



CHAPTER 1:

STRENGTHENING FOOD SYSTEMS FOR NUTRITION, FROM FARM TO FORK

More than two centuries ago, the British economist Thomas Malthus predicted that population growth would exceed the capacity of nations to produce enough food for everyone on Earth. Malthus has been proven wrong again and again. In just the last 60 years, agricultural productivity has more than tripled, primarily due to improvements in technology, and has remained ahead of population growth.

Today, we understand that hunger stems from other problems than simply food production. The Indian economist Amartya Sen was awarded a Nobel Prize for showing that hunger has more to do with poverty and weak governance than production shortfalls.

At this time, food systems around the world cumulatively produce more than enough to feed the current population of 7.8 billion, and experts believe that food systems will also be able to produce enough for a projected 10 billion people by 2050.¹ But food production is not the full story. This is where nutrition enters the picture, steering much-needed attention to dietary quality. Considering only quantity crowds out or distorts the policies needed to improve the quality of people's diets. A poor diet has been identified as the leading risk factor for noncommunicable diseases. ([See Chapter 2: Food, Nutrition, and Health](#)).

The potential to nourish everyone, as well as feed them, is real and within our grasp. This chapter of the Hunger Report describes the kind of food systems needed to accomplish this. The subsections of the chapter—starting with farmers

and continuing through other major links in the food supply chain to consumers—are **increasing the supply of nutritious food; adding nutritional value across the food supply chain; and improving access to affordable nutritious foods.**

Increasing the Supply of Nutritious Foods

One can tell a lot about a nation's food system by its agriculture. "No farmers, no food" is a slogan that can be seen on bumper stickers across the United States. Undoubtedly this is a true statement—but "farmers" around the globe are not a homogenous group.

Giant Combines and Smallholder Farmers

In the United States, commercial farming and ranching are dominated by capital-intensive enterprises in which technology and efficiency determine whether farms can survive. The starting capital needed is substantial. A new John Deere S700 series combine for harvesting corn has a price tag of nearly a half-million dollars.² A state-of-the-art model is capable of covering 16 rows at a time and comes equipped with automated settings to eliminate human error and reduce crop loss. When the website Successful Farmer sought to calculate the total funds that a new farmer would need to start from scratch, it came up with a figure of more than \$5 million.³

Farmers in the United States make up less than 2 percent of the workforce, roughly the same as in other high-income

RECOMMENDATIONS:

- Align agricultural priorities toward dietary quality and diversity, away from a small number of staple crops and animal source products.
- Invest in small-scale, local-level producers and processors of nutritious foods, ensuring gender and racial equity; and incentivize large-scale producers and processors to expand dietary diversity and improve nutrient quality.
- Build infrastructure to pave the way for disconnected rural farmers to reach urban markets to deliver nutritious foods at reasonable prices.
- Reduce nutrient loss and waste by improving food chain management.
- Mobilize private sector leadership to improve food environments for nutritionally vulnerable populations around the world.
- Make dietary diversity more affordable and accessible to low-income consumers by improving social protection systems and ensuring gender and racial equity.

countries, where economies of scale are the rule. As of 2017, 58 percent of all U.S. cropland belonged to farms of 2,000 acres or more. These large farms also produced and sold more than two-thirds of the \$389 billion worth of U.S. farm production that year.⁴ Since 1982, each five-year Census of Agriculture produced by the U.S. Department of Agriculture has shown more consolidation of land and sales than the previous one.⁵

In the United States, as in other high-income countries, the norm among commercial farmers is to specialize in one or two crops.⁶ Corn and soybeans—common ingredients in virtually all processed foods—occupy more than 50 percent of U.S. cropland. U.S. farmers produce bountiful harvests of corn and soybeans because that is what farm policies encourage them to grow. The United States is not only the world's leading producer of corn, but also so efficient that it can afford to pour nearly one-third of its harvest into gas tanks as ethanol, export one-fifth of what's left, and still end the year with another one-fifth in surplus.⁷

