	124,004	97,053	91,526	91,084	84,214
North Dakota	14,149	13,071	10,633	8,682	8,123	8,646	8,881	8,344	8,677
Ohio	591,659	538,597	466,524	340,179	262,806	236,976	199,352	190,998	187,557
Oklahoma	120,196	99,035	80,294	69,316	49,715	32,281	33,895	36,923	36,830
Oregon	100,680	80,946	57,672	46,395	46,761	41,072	41,976	40,916	42,722
Pennsylvania	582,160	527,214	437,898	357,684	278,036	231,983	215,175	210,595	210,405
Rhode Island	60,375	57,429	55,286	53,369	49,020	44,246	41,628	38,957	35,514
South Carolina	126,534	114,709	81,944	60,110	41,029	40,179	40,266	50,866	50,561
South Dakota	16,797	15,759	12,550	9,609	7,680	6,656	6,365	6,603	6,285
Tennessee	270,805	248,310	166,582	149,440	153,286	147,902	155,094	164,823	180,940
Texas	729,525	661,975	530,281	370,857	310,698	346,753	349,279	331,363	334,406
Utah	44,077	39,096	32,067	28,934	28,151	23,188	21,815	19,892	21,812
Vermont	26,777	24,764	21,086	19,644	17,585	15,626	15,060	13,407	12,701
Virginia	178,679	155,249	122,766	100,358	85,933	69,315	65,051	67,262	58,198
Washington	282,658	271,270	246,202	202,573	166,100	148,444	141,397	137,755	135,893
West Virginia	102,303	88,437	82,899	44,179	30,150	33,470	39,037	41,643	40,699
Wisconsin	202,448	158,581	98,732	41,651	41,984	38,186	40,030	45,231	49,019
Wyoming	14,120	12,180	5,679	2,586	1,576	1,118	987	823	733
Guam	..	..	..	..	..	..	9,729	10,783	10,783
Puerto Rico	164,317	152,242	140,344	121,402	102,806	87,354	75,114	67,413	53,506
United States	**13,418,386**	**12,320,970**	**10,376,224**	**8,347,041**	**6,836,093**	**5,821,857**	**5,469,184[g]**	**5,146,132**	**4,965,419[h]**

.. Data not available.
a Special Supplemental Nutrition Program for Women, Infants and Children.
b Temporary Assistance for Needy Families.
e Data refer to fiscal year.
f Data refer to calendar year.
g Data include Guam.
h Data include Virigin Islands.
i Data include American Samoa.
n/a Not Applicable.

Sources for Tables

Table 1: Global Hunger—Life and Death Indicators

Total population, projected population, projected growth rate, life expectancy: The Population Reference Bureau, *2004 World Population Data Sheet,* data posted at http://www.prb.org.

Population under age 15: Statistics and Population Division of the U.N. Secretariat, "Indicators of Youth and Elderly Populations," data posted at http://unstats.un.org/unsd/demographic/products/socind/youth.htm.

Total fertility rate, urban population, infant mortality rate, low-birth weight infants, children immunized, under-5 mortality rate, maternal mortality rate: U.N. Children's Fund, *The State of the World's Children, 2004 (SWC)* (New York: UNICEF, 2004).

Refugees: U.S. Committee for Refugees, *World Refugees Survey, 2004* (Washington, DC: Immigration and Refugee Services of America, 2004) data posted at http://www.refugees.org.

Table 2: Global Food, Nutrition and Education

Per capita dietary energy supply, food production per capita: Food and Agriculture Organization of the United Nations (FAO) Database, http://faostat.fao.org.

Vitamin A supplementation coverage, gender-related primary school enrollment: *SWC, 2004.*

Total adult literacy rate, gender-based adult literacy rate, total net primary school enrollment, combined educational enrollment: U.N. Development Program, *Human Development Report, 2004 (HDR)* (New York: Hoechstetter Printing Co., 2004).

Table 3: Hunger, Malnutrition and Poverty

Undernourished population: FAO, *The State of Food Insecurity in the World, 2004* (Rome: FAO, 2004).

Underweight, wasting, stunting, safe water: *SWC, 2004.*

Population in poverty: World Bank, *World Development Indicators, 2004 (WDI).*

Table 4: Economic and Development Indicators

GNP data, PPP data, distribution of income or consumption, central government expenditures, per capita energy consumption, annual deforestation: *WDI, 2004.*

Human Development Indicators rank, public education expenditures, military expenditures: *HDR, 2004.*

Table 5: Economic Globalization

Exports, imports, net private capital flows, gross capital formation, investment, aid, debt: *WDI, 2004.*

Table 6: United States—National Hunger and Poverty Trends

Total population: U.S. Bureau of the Census, data posted at http://www.census.gov/popest/states/tables/NST-EST2003-01.pdf.

Food insecurity prevalence: U.S. Department of Agriculture (USDA), *Household Food Security in the United States, 2003.* Food Assistance and Research Nutrition Service, Report No. 42 (FANRR-42). November, 2004. Report posted at http://www.ers.usda.gov/publications/fanrr42/

Infant mortality: Centers for Disease Control and Prevention, National Center for Health Statistics, *National Vital Statistics Reports, Vol. 53, No. 5,* data posted at http://www.cdc.gov/nchs/products/pubs/pubd/nvsr/nvsr.htm.

National poverty rate, poverty rates by race, region and age, and income: U.S. Census Bureau, *Income, Poverty and Health Insurance Coverage in the United States: 2003* . September 2004. Report posted at http://www.census.gov/prod/2004pubs/p60-226.pdf.

Unemployment by race: U.S. Department of Labor, Bureau of Labor Statistics, data posted at http://www.bls.gov/cps/#charemp.

Income: Historical Income Tables by Race-Household, data posted at http://www.census.gov/hhes/income/histinc/inchhdet.html.

Table 7: United States—State Hunger and Poverty Trends

Total population: U.S. Census Bureau, data posted at http://www.census.gov/popest/states/tables/nst-est2003-01.xls.

