



Farm Policies for Today and Tomorrow

Chapter 1

CHAPTER SUMMARY

America's farmers and the federal government are natural allies in the fight against domestic hunger and malnutrition—and this alliance is enshrined in the nation's farm policies. The U.S. public needs farm policies to ensure a safe and affordable food supply, to protect the sustainability of vital natural resources that agricultural production depends on, and to produce well-balanced, nutritious foods.

A cursory look at the U.S. food system reveals the latter—producing well-balanced, nutritious foods—as badly in need of attention. Rising healthcare costs associated with chronic diet-related diseases should lead policymakers to reassess the balance of farm policies. Current policies favor production of calories, not nutrients. Today, the United States does not produce enough fruits and vegetables for Americans to meet the recommended daily allowances (RDAs) of vitamins and minerals. Thus, farm policies should lean more towards the production of healthy foods.

A rapidly growing segment of the U.S. population is demanding healthy, sustainably produced foods. Small and medium-size producers, the farmers best suited to meet this demand, receive virtually no support from U.S. farm policy. The largest, wealthiest producers of a limited number of crops are the biggest beneficiaries of government support. At a time when they are earning record high farm income, it makes little sense for them to be the main beneficiaries of national farm policy.

Government has directed schools to serve children healthier meals, and when possible to source more of the foods used in child nutrition programs from local and regional producers, mostly small to medium-size producers. This merits much stronger support from policymakers. Not only would it benefit children, including low-income children, but also a great many farmers and their communities, reviving a connection between agriculture and rural development that once was much stronger.

Included at the end of this chapter is a proposal to restructure the current farm safety net. Income-support programs should be replaced by a more efficient system of revenue insurance, and support should be available to all farmers and based on principles of fairness and shared responsibility.

Recommendations

- Farm policies should lean more towards the production of healthy foods.
- Farm policies should be linked to local and regional development of rural areas.
- Shared responsibility, fairness, and efficiency should define how government partners with farmers on risk management.



Richard Lord

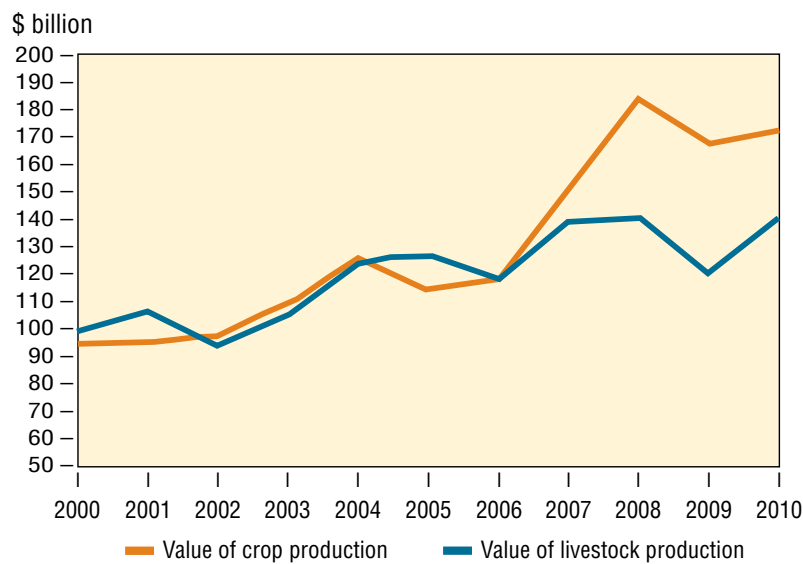
Revisiting Rural Priorities

In recent years, the U.S. farm sector has recorded its highest growth rates since the 1970s.¹ At the time of this writing, 2011 looks set to be the most prosperous year of all.² The rise in global grain prices has been very good for the U.S. farm sector, and the U.S. Department of Agriculture (USDA) forecasts a rising demand for U.S. grain for years to come.³

It is no wonder the U.S. farm sector is prospering. The United States has been blessed with some of the most productive farmland in the world. U.S. agricultural producers are thriving as more people around the world escape poverty and seek to improve their diets, usually by adding animal products. By far the largest share of U.S. farm income comes from sales of feed grain and what are called “value-added products,” meaning the cattle, hogs, poultry, and other livestock that consume the feed grain.

From 2007-2010, U.S. agricultural exports averaged more than \$100 billion annually.⁴ Trade with emerging markets has been fueling this higher level of exports—particularly trade with China, now the top export destination of U.S. agricultural products.⁵

Figure 1.1 Value of Crop and Livestock Production, 2000-2010



Source: USDA, Economic Research Service.

While the U.S. economy as a whole has run trade deficits since the 1970s, the agricultural sector has bucked this trend by posting steady surpluses.⁶ Between 1996 and 2011, soybean exports to China alone increased an astounding 26-fold.⁷

Outside the metropolitan centers where most of the U.S. population resides, hundreds of millions of acres of farmland stretch across the countryside. More than 40 percent of the U.S. landmass is farmland.⁸ Yet most Americans live far from where the food they eat is produced and know little about the farm sector or the role of the government in supporting farmers.

Federal farm policy can be traced back to the Great Depression. The U.S. Agricultural Assistance Act of 1933 was in effect the first farm bill. Farm



Between 2000 and 2009, corn used for ethanol increased by 3.7 billion bushels, while total corn production increased by 3.2 billion bushels. During this same period, U.S. ethanol production increased from 1.6 billion gallons to 10.8 billion gallons.

The farm share of every dollar spent on food is **15.8¢** and the marketing bill is **84.2¢**

policy during the Great Depression not only helped farmers keep producing the food needed to feed the country, but also kept rural America from sinking deeper into poverty. From 1929 to 1932, during the first years of the Great Depression, farm income plummeted by 52 percent,⁹ so the 1933 act was much-needed. In the early years of farm policy, government support for farmers was the equivalent of rural development: the farm sector was indivisible from the rest of the rural economy.

Today, federal farm programs are still in place, but they no longer play much of a role in reducing rural poverty in the United States. This is because the face of rural poverty has changed since those early farm policies were established. Poor people in rural areas now work primarily in the service sector—much like poor people in metropolitan areas. Just 6.5 percent of the rural labor force works on a farm.¹⁰ Farmers themselves are not often poor; the median income of farm households is higher than of U.S. households as a whole.¹¹ Some farming areas have high rates of poverty, particularly the Deep South and parts of the West, but it's unusual for people who earn a living farming to be in poverty. The major exception is immigrant farm workers, whose experiences of poverty in America are some of the harshest.

Farm policies that support the incomes of American farmers seem unnecessary at this point. And, in fact, most farmers don't receive any direct support from the U.S. government. Among those who do, there are gaping inequalities—the largest, wealthiest farms receive much more than everyone else. It is hard to make a case that this is fair under any circumstances, but particularly at a time when elected officials are scouring the budget to eliminate wasteful spending. This is an optimal time to rethink U.S. farm policy.

Reforming farm policy does not mean eliminating support. Farming is a risky undertaking, and all farmers need a guarantee of government protection in the event of a catastrophic loss in revenue. Tornadoes, droughts, floods, heat waves, frost, erratic markets, tit-for-tat trade policies: these are only some

People who earn their living as farmers have a unique role in society as stewards of an essential public good—an agriculture system that feeds and nourishes everyone.



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Nearly half of the nation's 2,050 nonmetropolitan counties lost population between 1988 and 2008; for more than 700 counties, this loss exceeded 10 percent.

\$167.3 billion

Commodity subsidies in the United States totaled \$167.3 billion from 1995-2010. The top 10 percent of recipients were paid 76 percent of commodity payments.

of the systemic risks that are beyond the control of individual farmers and justify a government safety net. But what kind of safety net, who is included, and how and when to use it, are the questions that make all the difference.

At the end of this chapter, Bread for the World Institute proposes revamping the farm safety net to make it a better deal for the vast majority of U.S. farmers and a better deal for taxpayers.

