

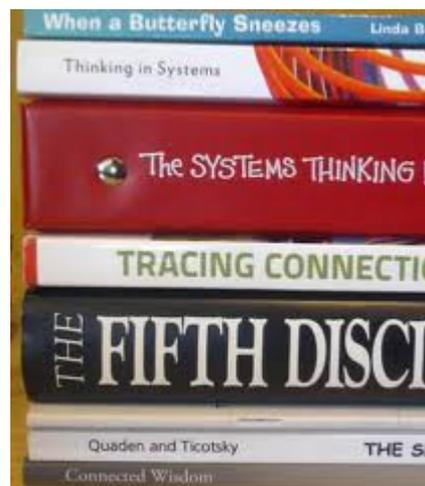
A large, colorful sculpture of a leafy branch, made of many red and blue leaves, is suspended in a glass and steel structure. The leaves are arranged in a dense, overlapping pattern, creating a vibrant, textured effect. The background shows the intricate framework of the building's interior, with light streaming through the glass panels.

Fixes that fail!

John M. Gerber

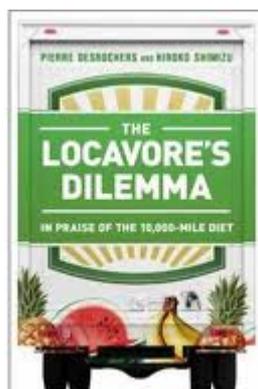
Systems Thinking Tools: fixes that fail!

FROM: <https://agsystemsthinking.net/2012/07/30/fixes-that-fail/>



My last few posts focused on systems thinking as a necessary means of understanding complex, real-world problems.

1. **Learn to Think Like a Mountain** introduced the need and value of systems thinking.
2. **Systems Thinking Tools: the Mind Map** presented one of the simplest and most useful tools to help you get started.
3. **Systems Thinking Tools: Finding the Root Cause of BIG Problems** presented a way of thinking about problems that “just won’t go away”



I've been thinking a lot about systems science lately as I prepare to teach a new course in **Agricultural Systems Thinking** at UMass. This post on Fixes That Fail was triggered by a **radio interview** I participated in a few weeks ago on WBUR in Boston in which University of Toronto Professor Pierre Desrochers, co-author of *The Locavore's Dilemma: In Praise of the 10,000-mile Diet*, claimed the growth of the local food system was a dangerous trend. He said things like...

"If everything was so great when most food was sourced locally centuries ago, why did we go through the trouble of developing a globalized food supply chain?"

And....

"If widely adopted, either voluntarily or through political mandates, locavorism can only result in higher costs and increased poverty, greater food insecurity, less food safety and much more significant environmental damage than is presently the case."



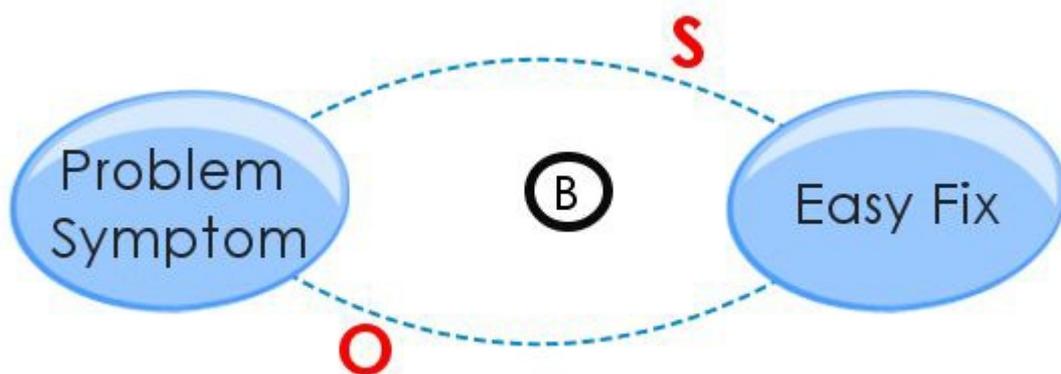
According to Desrochers, we must globalize the entire food system to maximize economic efficiency, keep food prices as cheap as possible, and avoid the ecological disaster that he claims will be caused by local food. He believes local food will only be accessible to rich people and that poor people benefit from the global food system.