Food insecurity prevalence: USDA, *Household Food Security in the United States, 2003.* Food Assistance and Research Nutrition Service, Report No. 42 (FANRR-42). Report posted at http://www.ers.usda.gov/publications/fanrr42/.

Infant mortality: Centers for Disease Control and Prevention, National Vital Statistics Report, Volume 53, Number 5. *Infant Mortality Statistics.* September 2004, pg. 99, data posted at http://www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53_05.pdf.

Population in poverty: U.S. Census Bureau, *Income, Poverty and Health Insurance Coverage in the United States: 2003.* September 2004. Report posted at http://www.census.gov/prod/2004pubs/p60-226.pdf.

Unemployment by state: U.S. Department of Labor, Bureau of Labor Statistics, data posted at http://www.bls.gov/cps/home.htm.

Table 8: United States—Nutrition and Assistance Programs

Food stamp participation: USDA, Food and Nutrition Service Program Data, data found at http://www.fns.usda.gov/pd/fsfypart.htm.

Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) participation: USDA, Food and Nutrition Service Program Data, http://www.fns.usda.gov/pd/wifypart.htm.

Temporary Assistance for Needy Families (TANF): U.S. Department of Health and Human Services, Administration for Children and Families, data posted at http://www.acf.hhs.gov/news/stats/newstat2.shtml.

Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ARVs	Anti Retroviral drugs
CAP	Common Agricultural Policy of the European Union
CARD	Center for Agriculture and Rural Development, Iowa State University
CDBG	Community Development Block Grant
CERCs	Coordinated Economic Relief Centers
CFSC	Community Food Security Coalition
DATA	Debt, AIDS, Trade for Africa
DRA	Delta Regional Authority
EZ/EC	Empowerment Zones and Enterprise Communities
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FEMA	Federal Emergency Management Agency
FRAC	Food Research and Action Center
GDP	Gross Domestic Product
GPS	Global Positioning System
HIV	Human Immunodeficiency Virus
HUD	Department of Housing and Urban Development
IFAD	International Fund for Agricultural Development of the United Nations
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
MCA	Millennium Challenge Account
MDGs	Millennium Development Goals
NEPAD	New Partnership for Africa's Development
NMVC	New Markets Venture Capital
ORCA	Texas Office of Rural Community Affairs
PRSPs	Poverty Reduction Strategy Papers
RAFI-USA	Rural Advancement Foundation International–USA
RCAC	Rural Community Assistance Corporation
SBA	Small Business Administration
SBIC	Small Business Investment Company
TANF	Temporary Assistance for Needy Families
UN	United Nations
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UPPAP	Uganda's Participatory Poverty Assessment Process
USDA	United States Department of Agriculture
WTO	World Trade Organization

Glossary

"Agro-dealers"—Major source of agricultural inputs to rural people.

Amenity county—County that offers natural amenities, including varied topography, lakes and ocean shore, sunny winters, and temperate summers, which are a magnet for population and tourism.

Assets—Legal property of material value, such as land title. Under most developed legal systems, assets can be borrowed against or converted to cash, increasing solvency (the ability to meet one's needs).

Biotechnology—The use of microorganisms, such as bacteria or yeasts, or biological substances, such as enzymes, to perform specific industrial or manufacturing processes. Applications include production of certain drugs, synthetic hormones, and bulk foodstuffs.

Black Belt—Strip of counties stretching across several southern states known as the Deep South, including the Mississippi Delta region, northern Louisiana, Alabama, Georgia and South Carolina.

Block grants—Federal government lump-sum payments to the states, which then have wide discretion over the use of these funds.

Box stores—Large discount stores, such as Wal-Mart.

Chronic hunger—A prolonged, consistent lack of food and nutrition that slowly erodes one's health and well-being.

Civil society—The sphere of civic action outside of the government comprised of citizens' groups, nongovernmental organizations, religious congregations, labor unions and foundations.

Colonias—Unincorporated communities along the U.S.-Mexico border.

Commodity program payments—Government subsidies paid out to farmers for specific agricultural products.

Debt relief—Measures to reduce the debt owed by developing country governments to either private lenders (commercial banks like Citibank), governments (like Germany or the United States) or international financial institutions (like the International Monetary Fund or World Bank).

Developed countries—Also called "industrial countries" or "the North," these are high-income countries, which the World Bank defines as having a gross national income per capita in 1999 of $9,266 or more. Most developed countries have an industrial economy, and most people living in these countries have a high economic standard of living, though significant populations also may live in poverty. Currently, about 50 countries in the world are considered high income, and their combined population is about 0.9 billion, less than one-sixth of the world's population.

Developing countries—Low-and middle-income countries in which most people have a lower standard of living with access to fewer goods and services than do most people in high-income countries. Also known as the "Third World," "the South" and the "less-developed" countries. Currently, about 125 countries are considered developing countries and home to approximately 5 billion people.

Dumping—The practice of selling commodities in a foreign market at a lower price than in the domestic market.

Empowerment—Measures that expand poor people's ability and access to participate in, negotiate with, influence, control and hold accountable institutions that affect their lives. Broadly, it is the expansion of freedom of choice and action. It is a participatory process that places decision-making responsibility and the resources to act into the hands of those who will benefit.

Empowerment Zones and Enterprise Communities (EZ/EC)—U.S. Department of Agriculture's Community Empowerment program that provides a good model for a federal rural policy that supports local solutions.

Fallow land—Land that is not cultivated.

Famine—An extreme collapse in local availability and access to food that causes a widespread rise in deaths from outright starvation or hunger-related illnesses.

Farm Security and Rural Investment Act of 2002 (farm bill)—The omnibus food and agriculture legislation signed into law on May 13, 2002, that provides a six-year policy framework (2002-2007) for the Secretary of Agriculture to administer various agricultural programs.

Fertility rate—The average number of children born by women during their lifetimes, used as a measure of long-term population changes.

Food access—The ability to physically acquire food. Poor people's access to food is often limited by lack of money, lack of transportation and illness in a family.

Food and Agriculture Organization of the United Nations (FAO)—U.N. agency specializing in agriculture, forestry, fisheries and rural development. FAO was founded with a mandate to raise levels of nutrition and standards of living, to improve agricultural productivity and better the condition of rural populations.