People who earn their living as farmers have a unique role in society as stewards of an essential public good—an agriculture system that affects the health and well-being of everyone. Like anyone else, farmers need to be able to provide for their families and support their communities; it is important that farming allows them to earn a decent living. The thrust of this chapter is to improve farm policies, not to jettison policies that work well to serve the public good.

Production Agriculture—Taking the Farm to Scale

Few images are more iconic of U.S. agriculture in the 20th century than a farmer seated on a tractor. But how much do we know about agriculture today? The latest tractors come equipped with global positioning systems (GPS) so sophisticated that they can tell farmers where to plant seeds within a fraction of an inch to maximize yield.¹²

Consider the following ad for a new line of tractors in development. “The day may not be far off when a farmer does his spring planting, not from the driver’s seat of a tractor, but from his office desk. And instead of driving a single tractor, he will be able to monitor several automated units at once, as they till fields, plant seeds, dispense fertilizer, and harvest crops.” This ad for Robotic Tractors comes not from John Deere or another farm equipment manufacturer, but from the website of Intel, the chipmaker.¹³

On a shelf alongside the kitchen table in his home, Arlyn Schipper has a collection of miniature scale models of all the farm tractors he’s owned since he started farming almost four decades ago. Schipper farms 6,000 acres of corn and soybeans in central Iowa. With so many acres, he is considered a large operator even by Iowa’s farm-size standards. The model tractors illustrate how technology has transformed the U.S. agricultural sector over the last half-century—and they also explain why Schipper has built a farm operation of 6,000 acres. When modern tractors allow him to plow 6,000 acres as easily as 600, and a single tractor puts him hundreds of thousands of dollars in debt, it makes sense to try to use the investment to its full potential.

As a board member of Foods Resource Bank, a U.S. based anti-

Iowa farmer Arlyn Schipper talks with Mannik Sakayan, deputy director of government relations at Bread for the World.



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hunger organization (and a sponsor of this report), Schipper volunteers with other U.S. farmers from the Midwest to share some of what they've learned about farming with smallholders in the developing world. On a trip to Zambia in the winter of 2011, he couldn't resist the urge to strap himself to a mule and plow a row of corn as farmers do in the village he was visiting. One row was enough for him.

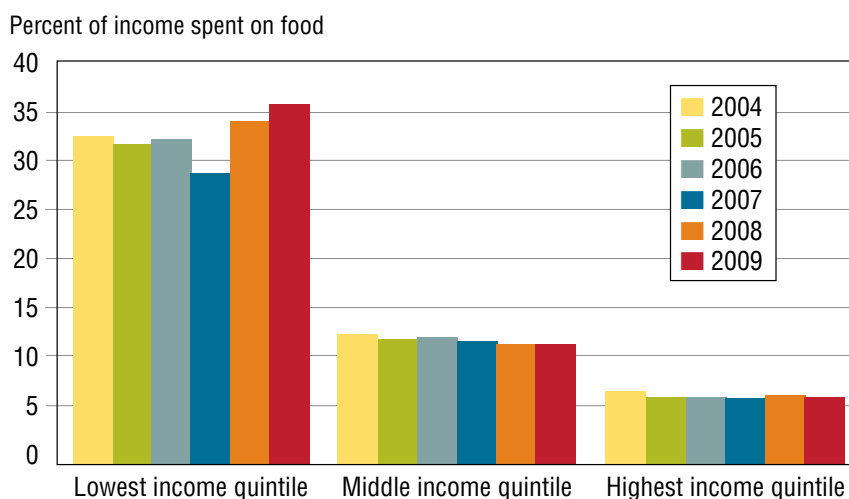
Since the beginning of the 20th century, breakthroughs in agricultural technology have transformed farming in the United States, making possible astonishing increases in productivity and efficiency. Productivity gains in agriculture have coincided with farms getting bigger.¹⁴ The data show that each U.S. farmer is now producing enough to feed 155 people—compared to 19 people in 1940.¹⁵ Arlyn Schipper has never tried to calculate how many people his farm feeds, but he takes immense pride in the fact that the food he produces prevents people in the United States and around the world from going hungry.

Consumers in the United States spend a lesser share of their incomes on food than people in any other nation. Leaving aside issues of quality for the moment, everyone in the country benefits from low food prices. Low-income households, with the least to spend on food, perhaps benefit the most. (See Figure 1.2.) Production agriculture—the kind done by Schipper and other large-scale operators—is crucial to maintaining U.S. food security and preventing hunger. This does not mean hunger has been eradicated in the United States—not as long as its underlying causes, primarily poverty, persist—but hunger rates would surely be higher if not for the relatively low cost of food.

Schipper hopes to see the family business he has built over decades carried on by his son, Brent, who is now farming alongside his father. At this stage of Brent's career, it is impossible to overstate the benefits of having a parent as successful as Arlyn. His father's mentoring alone is priceless. A more tangible benefit is the physical assets, such as tractors and land, Brent stands to inherit. In Iowa, the cost of raising a conventional crop of corn or soybeans ranges from \$600-\$800 per acre.¹⁶ This does not include the cost of the land itself—and in 2011, the price of an acre of Iowa farmland passed the \$10,000 mark.¹⁷ In 1982, 12 percent of Iowa's farmland was owned by someone age 75 or older. By 2007, that figure was 28 percent.¹⁸

When grain prices are high, as they've been for most of the past decade, farmland prices soar; this makes it much harder for beginning farmers to gain a toehold in the land market. Banks are less inclined to offer credit to

Figure 1.2 Low-Income Households Spend the Greatest Portion of Income on Food



Note: Average annual incomes for the quintiles in 2009 were \$9,846 for the lowest, \$46,012 for the middle, and \$157,631 for the highest.

Source: U.S. Bureau of Labor Statistics.

BOX 1.1 U.S. AGRICULTURE HAS TO BECOME MORE PRODUCTIVE AND SUSTAINABLE

By 2100, the global population is expected to peak at 10.1 billion.²³ According to the United Nations Food and Agriculture Organization (FAO), agricultural productivity will need to increase by 70 percent to keep up with the growing population.²⁴

Malthusian predictions that population will outstrip food production have been proven wrong ever since Malthus himself made this argument in the 19th century. But climate change could make for a different outcome in the 21st century. The U.S. Global Change Research Program, a consortium of 13 government departments and agencies, reports that climate-change impacts can already be observed in major crop-producing areas of the United States. Over the past 30 years, the Midwest

and northern Great Plains have experienced increases in average winter temperatures of more than 7 degrees Fahrenheit.²⁵

Responding to climate change alone would be a significant challenge, but there are additional reasons to be concerned about whether the production agriculture system that provides us with plentiful, affordable food is sustainable.

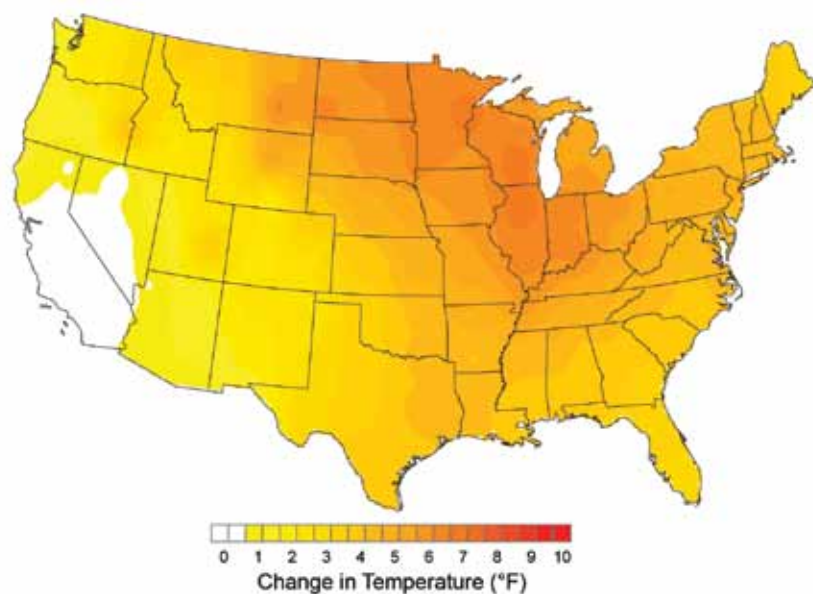
Agricultural production depends heavily on fossil fuels—non-renewable resources. David Pimentel of Cornell University estimates that the U.S. food system consumes 19 percent of the fossil fuels used in the United States. When forestry is added, the figure rises to 24 percent—the same as U.S. automobiles use.²⁶ It

would be hard to imagine a future in which automobile manufacturers will not need to become more energy efficient—and agricultural producers are no different.

