



## The Food System and Public Policy

Posted by [Jason Bradford](#) on December 4, 2009 - 10:50am

Topic: [Policy/Politics](#)

Tags: [agriculture](#) [[list all tags](#)]

*Note: This post is based on a portion of my presentations at the recent Association for the Study of Peak Oil [conference in Denver](#). Go to the ASPO web site for the [complete slide deck](#). And thanks to Debbie Cook for inviting me to be on her panel.*

As reported by the [Des Moines Register](#), Columbia University Professor Jeffrey Sachs had some strong words for the food industry at the [2009 Borlaug Dialogue](#):

Sachs said agriculture is the leading source of greenhouse gas emissions, and he also linked the industry to depletion of water supplies and fisheries and poor dietary habits.

What I'd like to do for this post is ask if government policies contribute to the troubles in the food system. I see ways in which we are working against our own interests, akin to a giant tug of war game, where the work of one only serves to counter the work of another. Once we identify the policies that support current conditions, we can readily suggest adjustments that will align with broad measures of well being.

I also want to acknowledge that part of the reason we produce food the way we do is because it has been incredibly successful at yielding abundantly and at low *initial* costs. What is more troubling are the unintended consequences that Prof. Sachs identified and that I will discuss further. These are the long-term costs, or externalities, that need to be factored into the transition towards sustainability in food production.

### Broad Social Goals

I am first going to identify some broad social goals that I believe are non-partisan. If you look at these and study the effects of the current food system it is clear that the way we are feeding ourselves is diametrically opposed to general notions of "public good."

I identify four social goals that most everybody can agree on: Environmental Protection, Healthy and Safe Food, Economic Vitality, and Peace and Security.



Many of us may be familiar with the environmental woes of agriculture, such as soil erosion, hazardous chemical runoff, and their impacts on air and water quality. Also, many people are waking up to the fact that our food supply is generally unhealthy and sometimes unsafe. Fewer people realize that from a monetary perspective, the U.S. is importing much of its food. We tend to export cheap commodities and import expensive fresh and processed foods. There are two ways to improve a trade balance: export more or import less. Our national balance of trade would improve and regional economies would revive if we focused more on replacing high value imports with local goods. An unintended consequence of subsidizing the over-production of certain crops, like corn, is that global prices were lowered to the point that farmers in poor nations were driven out of business. This has tremendous implications for global peace and security as nations with weak trade and financial power lose food sovereignty.

## Feedlot System

Perhaps the easiest way to explain the conflicts between broad social goals and food policy is by explaining the feedlot system.

A typical meat or dairy feedlot does not place cows on pasture, but in pens where food is delivered in the form of hay and feed made primarily from corn and soy. Feedlots have tended to develop in regions far away from population centers where land costs are low and environmental regulations are weak. For example, in the U.S., some of the newest and largest dairy feedlots are in eastern New Mexico and western Texas. Some local hay is grown using center pivot irrigation by pumping fossil water using fossil fuels, but most feed is trucked in from more fertile regions. And the animals in these operations are given antibiotics to keep disease from spreading in the confined and unsanitary conditions. Of course a lot of energy goes into keeping the milk cold for the long distance it needs to go to reach store shelves.

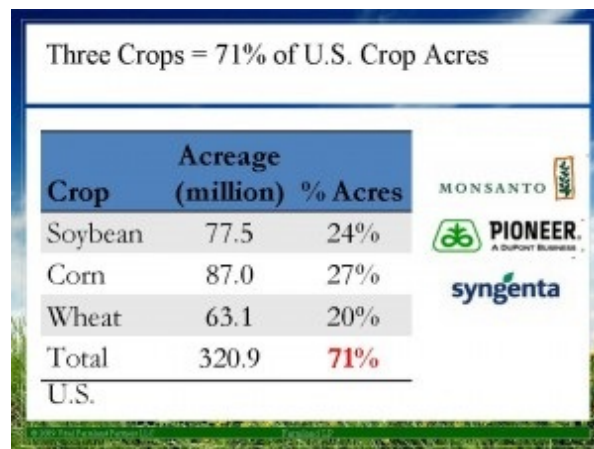


These feedlots are only possible because a specific set of conditions exist: 1. Cheap energy (especially oil) allows food to be transported around the world, 2. Environmental regulations are ignored or under-enforced, and 3. Crop subsidies make feed (especially corn and soy) ridiculously cheap.