Food availability—The existence of sufficient food in an area, country or community, either through local agricultural production or importation, to feed its inhabitants. Drought is one cause of insufficient food availability and often results in famine.

Food deserts—Areas in which healthy food at affordable prices are not available or easily accessible.

Food insecurity—A condition of uncertain availability of or ability to acquire safe, nutritious food in a socially acceptable way.

Food security—For every person, assured access to enough nutritious food to sustain an active and healthy life with dignity. Includes food availability, food access and appropriate food use.

Food stamps—Credit for low-income people to buy food in retail stores. Previously issued in the form of coupons and now issued electronically with debit cards.

Foreign aid—See *Official Development Assistance.*

G-20+—Group of developing countries with special interests in agriculture, including: Argentina, Bolivia, Brazil, Chile, China, Cuba, Egypt, Guatemala, India, Indonesia, Mexico, Nicaragua, Pakistan, Paraguay, Philippines, South Africa, Tanzania, Thailand, Venezuela and Zimbabwe.

Globalization—In economic terms, it is the process of increasing integration of national economies at the global level. In social terms, the increasing interconnectedness of peoples and cultures and the increasing exchange of ideas.

Green Revolution—Modification of agriculture in the 1960s and 1970s to improve agricultural production through the use of new technologies, including new machines, fertilizer, pesticides, irrigation and cultivation methods, and high-yielding varieties of grains, such as rice, wheat and corn. This revolution was meant to make India and other Asian countries self-sufficient in food production.

Gross domestic investment (GDI)—Total investment in new facilities or productive capacity, usually expressed as a proportion of gross domestic product.

Gross domestic product (GDP)—The value of all goods and services produced within a nation during a specified period, usually a year.

Gross national product (GNP)—The value of all goods and services produced by a country's citizens, wherever they are located.

Group of 8—The wealthiest industrial countries: Canada, France, Germany, Italy, Japan, Russia, United Kingdom and United States (formerly the Group of 7, excluding Russia).

Heavily Indebted Poor Countries (HIPC)—Adopted in 1996, this initiative provides assistance to eligible countries to reduce external debt burdens to sustainable levels, enabling them to service their external debt without the need for further debt relief and without compromising economic growth. Assistance under this initiative is limited to countries that have established a strong track record of policy implementation to ensure that debt relief is used effectively.

Hectare—A metric unit of area equal to 2.471 acres.

Human Development Index (HDI)—As used by the U. N. Development Program, a measure of well-being based on economic growth, educational attainment and health.

Human rights—The basic rights and freedoms afforded all human beings, including the right to food and other basic necessities, the right to life and liberty, freedom of thought and expression, and equality before the law. A summary list can be found in the U. N. Universal Declaration of Human Rights.

Hunger—A condition in which people do not get enough food to provide the nutrients (carbohydrate, fat, protein, vitamins, minerals and water) for fully productive, active and healthy lives.

Industrial countries—Countries in which most people have a high economic standard of living (though there are often significant poverty populations). Also called the "developed countries" or the "North."

Infant mortality rate (IMR)—The annual number of deaths of infants under age 1 per 1,000 live births.

Inflation—An increase in overall prices, which leads to a decrease in purchasing power.

Infrastructure—The basic facilities, services and installations needed for the functioning of a community or society such as transportation, communications, financial, educational and health care systems.

Input—The resources that are used in farm production, such as chemicals, equipment, feed, seed and energy.

International financial institutions (IFIs)—Intergovernmental agencies, including the International Monetary Fund and the World Bank, which make loans to governments.

International Monetary Fund (IMF)—An international organization that makes loans to countries with short-term foreign exchange and monetary problems. These loans are conditioned upon the borrowing country's willingness to adopt IMF-approved economic policies.

Jubilee 2000—A worldwide movement calling for cancellation of the unpayable foreign debt of heavily indebted poor countries by the year 2000.

Jubilee 2000 USA—A movement in the United States, working in collaboration with Jubilee 2000, calling for cancellation of poor-country debt. That cancellation includes acknowledgement of responsibility by lenders and borrowers, as well as mechanisms to prevent recurrence of such debts.

Least developed countries (LDCs)—According to the United Nations, LDCs are low-income countries that suffer from long-term handicaps to economic growth, in particular low levels of human resource development and/or severe structural weakness.

Living wage—The wage level a person must earn to live at an adequate standard of living.

"Lost" land—Land either consumed by urbanization or degraded beyond the point of rapid recovery.

Low birth-weight infants—Babies born weighing 2,500 grams (5 pounds, 8 ounces) or less who are especially vulnerable to illness and death during the first months of life.

Marginal areas—Areas affected by poor soils, low or erratic rainfall and other adverse environmental conditions, making cultivation more difficult.

Malnutrition—A condition resulting from inadequate consumption (undernutrition) or excessive consumption of a nutrient, which can impair physical and mental health, and can be the cause or result of infectious diseases.

Market access—The extent to which a country permits imports. A variety of tariff and non-tariff trade barriers can be used to limit the entry of foreign products.

Metropolitan (metro)—In 2003, the Office of Management and Budget defined metro areas as including central counties with urbanized areas of 50,000 or more residents, regardless of total area population. In addition, the classification includes outlying counties with commuting thresholds of 25 percent, with no metropolitan character requirement.

Glossary

Millennium Challenge Account (MCA)—The MCA was designed to absorb increased development assistance funding from the U.S. government and to channel those funds out to poor countries in the form of grants. Countries will qualify for MCA funding if their leaders govern responsibly, plan to implement development initiatives and operate with economic transparency.

Millennium Development Goals (MDGs)—The MDGs are a set of objectives for the betterment of quality of life for all people first laid out in a series of international conferences in the 1990s, then officially adopted by the United Nations in 2000 with the Millennium Declaration. The goals serve as a road map for development to be achieved by the year 2015.

Microcredit—Small, short-term loans to low-income people, who are too poor to borrow from commercial banks, to help them start their own businesses, generate income and raise their standard of living.