My response on the radio proposed a balanced approach, in which there was room in the marketplace for local, regional, national and global food. Desrochers claimed that a little bit of poison (referring to local food) is still poison. Hmmmmmm.... not much room for negotiation!



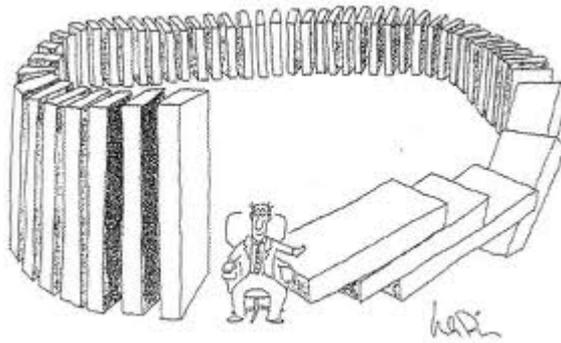
Lots of folks have **punched holes in Desrochers' academic thesis**, so I won't bother. I'd prefer to use his theory to help understand how the Fixes That Fail tool can help us understand a complex system. Specifically, we'll examine the flaw in the argument that the corporately controlled global food system is necessary and beneficial to people with a limited income.

Okay, so the reason some arguments make sense is that if you don't consider the whole system... well, they make sense. Desrochers argues that poor people benefit from the global food system because large corporations have produced lots of cheap food. In systems language we would depict it like this:



We would read this systems model as follows... “as the problem symptom increases, the fix increases (*S* = moves in the same direction). As the “easy fix” increases, the problem symptom decreases (*O* = moves in the opposite direction).” This is called a balancing feedback loop (labeled *B*).

Applying this balancing loop to Desroches thesis, we would say “as financial stress or poverty increases, people will buy more food from the global corporate food system (the fix). And as the fix increases, financial stress will decrease. And of course on an individual basis this is true. People experiencing financial stress should surely buy food from the least expensive source, and that is generally a corporate food store (not always however).