Much of the energy needed to support the current food system is liquid-fuel based, and the U.S. now imports 2/3 of its oil consumption. I am not going to delve into the details here, but given that domestic oil production [peaked in 1970](#) and is now down by about half, this is not a situation that can be reversed by more drilling or exploitation of unconventional reserves like tar sands or shale oil. Suffice it to say that the era of cheap oil is behind us in the U.S., and the food system will need to adapt.

The U.S. has many great laws aimed at protecting public health and the environment, but enforcement is often tricky. A prime example is the feedlot industry, which has developed in poor rural areas in need of jobs and with relatively weak government oversight. Even when facilities are cited for [hundreds of violations](#), it can be difficult to shut them down. The public backlash is growing stronger, however, and one wonders when this whole business model will be untenable.

Let's look at crop subsidies. Between 2003 and 2005, about half of all U.S. crop subsidies went just to corn, or about [\\$17 billion](#). This is one reason why so much corn is grown in the U.S.--over a quarter of all cropland for just this species. Corn and soy breeding and seed sales are now controlled by just a few companies, and these companies now create huge corporate political interference when reforms are suggested. In the article cited at the top of the post, Jeffrey Sachs warns that these companies might just have the power to lobby themselves out of business.



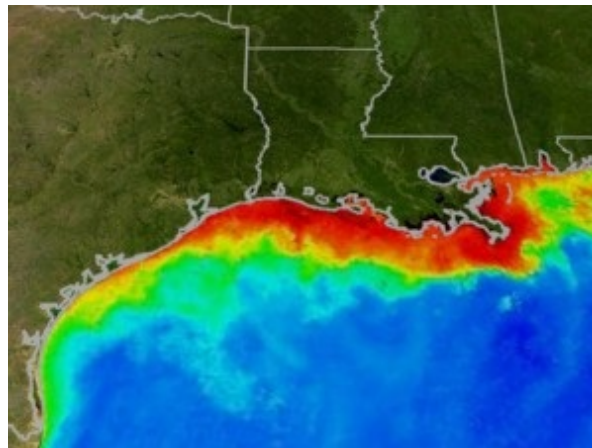
## Ugly Consequences

What are the results of growing all this corn and soy in terms of public health, the environment, economic vitality and peace and security?

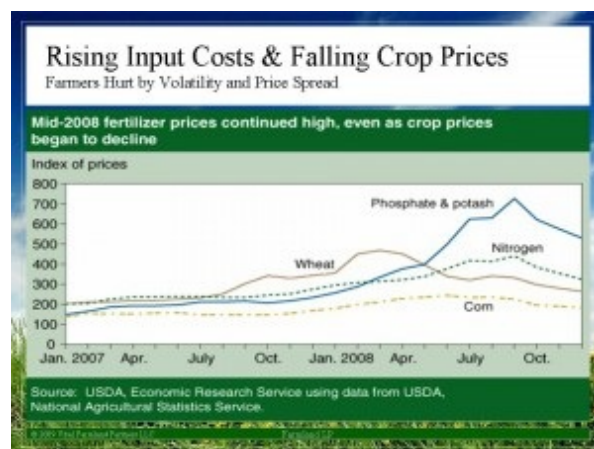
The [health and medical communities](#) are dismayed by the poor diets in America, especially among the poor, who predominantly eat highly processed foods. Something like half of all minority children are expected to suffer from diabetes. And obesity is a slow motion national health catastrophe that is straining our already broken economy.



The pollution is tremendous: greenhouse gases, pesticide runoff, soil erosion, terrible air quality, antibiotic contamination, etc. Results can be seen from space as a dead zone develops each summer in the Gulf of Mexico, as the waters of the Mississippi River overwhelm even the absorption capacity of the ocean.