Other stark challenges include:

- **Erosion.** The United States is losing soil 10 times faster than it can be replenished naturally.²⁷ In 2007, topsoil was eroding at a rate of 200,000 tons an hour.²⁸
- **Water pollution.** Agriculture is the leading source of pollution in the nation's rivers and lakes and a major source of pollution in estuaries. This pollution comes mostly from fertilizer application and from animal waste produced in feedlots.²⁹
- **Greenhouse gases.** Agriculture is the largest emitter of nitrous oxide, one of the most potent greenhouse gases contributing to climate change. Again, this comes mainly from fertilizer application.³⁰ On a per-molecule

Figure 1.3 Winter Temperature Trends, 1975 to 2007



Temperatures are rising faster in winter than in any other season, especially in many key agricultural regions. This allows many insect pests and crop diseases to expand and thrive, creating increasing challenges for agriculture. As indicated by the map, the Midwest and northern Great Plains have experienced increases of more than 7°F in average winter temperatures over the past 30 years.

Source: National Oceanic and Atmospheric Administration, National Climate Data Center.

basis, nitrous oxide is 300 times more potent than carbon dioxide.³¹

- **Pesticide exposure.** U.S. agricultural producers use more than 500 million pounds of pesticides each year.³² Pesticide exposure is harmful to humans, animals, and the environment.³³
- **Resistance to antibiotics.** Recent studies indicate that 80 percent of all antibiotics in the United States are given to farm animals, mostly to prevent disease outbreaks in feedlots. Overuse of antibiotics in farm animals is contributing to increasing resistance to antibiotics among disease-causing pathogens.³⁴ These are antibiotics also used to treat humans.

There are farm policies in place to reduce pollution and promote the conservation of natural resources. In recent farm bills, funding for conservation has increased faster than for other farm programs,³⁵ and more farmers are able to participate in conservation programs than ever before. That's good, but a serious shortcoming is the lack of monitoring and evaluation in conservation programs. The public should know what it is getting for tax dollars spent on these programs, but currently, farmers are under no obligation to disclose which anti-pollution practices they are implementing or whether these are benefiting the environment.³⁶ In general, U.S. farm policy relies on voluntary approaches to solving environmental problems. At a minimum, farm runoff should be regulated under the Clean Water Act, and feedlots—the largest source of toxic ammonia emissions—should be regulated under the Clean Air Act.

The daunting challenges of rising population and climate change mean that every farmer who receives government support should be required to operate more sustainably. Farmers surely understand that it's in their own best interest to be good stewards of the natural resources they depend on for their livelihood.

a farmer without sufficient capital to back up a loan. Policymakers need to be concerned about rising land prices and other capital costs facing farmers who are just starting out. According to government figures, U.S. farmland values roughly doubled in nominal terms between 2000 and 2010; they rose by 58 percent in real terms (after accounting for inflation).¹⁹ USDA's Farm Service Agency (FSA) has traditionally been the lender of last resort.²⁰ The 2008 farm bill affirmed the role of FSA in supporting beginning farmers and enhanced other supports for them, but it's not clear that these provisions are enough to stay ahead of the cost curve.²¹

New farmers are needed to help feed growing U.S. and global populations. By 2050, the U.S. population is expected to increase by nearly a third. Meanwhile, the average age of American farmers continues to climb—currently it is 57,²² the same age as Arlyn Schipper. The issues associated with production agriculture, particularly the difficulties facing beginning farmers, must remain a priority of policymakers for some time to come.

Against the Grain—The Value-Added of Small and Medium-Size Farmers

Rising commodity prices do not translate into higher profits for all U.S. farmers. As commodity prices rise, so do the costs of fuel, fertilizer, seed, and other inputs. Scaling up the size of a farm operation mitigates the effects of rising input costs, but not all farmers are in a position to increase the size of their operation.

Farmers with hundreds rather than thousands of acres are considered medium-sized producers.³⁷ For these farmers, and for small-scale producers who farm less than 100 acres, the challenge is to figure out how to succeed in a system geared to larger producers.

Tim Nissen is considered a medium-sized producer. A decade ago, he was farming 700 acres of conventional corn and soybeans in eastern Nebraska. In Bread for the World Institute's 2007 report, *Healthy Food, Farms and Families*, Nissen explained why he got out of farming these crops. Without government support, he was barely able to survive. Nissen wanted to be more entrepreneurial, and he found farming conventional corn and soybeans too constraining. Once he was no longer forced to follow the rules required for recipients of government payments, he diversified his farm operation by adding fruits and vegetables, including grapes to establish a winery. At the time we met, the winery was about a year away from beginning production.

Nebraska farmer Tim Nissen used to raise conventional corn and soybeans, but now he is farming organically.



Brian Duss

The winery is now producing. Through the Nebraska Department of Tourism, Nissen has arranged for the wines to be publicized along the 231-mile Outlaw Trail, a scenic byway that promotes the state’s natural resources, history, and culture. He sells to wholesalers, liquor stores, and restaurants across Nebraska. But his most financially successful venture so far comes not from buyers of his wine, but from people willing to pay him for bottling wine. Many people produce wine as a hobby but would rather let someone else do the bottling. Once Nissen learned the necessary skills, he began operating a mobile bottling facility. For several weeks of the year, he travels across much of the Midwest. In one four-state region, Nissen offers the only such mobile service, so he has this niche market all to himself.

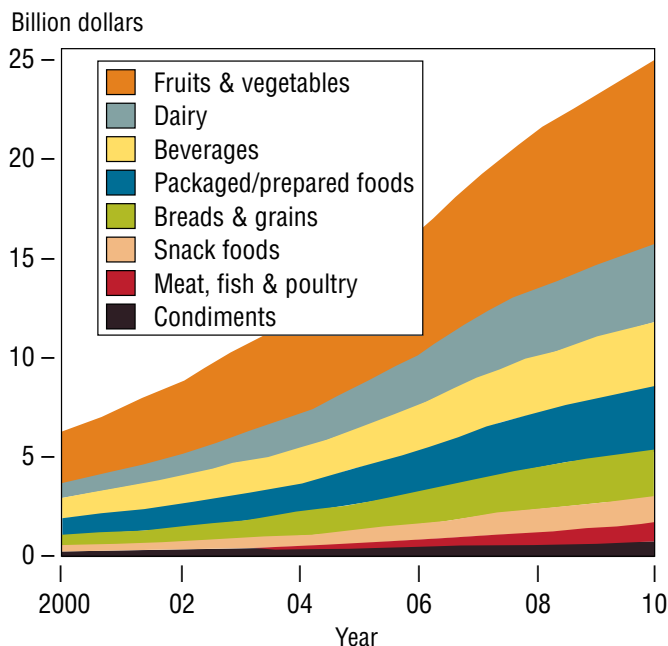
By diversifying his operation, Nissen is managing risk the way farmers used to, before farm policy turned risk management upside down and made it reasonable for farmers to grow just two crops. In addition to fruits and vegetables, he raises organic feed grains for niche livestock markets.

Nissen is regarded as an oddity by his neighbors. When we last spoke with him in 2011, the price of corn had climbed to the highest level in decades. Many of his neighbors have cashed in on the ethanol boom ever since the mid-2000s, when Congress mandated dramatic increases in biofuel production. Would he have stuck with growing conventional corn if he’d known the ethanol boom was coming? He says definitely not. “Corn is going to be replaced by other feedstocks,” he says, “and when that happens, the boom will turn to bust.” He thinks the future is much brighter for organic producers. In the last decade, sales of organically produced foods grew by double digits every year, and there’s little sign that this trend is waning.³⁸

(See Figure 1.4.)