Microenterprises—A business with five or fewer employees and little working capital.

More and Better Campaign—The *More and Better Agriculture, Rural Development and Food Aid Campaign* is an international network of nongovernmental and civil society organizations committed to mobilizing political will to increase both the quality and quality of aid for agriculture and rural development.

National Anti-Hunger Organizations (NAHO)—A coalition of organizations, formerly known as the Medford Group, working together to end hunger in the United States. Members include: America's Second Harvest, Bread for the World, Center on Hunger and Poverty, Congressional Hunger Center, End Hunger Network, Food Research and Action Center (FRAC), Interfaith Hunger Coordinators, MAZON: A Jewish Response to Hunger, RESULTS and Share Our Strength.

Nongovernmental organizations (NGOs)—Groups and institutions that are entirely or largely independent of government and that have primarily humanitarian or cooperative rather than commercial objectives. They include private agencies in industrial countries that support international development; organized indigenous groups; member-groups in villages; charitable and religious associations; independent cooperatives; community associations; water-user societies; women's groups; and pastoral associations. Citizen groups that raise awareness and influence policy also are NGOs.

Nonmetropolitan (nonmetro)—Analysts and policymakers who refer to "rural" America are often referring to nonmetropolitan (nonmetro) areas. The Office of Management and Budget defines nonmetro as outside the boundaries of metro areas and subdivided into two types: micropolitan and noncore. Micro areas are nonmetro areas with urban clusters of at least 10,000 persons. Noncore areas have no urban clusters of 10,000 or more persons. Micro areas have more college graduates and full-time workers, higher average earnings, and lower poverty rates than other nonmetro areas.

Official development assistance (ODA)—The term used by the Organization for Economic Cooperation and Development for grants and loans to developing countries undertaken by governments to pursue economic development at concessional financial terms.

ONE Campaign—The ONE Campaign is a nationwide collaborative effort by Bread for the World, DATA, the Better Safer World Coalition, and countless celebrities to rally Americans ONE by ONE to fight the emergency of widespread hunger, global AIDS, and extreme poverty. The campaign encourages Americans to sign a declaration which states that we believe we can do something about fair trade, debt relief, corruption, clean water, and education for poor and hungry people all over the world by making our voice heard and targeting ONE percent of the federal budget toward poverty-focused development.

Pastoralists—People whose livelihoods depend on livestock for some or all of their subsistence.

Payment limitation—The maximum amount of commodity program benefits a person can receive by law. "Persons," as defined by payment limitation regulations established by the Secretary of Agriculture, are individuals; members of joint operations; or entities, such as limited partnerships, corporations, associations, trusts and estates, that are actively engaged in farming.

Per-capita income—Income measured per person.

Persistent poverty counties—Counties that have experienced poverty rates of more than 20 percent for the past 30 years.

Political will—Impetus or motivation by political leaders to pass legislation or measures that create change or political movement on an issue.

Poverty—The lack of sufficient money or resources to provide the basic needs of survival for oneself and one's family.

Poverty line—An official measure of poverty defined by national governments. In the United States, it is calculated as three times the cost of the USDA's Thrifty Food Plan, which provides a less-than-adequate diet. In 2003 the poverty line was $15,260 for a family of three, $18,400 for a family of four. Poverty also can be measured internationally, by determining the percentage of per capita income levels under $1 or $2 per day for a population. Income levels are adjusted for purchasing power parity so that they are comparable from country to country.

Private investment—Commitment of funds by private individuals or corporations.

Protectionism—Trade policy that protects domestic products or industries by limiting imports, as with tariffs or quotas.

Public investment—Investment of funds by governments and intergovernmental organizations.

Public policy advocacy—Political action taken by citizens focused on the policies, programs and practices of governments, international financial institutions and corporations.

Recession—A period in which a country's gross domestic product declines in two or more consecutive three-month periods; a period of reduced economic activity that is less severe than a full-fledged economic crisis or "depression."

Social safety nets—Government policies and charitable programs designed to ensure basic needs are met among low-income, disabled and other vulnerable social groups. Safety nets may also provide protection against risks, such as lost income, limited access to credit or devastation from natural disaster.

Smallholder farmers—Farmers who work small plots of land, usually 2 hectares or less.

Starvation—Suffering or death from extreme or prolonged lack of food.

Stunting—Failure to grow to normal height caused by chronic undernutrition during the formative years of childhood.

Subsidy—A direct or indirect benefit granted by a government for the production or distribution (including export) of a good or to supplement other services.

Sustainability—Society's ability to shape its economic and social systems so as to maintain both natural resources and human life.

Sustainable agriculture—Agriculture that is practiced in a way that does not deplete the earth of natural resources, does not harm the surrounding ecological equilibrium and allows for continued farming on the same land year after year.

Sustainable development—The reduction of hunger and poverty in environmentally sound ways. It includes: meeting basic human needs, expanding economic opportunities, protecting and enhancing the environment, and promoting pluralism and democratic participation.

Tariff—Tax or duty placed on imported, and sometimes exported, goods to protect domestic producers by keeping prices higher than world prices or to generate revenue for the government.

Trade deficit—The difference between the value of a country's imports and the value of its exports when the former is greater than the latter.

Transfer dependent—Designation made by the U.S. Department of Agriculture for counties that receive a quarter of the total personal income from government assistance.

Transition economies—Former communist states in Eastern Europe and Central Asia.

Under-5 mortality rate—The annual number of deaths of children younger than 5 per 1,000 live births. A high rate correlates closely with hunger and malnutrition.

Underemployment—Partial or inadequate employment of an individual or the labor force as a whole.

Undernutrition—A condition resulting from inadequate consumption of calories, protein and/or nutrients to meet the basic physical requirements for an active and healthy life. Measured by the Food and Agricultural Organization of the United Nations by country as the number of people and the percentage of the population consuming less than 1,800 calories per day.

Underweight—A condition in which a person is below the average, expected or healthy weight for her or his age and height.

Unemployment—The state of being without work, usually applied to those not working involuntarily.