U.S. livestock feed is 96 percent corn.⁸ Animal-source foods are a rich source of protein and micronutrients when consumed in moderation—while overconsumption is a leading cause of obesity and contributes to the early onset of several chronic diseases (See Chapter 2). The United States has one of the highest per capita levels of meat consumption in the world, exceeding the amount recommended in the Dietary Guidelines for Americans by 20 percent to 60 percent. It also has one of the highest obesity rates in the world.⁹

While farms are getting larger in high-income countries, the opposite is occurring in South Asia and sub-Saharan Africa, the regions with the highest percentages of chronically undernourished people.¹⁰ An estimated 500 million smallholder farmers produce most of the food consumed by people in low- and middle-income countries. A “smallholder” usually means a farmer with less than 2 hectares of land, or just shy of 5 acres. The bitter irony is that smallholder farming families have the highest rates of chronic malnutrition of any group in the world.

BOX 1.1

KEY CONCEPTS IN THIS CHAPTER

Food supply chain

“Refers to the processes and actors that take a food item from on-farm production to the end consumer. For some foods, this encompasses many changes required to turn the raw agricultural material into the final product, for example from stalks of grain to wheat to flour to bread. This includes production, storage and handling, transportation, processing, packaging, distribution, and retail.”

Development assistance aimed at ending global hunger and malnutrition is directed to rural areas of low- and middle-income countries. For example, Feed the Future, the U.S. government's flagship global food security initiative, targets assistance to smallholder farmers. Agricultural development assistance can deliver some of the highest returns on investment for reducing extreme poverty, and it can make huge gains in reducing malnutrition when designed effectively. Feed the Future, operating in 19 countries since it was launched in 2010, reported a 32 percent drop in childhood stunting in the communities where it has operated.¹¹

In rural areas of low- and middle-income countries, smallholder farmers grow mostly the staple grains that supply the major part of people's diets. They grow what consumers in their local markets want and can afford. But farmers' decisions about what to plant are also shaped by what government policies encourage them to grow.

There are an estimated 30,000 edible plant species, but humans cultivate only about 150 of them, and of these, significant government support goes to only a handful.¹² This is beginning to change. CGIAR conducts agricultural research in low- and middle-income countries, with financial support from the global community. Most of its resources are allocated to research and development for staple grains.¹³ In recent years, CGIAR has shifted more of its resources on nutrient-dense crops. The nutrition community emphasizes the need to produce a wider variety of more nutritious foods, such as fruits and vegetables. Since women are more likely than men to control production of such foods,¹⁴ ensuring that women have agency to make decisions about their crops is essential to improving nutrition—one reason among many to make women's empowerment a top priority. (See Chapter 4: [The Female Face of Food Systems](#)).

Support for both producing and consuming fruits and vegetables should be a priority of governments everywhere, but these nutrient-dense foods do not receive comparable levels of government support.¹⁵ In Zambia, for example, government

Food value chain

“A food supply chain becomes a food value chain when it is seen as a process in which value is added to the product at different stages. Food value chains can, therefore, improve food safety by removing contaminants or increase nutritional value, for example through food fortification.”

Source: Global Alliance for Improved Nutrition.

agriculture spending is focused on maize production¹⁶ even though the country has one of the world's highest rates of child malnutrition.

Eating few fruits and vegetables is linked to vitamin and mineral deficiencies, a leading cause of poor health around the world. Climate change adds another dimension to the problem since nutrient-rich produce crops are especially sensitive to changes in environmental conditions. This is why improving global nutrition absolutely requires changes in agricultural policies around the world—changes that both support high-nutrient crops and de-emphasize products that create high levels of greenhouse gas emissions.