Nissen isn’t opposed to using government support as a matter of principle; he receives support from U.S. conservation programs to improve his stewardship of water and soil quality. He also got a “value-added producer” grant to assist his transition to organic production. Establishing the winery is an example of adding value to the production of grapes. The grant program gives priority to small and medium-sized producers as well as to beginning and/or disadvantaged farmers and ranchers,³⁹ and is designed to help them succeed in niche markets. For

Figure 1.4 U.S. Organic Food Sales Estimated at Nearly \$25 Billion in 2010



Source: USDA, Economic Research Service using data from the *Nutrition Business Journal*.

small and medium-sized producers, the truth may be that adding value is their best chance to survive in a system that favors large producers.

Profitability doesn't always require that farmers own lots of acres. Alex and Betsy Hitt, owners of Peregrine Farm, earn \$27,000-\$28,000 an acre on the five acres they farm outside Chapel Hill, North Carolina.⁴⁰ They've grown many different crops, depending on the season, the profitability of the crops, their personal preferences, and the markets available to them. Like Nissen, diversification is a fundamental part of the Hitts' business strategy, as is direct sales to consumers.

USDA reports that for every dollar spent on food, the farm's share averages 15.8 cents; the rest goes to marketing.⁴¹ When farmers take on more of the marketing and selling of their products, they earn a larger share of these dollars. But most don't market or sell their products. Farmers generally prefer to do what they know how to do best: farm.

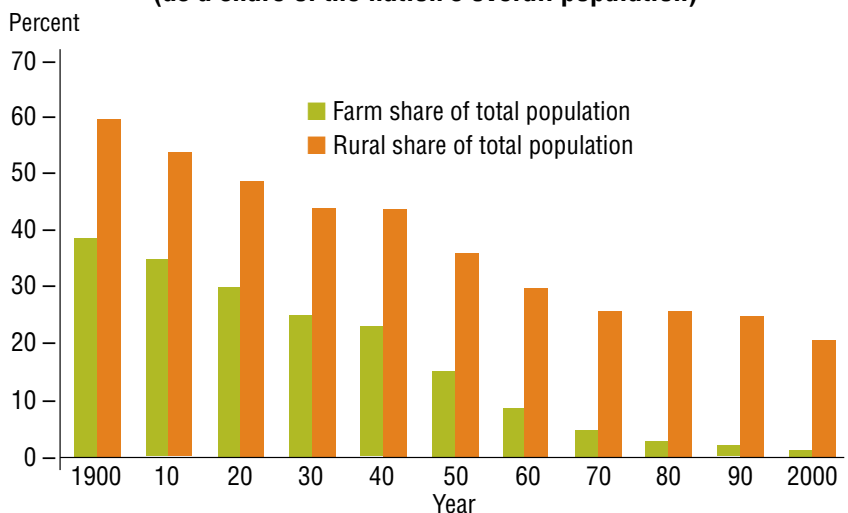
Program Crops versus Rural America

"The future of U.S. farm policy must grapple with two fundamental questions," says economist Robert L. Thompson, co-chair of the Agricultural Task Force for The Chicago Council on Global Affairs and a professor of agricultural economics at the Johns Hopkins School of Advanced International Studies. "Of the federal dollars allocated to agriculture and rural America, how much should go to farmers as individuals and how much should be invested for the greater good of agriculture and rural America?" asks Thompson. "Of the fraction that goes to farmers as individuals, how much should be linked to the production of specific commodities and how much should be decoupled from what the farmer produces?"

In the early years of farm policy, there was scarcely any room for doubt about the relationship between farm policy and the greater good of agriculture and rural America. When the Agricultural Assistance Act of 1933 was written, farmers made up half the rural population. Today, farm policy exists primarily to enhance the incomes of individual farmers, and any ripple effects for the rest of the residents of rural communities are less than apparent.

In the years since Arlyn Schipper and his wife started their family, they've seen the population of their county—one of the most productive farm counties in Iowa—shrink by what they estimate is two-thirds. Population loss is inevitable in farm communities when farms get bigger by buying smaller farms. Communities can withstand a certain amount of population loss, but when schools

Figure 1.5 **U.S. Farm Population and Rural Population Have Dwindled (as a share of the nation's overall population)**



Source: USDA, Economic Research Service.

BOX 1.2 RETHINKING U.S. BIOFUEL POLICY

Some policymakers praise biofuels as a way to reduce dependence on foreign oil and cut the greenhouse gases (GHGs) responsible for climate change. However, not all biofuels are able to accomplish these things: success ultimately depends on the choice of feedstocks to produce the biofuel.

In the United States, the dominant biofuel is ethanol made from corn. So far, corn-based ethanol has not moved the United States closer to using less foreign oil or reducing greenhouse gases⁴²—even though about half of the corn grown in the United States is now used to produce ethanol.⁴³



Corn unloaded from truck to begin the process of converting into ethanol at the Lincoln Energy Plant in Iowa.

A 2011 report by the International Energy Agency argues that by 2050, more than a quarter of the world's transportation fuel could be biofuels.⁴⁴ But realizing this potential will require much greater support for “advanced biofuels”—something altogether different than from the corn-based ethanol produced in the United States.

Advanced biofuels can be made from many types of materials, such as wood chips, grasses, waste, and even algae. The United States has the potential to produce abundant quantities of advanced biofuels,⁴⁵ but this potential won't be realized as long as corn dominates the biofuel sector.

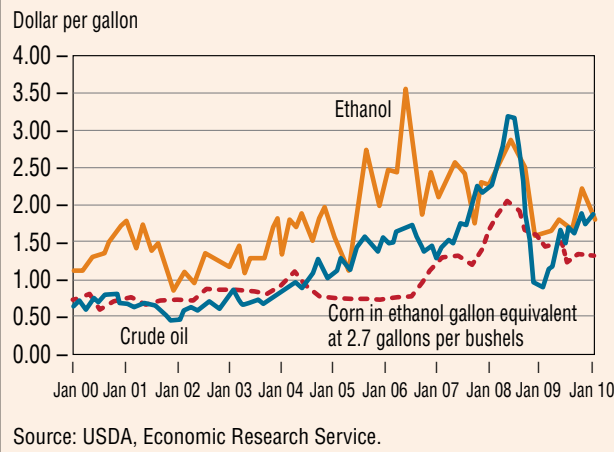
The greatest deterrent to the development of advanced biofuels in the United States is current biofuel policies, which are tilted so heavily toward ethanol that they discourage research and development of advanced biofuel options. From 2005-2011, taxpayers paid for more than \$30 billion in subsidies for corn-based ethanol. Most of this came in the form of tax credits to the oil industry to blend ethanol with gasoline—a nearly incomprehensible use of public resources since blenders did not need an incentive to use ethanol. Ethanol was already in use as an additive to gasoline—and, in fact, the only possible alternative additive had been phased out by 2006.⁴⁶

In addition, Congress set renewable fuel standards in 2005 and 2007 mandating aggressive increases in biofuel consumption. Because most biofuels produced in the United States are corn-based ethanol, the standards only reinforced ethanol's domination of the renewable fuels market.

Finally, an import tariff on ethanol protects U.S. producers from foreign competitors—most notably Brazil, the other major ethanol producer. In Brazil, ethanol is produced with sugarcane.⁴⁷ “The presence of the tariff,” writes Christopher Knittel of the Massachusetts Institute of Technology, “strongly suggest[s] that the main motivation behind ethanol-related policies is likely to protect farmer profits, rather than reduce GHGs or our dependence on foreign oil.”⁴⁸ Thanks to the triple incentive of subsidies, a production mandate, and a protective tariff, the corn-based ethanol industry has grown so much that the United States is now a net exporter of ethanol.