Farmers are not generally getting rich growing cheap commodity crops. A lot of money was made by some during the 2008 commodity boom, but input costs also rose sharply. We see over the long-term that many rural communities across the country suffer from depopulation and an aging demographic profile, and food policies have contributed to these trends.



Many sensational and heartbreaking news reports during 2008 discussed how rising food prices and a weakening economy were causing hunger and political instability around the world. Oddly, a number of the nations affected could grow plenty to feed themselves. But they weren't because of

development programs initiated by the World Bank, the International Monetary Fund, and the U.S. government. The gist of the story is that countries wanting aid money needed to orient their economies towards export and open their ports for import. As cheap U.S. grain flooded the world, local farmers producing the essentials went out of business, and large agribusinesses were able to move in and produce the kinds of crops wanted in the wealthier world. This seemed to work fine until prices of the commodities imported rose, and the local currencies dropped in value.



## Suggested Changes

Now I will turn to five policy recommendations that would drive the food system away from the *status quo* and towards the desired ends. These are:

- Reduce subsidies for crops used mostly as animal feed, i.e., corn and soy.
- Ensure carbon price reflect full costs to drive land use towards pasture systems and make long-distance trucking more expensive.
- Increase funding for conservation reserve programs and habitat restoration on farmland.
- Fund research and outreach into low-input farming systems, including public domain seeds.
- Support wellness and acute health care for all citizens.

The logic behind these recommendations is as follows. Crop subsidies create an oversupply of corn and soy that drive down prices and enable unhealthy practices to persist, including feedlots and the kinds of processed foods leading to obesity and diabetes. By removing those subsidies and instead allowing farmers to earn credit for soil carbon sequestration, environmental gains will start to appear as land is placed into healthier rotation schedules, including pasture. A price on carbon would also make distance more expensive and local more affordable by comparison. To wean ourselves off of oil dependency and increase food security, locally produced foods need to steadily gain market share.

Greater funding of existing programs that discourage the use of marginal lands and encourage the creation of natural habitats, such as riparian buffers, would support an agroecological approach that reduces dependencies on pesticides and other inputs. Farmers that have been on the chemical cycle for decades will need information, living examples in their area, and new sources of products including non-patented seeds. The programs to make these changes already exist but need expansion, such as [SARE](#), [ATTRA](#), [NRCS](#), other non-profit groups, and regional university and USDA extension offices.

And finally, one of the lessons we can draw from the [farmer suicides in India](#) is that the lack of a safety net can push people over the edge. By contrast, if we ask farmers to take a risk and change what they are doing, it behooves us to put a health care system in place for them and their family

so they are less afraid to let go of the familiar. From the food eater perspective, reduced subsidies may mean higher food prices, but these could be handled by lowering health care costs. U.S. families tend to spend only 10% of their income on food, which is the lowest of any nation in the world. By contrast, we spend more on health care than any nation, which is partly due to spending so little on subsidized food.

## Transition Possibilities

My [current work](#) is to establish agroecological farming systems that link into healthy local food systems. I see the liabilities of what exist now and know that our nation is literally and figuratively hungry for change.

Fortunately, there are signs that at the very highest level, people are seeing the systemic connections and necessary policy shifts. As a key example, I conclude with a quote by Barack Obama from [Time magazine, Oct. 2008](#):

I was just reading an [article](#) in *The New York Times* by Michael Pollen [sic] about food and the fact that our entire agricultural system is built on cheap oil. As a consequence, our agriculture sector actually is contributing more greenhouse gases than our transportation sector. And in the mean time, it's creating monocultures that are vulnerable to national security threats, are now vulnerable to sky-high food prices or crashes in food prices, huge swings in commodity prices, and are partly responsible for the explosion in our healthcare costs because they're contributing to type 2 diabetes, stroke and heart disease, obesity, all the things that are driving our huge explosion in healthcare costs.



This work is licensed under a [Creative Commons Attribution-Share Alike 3.0 United States License](#).