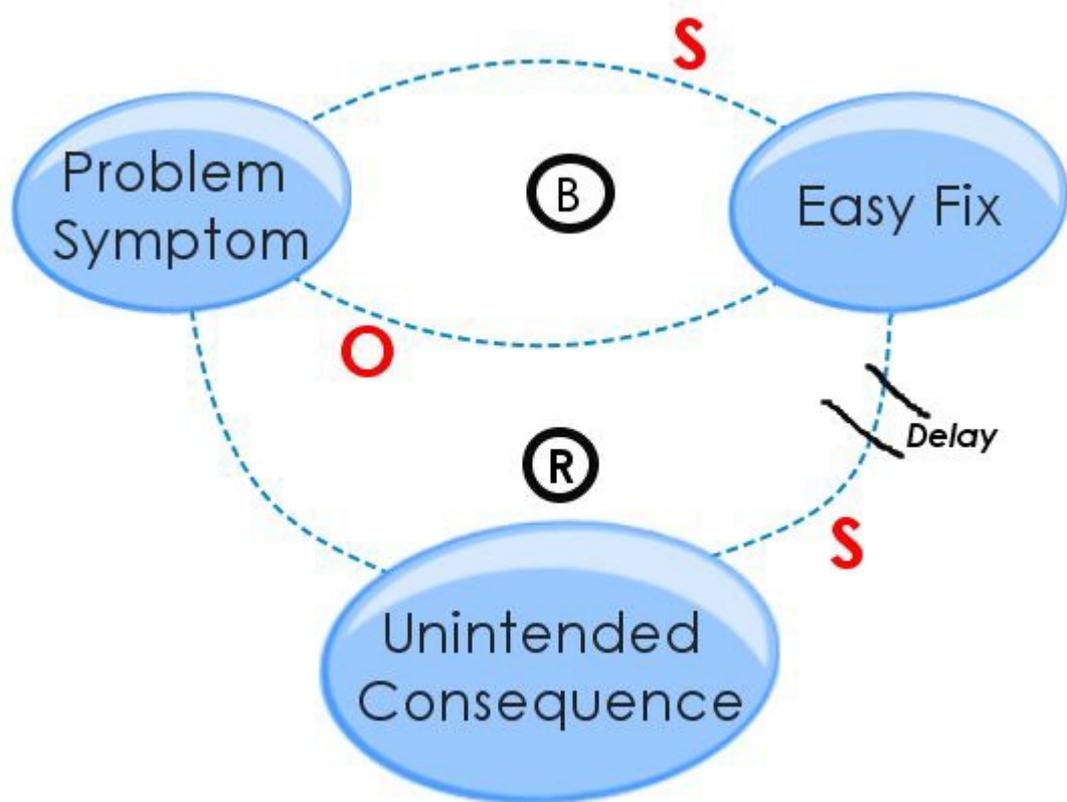


Here is the problem. When we look at the larger system we can see that the globalized corporate food system is NOT a solution but in fact part of the cause of the problem. The corporate system drives down wages and moves jobs overseas, CREATING not preventing poverty. In systems language this is called an “unintended consequence” of the system.

First some facts from a [recent report](#) on jobs in the global food system:

1. About 20 million people in the U.S. work in some aspect of the food system. This is about 1/6 of the total workforce.
2. Most jobs in the food system offer low wages with little access to health benefits and opportunities for advancement. Only 13.5 percent of all U.S. food workers surveyed earned a livable wage.

So the global food system that provides lots of cheap food does so on the backs of poorly paid workers (and exploitation of the environment – but that is another story). Global food corporations represent a “Fix That Fails” and would be depicted in systems language like this:



Cheap food from the global food system (easy fix) does in fact alleviate poverty (problem symptom) in the short term. It also increases poverty in the long run by reducing opportunities for people to earn a livable wage. The problem is that there is a “delay” before the unintended consequence (fewer well-paid jobs) is experienced and it may not be obvious that the cause of the unintended consequence is in fact the “easy fix” itself. This second loop is called a reinforcing feedback loop (labeled R). This model reads “as the easy fix increases, the unintended consequence increases (moves in the same direction) and thus increases the problem symptom. Hey, that’s not what we intended!

The lower prices generated by the corporate food system does so by driving down wages (ask anyone who works for a big box store or a fast food restaurant) and moving jobs overseas (where wages are lower and health and safety regulations are nonexistent). Thus the so-called “fix” actually increases the original problem (financial stress).



We know that real job growth in the U.S. comes from small, local businesses not corporations. Those businesses that are cooperatively managed have the additional advantage of providing a decent wage and participation in ownership for the workers. The larger the corporation, the more likely it is to “outsource” jobs to overseas markets. Corporations (and their rich owners and shareholders) do not create more good jobs in the U.S – it just the opposite!

Further, corporate retail sales drain money from the community to make financial investors more money. When we shop locally, we support our neighbors. When we shop at national food chains, we support people wealthy enough to make investments in the corporation (stockholders and upper level management).

The globalized, corporate food system is a CAUSE not the solution to poverty!

It is in fact a fix that has failed.....

The Fixes That Fail model is called a systems archetype, that is, something that happens over and over again in human behavior. There are lots of other examples, such as:

1. Putting out small forest fires actually is the cause of big fires (because there is more flammable material when it does burn).
2. Widening a road to prevent accidents actually causes more accidents (because people drive faster).
3. Saving money by not repairing a roof on a house actually costs more money (eventually).
4. Borrowing money to pay the interest cost on loans (bad idea).



These are all obvious when you understand the Fixes That Fail archetype, which we teach as part of systems thinking. The solution is always advanced planning to avoid the situation in the first place. Of course, this isn't possible in the U.S. food system, as it has already been thoroughly globalized. Estimates of the extent of local food purchases range from 1 to 4 percent of total agricultural sales nationally. We are already a victim of the problem of almost total corporate control of our food supply and nobody in authority seems to have noticed!

The answer must be a shift in personal behavior AND public policy to help grow the local food system. Personally, I don't believe we face the many dangers Desroches describes in his book. I don't expect we will ever (nor should we) completely eliminate global food trade as he threatens. I'd just like to see a little more balance. But what about you? What would you propose to address this fix that failed?

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