How does ethanol affect hungry people? Corn-based ethanol is one factor in the sharp rise in global grain prices that plunged more than 100 million additional people into

Figure 1.6 Corn and Crude Prices are Linked Through Ethanol



hunger in 2008 and tens of millions more in 2011. In an effort to rebut the argument that ethanol displaces corn that could be used for food,⁴⁹ the ethanol industry frequently points out that it can produce ethanol and feed grain together in the same manufacturing process. This technology does exist, but ethanol is not off the hook as a contributor to global hunger. Since 2005, when the biofuel policies discussed above were adopted, the price of corn has been hitched to the price of crude oil. As crude prices rise, so does demand for ethanol. In other words, as world oil prices rise, so do corn prices. Figure 1.6 illustrates this relationship. Historically, oil has been a much more volatile commodity than grain.⁵⁰ Not any longer, it appears.

One of the U.S. motivations for expanding corn-based ethanol was the hope that it would lead to energy independence and increase national security. But in light of ethanol's contribution to food-price volatility, and to the political and economic instability that accompany it, efforts to replace oil with corn through biofuel policies threaten to replace one national security threat with another.

close because there aren't enough kids to teach and businesses move out because there aren't enough customers, it's difficult to argue that farm policies that encourage consolidation are supporting rural development or the health of communities.

The main reason for farm consolidation is the improvements in agricultural technology that enable large farms to realize significant economies of scale. But technology isn't developed in a vacuum. When Earl Butz, Secretary of Agriculture during the Nixon administration, exhorted America's farmers to "get big or get out," he wasn't merely voicing an opinion. Information available in recent years leaves little room for doubt that Butz was directly telegraphing the future of farm policy. From 1995-2010, the largest 10 percent of farms got 76 percent of the \$262 billion the federal government spent on farm support. Their average annual payment was \$30,751—while the bottom 80 percent of farms that received support got an average of \$587.⁵¹

Five crops—corn, soybeans, wheat, cotton, and rice—get the largest share of government support.⁵² In farm policy jargon, these are referred to as program crops. They are also sometimes called commodity crops or row crops—picture row upon row of a single crop, stretching out toward the horizon. Corn, soybeans, and wheat get the most government support in absolute dollars, while rice and cotton receive more dollars per acre. Does the U.S. government support for program crops help spur broader rural development? One way to answer this question is to look at regions of the country where farmers get payments to grow rice and cotton. Arkansas leads the nation in rice production, Texas in cotton. Many of the counties in Arkansas and Texas that receive significant farm support have the dubious distinction of being "persistent poverty" counties—meaning that they have had high poverty rates for decades.

In Woodruff County, Arkansas (population just over 7,000), rice producers received \$191 million in farm program support between 1995 and 2009. During that same period, the county's poverty rate averaged 26.5 percent and unemployment averaged 8.6 percent.⁵³ Food prices are low in Woodruff County, as they are in general for Americans. Low food prices may help the county's poor people get by, but the best anti-hunger program is a well-paying job. By that measure, farm support policies have failed to deliver. The investment of billions of dollars a year has generated little economic development in places where it is needed most.



Cotton is one of the most heavily subsidized crops in the United States. From 1995-2010, U.S. cotton farmers received \$31 billion in government subsidies.

Farm Policies and Poverty

Thompson's second fundamental question about farm policy asks whether it should be based on production and decoupled from which crops farmers produce. Basing farm support payments on production is problematic for several reasons. When commodity prices are high, farmers still get government support to produce crops, even though the market is providing plenty of encouragement. When commodity prices are low, farmers get government support to produce—and overproduce—when there is no market signal to do so. These subsidies distort trade.

In fact, production subsidies violate World Trade Organization (WTO) rules that the United States agreed to follow. If the government fails to change these trade-distorting policies, U.S. exports—agricultural *and* non-agricultural—could face stiff penalties in international markets.⁵⁴ Production subsidies also benefit the largest farms disproportionately because of these farms' tremendous economies of scale. Farm policies based on production should be eliminated. Conservation subsidies do not distort trade and could be distributed more equitably among farms of all sizes. Box 1.1 explains why farm policy should treat conservation as a top priority.

As the Doha Round, the current round of WTO negotiations, stumbles along with little progress in sight, it is important to remember what it was intended to achieve. When the round opened in 2001, in the wake of the 9/11 terrorist strikes in the United States, it was billed as a “development round.” In the world's least developed countries, agriculture is how the vast majority of the population earns a living, and agricultural development is the most accessible path to wide-scale poverty reduction. Since the start of the round, we have witnessed the effects of highly volatile markets for agricultural commodities: they drive up hunger rates in poor countries around the world. A successful conclusion to the Doha Round has the potential to create a more stable environment and smooth out a portion of this volatility.⁵⁵

Past rounds of multilateral trade negotiations have helped developing countries get access to manufacturing and service markets that were once closed to them. But agricultural trade remains a sticking point. Developing countries will only see progress as a result of the Doha Round if developed countries commit to liberalizing markets for the products that are the developing countries' comparative advantage: raw commodities. The round is likely to remain stalled as long as U.S. agricultural policies are in violation of WTO rules.

Turning to the United States, it's clear that farm policies also affect Americans living in poverty. As health problems related to diet become more and more common, farm policies have come under much greater scrutiny.⁵⁶ Two-thirds of Americans are overweight or obese, and this condition is linked directly to dietary choices.⁵⁷ If current trends continue, obesity and overweight will account for one-fifth of all healthcare expenses by 2020.⁵⁸

Poor diets increase the risk of cardiovascular disease, cancer, diabetes, and hypertension. People living in poverty suffer disproportionately from all

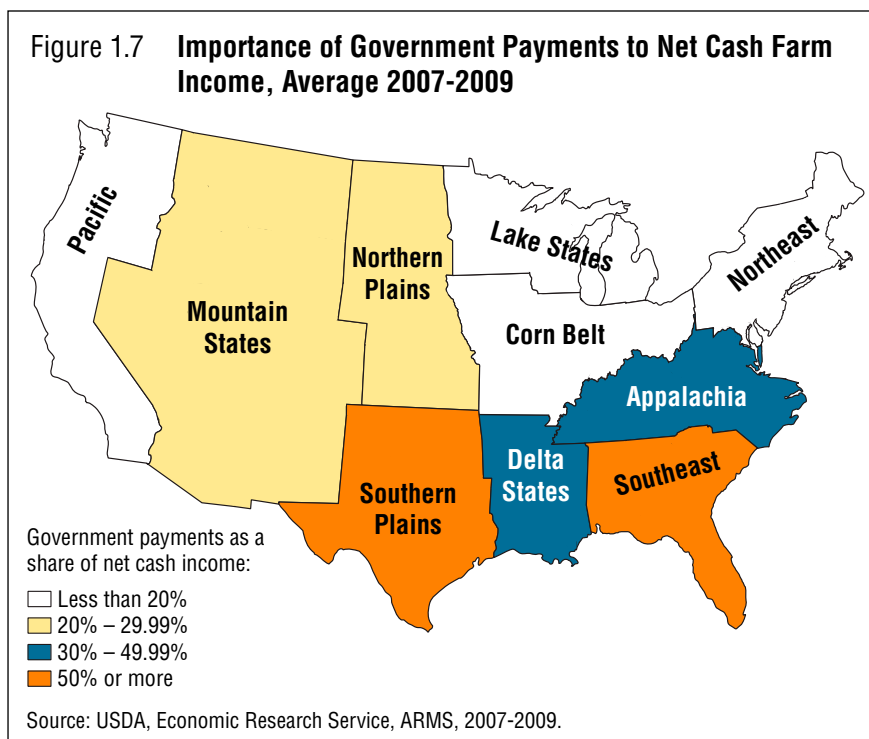
of these diet-related health conditions. While food prices in this country were falling throughout the 20th century, the prices of fruits and vegetables did not fall nearly as quickly as the prices of subsidized program crops. Hence, relative food prices have moved directly against a healthier diet, and consumption patterns clearly reflect this trend.⁵⁹ (See Figure 1.8, next page.)

