



The Global Food Basket

Industrial-scale agribusiness and the global food market are squeezing farmers out of the food chain and undermining sustainable agriculture.

BY SOPHIA MURPHY

For many Americans, though far from all, food has become a very minor consideration in the fight for survival. Food is available everywhere, often 24 hours a day, in astonishing quantity and variety. Most Americans would likely make controlling excessive calorie intake, rather than finding enough to eat, their number one food-related concern—almost one in five adult Americans is obese, and, increasingly, our children are too.¹

In this respect, Americans are not typical of the world's population. According to conservative estimates, 800 million people in the world are chronically malnourished. Many more would eat more if they could afford to. American supermarkets, with their abundance of choice and sheer size,

would astound and overwhelm most of the world's population.

Global Markets

Some of the great differences that exist between rich and poor countries, however, are being reduced through globalization. A series of technological and legal changes is altering what

we eat, where it comes from, and how it is grown. Information and communications now flow freely, as do capital, production technologies, and transportation. These changes are creating a world where the affluent—whether in Delhi, Johannesburg, Quito, or Paris—eat similar food provided by a food system increasingly global in scope.

Developments in technology—in information technology and in refrigeration, transportation, and preservation of perishable foods—have opened up new possibilities for moving foods from every corner of the earth. Changes in trade and investment laws under the auspices of the World Bank, International Monetary Fund, and World Trade Organization have made it easier to import and export foods, making legally possible what technology is making physically possible.

Just as more and more electronic goods sold in the United States are made in China, likewise even fresh food now comes into the supermarket from as far away as South Africa and Indonesia. British supermarkets fly in green beans from Kenya and organic eggs from Wisconsin, available for sale within 24

hours of leaving the country of origin.

Globalization has changed the entire food chain, including suppliers of fertilizers, pesticides, hybrid seed, and tractors, as well as grain traders, millers, transportation companies, processors, and supermarkets. Farmers, of course, have also faced significant changes. Farmers have less and less economic power and find themselves squeezed by giant input suppliers and grain companies.

While many farmers continue to receive generous payments from the government through various agricultural programs, the money does not stay on the farm. Instead, it goes into increasing prices for inputs, rent payments for land, and payment of the debt incurred when production costs are higher than the final sale price. As the supply chain gets longer and more concentrated, the profits made in agricultural and food production have been redistributed. The U.S. Department of Agriculture notes that between 1980 and 1997, the amount of every consumer dollar spent on food declined from 37 cents to 23 cents.²

The process of reducing farmers to a marginal role in the food system, most advanced in the United States and Europe, is being repeated around the world. What lies behind this phenomenon?

Corporate Consolidation

Each part of the food chain has undergone considerable consolidation over the last 20 years. For example, four meat-packing companies slaughter 79 percent of all U.S. beef.³ Six grain companies dominate the grain trade in the United States, and not many more are active around the world.

At the same time, vertical integration is on the increase. Suppliers of seed, pesticides, and other agricultural inputs, such as Monsanto, are entering into arrangements with grain buyers, such as Cargill. A company like ConAgra now has interests in every part of the food chain, from seed to supermarket shelf. The retail sector is also undergoing consolidation, creating

corresponding fall in the price paid at the retail level by the consumer.⁴ This asymmetric response is the kind of market distortion that could not occur if the market were working properly.

Farmers themselves are under pressure to expand and consolidate—or go out of business. Some 40 percent of agricultural land in the United States is farmed by ten-

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buyers at the end of the food chain with the power to set standards and insist on what should be grown and how. In Europe, supermarkets, as much as agribusiness, are a dominant force determining agricultural production.

Moreover, with the introduction of genetically modified seeds, farmers are being asked to sign licensing agreements to get permission to use the seed. They have to promise not to share the seed with neighbors or family and not to save any seed for next year's harvest. And while crop production has yet to go the way of poultry and hog production—where contracts dictate production methods and quotas to the farmer are increasingly the norm—farmers are in effect becoming hired labor for agribusiness.