Vulnerability to hunger—A condition of individuals, households, communities or nations who have enough to eat most of the time, but whose poverty makes them especially susceptible to hunger due to changes in the economy, climate, political conditions or personal circumstances.

Wasting—A condition in which a person is seriously below the normal weight for his or her height due to acute undernutrition or a medical condition.

Water-harvesting—Management technique for collecting, storing and distributing water runoff for any productive use.

Water parliament—Forum representing different groups that claim rights to a body of water.

Watershed—A ridge of land that separates two adjacent river systems.

Welfare—Financial and other assistance provided by government and private charitable organizations to people in need in the areas of nutrition, education, health care and employment.

World Bank—An intergovernmental agency that makes long-term loans to the governments of developing nations. Formally called the International Bank for Reconstruction and Development.

World Health Organization (WHO)—The U.N. special agency for health that strives to attain the highest possible level of health for all people.

World Trade Organization (WTO)—An international organization, headquartered in Geneva, established in 1995 to enforce the Uruguay Round global trade agreement.

Zais—Technique used in Burkina Faso and Niger to revive the land by making holes in the ground and filling with crop residue and household compost.

Zud—Disastrous phenomenon of summer droughts and extreme winters in Mongolia.

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The **International Fund for Agricultural Development** (IFAD) is a specialized agency of the United Nations dedicated to eradicating poverty and hunger in developing countries. Through low-interest loans and grants, it develops and finances projects that enable rural poor people to overcome poverty themselves. IFAD mobilizes resources that help rural households gain access to land, water, natural resources, technology, research, knowledge, and markets. As a priority, it assists rural poor people, especially women, to develop and strengthen their own organizations so they can better advance their own interests and dismantle the obstacles that stand in the way of a better life. IFAD tackles poverty not just as a lender, but as an advocate for the rural poor.

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Christian Children's Fund (CCF) is an international child development organization, working in 31 countries, assisting 7.6 million children and family members regardless of race, creed or gender. CCF works for the well-being of children by supporting locally led initiatives that strengthen families and communities, helping them overcome poverty and protect the rights of their children. CCF programs are comprehensive, incorporating early childhood development, health, education, nutrition, sanitation and livelihood interventions that sustainably protect, nurture and develop children. CCF is recognized for its groundbreaking approaches to building self-governance/civil society; unique child protection programs for children in conflict and emergency situations; early childhood care and development; and its child-centered, community-based approach to development.

CCF is a member of ChildFund International, a worldwide organization of 11 child sponsorship charities, working 55 countries, assisting 8.7 million impoverished children and family members.

2821 Emerywood Parkway
Richmond, VA 23294
Phone: (800) 776-6767
Web site: www.christianchildrensfund.org

The Community of Christ World Hunger Committee seeks to engage the church and others in a response to the needs of hungry people throughout the world. Its primary purpose is to support programs of food production, storage and distribution; fund projects to provide potable water; supply farm animals; instruct in food preparation and nutrition; and educate in marketing strategies for produce. It also seeks to advocate for the hungry and educate about the causes and alleviation of hunger in the world.

The majority of proposals reviewed by the committee originate with Outreach International and World Accord, agencies recognized by the church as engaged in participatory human development that is global in scope. Direct grants to Community of Christ jurisdictions for community hunger projects, as well as disaster relief, also are considered.

1001 W. Walnut
Independence, MO 64050-3562 USA
Phone: (816) 833-1000, ext. 3073
Fax: (816) 521-3096
Web site: www.CofChrist.org/hunger

Covenant World Relief is the relief and development arm of The Evangelical Covenant Church. Covenant World Relief was formed in response to the Covenant's historic commitment to being actively involved in Christ's mission to respond to the spiritual and physical needs of others.

5101 N. Francisco Avenue
Chicago, IL 60625-3611 USA
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Fax: (773) 784-4366
E-mail: 102167.1330@compuserve.com
Web site: www.covchurch.org

Episcopal Relief and Development saves lives and builds hope in communities around the world. For 64 years, ERD has helped people in more than 100 countries. Working with partners in the Anglican Communion as well as ecumenically, it provides emergency assistance in times of disaster and rebuilds devastated communities. ERD offers long-term development programs in the areas of food security and health care to help people sustain safer, healthier and more productive lives.

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E-mail: er-d@er-d.org
Web site: www.er-d.org

Evangelical Lutheran Church in America World Hunger Program is a 31-year-old ministry that confronts hunger and poverty through emergency relief, long-term sustainable development and organizing, education, advocacy and stewardship of financial resources. Seventy-three percent of the program works internationally and 27 percent works within the United States. Lutheran World Relief (Baltimore) and the Lutheran World Federation (Geneva) are key implementing partners in international relief and development throughout the world.

8765 W. Higgins Road
Chicago, IL 60631-4101 USA
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The Independent Presbyterian Church Foundation is a public charity established in 1973 by the congregation of the Independent Presbyterian Church. It holds and administers all endowment funds received by the church. Composed primarily of congregational gifts and bequests, these endowments represent an added dimension of Christian stewardship that compliments rather than supplants strong congregational giving. Each endowment fund is governed by terms established by the donors or by various church-related governing bodies. The purposes of funds held and managed by the Foundation are administered to support

the mission and ministry of the Independent Presbyterian Church as that mission and ministry is defined by the session of the church. The Foundation distributes funds to support internal programs and ministries as well as external organizations doing the work of Christ in the world.

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Birmingham, AL 35205 USA
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Web site: www.ipc-usa.org

The Lutheran Church Missouri Synod World Relief and Human Care provides emergency relief and sustainable development funding for domestic and international projects. LCMS World Relief and Human Care provides grants for Lutheran congregations and social ministry organizations in the United States as well as other groups with Lutheran involvement that are engaged in ministries of human care. Domestic support also is provided to Lutheran Disaster Response and Lutheran Immigration and Refugee Service. International relief and development assistance is channeled through the Synod's mission stations and partner churches as well as through Lutheran World Relief.