The British medical journal *The Lancet* reported in 2019 that only 40 countries, with a combined total of a little more than one-third of the global population, produce enough fruits and vegetables to enable everyone to consume the recommended amounts.¹⁷ Average consumption in the United States is 50 percent lower than the recommended amounts.¹⁸ As in other countries, U.S. farm policy does not encourage farmers to

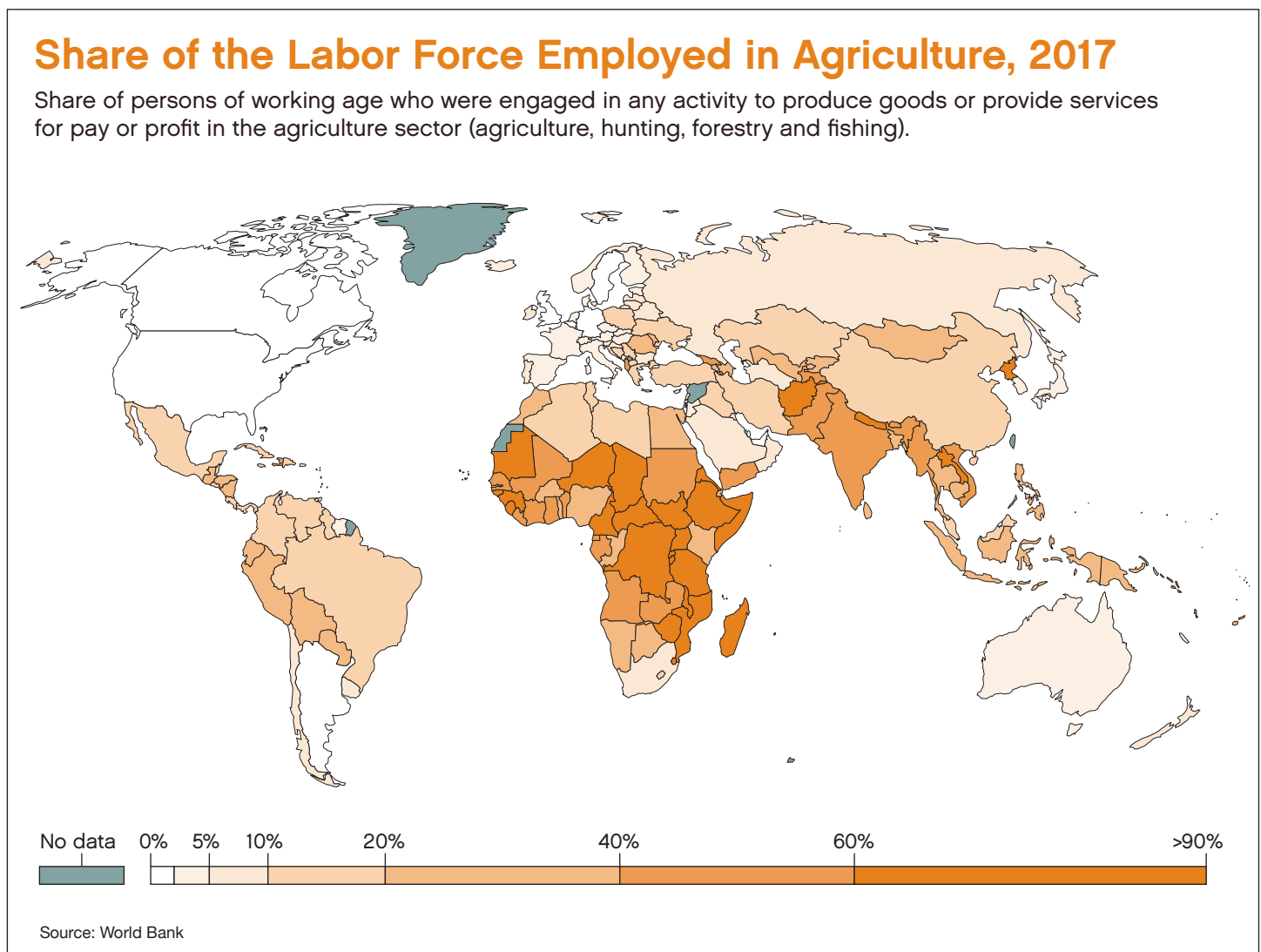
grow more of the nutrient-dense foods that are missing from people's diets.