One of the results of consolidation has been the growth in market power of agribusiness. This power creates the hazard of abuse just as a monopoly does. For example, the World Bank has shown that, when commodity prices rise, consumers pay more for the final products. Yet when prices fall, there is often no

ants, not the land owner, as families keep the land, which has retained its value, but lease it out to someone else to farm because there is too little profit in farming. In developing countries, farming is also a precarious way of life. Thousands of small-holders from Mexico get family members to work their land while they come north, legally or illegally, to earn money in the United States that makes it possible for them to hold on to their land.

Agents of Change

Globalization, and the literature it generates, convey a sense of inevitability. We are told it just happens, forcing change in its wake. But globalization, and how it takes shape, is not out of our control. Instead, it the result of conscious political decisions that place international trade above other priorities.

The World Trade Organization is the intergovernmental body that determines international trade law. Its agreements regulate international commerce. The WTO agree-

ments, including the Agreement on Agriculture, are premised on the assumption that increased trade is a good thing. Countries that join the WTO have a heavy burden of proof to justify exceptions to the rules that ensure the freest possible movement of goods and increasingly of services. Members of the WTO are restricted in the measures, such as tariffs, they can use to keep out

food security, sustainable agricultural systems, and secure livelihoods for the most vulnerable people in the world.

Globalization has undoubtedly opened up some new opportunities. Traditionally, the competitive advantage of trading firms rested in having information about both production and consumption. The firms acted as a bridge between pro-

Europe and Japan rejected genetically engineered soybeans and yellow corn, suppliers struggled to segregate those from the general supply. These problems are far from resolved, even several years later.

Food Security

Food security may be defined as a situation in which food is available at all times, all people have access to it, it is in adequate supply and of sufficient quality and variety, and it is considered acceptable by specific cultures.⁷ Food security also requires equitable income growth to reduce poverty. A safety net is also required to protect people from sudden shortfalls that result from a bad harvest, job loss, or a natural disaster. Finally, peace is a must, since conflict and the resulting displacement of people and supplies are among the most common causes of hunger.

Food security is not a simple equation between the number of mouths to feed and the amount of food available at the global level. For a long time now, the world has grown enough to feed everyone, but the food does not reach the people who need it. Just as importantly, while the world has seen a dramatic increase in levels of production, food dependency in developing countries has grown. Latin America and sub-Saharan Africa, both historically net food exporters, are now net importers.

To pay for these food imports, countries need to generate foreign exchange by exporting goods. Yet market access for their exports is often limited and unpredictable. For some time, the value of many commodities has been in decline so that countries need to sell more volume to generate the same income. In addition, many developing coun-

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imports and are obliged to treat all producers, domestic and foreign, the same. Free movement of people, meanwhile, remains too sensitive politically for rich countries to take on, while free movement of ideas is explicitly rejected in the patent protection given under the WTO's Trade Related Intellectual Property Rights Agreement.

Many people, however, reject the assumption that more trade is inherently good.⁵ Instead, critics propose other ways to regulate the flow of agricultural goods and services—ways they think better protect and promote social, environmental, and even economic concerns. For example, they propose that countries be allowed to discriminate among products according to how they were produced: Was a fair wage paid? Were environmental regulations respected?

More fundamentally, many people around the world—farmers, environmentalists, consumers, and some governments—are concerned that the emphasis on trade at the WTO has undermined the pursuit of more important goals, including

producers and consumers. New information technologies, however, have eroded some of this advantage. The Internet makes it easier for both producer and consumer, not to mention other players in the food chain such as processors, to keep up with price shifts and production forecasts around the world. The Internet also makes it cheaper and easier for producers, handicapped by geographical separation from one another and from business centers, to cooperate with each other and protect their interests. One of the results has been new farmer-owned initiatives that rely on web-based marketing to bring products directly from the farm to consumers.⁶

Globalization has also created challenges for traditional traders. For example, in developed countries, consumer taste has shifted from mass-produced coffee to specialty beans and from processed to fresh vegetables. These changes have to some extent fragmented the market, favoring smaller, more flexible suppliers.

Large-scale agriculture and centralized distribution can create other problems. When large clients in

tries have devalued their currency, eroding their purchasing power on the international market. In practice, relying on the world market to make up shortfalls in food supply has proved a risky strategy. It can work, but too often fails.