1333 S. Kirkwood Road
St. Louis, MO 63122-7295 USA
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Fax: (314) 996-1128
E-mail: lcms.worldrelief@lcms.org

For 35 years, the **Presbyterian Hunger Program** has provided a channel for congregations to respond to hunger in the United States and around the world. With a commitment to the ecumenical sharing of human and financial resources, the program provides support for direct food relief efforts, sustainable development and public policy advocacy. A network of 100 Hunger Action Enablers leads the Presbyterian Church (USA) in the study of hunger issues, engagement with communities of need, advocacy for just public policies, and the movement toward simpler corporate and personal lifestyles.

100 Witherspoon Street
Louisville, KY 40202-1396 USA
Phone: (888) 728-7228 ext. 5832
Fax: (502) 569-8963
Web site: www.pcusa.org/hunger

Share Our Strength works toward ending hunger and poverty in the United States and abroad by supporting food assistance, treating malnutrition and other consequences of hunger, and promoting economic independence among people in need. Share Our Strength meets immediate demands for food while investing in long-term solutions to hunger and poverty by mobilizing both industry and individuals in such efforts as Operation Frontline, a food and nutrition education program that trains culinary professionals and financial planners who volunteer to teach six-week cooking, nutrition, food budgeting and financial planning classes to low-income individuals; Taste of the Nation, the nation's largest culinary benefit to fight hunger; and the Great American Bake Sale, a groundbreaking program to end childhood hunger in America. All Americans—individuals, church groups, organizations and businesses—are encouraged to participate by hosting a bake sale in their communities.

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Web site: www.strength.org

The United Methodist Committee on Relief (UMCOR) was formed in 1940 in response to the suffering of people during World War II. It was a "voice of conscience" expressing the concern of the church for the disrupted and devastated lives churned out by the war. UMCOR has expanded its ministry to more than 80 countries by ministering with compassion to "persons in need, through programs and services which provide immediate relief and long-term attention to the root causes of their need." Focusing on refugee, hunger and emergency response ministries, the work of UMCOR, a program department of the General Board of Global Ministries of the United Methodist Church, is carried out through direct services and a worldwide network of national and international church agencies that cooperate in the task of alleviating human suffering.

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E-mail: umcor@gbgm-umc.org

The U.N. **World Food Program** (WFP) is the food-aid arm of the United Nations and the primary U.N. agency fighting to eradicate world hunger. WFP strives to provide "food for life" to sustain victims of man-made and natural disasters; "food for growth" aims to improve the nutrition and quality of life of the most vulnerable people at critical times in their lives; and "food for work" seeks to help build assets and promote the self-reliance of poor people and communities, particularly through labor-intensive work programs. WFP provides commodities to least developed and low-income food-deficit countries, with a focus on feeding the most vulnerable people: women, children and the elderly. WFP envisions a world in which every woman, man and child has access, at all times, to the food needed for an active and healthy life.

Via Cesare Giulio Viola, 68
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00148 Rome, Italy
Phone: (39-06) 6513-1

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The Adventist Development and Relief Agency (ADRA) International is an independent humanitarian agency established in 1984 for the specific purpose of providing individual and community development and disaster relief. Committed to improving quality of human life, ADRA serves people in need without regard to their ethnic, political or religious association.

ADRA's development and relief work is divided among five core activities: food security, economic development, primary health, disaster preparedness and response, and

basic education. In addition to feeding the hungry, ADRA works to prevent hunger through long-term development programs. Struggling families and individuals learn how to support and feed themselves by using agricultural methods that do not hurt the environment. ADRA also helps improve access to food and ensures equitable distribution of food among community members.

12501 Old Columbia Pike
Silver Spring, MD 20904 USA
Phone: (800) 424-2372
Web site: www.adra.org

America's Second Harvest—The Nation's Food Bank Network, is the nation's largest domestic hunger-relief organization with a national Network of more than 200 regional Member food banks and food-rescue programs, serving all 50 states and Puerto Rico. The Network secures and distributes nearly two billion pounds of donated food and grocery products annually. The America's Second Harvest Network supports approximately 50,000 feeding agencies nationwide, including food pantries, soup kitchens, women's shelters, and Kids Cafes. These local organizations provide emergency food assistance to 23 million hungry Americans, including more than nine million children and nearly three million seniors each year. For more information on America's Second Harvest, visit www.secondharvest.org.

35 E. Wacker Drive, Suite 2000
Chicago, IL 60601
Phone: (312) 263-2303
Fax: (312) 263-5626
E-mail: feedback@secondharvest.org

Baptist World Aid (BWAid) works through Baptist communities around the world, mitigating suffering and providing long-range help for persons in need, regardless of religion, nationality, tribe or class. BWAid also helps poor people avoid situations of famine and malnourishment and improves their capacity for self-help and wage earning.

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Web site: www.bwanet.org/bwaid

Canadian Foodgrains Bank is a specialized food-program agency established in 1982 and now operated by 13 church-related relief and development organizations. It collects substantial amounts of food grain donations directly from Canadian farmers and from more than 200 community groups that collectively grow crops for donation to the Canadian Foodgrains Bank. The approximately $6.0 million per year in grain and cash donations, combined with matching support from the Canadian International Development Agency, are used to provide food assistance and food security support to food-deficit countries and communities around the world to meet immediate food needs and support the longer-term ability of communities and households to feed themselves. In addition, the Canadian Foodgrains Bank engages in focused public policy research and advocacy in the areas of agricultural trade policy, Canadian aid policy and the application of a human rights approach to reducing hunger.

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E-mail: cfgb@foodgrainsbank.ca
Web site: www.foodgrainsbank.ca

Catholic Relief Services (CRS) is the overseas relief and development agency of the U.S. Catholic community. Founded in 1943, CRS provides more than $400 million in development and relief assistance in more than 94 nations worldwide. Working in partnership with the Catholic church and other local institutions in each country, CRS works to alleviate poverty, hunger and suffering, and supports peace-building and reconciliation initiatives. Assistance is given solely on the basis of need. Even while responding to emergencies, CRS supports more than 2,000 development projects designed to build local self-sufficiency. CRS works in conjunction with Caritas Internationalis and CIDSE, worldwide associations of Catholic relief and development agencies. Together, these groups build the capacity of local nonprofit organizations to provide long-term solutions. In the United States, CRS seeks to educate and build awareness on issues of world poverty and hunger and serves as an advocate for public policy changes in the interest of poor people overseas. CRS reaches out to Catholics in dioceses, schools and universities, providing education materials, workshops and a grassroots legislative network.