In 2011, USDA issued new guidelines on the recommended daily allowances (RDAs) of vitamins and minerals in diets. People cannot meet most of the new RDAs without consuming more fruits and vegetables, yet the United States *does not even produce enough fruits and vegetables to meet the RDAs*.⁶⁰ The number of acres devoted to production of fruits and vegetables is roughly 2.5 percent of the total U.S. cropland under production.⁶¹

Farmers' choice of crops to grow is driven by what U.S. farm policies favor. Consider the Direct Payments program, a lump sum payment provided to owners of farmland with a history of raising program crops. Seventy percent (220 million acres) of all harvested cropland is eligible for the program.⁶² Farmers who receive direct payments are under no obligation to plant anything on this land. But if they do raise a crop, it must be a program crop. If they attempt to divert even a single acre to grow fruits and vegetables, they risk losing government support for all the acres they qualify for.

One way to increase production of healthy foods—and make them more affordable to low-income households—would be to allow farmers to diversify their farm operations. Diverting just 1 percent of program crop acres to grow fruits and vegetables would increase U.S. fruit and vegetable production by a third.⁶³ A large farmer like Arlyn Schipper may not be interested in diversifying, but medium-sized farmers struggling to survive and dependent on government subsidies may well find this a compelling option.

The Direct Payments program has been costing taxpayers \$5 billion every year—a figure that has made the program emblematic of government waste. At a time of record farm profits, it is difficult to understand why taxpayers should provide farmers with billions of dollars that come with no strings attached except a requirement not to grow fruits and vegetables (the healthy foods that USDA says Americans need to eat more of). The program became still more notorious once information became publically available showing that half of the payments go to landowners who are not farmers. Many are speculators who've never set foot on the farmland—thousands of residents of New York, Boston, Chicago, Miami, Los Angeles,



Seattle, and other metropolitan areas. Together, they own a significant share of U.S. farmland.⁶⁴

Past farm bills have considered changes to the restrictions in the Direct Payments program on planting other crops. The 2008 farm bill included a pilot program to incorporate “flex acres,” allowing farmers in six states to divert 75,000 acres from program crop production to raise vegetables for processing. A 2011 evaluation showed that only 13.6 percent of the flex acres were used to grow alternative crops.⁶⁵ A few factors that likely contributed to this low figure: one, unlike markets for fresh vegetables, the markets for processed vegetables have been stagnant for years; two, participating farmers found the rules of the program cumbersome; and, three, with record high grain prices, farmers have had less incentive to switch to other crops.

Fruit and vegetable growers have traditionally opposed easing the planting restrictions on program crops because it would create more competitors for them. They have argued that program crops already command a greater share of government support than fruits and vegetables, so it would be unfair to lift the planting restrictions.⁶⁶ They are certainly correct that program crops get a greater share of government support, but this is no reason to keep renewing a bad policy. Fruit and vegetable growers’ concerns can be addressed in other ways. For example, policymakers could expand the purchase of fruits and vegetables in federal nutrition programs to help offset a loss of market share. For more on this and other options, see Chapter 2.

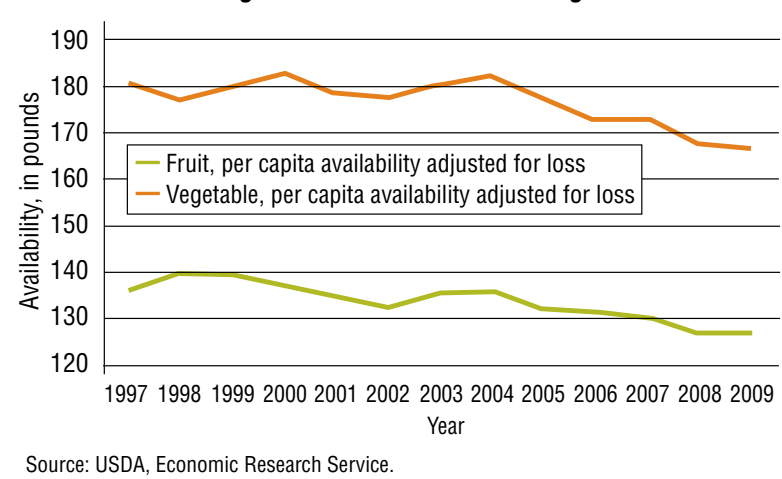
An Appetite for Sustainably Produced Foods Creates New Opportunities for Farmers

The percentage of Americans who smoke has been dropping for decades as a result of greater public awareness about the health risks of tobacco use.⁶⁷ Until recently, however, U.S. farm policies included support for tobacco farmers. In the 1990s, government support began to wane as the tobacco industry came under attack for marketing its products to children. Children were, in fact, the only subgroup of the U.S. population whose tobacco use had

not decreased. In 2004, the government decided to get out of the business of supporting tobacco farming altogether.

Today, a growing share of the public opposition to farm subsidies stems from concerns about diet-related health conditions, including childhood obesity. As in the case of tobacco, aggressive marketing of junk foods to children has outraged parents and some policymakers. In the lead-up to the 2008 farm bill, the American Medical Association weighed in by calling for efforts “to ensure that federal subsidies encourage the consumption of products low in fat and cholesterol.”⁶⁸ Congress did not heed the doctors’ advice.

Figure 1.8 Per Capita Annual Availability of Fruit and Vegetables Has Been Declining



It is premature to project the fate of federal support for tobacco onto corn—the crop most associated with junk foods because of high fructose corn syrup—but concerns about increasing childhood obesity and healthcare costs are not going away. If farm subsidies—for corn or any other crop—were to be eliminated, farmers who had been dependent on them might learn something about how to adapt from a group of ex-tobacco farmers in southern Virginia and eastern Tennessee.

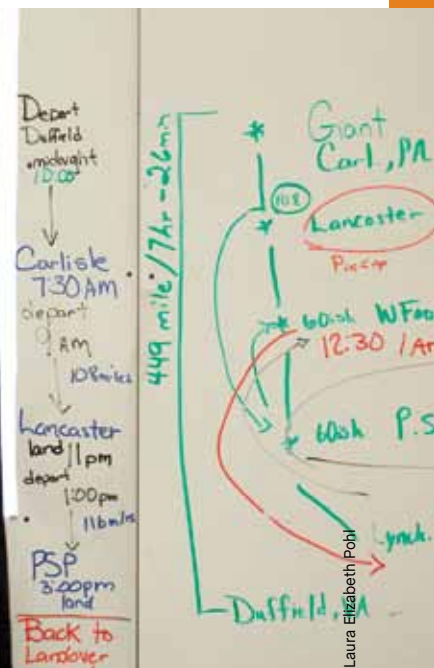
When Robin Robbins was a little girl, she used to help her grandfather farm tobacco in southwest Virginia and thought she wanted to be a farmer some day, too. Today, she farms a portion of her grandfather's land with her husband and daughters, but instead of tobacco, they raise fruits, vegetables, and horticultural products. Robbins also has a full-time job as the marketing and sales manager for Appalachian Sustainable Development (ASD), a nonprofit organization formed in 1995 for the express purpose of helping former tobacco farmers to diversify their crops.

This area of central Appalachia was once home to thousands of tobacco farmers, many of whom were living in poverty or near-poverty. The tobacco program was a quota and price support system. Government told farmers how much to grow, and the farmers knew exactly how much they would be paid each year.

ASD partners with 50 ex-tobacco farmers to supply local and regional markets with sustainably grown fruits and vegetables. Anthony Flaccavento, the founder of ASD and a farmer himself, trained his fellow farmers in how to produce these crops so that they meet food safety regulations. “With tobacco there was a tried and true recipe,” says Flaccavento, “one that was supported by USDA extension. But when the farmers began to switch to fruits and vegetables, the extension agents around here had no experience with these crops.” That has changed, according to Flaccavento, who credits the USDA extension offices with getting themselves up to speed quickly.

Robbins describes ASD's role as an aggregator. “It doesn't make sense for one farmer to try to sell five boxes of peppers to a grocery store a hundred miles away. But I combine that farmer's five boxes with another farmer's 10 boxes and another farmer's 20 and another's 20, and with that kind of volume we can reach markets they'd never be able to get to on their own.”