In 1996, for example, world cereal prices more than doubled while world stocks fell to their lowest level in 20 years. The International Grains Council reported that several developing countries had been obliged to raise flour and bread prices while allowing stocks to fall to very low levels. For poor, import-dependent developing countries, especially in sub-Saharan Africa, increases in the price of food will increase hunger because of the high prevailing levels of poverty.⁸

Shifting land use from food production to the monoculture production of export crops creates opportunities, but it also poses risks for the people who work the land. Export crops tend to require relatively high capital inputs and more extensive land holdings, which favor larger farmers. Selling crops on the world market requires access to sophisticated information and the means to get the product to the market. As the market moves from local to global, this becomes a more capital-intensive exercise. In countries where a large percentage of the population continues to engage in subsistence agriculture, the increased food imports compete directly with the one thing poor people have to sell, small surpluses of locally produced food. The impact on local production can be devastating.

Distribution

Distribution—getting food from where it is grown to where it is needed—is a key element of food security. Distribution

depends on markets, transportation infrastructure, the strength of consumer demand, and the source and nature of the supply. Governments have traditionally played a significant role in food distribution by intervening to buy food from producers and selling it, sometimes at subsidized prices, to consumers around the country. In countries such as Kenya and Zambia, govern-

the liberalization of trade and finance, or are undermined by it, in part depends on their capacity to manage distribution issues. For example, poor roads between the north and south of Mozambique, combined with surplus production generated by the Common Agricultural Policy, make it cheaper to import food to Maputo from Europe than to provide a market for farm-

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ment policies controlled maize production, pricing, and distribution in the early 1990s. Maize is a staple crop in much of the region. In fact, there are few countries in the developing world that did not have a centralized government agency involved in managing the production and distribution of staple crops. In Asia, this would typically be rice. This was true from the time of independence until the implementation of structural adjustment programs or, as in India, until WTO obligations made some of the policies illegal.⁹

Trade law and other policies also shape distribution networks in very important ways. In the current globalization climate, deregulation and privatization of state functions have significantly reduced, and in many cases eliminated, the state from food distribution networks. For example, in the United States, the 1996 Federal Agriculture Improvement and Reform Act ended government-paid on-farm storage programs that created a publicly owned food reserve.

How countries take advantage of

ers within the country. Even when roads and weather are at their best, the transportation costs of grain from the farms in the north to Maputo account for an estimated 33 to 55 percent of the final sale price.¹⁰ What should be highly competitive, locally grown food suddenly becomes uncompetitive.

Uneven distribution of wealth within countries can also affect a country's interaction with the world market, to the detriment of food security. A growing middle class can shift demand from staple foods such as rice to more expensive food such as meat, increasing the price of feed grains, and so the profitability of growing them, at the expense of land that might have been used to produce food crops. Inequitable development, as we have seen on an unprecedented scale in the last two decades, reinforces the potential for hunger in the midst of relative plenty.¹¹

In many of the poorest countries, up to 80 percent of the population still earns its living from agriculture. Even in Mexico, where only 7 percent of gross national product is

derived from agriculture, 23 percent of the population depends on agriculture for its livelihood.¹² The disruption of traditional agriculture has created food insecurity and political instability. The transition from subsistence farming to a wage economy, even as it increased purchasing power, has left people less able to afford the higher prices of food in the local market.

The government cannot just decide what policy will maximize access to cheap food for its people; it must at the same time protect the livelihoods of the poorest. Competition from cheap imports can have a negative effect, lowering the average price of food in the market, but in the process, eliminating the purchasing power of the most needy in that market.

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Striking a Balance

Ensuring food security is essential to political stability. Therefore, it's the government's job to balance conflicting demands for the security of their people. Yet achieving food self-sufficiency is expensive, and for some countries with limited resources, impossible. Our national borders are drawn by politics and history, not by criteria of ecological or food self-sufficiency. Some countries, including Hong Kong, Cap Verde, and even the United Kingdom, have recognized they cannot grow all their own food and have focused their development strategy on generating enough money to buy the food they need.

This does not mean that local food production is not important, however. The vast majority of countries have considerable capacity for efficient local food production. For example, over 50 percent of India's population earns a living from agriculture. These are people whose access to food depends in part on their ability to sell what they grow to buy the things they need to live.