Rural-Urban Connections

Many countries in Africa, Asia, and Latin America are among the fastest growing markets for agricultural products.¹⁹ Because domestic producers are unable to meet rising demand, consumers are turning to imported food. Urbanization is a major cause; urban consumers with rising incomes want more diverse food choices.

Urban population growth is expected to continue surging at least through 2050. The challenge will be to equip small-holder farmers to share in this growth so they can improve their economic and nutritional status. Economist Thomas A. Reardon, author of the Chicago Council on Global Affairs report *Growing Food for Growing Cities*, writes, "A rural-urban supply chain has the potential to massively increase agricultural output and incomes and a chance to climb the 'value ladder' from primarily staple crop production to higher-value products."²⁰

FIGURE 1.1



Demand for higher-value products such as fruits and vegetables can be an incentive for smallholder farmers to diversify beyond grains and, in doing so, improve their own nutritional status. Smallholder farmers are being left behind because they don't have resources to invest in diversifying their crops. Farming is such an inherently risky and unpredictable way of earning a living, particularly for smallholder farmers, that they may be understandably reluctant to take additional chances by planting crops they are less familiar with, that spoil easily, and that may not appeal to buyers. But governments, businesses, and aid agencies can support farmers in connecting with urban food markets.

Small-scale and/or marginalized farmers in the United States also have opportunities to earn higher incomes while contributing to better national nutrition. The customer base is mainly urban residents who are troubled by industrialized agriculture's contribution to climate change and who are willing and able to pay more to buy fruits and vegetables directly from farmers who use environmentally sustainable techniques. (See Chapter 3).

Small and mid-size farms are ideally suited to connect with this "eat local" movement. A new generation of young farmers has embraced the local ethos, having grown up with direct-to-consumer markets. Farmer's markets in urban areas have grown exponentially since the beginning of the 21st century. Some urban restaurants boast of the local ingredients on their menus, since this is what their clientele want to know.

Demand for loans and other start-up support for young farmers currently outstrips the available funding.²¹ One of the biggest problems is the lack of affordable farmland. Nationwide, farmland values averaged \$3,040 an acre in 2018, with land in some states priced at more than \$10,000 on average. Rhode Island had the highest prices—an average of \$13,800 an acre.²²

"Regardless of geographic area, land access is the top challenge for young farmers who are currently farming, and the biggest barrier preventing aspiring farmers from entering the industry ... and it's the number one reason that young farmers are quitting," says Holly Rippon-Butler, the Land Access program director for the National Young Farmers Coalition.²³

U.S. government support for farmers is mainly provided through the farm bill, legislation that is updated and reauthorized every four to five years. However, farm policies and how support is allocated generally change very little from one farm bill to the next. This is problematic for many reasons—one of which is that the system virtually guarantees that the number of farmers will continue to fall, and their average age will rise. This is borne out by the Census of Agriculture, which found that the average age of a U.S. farmer is 58.6 in the 2017 Census.²⁴

Federal support for beginning and socially disadvantaged farmers (defined as people of color and veterans) has been added to the farm bill, but at a fraction of the allocations for

established farmers. The 2018 farm bill authorized \$217.5 million spread over 10 years for the Beginning Farmer and Rancher Development Program,²⁵ and the same for Outreach and Assistance for Socially Disadvantaged and Veteran Farmers and Ranchers.²⁶ Farm subsidies, mostly to large farms producing corn and soybeans, totaled \$205 billion between 1995 and 2017. Just 10 percent of farms received 77 percent of the subsidy money.²⁷

Adding Nutritional Value Across the Food Supply Chain

Most foods do not reach consumers directly from the farm. Between production and consumption, the food system is organized as links in a chain, and each link is an opportunity to have a positive (or negative) impact on nutrition. Efficiency is the top priority in a supply chain, and normally anything else is a garnish. But nutrition should not be a garnish in food supply chains.