209 W. Fayette Street
Baltimore, MD 21201-3443 USA
Phone: (410) 625-2220
Fax: (410) 234-2987
E-mail: advocacy@catholicrelief.org
Web site: www.catholicrelief.org

Church World Service is the global relief, development and refugee-assistance ministry of Protestant, Orthodox and Anglican denominations. Founded in 1946, CWS works in partnership with local organizations worldwide to support sustainable self-help development, meet emergency needs, and address the root causes of poverty and powerlessness.

475 Riverside Drive, Suite 700
New York, NY 10115-0050 USA
Phone: (800) 297-1516
Fax: (212) 870-3523
Web site: www.churchworldservice.org

P.O. Box 968
28606 Phillips Street
Elkhart, Indiana 46515
Phone: 800-297-1516

Foods Resource Bank is a Christian response to world hunger. Its goal is for hungry people to know the dignity and pride of feeding themselves by making it possible for them, through sustainable agricultural programs, to produce food for their families with extra to share, barter or sell. Foods Resource Bank endeavors to twin rural and urban communities in "growing projects" in the United States, allowing participants to give a gift only they can give. These volunteers grow crops, sell them in the United States and the resulting money is used by implementing members (many of the mainline denominations) to establish food security programs abroad. Foods Resource Bank creates solidarity between America's bounty and the needs of the world's hungry.

2141 Parkview
Kalamazoo, MI 49008 USA
Phone: (269) 349-3467
Web site: www.FoodsResourceBank.org

Sponsors

Heifer International is a nonprofit charitable organization working to end world hunger by giving cows, goats and other kinds of livestock, along with appropriate training to impoverished, undernourished families around the globe. In turn, these people give to others their animals' offspring, multiplying the benefits of each donated animal. "Passing the gift" is fundamental to Heifer's approach to sustainable development. As people share their animals' offspring with others along with their knowledge and resources, an ever-expanding network of hope, dignity and self-reliance is created that expands the globe.

Since it began in 1944, Heifer has worked directly with millions of families in 128 countries and 38 U.S. states, and has affected the lives of millions more through an average of six pass-on animals for each animal it provides. Each year Heifer's message of hope reaches still others through the media and through its own publications, such as its bi-monthly World Ark magazine. Heifer's three learning centers in Arkansas, California and Massachusetts offer hands-on educational experiences with seminars, service learning projects and hunger immersion experiences.

1015 Louisiana Street
Little Rock, AR 72202 USA
Phone: (501) 907-2600
Fax: (501) 907-2602
Web site: www.heifer.org

Lutheran World Relief works with partners in 50 countries to help people grow food, improve health, strengthen communities, end conflict, build livelihoods and recover from disasters. With people in the U.S. we work for justice for those we serve.

Lutheran World Relief
700 Light Street
Baltimore, MD 21230-3850 USA
Phone: (410) 230-2700 or (800) LWR-LWR-2
Fax: 410-230-2882
E-mail: lwr@lwr.org

LWR Office of Public Policy
122 C Street NW, Suite 125
Washington, DC 20001 USA
Phone: (202) 783-6887
Fax: (202) 783-5328
Web site: www.lwr.org

Mennonite Central Committee (MCC), founded in 1920 by the Mennonite and Brethren in Christ churches in North America, seeks to demonstrate God's love by working among people suffering from poverty, conflict, oppression and natural disaster. MCC serves as a channel of interchange by building relationships that are mutually transformative. MCC strives for peace, justice and dignity of all people by sharing our experiences, resources and faith in Jesus Christ. MCC's priorities include disaster relief, capacity building (including Ten Thousand Villages), peace building and connecting people.

21 S. 12th Street, Box 500
Akron, PA 17501 USA
Phone: (717) 859-1151
Fax: (717) 859-2171
E-mail: mailbox@mcc.org
Web site: www.mcc.org

Oxfam America is dedicated to creating lasting solutions to global poverty and hunger by working in partnership with grassroots organizations promoting sustainable development in Africa, Asia, the Caribbean and the Americas, including the United States. Oxfam's grant awards and advocacy work aim to challenge the structural barriers that foster conflict and human suffering and limit people from gaining the skills, resources and power to become self-sufficient. Oxfam America envisions a world in which all people one day shall know freedom—freedom to achieve their fullest potential and to live secure from the dangers of hunger, deprivation and oppression—through the creation of a global movement of economic and social justice.

26 West Street
Boston, MA 02111 USA
Phone: (800) 77-OXFAM
Fax: (617) 728-2594
E-mail: oxfamusa@igc.apc.org
Web site: www.oxfamamerica.org

The mission of **Physicians Against World Hunger** is to alleviate chronic hunger by supporting programs that implement microlending and education to break the hunger cycle. As part of this educational service, beginning in 2003, Physicians Against World Hunger also will make available a speaker to societies and organizations that wish to know more about world hunger.

2 Stowe Road, Suite 13
Peekskill, NY 10566 USA
Phone: (914) 737-8570
Fax: (914) 737-6016
Web site: www.pawh.org

Save the Children was founded in the United States in 1932 as a nonprofit child-assistance organization to make lasting positive change in the lives of children in need. Today, Save the Children works in the United States and 47 other countries in the developing world to help children and families improve their health, education and economic opportunities. Save the Children continues to help children and families devastated by the tsunamis in Southeast Asia, displaced by conflict and ethnic violence in Sudan, deprived by war and decades of neglect in Iraq, and has mobilized rapid life-support assistance for other children and families caught in the tragedies of natural and man-made disasters.

Save the Children is a member of the International Save the Children Alliance, an association of 27 independent organizations that provide child-oriented emergency response, development assistance and advocacy of children's rights in more than 100 countries.