Other countries have a larger industrial base, and the benefits of cheap food might justify the expense of maintaining safety nets for poor producers. The government might be able to guarantee a price floor for producers while importing food to keep retail food prices low for industrial workers. Governments often have to make hard choices among different interest groups. Food is not only imported for direct resale, often there is also demand from processing industries. For example, in Mexico, many people make a living from growing maize. There is also a milling industry, which turns maize into tortillas—a staple food of the country. The industry wanted the cheapest possible source of maize and lobbied successfully for cheap imports of U.S. maize, known in the United States as yellow corn, to replace the more expensive but nutritionally superior Mexican white maize.¹³ The government ignored its own provisions to limit U.S. imports and chose to favor the millers, some of them owned by American grain companies, over the maize growers.

There is no one answer to the question of how governments should balance these conflicting interests. But when dealing with something as fundamental as ensuring food security, countries should be cautious about putting all their eggs in one globalized basket.

Farmers' Perspective

In their different ways, farmers have resisted inserting agriculture into a neo-liberal economic model.¹⁴ In Europe some farmers have resisted changes to the European Union's Common Agricultural Policy, while others are advocating changes, but not in the direction of increased liberalization.¹⁵ Many small and peasant farmers' associations have joined to form La Via Campesina (the Peasant Road). With members in every continent including Europe, the Americas, Asia, and Africa, La Via Campesina has voiced clear opposition to including agriculture in international trade agreements.

While farmers may welcome the suspension of government interference in deciding what and how much they should grow, they are concerned about the alternative, which has been even more difficult to manage. African farmers, held captive for years to governments that exploited their production to feed urban centers at less than cost of production, were pleased to see the kinds of reforms recommended under structural adjustment programs. This freed them to market their own produce and allowed prices to reflect demand. However, the dismantling of the state-owned marketing and distribution systems came before any alternative had developed to take its place. Farmers found themselves either unable to access the market at all, or as dependent on private traders as they

had been on the government-operated system.

Common Ground

Resistance to industrial agriculture is growing. Consumers are beginning to demand better quality and taste from their food and to recognize that what seems cheap actually comes at a price. Recent food scares—from the alarming incidence of Bovine Spongiform Encephalopathy, BSE or mad cow disease, to persistent deadly bacterial infections such as *e. coli* and salmonella, to foot-and-mouth disease—have made consumers aware of some of the problems with industrial scale food production. While the U.S. Department of Agriculture proposes chemical baths and irradiation to kill these diseases, consumers are asking why the contamination is occurring in the first place. Not all of the diseases are new, but with industrial scale production, the risks of contamination are higher. And once contaminated, the meat is shipped out to hundreds of retailers across the nation.

Environmentalists and farmers, traditionally at odds over land management policy and farm practices, have begun to find common cause. Farmers have grown disillusioned with the promise that ever-more-efficient production will somehow secure new export markets and begin to put prices back on a rising trend. Environmentalists have come to appreciate the benefits of some kinds of farming systems as a way to manage land, to protect it from urban sprawl, and to maintain ecosystems that provide habitat for many kinds of wildlife.

Meanwhile, corporate farms face a growing number of county and state initiatives to curb their size and scale of operations. Communities

are increasingly aware of the pollution generated by confined animal feeding operations, where livestock are reared and fattened in huge, closed barns for slaughter. The manure lagoons that contain animal waste are contaminating water supplies and poisoning the air with methane. Perhaps worst of all, the operations are destroying the once-profitable business of hog rearing, by glutting the market with an excess of supply.

At the same time, definitions of productivity have been shifting. From measuring yields of monocrops, agroecologists have begun to measure overall farm productivity, counting the benefits that diverse farm systems offer in terms of nutritional output, calorie output, and environmental services provided. A diverse, organically managed farm may not see the same high yield levels that hybrid seeds with nonorganic fertilizers can, if you compare crop for crop. Yet the overall productivity of the farm can be much greater. An organic rice paddy can double as a fish breeding ground, giving farmers access to good protein without increasing their land holding. Coffee can grow in the shade of other plants, allowing the birds that nest in those plants to keep their habitat, and effectively doing double-duty with the acreage available. The yield of the land increases significantly with less intensive, diverse cropping.