Food chains should be "value" chains rather than "supply" chains. Usually, people mean economic value when they use the term "value"—for example, processing corn into cornmeal adds "value," which means the producer can sell it for a higher price than if it were a raw commodity. Aid agencies, agricultural extension agents, and others have worked with smallholder farmers around the world, providing tools and know-how so that they can add value to their commodities and earn higher incomes.²⁸

Bread for the World supports the idea of adding economic value, but we also argue that this is too narrow a definition. The concept of value should be expanded to values beyond financial benefits—in particular, to nutritional benefits. In fact, nutrition is so important to human well-being that it should be the preeminent value that shapes priorities at every stage of a food value chain, from farm to fork. Nutrition does add economic value in the long run, through increased productivity and lower healthcare costs, but since those are not its only benefits, and they cannot be quantified in the short term, nutrition must be a priority in and of itself.

Market Links: Between Production and Consumption

Post-harvest management is crucial to preserving the nutritional value of food. In some foods, more than 60 percent of the vitamin and mineral content is lost between harvest and the dinner table.²⁹ The most important post-harvest stages are storage, handling, transportation, and distribution. Foods lose nutrients at each stage.

Foods high in nutritional value are most at risk of losing nutrients when they are not stored properly. The crops with the highest levels of nutrient loss are fruits, vegetables, roots, and tubers.³⁰ Staple grains that are not stored properly are susceptible to aflatoxin, a carcinogenic fungus linked to stunting in

children.³¹ (Aflatoxin contamination may also occur prior to harvest.) Proper storage facilities prevent losses, as do efficient transportation systems that make it possible for foods to reach distant markets more quickly. Post-harvest management also ensures foods are safe to eat. Foodborne illnesses cause diarrhea and other diseases that contribute to malnutrition. An estimated 420,000 people die each year because of food contamination, 30 percent of them children under 5. Most such deaths occur in sub-Saharan Africa and Asia.³²

The U.S. government has embraced the goal of cutting food loss and waste in this country in half by 2030.³³ Food waste typically, but not exclusively, takes place at the retail and consumption stages of the food supply chain. A 2017 study of the U.S. food system found substantial amounts of nutrients wasted.³⁴ These include “nutrients of public health concern,” such as dietary fiber, vitamin D, calcium, and potassium. The losses in dietary fiber were particularly significant—enough to meet the recommended consumption levels of more than 300 million adults.³⁵ Dietary fiber is important in preventing diseases such as diabetes, heart disease, and cancer—all among the top causes of death in the United States. It is found mainly in fruit, vegetables, and whole grains.

Refrigeration and/or freezing is an integral part of preserving food for longer periods so that it can be transported to more distant markets. Developing a so-called “cold chain” in low- and middle-income countries is critical to minimizing food losses and improving food safety. Using several strategies to manage the temperatures of perishable products, cold chain storage and transport can dramatically extend the time producers have to get perishable foods to retail markets. For example, fresh fish lasts up to 10 days when refrigerated at 0°C/32°F versus just a few hours when exposed to typical temperatures in tropical climates.³⁶ Without a reliable cold chain, it is very difficult for smallholder farmers to meet urban food safety standards. This means that there must be public investments in rural infrastructure and services—such as electricity—that make cold chains possible. Without a way to maintain a cold chain, efforts to enable smallholder farmers to reach beyond local markets will not succeed.

Processing Adds Value, but Ultra-Processing Subtracts Value

Food processing has been done for thousands of years to preserve the safety and taste of foods. Many rural communities in low- and middle-income countries continue to use traditional food preservation techniques. Both in the past and now, food processing serves as a type of insurance in areas that experience “hunger seasons” or “lean seasons” every year, when crops from the previous harvest are low. Preserving food helps ensure that families have enough to eat during these times. Modern science has shown that some traditional techniques create “added value.” For example, Queen Cleopatra of Egypt is said to have attributed her good health to pickles,³⁷ and

the fermentation process of pickling has several documented health benefits.

It is common for food manufacturers in high-income countries to add essential vitamins and minerals to food staples during processing. In the United States, fortification is not mandatory in any food, but there are legal standards if manufacturers make certain claims. For example, if flour is labelled “enriched,” it must contain prescribed amounts of thiamin, riboflavin, niacin, iron, and folic acid.³⁸ Food manufacturers generally support fortification, since it is a simple process that can help persuade consumers to buy a product.