ASD has an infrastructure to fulfill its orders that is matched by few of the other U.S. regions with burgeoning markets for local and regional foods. ASD has built a \$750,000 processing facility where produce is washed, graded, and packed for distribution. Produce leaves the processing facility in one of ASD's two trucks. On a white board in her office at the processing center, Robbins has drawn flow charts of the routes the trucks take to reach



Robin Robbins is the marketing and sales manager for Appalachian Sustainable Development (ASD) in southwest Virginia. ASD has helped farmers who used to grow tobacco switch to sustainably produced fruits and vegetables.

customers. She knows exactly how long it takes for them to reach their destinations in every one of the markets they serve. ASD and its farmers supply major grocery chains like Whole Foods, Kroger's, and Food City.

The market for local and regional foods is small but growing rapidly.⁶⁹ One reflection of that growth is that Wal-Mart, the largest food retailer in the world, announced in 2010 that it plans to double its purchases of sustainable, locally grown produce in the United States by 2015.⁷⁰ Wal-Mart and other food retailers are responding to consumer demand for what marketers are calling “sustainability brand” products⁷¹—a demand that stems from a backlash against mainstream agribusiness and what is seen as the relentless production of highly processed, unhealthy foods.

Many in the local and regional food movement—a “movement” is a fair characterization at this point⁷²—are seeking a more direct link to the farmers who produce the food they eat. Not only Wal-Mart but USDA has picked up on this desire. In 2009, Secretary of Agriculture Tom Vilsack launched the ‘Know Your Farmer, Know Your Food’ initiative, which could be the agency’s most deliberate effort in decades to reestablish a linkage between agriculture and rural development. “Reconnecting consumers and institutions with local producers will stimulate economies in rural communities,” said Vilsack. “American people [who] are more engaged with their food supply will create new income opportunities for American agriculture.”⁷³

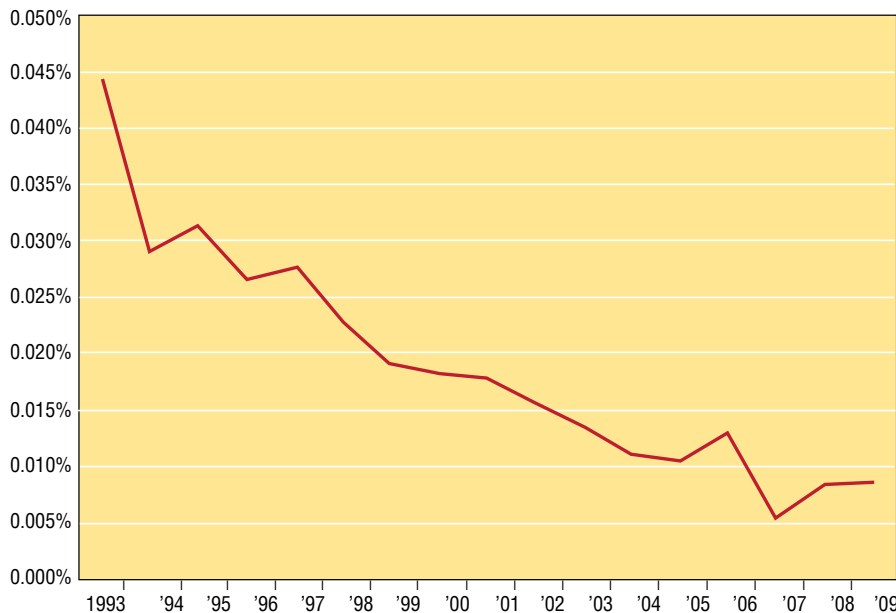
Reconnecting Farm Policy with Nutrition

So far there is little evidence to suggest that low-income households are a significant part of the consumer demand for local and regional foods. Farmer’s market purchases, for example, account for less than 1 percent of

all SNAP redemptions.⁷⁴ Wal-Mart has been criticized as doing a disservice to farmers by lowering the prices of locally sourced foods,⁷⁵ but critics may not realize that people using SNAP benefits tend to shop at food outlets where they can find the lowest prices.⁷⁶

The interests of low-income households would seem to be at odds with those of farmers, whose objective is to get the best prices for their products. There are hopeful signs that USDA is trying to work through these differences. We’ll examine one of these efforts here. Farm-to-school programs are a way to ensure

Figure 1.9 Percentage of Total Nationwide SNAP Redemptions at Farmer’s Markets



Source: USDA, Food and Nutrition Service, February 2010.

that low-income households are not excluded from the goal of improving the country's food choices. Each day, more than 30 million students participate in the National School Lunch Program (NSLP); two-thirds of them receive free or reduced-price meals.⁷⁷ The NSLP is an ideal market for farmers' "seconds"—products that are of sound nutritional quality but unacceptable for sale in retail markets because of blemishes. Farmers are willing to sell these at a lower price because they would probably otherwise end up in the compost pile.

The NSLP was established in 1946 with the express purpose of improving national nutrition standards while increasing demand for domestic agricultural products.⁷⁸ In 1946, Americans' hunger problem was typically undernutrition, a result of chronic hunger.

Farm policies encouraged production of fats and sugars because the understanding then was that in order to grow, hungry children needed foods high in fats and sugars.⁷⁹ America's farmers responded—and they continue to respond. Since 1970, the consumption of corn sweetener calories has increased by 359 percent. Fat calories, primarily from corn and soy, rose by 69 percent.⁸⁰ In contrast, per capita consumption of fruits and vegetables, after rising steadily from 1970-2000, has declined over the last decade.⁸¹

It is important not to lose sight of the historical relationship between nutrition programs and farm policy. We do not need farm policies that encourage farmers to produce more fats and sweeteners to feed hungry children. Rather, the childhood obesity epidemic has focused attention on improving the nutritional value of school meals. There is overwhelming support among healthcare professionals, including the Institute of Medicine's Committee on Nutrition Standards for National School Lunch and Breakfast programs,⁸² for increasing the amount and variety of fruits and vegetables served in school meals.

In April 2011, Secretary Vilsack announced plans to begin sourcing more foods locally as part of a joint effort to improve the quality of school-meal programs and support economic development in rural communities.⁸³ Vilsack's focus on improving the quality of school meals advances the agenda laid out in the 2010 reauthorization of child nutrition programs, the Healthy, Hunger-Free Kids Act. This legislation governs the National School Lunch and Breakfast programs and several other programs that benefit school-age and preschool children. Passage of the Healthy, Hunger-Free Kids Act was one of the few examples of bipartisanship in the last Congress. A significant share of the credit for this achievement is due to the tireless efforts of anti-hunger and pro-nutrition groups, including Bread for the World, who worked patiently to bridge partisan differences.

The childhood obesity epidemic has focused public attention on improving the quality of foods served in school-meals programs. Farm-to-school programming is not the cure-all the nation has been looking for. It



Schoolchildren at Bruce-Monroe Elementary School in Washington, DC, celebrate lunch after receiving a Gold Award of Distinction honor through USDA's HealthierUS School Challenge.

is one tool—and at present, one small tool. For farm-to-school initiatives to become more than a small improvement in child nutrition programs, the U.S. government will need to resolve the problems that now pose major barriers to local producers’ participation. The government reimburses schools for the foods they purchase, but the reimbursement rates are so low that in most cases, schools must choose providers based on cost rather than quality. This puts local producers, whose value-added is the higher quality of their produce, at a disadvantage compared to large-scale food service operations with their economies of scale.

Another challenge is infrastructure. Working with fresh foods in school cafeterias requires cooking skills. But the longstanding trend in school-meal programs has been to reduce the amount of scratch cooking. Fresh ingredients have been replaced by heat-and-eat meals that are designed to save money by requiring fewer staff. Seasonality poses yet another challenge. Millions of school meals are served each day, *every* day of the school year.

