



Tim and Krisanne Cada convert to organic production on the family farm, increasing profits while maintaining their farm's manageable size and their quality of life.

Less Land, More Profits: Organic Crop Production Makes a Stand

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How They Started

1983 saw a change of operators on the Cada farm in northern Nebraska's Colfax county when Tim and Krisanne Cada took over the farm from Tim's grandfather. For the next nine years Tim farmed those 400 acres a lot like his neighbors, rotating corn, soybeans, alfalfa, and pasture.

Life was fairly easy for the young couple. They'd plant the crops and spray for weeds in the spring, play softball in the summer, and harvest the crop in the fall. The farm supported the young couple well enough, but Tim bought a grain-vac to earn extra cash. That piece of machinery was responsible for introducing Tim to a whole new way to farm.

Soybeans, a Grain-vac and a New Pick-up Truck

In early 1994, Tim was hired to move a bin of organic soybeans. He wasn't too impressed by what he saw until he found out that those soybeans were selling for \$9.50 a bushel. "The quality didn't impress me, but the price did!" said Tim.

He talked to a couple of organic farmers to learn more, and decided to try organic soybeans on 45 acres of alfalfa land. Those 45 acres had been chemical-free for at least three years, and qualified for organic certification immediately.

Tim was pretty high on the learning curve that first year. He expected low weed pressure because the field had been in alfalfa. He drilled the beans on 27 acres of the field and planted the rest in 36-inch rows. Weeds

took over the drilled section, reducing the yield and eye appeal of the field.

To his surprise, with less than a 30 bushel per acre yield, the 1,500 total bushels still generated \$24,000. Tim said "WOW!" and went out and bought a new pick-up truck.

rent conventions. Tim's strategy, organic farming, combines traditional respect for natural systems with current technologies to manage and support those systems.

Unlike the conventional farmer who attempts to feed the crop, organic farmers improve the quality of the soil to accept

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A New Way to Farm, a New Way to Think

Within five years the whole farm was certified organic, and the crop rotation had been expanded to include small grains. Making that switch required a change in Tim's attitude as well as his farming practices.

The conventional model that most farmers follow relies on purchased inputs to support high production levels of a few commodity crops. The emphasis on a few agricultural products has created oversupplies and lower prices for those crops. With declining profit margins, many farmers need to get bigger, find off-farm employment to supplement farm income, or get out. Farmers and ranchers who have expanded acres to preserve their income level found that increased acres require more time and labor unless they buy inputs—fertilizers, pesticides and herbicides—to minimize their time in the fields.

Another way to stay on the farm is to think outside the cur-

and hold more water and nutrients, reducing the need for irrigation and fertilization. The focus is on conservation and enhancement of the soil and the life systems it supports. You could say the organic farmer's real crop is the soil.

Tim uses tillage to replace herbicides and manure instead of commercial fertilizer—time and equipment not required by conventional farmers. Because organic farmers invest more in time and labor than purchased inputs, organic farmers have fewer or lower out-of-pocket expenses to recover. The crop diversity that they incorporate to manage pests minimizes the risk of a crop failure since there are more than one or two crops.

Less Land + Intensive Management = Profits for Farmers and Benefits to Rural Communities

Higher prices paid per unit for organic grains and livestock means organic farmers can con-

tinue to make a living on fewer acres than the conventional farmer, keeping more farmers on the land and more families in rural communities. Those families tend to spend money right in their communities, contributing to a vital local economy.

The Cadas continue to plant 80-100 acres each of corn and soybeans. "That's enough to live on if the crops do well," says Tim. "If I make money on the remaining acres, that's just extra money in the bank and allows me to experiment with other crops and practices, focusing on improving the quality of the soil." Tim also diversifies the types of corn and beans varieties he plants, often two to three types of soybeans and two or more kinds of corn.

Organic farming does require more equipment and labor than conventional farming, which replaces labor with herbicides, but controlling weeds is expensive in either farming system. It's just a matter of where you choose to put your investments. Investments in labor or equipment stay in the local economy, rather than profiting a distant corporation.

Since Tim puts in about 500 hours a year in the tractor seat, it made economic sense for him to invest in a new tractor this year. He began his farming career with four-row equipment but is now using eight-row machines to cover the fields faster. Tim notes, "If all farmers in the country were 'organic,' the chemical dealers may suffer, but the equipment

dealers would surely prosper."

Says Tim, "A piece of tillage equipment may be expensive to buy, but that equipment will be around year after year for me to use. The farm chemicals the neighbors buy are usually gone after one season."

A Growing Market

Marketing has changed for the Cadas—for the better. Tim remembers trying to get a local

"WE SHOULD BE WORKING TOGETHER TO IMPROVE OUR RETURNS AND CUT EXPENSES."

feedlot to buy his conventional corn. "They found every reason in the book to dock me on price. I felt as if I was begging them to take it," he says. "Since switching to organic, the buyers call me and compete for my product." Growing organic makes it possible for Tim to sell for a premium, but the quality of his product makes customers more likely to come back year after year. "I always strive to produce a quality product, but buyers weren't willing to pay for it. Now I get paid for the quality," Tim states.