A country’s ability to provide safe, nutritious, affordable food for its population depends on the strength of its food processing sector. There are opportunities for millions of smallholder farmers in sub-Saharan Africa to gain access to larger markets, given the continent’s vast agricultural resources and its current shortage of food-processing capacity.

Unfortunately, small to medium-size manufacturers face formidable obstacles to success in the countries that need them the most. Baby food manufacturer Marie Diongoye Konaté, who founded her company PKL (Protein “Kissee-La”) in Côte d’Ivoire, described the difficulties with access to finance: “In commercial banks, the interest rates are extremely high. International finance institutions like the World Bank and the African Development Bank welcomed me at first, told me my project was amazing and covered all the requirements (being a woman, contribution to tackle a social problem, etc.); however, they called me a few weeks after I had submitted the file to tell me I was not trustworthy, and therefore they could not give me a loan. They said that I would never be able to compete against Nestle and the like, that I would be crushed, and that I would never be able to pay the loan back.”³⁹

Konaté ultimately gained support from the Global Alliance for International Nutrition (GAIN),⁴⁰ a Swiss-based foundation that works with small and medium-sized businesses to help overcome barriers to market entry. Working with countries with high levels of malnutrition since 2002, GAIN emphasizes facilitating public-private partnerships and strengthening national political commitment to making nutritious food available.

The head of GAIN, Lawrence Haddad, is the co-winner of the 2018 World Food Prize, awarded for a lifetime of achievement on global nutrition. Haddad grew up in England, not noted for its cuisine, and at the ceremony when he received the award, he described one of his earliest impressions of the food industry: “If you can make ravioli in a can taste okay, you can do anything,” then the punch line, “and that’s the power of business.”⁴¹

Businesses certainly have the power to contribute to ending malnutrition. ([See The Kroger Company Zeroes in on Hunger and Waste](#)). Recognizing this, the Scaling Up Nutri-

tion (SUN) Movement, with 60 member countries and four member Indian states, has a private sector network along with networks for government and civil society.⁴² The private sector is not a monolith, and companies face competing interests, some good for nutrition and some not.

Food processing is a perfect illustration of this, since processing can reduce the nutritional value of food just as it can increase it. Unfortunately, companies tend to get the highest returns on their investment by marketing ultra-processed products that are typically high in fat, salt, and/or sugar. Some have even been scientifically designed to increase consumption.⁴³ These products are available in low-income communities around the world, just as they are everywhere else.

“Although not all ultra-processed food products are bad for human health,” states *The Lancet*, “almost all the foods that are linked to risks to health are included in the ultra-processed food category.”⁴⁴

Sales of ultra-processed foods have levelled off in high-income countries, but they continue to grow rapidly in low- and middle-income countries. Thus far, food industry trade groups have flatly rejected calls for regulations that would limit the marketing of foods directly linked to the world’s overweight and obesity epidemic. Transnational food and beverage companies use a range of strategies to combat criticism of the impact ultra-processed foods have on public health. The private sector has a great deal of latitude in its actions to shape global and local food systems. Market power has brought considerable political power to shape food systems, often in ways that work against public health.

Improving Access to Affordable Nutritious Foods

Consumers are the drivers of the demand side of the food system, having ultimate say over what foods end up on their plates—or do they? Low income and the limitations that come with it, such as a lack of transportation, make it much harder to access the most nutritious or desirable foods. If we ignore economic and physical barriers, we assign the blame for nutritional problems to low-income people themselves, not recognizing or respecting that they have as much desire to eat healthy foods as people with more resources available to them.

Patterns of food consumption are influenced by a host of external factors—everything from farm policy to international trade agreements and food industry profit margins. People doing their grocery shopping, and often government officials as well, rarely realize what these factors are or how much influence they have on consumer “choice.”