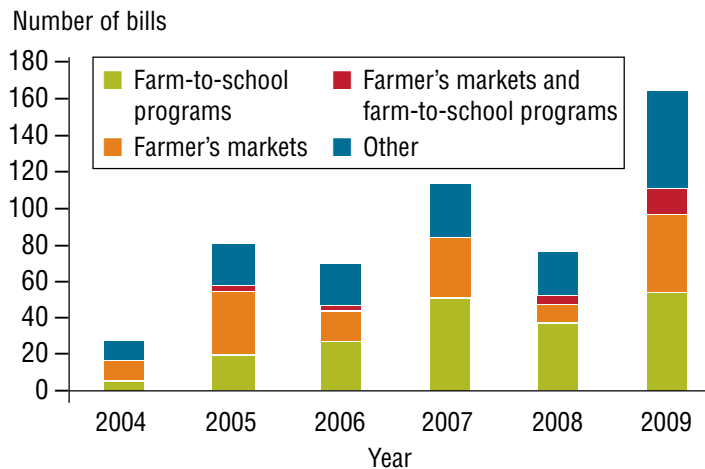
Greenhouses can extend growing seasons, but this doesn’t change the fact that months go by when the fields are not producing but children are eating lunch at school. Seasonal constraints can be partly overcome using light processing. But, like the rest of the agricultural sector, food processing has become more concentrated, leaving whole areas of the country without local processing facilities.⁸⁴

None of these challenges are insurmountable, but they require action. Under the ‘Know Your Farmer, Know Your Food’ Initiative, USDA’s Rural Development Agency has dedicated funds to the processing, distribution, aggregation, and marketing of locally or regionally produced food products—another positive sign that USDA is thinking broadly about lowering the barriers between food

producers and low-income consumers.

The United States is not the first country to see farm-to-school programs as a way to link rural development with improvements in child nutrition—many other nations, both rich and poor, have had the same idea. The Ghanaian government, for example, uses local farmers as much as possible to supply food to its national school feeding program. Infrastructure is a weak link in Ghana as in the United States, but the farm-to-school program has prodded the government to strengthen the supply chains needed for the program to succeed. The benefits to the farmers and their communities multiply as roads are built and as less food is wasted because adequate storage systems have been put in place. Perhaps most importantly, the infrastructure improvements spur job creation and more income in rural areas. The United States could realize similar benefits.

Figure 1.10 State Legislative Bills Focusing on Local Foods, 2004-09



Sources: National Conference of State Legislatures, Healthy Community Design and Access to Healthy Food Database, 2010.

A Farm Policy that Creates Jobs and Helps Rebuild Struggling Economies

Michigan's economy had plunged into a deep recession well before the rest of the United States followed in 2008. From 2000-2009, Michigan led the nation in job losses: nearly one of every four jobs lost was in Michigan.⁸⁵ The manufacturing sector has been the mainstay of Michigan's economy ever since Henry Ford and the rise of the U.S. auto industry. Despite the recent hard times, manufacturing is still a significant sector. As in much of the rest of the Rust Belt, many manufacturers in Michigan have scaled back production, moved overseas, or simply gone out of business.

Few sectors of Michigan's economy have shown more potential to get people back to work than agriculture. Agriculture is now the second most-productive sector of the Michigan economy, behind what remains of the once-dominant manufacturing sector. Sen. Debbie Stabenow (D-MI), chair of the Senate Committee on Agriculture, Nutrition and Forestry, is keen to point out that agriculture in Michigan is a \$71 billion industry and provides one of every four jobs in the state.⁸⁶ This is especially noteworthy because Michigan agriculture receives much less federal support than states dominated by program crops. Over the last 30 years, as most Midwestern states were losing rural population, Michigan led the region in rural population gains.⁸⁷

Michigan's agricultural sector is defined by its diversity. The state is second only to California in the number of crops it produces. In the southern part of the state, corn and soybeans are plentiful, and Michigan also has a thriving dairy sector. But what the state is mainly known for is the wide variety of fruits, vegetables, and horticultural products grown there. USDA refers to these as specialty crops (as opposed to program crops). The federal government supports specialty crops mainly through conservation programs and investments in agricultural research and extension. With these crops, technology plays a less important role in determining the sector's production capacity. Rather, specialty crop production is labor intensive—and therefore creates many more jobs than program crops.

Mark Coe is one of the many Michigan residents who have found a niche in agriculture after major upheaval in their previous industries. Coe owned a photography development business in Mount Pleasant, MI, a bustling city compared to his hometown, Kaleva, a small town where he grew up surrounded by farms. The digital revolution in photography swept in so fast that it put Coe and most of his competitors out of business. In his early 40s, he moved back to Kaleva to care for his aging mother and mull over how to put his career back on track. Calvin Lutz, a childhood friend and the owner of Lutz Farm, asked him if he would be interested in helping out part-time with managing the farm. Lutz, a third-generation farmer, raises an assortment of fruits, vegetables, and Christmas trees on 1,800 acres.

Coe had been around farming all his childhood, but he didn't know the business from the inside. Yet he needed work and told his friend he'd try. Seven years later, he's still managing Lutz Farm, now full-time. Since Coe started working for Lutz, the farm has prospered and he has helped it expand into new markets. One of the markets Coe is most excited about is farm-to-school.



Michigan farmer Mark Coe is an enthusiastic supporter of farm-to-school programs in his state.

BOX 1.3 EAT WELL & CREATE JOBS

A study by Michigan State University found that if Michigan residents ate just 20 percent more fruits and vegetables produced in-state, it would create \$200 million in farmer income and almost 2,000 additional off-farm jobs. “It is clear that relatively small changes in individual eating habits across a state’s population can have significant direct and indirect impacts on employment and income,” said Michael Hamm, one of the authors of the study. “In a sense, the figures we came up with are conservative in that they don’t account for the economic benefit resulting from improved nutrition and health.”⁹¹



Richard Lord

“I was invited to a meeting about farm-to-school programs and thought this sounds interesting,” he explained. “After all, my job is trying to figure out new markets—but there were the infrastructure hurdles to overcome. About a year later, I had a distributor come to me and say, ‘We have a deal with Chicago Public Schools and they need peaches, can you fill an order?’ I loaded up a truck with peaches and sent it off to Chicago. A couple of days later, I started getting phone calls from school administrators in Chicago telling me how much the kids loved the fresh peaches. They’d never had a fresh peach before. I thought this is cool—and could be something big.”

Coe is now helping to develop farm-to-school programs in northwest Michigan and looking for investors to build a processing center on Lutz Farm so that he and other farmers in the region can supply their crops to schools throughout the year. He says that not all the infrastructure challenges have been solved yet, but he’s impressed that Michigan is emerging as a national leader in farm-to-school programs and feels confident that public officials are going to help resolve the challenges.

“There are obstacles everywhere you look in farming, and farmers figure out how to overcome them every day,” he says. One of the biggest obstacles he sees is getting local farmers to work together. “Farmers don’t usually like to share information about who they’re selling to,” he explains. In this case, though, their mutual interests in helping kids eat better and supporting local and regional economic development has united them. Coe believes that identifying these shared goals will have ripple effects in local communities, sustaining partnerships that are dedicated to a common vision of community development. His can-do attitude reflects, above all, his faith in his community.

Farm policy and rural development have been on divergent paths for decades, but Michigan may be showing the whole nation how to bring them closer together again. The policy environment is crucial: do farmers believe that government is a partner, or just another obstacle for them to overcome? In Michigan, Governor Rick Snyder has said he wants to build up industries that are already strong.⁸⁸ In agriculture, this means building new markets for farmers.

Farmers need partners at both the state and federal levels. Sen. Stabenow has said, “I’m focused on continuing to support the great men and women of our state who work so hard, day in and day out, to produce a safe and abundant food and fiber supply that powers our nation’s economy.”⁸⁹ The Michigan senator is talking about her own state, but others stand to benefit if she is correct in her assessment; federal legislation is not written for the benefit of a single state. “When we talk about the farm bill,” she has said, “we are really talking about a jobs bill.”⁹⁰