54 Wilton Road
Westport, CT 06880 USA
Phone: (203) 221-4000 or (800) 728-3843
Web site: www.savethechldren.org

Since 1944, **World Relief** has been helping churches to assist suffering people worldwide in the name of Jesus. As the humanitarian arm of the National Association of Evangelicals, World Relief equips churches to minister to hurting people's physical, emotional and spiritual needs. Working with local churches, World Relief serves in some of the poorest countries in the world. Its innovative ministries focus on microenterprise development, maternal and child health, HIV/AIDS, agricultural assistance, refugee care and emergency relief.

7 East Baltimore Street
Baltimore, MD 21202 USA
Phone: (443) 451-1900 or (800) 535-LIFE
E-mail: worldrelief@wr.org
Web site: www.worldrelief.org

World Vision is a Christian relief and development organization dedicated to helping children and their communities worldwide reach their full potential by tackling the causes of poverty. Motivated by our faith in Jesus, we serve the poor, regardless of a person's religion, race, ethnicity, or gender, as a demonstration of God's unconditional love for all people. World Vision provides emergency assistance to children and families affected by natural disasters and civil conflict, works with communities to develop long-term solutions to alleviate poverty, and advocates for justice on behalf of the poor. World Vision serves more than 100 million people in nearly 100 countries around the world. Our work is evident in 4,500 communities, where we join with local people to find lasting ways to improve the lives of impoverished children and families.

34834 Weyerhaeuser Way South
Federal Way, WA 98001 USA
Phone: (888) 511-6593
Web site: www.worldvision.org

Friends

(Gifts under $5,000)

Academy for Educational Development
www.aed.org

ACDI/VOCA
www.acdivoca.org

Alternatives for Simple Living
www.simpleliving.org

Baptist General Convention of Texas: Christian Life Commission
www.bgct.org

Board of World Mission of the Moravian Church
www.mcsp.org

Catholic Charities USA
www.catholiccharitiesusa.org

Congressional Hunger Center
www.hungercenter.org

Food for the Hungry
www.fh.org

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

Islamic Society of North America
www.isna.net

MAZON: A Jewish Response to Hunger
www.mazon.org

Nazarene Compassionate Ministries International
www.nazarene.org

Reformed Church in America
www.rca.org

United Church of Christ: Justice and Witness Ministries; Wider Church Ministries
www.ucc.org

U.S. Fund for UNICEF
www.unicefusa.org

World Cocoa Foundation
www.worldcocoafoundation.org

World Hope International
www.worldhope.net

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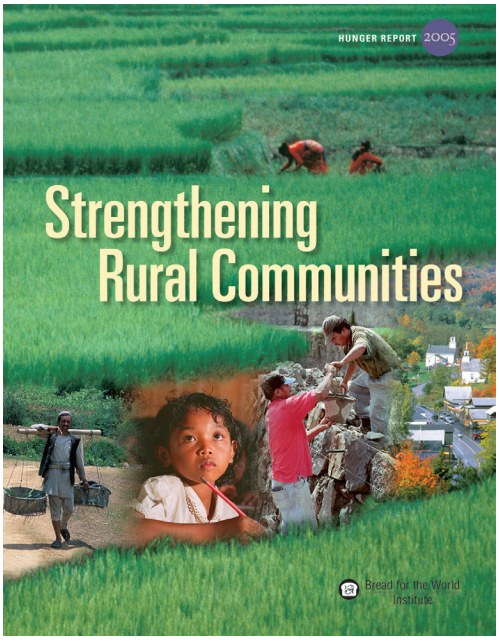

Strengthening Rural Communities

Hunger 2005

Bread for the World Institute

Study Guide

This study guide is meant for individual or group use. Please use this guide to stimulate reflection and discussion.

The following outline is meant to cover three one-hour sessions of discussion on the Bread for the World Institute 2005 Hunger Report: *Strengthening Rural Communities*. We recommend the questions below be used per session. Discussions need not be restricted to just these questions, but even if groups choose to discuss broader issues covered in the report, these questions will still serve as a useful launching-off point and so we encourage groups to start here.

Session 1 (1 hour): Introduction and Chapter 1	Progress in reducing hunger is lagging behind progress on other systemic problems in rural areas around the world. Why is hunger different? Why is it such a hard problem to solve? What is your knowledge of living for sustained periods of time with hunger? How would this affect your ability to function in the life you have now? Over a billion people worldwide live on less than $2 per day. List your expenses per day and then discuss what it would be like to live on $20 per day; $10 per day; $5 per day; and even $2 per day. Where would you be cutting your expenses?
Session 2 (1 hour): Chapters 2-3	Have you or anybody you know grown up on a farm or as part of an agricultural community? How similar, or different, is your experience with the findings about farming and agriculture described in the Hunger Report? A combination of factors contribute to the problems facing rural communities in the developing world. Discuss them in the order of importance as you view them now based on your reading of this report. How does this compare with what you understood of hunger and poverty in the developing world before reading the report?

Session 3 (1 hour): Chapter 4-5	What are ways the federal, state or local governments, or some combination of these working together, can help rural areas to develop the strength and creativity within their own communities? Imagine you were hired by a public relations firm to create a full-page ad in a major magazine or newspaper intended to explain to Americans why they should press their government to invest in improving the lives of poor people in the developing world. What information from this report would you include in your ad?
Session 4 (1 hour): Chapters 6-7	How does U.S. farm policy hinder development in rural communities in the United States that do not depend on agriculture? Why is the Doha Round of the World Trade Organization negotiations an important opportunity for developing countries to achieve progress in reducing poverty and hunger? Individuals can make important contributions in the fight against hunger and poverty. Do you know someone who has—or have you—been part of a project or worked on a campaign for social justice?

Copies of *Hunger 2005: Strengthening Rural Communities* are available through Bread for the World at www.bread.org or by writing 50 F Street NW, Suite 500, Washington, DC 20001. You can also email your order to institute@bread.org or call 1-800-82-BREAD. Orders of 10 or more will receive a 20% discount.

Bread for the World
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1-800-82-BREAD www.bread.org