Make Nutrition Affordable

A national hunger rate reflects the amount of hunger in a country at a precise moment in time. The rate of child stunting shows not only the situation at a certain moment,

but also the nutrition situation in the country in the recent past—from the past few months to as long as the past four or five years. The stunting rate is also a stark indication of the problems a country will face in the future as stunted children reach adulthood. This is why the SUN Movement emphasizes reducing stunting. The costs to countries in lost labor output alone due to stunting would more than pay for ensuring all babies are adequately fed.

Every infant weaning off breastmilk should be fed a fortified infant cereal, which contains all the nutrients a child this age needs. But these cereals are prohibitively expensive for most families in low-income countries. In sub-Saharan Africa, which has extremely high rates of child stunting, fortified cereals cost almost 10 times as much as a starchy substitute product that lacks the essential nutrients to protect a child against stunting. Perhaps not surprisingly, researchers working in several low-income countries found that in areas where the cost of fortified cereals is high, so is the stunting rate.⁴⁵

Another study showed that in low-income countries, a diet that contains the minimum recommended servings of fruits and vegetables per day costs, on average, more than half of a household’s entire income.⁴⁶ All over the world, including in high-income countries, rural households spend a larger share of their income than urban households to purchase the same servings of fruits and vegetables.⁴⁷ Economic growth tends to make healthy foods more affordable, but it appears that it has an even stronger effect on making unhealthy foods cheaper.⁴⁸

In the United States, spending on food varies widely. The highest-income households spend, on average, less than one-tenth of their incomes on food, while the lowest-income households spend, on average, more than one-third of their incomes on food.⁴⁹ There are cost differences within food groups. Most of the time healthier meats cost more than fattier cuts, whole grains more than refined, fruit juices more than fruit-flavored drinks, and so on. Food prices vary across the United States, and studies show price differences between healthier and less healthy foods appear related to differences in health outcomes.⁵⁰

SNAP, which helps people in low-income households put nutritious food on the table, is a fundamental part of the U.S. food system. It has been for more than half a century. Formerly known as the food stamp program, the initiative was renamed SNAP in 2008, but the purpose remains the same: “to permit low-income households to obtain a more nutritious diet ... by increasing their purchasing power.”⁵¹ All participants in SNAP must meet income eligibility criteria, and benefits are adjusted according to family size.

But SNAP does not adjust benefits according to geographical differences in food prices. Researchers have found that SNAP households in areas with high food prices are 15 to 20 percent more likely to be food insecure than SNAP households in

areas with low food prices.⁵² USDA estimated in 2013 that increasing the maximum SNAP benefit by 10 percent would reduce the number of SNAP households that face what the government terms “very low food security” (being forced to skip meals or not eat for a whole day) by as much as 22 percent.⁵³

Cash transfers are used in low- and middle-income countries to increase the food purchasing power of households at risk of hunger and malnutrition. Often the transfers have conditions attached to them. The most common are that all children in the household must receive vaccinations and other health care and/or that girls must stay in school.

A study of cash-transfer programs in Zambia, Zimbabwe, Kenya, and Malawi showed that families increased their spending on food by between 10 percent and 30 percent, and they improved their dietary diversity.⁵⁴ One caution is that if no nutrition education is provided, such a program could inadvertently increase people’s spending on unhealthy foods. This happened in Mexico, leading to increases in overweight and obesity among adults.⁵⁵

All consumers make food choices in a complex food environment. Behavior change communication (i.e., nutrition education) combined with cash transfers has been shown to lead people to make healthier choices.⁵⁶

Peru has an outstanding record of reducing child stunting. In only eight years, the country cut its stunting rate by more than half, from 28 percent to 13 percent. “Juntos,” a very well targeted cash transfer program, has been the lynchpin of the strategy.⁵⁷ Peru is a member of the SUN Movement and has attracted the attention of other members who have sought to replicate its success. Peru is a middle-income country, which has given it the advantage of lower relative food prices.⁵⁸ It would be an overstatement to attribute Peru’s success entirely to its cash transfer program, but as the evidence shows, it is much harder for people to make healthy food choices without sufficient grocery money.