Organic food production is the fastest growing agricultural food sector in the world. It has grown by about 20 percent annually for the last nine years, while conventionally-grown grains have continued to lose value.

What Will the Neighbors Say?

As an organic farmer surrounded by conventional farmers, Tim

faces some unique challenges. One is the risk of contamination by spray and pollen from adjacent land. Tim explains the problem to his neighbors and asks them to "Keep your spray and pollen on your side of the fence. As long as you don't jeopardize what I'm doing on my farm, I don't care what you do on yours."

It is a challenge to manage with the least amount of field operations and still get the optimum weed control. "I now tolerate a few weeds to earn the organic premium," says Tim, although he thinks some

neighbors may have resented the organic caution signs (posted to ward off accidental spraying) because the Cada crops looked as good as the adjacent chemical-treated fields.

Tim recalls the time a hunter stopped to ask permission to hunt the neighboring CRP field. Tim couldn't grant permission because the land didn't belong to him, but he did tell the man that the field wasn't enrolled in CRP. It was a soybean field where the herbicide hadn't worked!

At first, the neighbors thought Tim was crazy for going organic. Not only did he take over his grandfather's farm, which limited their ability to expand, but now he was growing corn and beans without chemicals! Some said it was just plain stupid.

Now most neighbors accept and respect the way Tim farms and say, "He certainly works for the premium he gets."

**Chart #2:
Organic v. Conventional
Net Return/Acre**

SOYBEANS

	CADA'S ORGANIC FARM	NEIGHBOR'S CONVENTIONAL FARM
Seed	\$20	\$22
Planting	6	6
Spray twice (includes product)		30
Disc	6	
Field cultivate		6
Rotary hoe twice x 4 each	8	
Cultivate twice x 6 each	12	6
Harvest	20	20
Hand weeding	13	
Total direct expenses	\$91	\$84
Yield (bu./acre)	30	38
Price/bu.	\$16	\$4.50
Gross return/acre	\$480	\$171
Total direct expenses	<\$91>	<\$84>
Net return/acre	\$389	\$87

CORN

Disc	6	
Field cultivate		6
Manure hauling	20	
Seed	25	25
Planting	6	6
Fertilizer		30
Crop chemicals		27
Rotary Hoeing (\$4 each)	8	
Cultivate (\$6/acre each)	12	6
Hand weeding	5	
Combining (harvest)	16	16
Total direct expenses	\$104	\$110
Yield (bu./acre)	136	154
Price/bu.	\$3.45	\$1.80
Gross receipts/acre	\$469	\$277
Total direct expenses	<\$104>	<\$110>
Net return/acre	\$365	\$167

In this comparison, the organic farm generated an average of \$377/acre compared to the conventional model at \$127/acre. A difference in profit of \$250/acre supports Tim's statement that the return from 200 acres (200 X \$377 = \$75,400) is enough for a family to live on.

***That's the Story.
Here's the Numbers.***

The cropping patterns and costs associated with them are typical for Tim's operation. Some years the number of Tim's field practices change, depending on the weather and the previous crop. The prices are what Tim received in 2000, and are also typical, even though the farm suffered last year from drought conditions.

Organic yields are usually within 90 percent of conventional crops. Organic farmers often grow low yielding specialty crops to maximize prices.

For purposes of this study, we are using a semi-no-till farming system as a comparison. Chemicals replace tillage operations and the crop is sold at the local elevator. These figures reflect the production costs in Tim's region, according to numbers in the *2000 Nebraska Custom Rates* published by University of Nebraska-Lincoln (EC00-823-A), and correlate closely with the figures for conventional farming in the *Nebraska Farm/Ranch Business Management 2000 Annual Report*.

Government payments, land payments/rent, interest, buildings, hired labor or insurance expenses were not included in this comparison. When assigning costs we used the local custom rate, even though Tim and the conventional farmer contribute the labor and provide most of the machinery. Both include no charges for personal labor or hired labor because both are single-family operations.

Prices given here are for cleaned grain. The clean-out percent varies from year to year, but even poorer quality grain normally sells for more than double the conventional grain price. The organic price is normally contracted before harvest, and delivery is usually three to six months after harvest. No expenses were allotted to the conventional farm for hauling the grain out. Organic growers normally price their grain FOB the farm, so incur no transportation expenses.

More Than Profit

Like any comparison, these figures are a guide, not gospel. That said, the profit figures Tim provides make organic farming look very attractive. Tim embraces organic agriculture because of the philosophy as well as the profits. He sees organic agriculture as an alternative to the "cannibalism" in conventional agriculture, where farmers feed on each other to survive. "Instead," he says, "we should be working together to improve our returns and cut expenses."