Jules Pretty with the Centre for Environment and Society at the University of Essex reported recently that sustainable agriculture practices are spreading and showing impressive results. About 3 percent of land in developing countries is now under sustainable cultivation practices, he estimates, with remarkable increases in food production as a result.¹⁶

Recent hurricanes in Central

America have also shown that traditional land management systems are more resilient in the face of natural disasters. In October 1998, Hurricane Mitch devastated Honduras, Nicaragua, and Guatemala. Ten thousand people died. However, according to an article in the *Economist*, not all farmers suffered equally. “Conventional” farms using the industrial model of chemical-intensive monoculture had 60 to 80 percent more soil erosion, crop damage, and water loss than those that had practiced “traditional” methods such as crop mixing, biological pest control, water conservation, and agroforestry.¹⁷ For countries with little money for safety nets, it is essential to give priority to this kind of resilience, protecting people from the loss of their livelihood.

Modern technologies, and even trade, are available to support more diverse and sustainable agriculture. If we are to move toward more-resilient and viable agricultural economies, we need to encourage local production of food, a balance of power among the actors in the food chain, and payment of the true costs of our food production. We must ensure that our governments design rules to promote this vision rather than undermine it. And we have to make our own choices as consumers in an intentional way.■

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NOTES

1. Centers for Disease Control and Prevention, from table available online <<http://www.cdc.gov/nccdphp/dnpa/obesity/prevtable91-99reg.htm>>.

2. United States Department of Agriculture, *A Time to Act* (Washington, DC: National Commission on Small Farms, 1998), p. 17.

3. William Heffernan, *Consolidation in the Food and Agriculture System*, Report to the National Farmers' Union (February 5, 1999) <http://nfu.org/images/heffernan_1999.pdf>.

4. Jacques Morisset, *Unfair Trade? Empirical Evidence in World Commodity Markets Over the Past 25 Years* (Washington, DC: World Bank, April 1997).

5. There is extensive literature on this subject. Increasingly, the proposals submitted by governments to the WTO reflect that support for the vision of a global agriculture system, driven only by the demand to produce the most amount of food for the least cost somewhere in the world, is not a vision that has wide support.

6. See, for example, <<http://www.innatura.org/>> for an example from the Netherlands.

7. Food and Agriculture Organization, *Elements for Possible Inclusion in a Draft Declaration and Plan of Action on Universal*

Food Security (FAO: Rome, ITA, 1995).

8. Penny Fowler, "The Marrakesh Decision: Honouring the Commitment to Net Food-Importing Developing Countries," Briefing (London, UK: Catholic Institute for International Relations, September 1996), p. 5

9. The literature on this subject is vast. The publication *Food Policy* is one good source of material on the subject of deregulating agricultural production. An example of an article that describes the transition from state to private food distribution in Zambia is V. Seshamani, "The Impact of Market Liberalisation on Food Security in Zambia," *Food Policy* (Oxford, UK: Elsevier Science Ltd), pp. 539-551.

10. D.L. Tschirley, "La Faim Est-elle de Retour?" *Courrier de la Planète* 43 (Montpellier, FRA: Solagral, January-February, 1998), pp. 18-19.

11. See various annual publications of the United Nations Development Programme, *Human Development Reports* (New York, NY) and the United Nations Conference on Trade and Development's *Trade and Development Report, 1997* (Geneva, SWI: UNCTAD, 1997).

HDR is annual and includes indicators and analysis on income distribution and equity.

12. Ana de Ita, "The Impact of Liberalization of Agriculture in Mexico: from the GATT to NAFTA," paper presented at international seminar, *International Workshop on the WTO Agreement on Agriculture* (New Delhi, IND: April 29-May 2, 1998).

13. Sophia Murphy, *Trade and Food Security: An Assessment of the Uruguay Round Agreement on Agriculture* (London, UK: Catholic Institute for International Relations, 1999), p. 28.

14. See, for example, the statements of La Via Campesina website: <<http://www.virtualsask.com/via>>.

15. See, for example, the statements of the Confédération Paysanne Européenne <<http://www.confederationpaysanne.fr/cpe.htm>>.

16. Jules Pretty, "Crops without Profit," *New Scientist* 164 (December 18, 1999).

17. "Farming the Garden of Eden: Can Agriculture Be Made Friendlier to the Environment?" *Economist*, U.S. edition (March 25, 2000).