Reduce Barriers to Access

In grocery stores across the United States, most of the heavily advertised “buy one, get one free” deals are for ultra-processed foods. There are more signs during the first week of the month, when SNAP benefits are issued,⁵⁹ than the rest of the month.

In a Guatemalan village, a child rests in his mother’s arms as they wait for his turn to be weighed and measured. A health-care worker can then let his parents know whether he is on a healthy growth trajectory. He munches on a bag of salty cheese-flavored chips.

Food systems have many features in common in high-income, upper-middle-income, and lower-middle-income countries. With globalization and trade liberalization, food systems are

also more interconnected with each other than ever before. One result of this is that increasingly, people all over the world are adopting “Western” diets, which typically contain too much fat and sugar.

Economic development has fueled the rapid rise of supermarkets in urban settings across low- and middle-income countries. Vietnam, for example, has one of the fastest-growing economies in Southeast Asia. In the capital, Hanoi, supermarkets are opening even more quickly than elsewhere in the country—part of a government plan to transform the city into a modern metropolis.⁶⁰ In an effort to improve food safety, city planners have been closing open-air markets and steering shoppers to supermarkets instead. But consumers may not agree that this is the best solution. In a 2018 survey, only about 1 percent of the residents of Hanoi’s underserved areas reported that supermarkets were their primary source for food shopping.⁶¹ The supermarkets are less affordable and often less welcoming than the open-air markets where people are used to shopping. Another problem is that closing open-air markets in favor of supermarkets could also be closing off the best opportunities for smallholder farmers to begin selling to urban consumers.

In high-income countries, on the other hand, supermarkets are the established norm, the place where most people shop. In this context, the problem is that low-income communities, particularly communities of color, do not have as many supermarkets as other neighborhoods. “Food deserts” are areas of high-income countries where people have less access to a full-service grocery store or supermarket. A rural community is a food desert if the nearest such store is 10 miles away or more, and an urban community is considered a food desert if a supermarket is one mile away or more.⁶² First used in the U.K. in 1995,⁶³ the term was soon adopted in the United States, where food deserts had existed for some time. One major cause is disinvestment in urban communities and “white flight”⁶⁴ that left many neighborhoods more segregated than before. Some food-justice activists argue that the term “food desert” is a euphemism—what is really happening is food apartheid. ([See Baltimore’s Black Churches Take on Food Apartheid](#)).

The first federal funding allocated to reducing barriers to healthy food access was in 2011 and was modeled on a Pennsylvania initiative that used public-private partnerships to attract supermarkets and grocery stores to underserved areas.⁶⁵ From 2010 to 2016, there was a 15 percent decline in the number of U.S. residents living in food deserts. However, over the same time period, there was an increase in the number of food deserts because there was an increase in the number of low-income communities.⁶⁶

According to a growing body of research,⁶⁷ opening a new supermarket does not in itself improve dietary diversity in an underserved community, nor can a supermarket alone reduce

obesity rates.⁶⁸ Making healthy food available in former food deserts is “necessary but not sufficient” to improve nutrition. Supermarkets also help neighborhoods in other ways, such as providing jobs and serving as an anchor for other new economic development.

Without more purchasing power, people cannot afford the higher-quality foods that are now more accessible. They still face the familiar dilemma of quality versus quantity: stretching the grocery budget by buying less expensive, less nutritious food. Federal nutrition programs can change the calculation: additional resources for groceries from SNAP or other programs can enable families to purchase more nutri-

tious foods. There is ample evidence that SNAP participants will take advantage of incentives to purchase nutrient-dense foods.⁶⁹ We will have more to say on this later in the report.

Up Next

“When it comes to nutrition, not just any consumer matters,” write Bonnie McClafferty and Jocelyn Zuckerman of GAIN. Women in their childbearing years are the preeminent consumers. “Not only are mothers the universal providers of food, but they also are imprinting, as early as in utero, the taste preferences and eating patterns of their children.”⁷⁰ This is where we are headed in the chapter [Improving Nutrition to Improve Health](#).

Endnotes

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