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Accepted for publication 20 April 2006. Published 21 September 2006.

Assessing Producer Options and Obstacles for Organic Agriculture

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Wolf, T. 2006. Assessing producer options and obstacles for organic agriculture. Online. Crop Management doi: 10.1094/CM-2006-0921-04-PS.

Introduction

Fall is a perfect time, as we harvest this year's crop and begin planning for the 2006 season, for me to explore organic farming opportunities and discover the challenges and opportunities that might exist. The first question that arose in my mind was: "Is organic farming a viable business option or a cultural movement?" Over the last 11 years, through my experiences with the US Grains Council and Council for Food and Agricultural Research (C-FAR), I have met several organic producers, not only in the U. S. but also in Cuba, Vietnam, China, and Austria, all with different perspectives on both the business and the culture of organic.

First, let me give you a snapshot of our farming operation. I am 57 and my wife, Jan, is 54. We both entered farming from a business background in the retail and wholesale grocery industry 29 years ago. Jan and I farm about 2500 acres in east-central Illinois, employing our son Jeremy and a fourth cousin, Tom. In addition to farming, we sell Mayrath grain augers to help balance the income flow and provide additional income opportunities for Jeremy and Tom.

Of the acreage we farm, Jan and I own 16%, my father owns 31%, and six landowners account for 53%. The farms are scattered over four counties in 25 tracts. The distance from our home to the farthest farm is about 45 miles or two hours by tractor or combine. This gives us a weather hedge but requires many hours on the road moving from field to field.

We all enjoy farming, but it is a business. Our success or failure impacts not just Jan and me, but 14 other families whose livelihoods depend in whole or part on the farming income generated by our operations. The capital needs required to farm in today's world are substantial, as are the risks. Since 1983, we have produced food-grade white and yellow corn, under contract, for a major snack food company. This has added marketing stability and discipline to our operation, but there is always a reason they pay you a premium — risk. The key to success is beating the averages in not only quantity, but also quality.

As chair of the Illinois C-FAR, I worked closely with the organic/sustainable producers in Illinois. One of my best friends and fellow board members, Jack Erisman, farms 2300 acres near Pana, Illinois. Jack switched to organic farming in 1990, going "cold turkey" and incorporating feed grains, forage crops, and organic beef cattle in his operation in a 14-year rotational cycle. Jan and I spent a day in Pana visiting with Jack and Jeannie about their experiences in organic farming. Jack and I had discussed organic agriculture over the years, but this allowed us a great opportunity to focus on organic production in Illinois and let me test some of my perspectives against his reality. My comments today reflect my thoughts as verified or challenged by Jack's 15 years of trials and tribulations in organic farming, and his thoughts about the challenges to entering organic farming in Illinois.

Risk of Self-Esteem and Credibility

I asked Jack: "Is organic farming a business venture or a cultural movement?" I think the answer is some of each. Each person's motivation is different. The world is full of perceptions and this is the first challenge in contemplating organic production in Illinois. We are a product of our experiences, and to many people in Illinois, organic farming is perceived as interchangeable with weeds, low yields, "last resort," "on the ropes," counter culture, and the list goes on and on. The majority of producers, landowners, and farm managers have a very skeptical view of organic farming — and I am probably being kind. Of course, when I started raising food-grade white and yellow corn under contract, people thought I was crazy. Anyone contemplating adopting organic farming in Illinois needs to be prepared to be under a microscope. This is one of the biggest barriers to entry. Before embarking on this path, honestly assess your ability to sustain criticism from your spouse, family, banker, landowners, and friends. I do not mean to imply you will not have any support, but it will be limited at best. If you can pass this crucial test, then you can move on to assess the risks and rewards involved in organic production. It takes strong conviction and determination to succeed in organic farming.

Financial Risks of Organic Farming

The biggest risk anyone entering organic production will encounter is financial. For three years, as you go through the certification process, you will have to change your farming practices completely. This will be a time of education, learning, and trials, with some failures and a few successes scattered in. The markets for these transitional years' crops are not going to be high value streams, so be prepared for some lean years during this transition. Jack's experience of switching his whole operation in one year is not the path of choice. Start small and limit your exposure during this learning experience.

Managerial Risks

As a traditional corn and soy producer, I would probably be switching to a four-year minimum rotational crop pattern including corn and soybeans. If I added cattle to utilize the small grains and forage, I would need to establish pastures, build fences and buildings, and add equipment to support the livestock production. In addition, I would need to learn new techniques to grow organic crops utilizing non-traditional methods. This would be a challenging time. Planting would be delayed by three to four weeks on corn and soybeans due to the new cultural practices, and to reduce the chance of pollen drift. The labor and management needed to succeed would be constant and intensive, as crops need continual scouting, hoeing, and cultivation. Despite my best efforts, I would probably have weeds in my crops unlike any I have experienced. By harvest time, which would begin weeks later than my neighbors, I probably would be faced with harvesting soybeans fields which may barely be recognizable as soybeans due to the weed pressure, and waiting for a hard frost to kill the weeds before beginning harvest. Cornfields might be weedy and lodged so badly that I might have to hire people to walk along with a pitchfork pitching the corn into the combine, and all for scant profits.

Financial risk in entering organic crop production in Illinois is very real. You should be financially able to withstand years without a crop. Crop failures are a very real possibility and you need to have the ability to weather those years. Debt load should be minimal in order to reduce risk. The risks are definitely higher in organic production than traditional crop production, but so are the rewards.

Land Base, Labor, Investment, Educational, and Locational Risks

As mentioned earlier, we rent about half of our farmland. In my case, none of my landowners would consider organic farming. One of my key landowners owns a fertilizer and chemical dealership and the others would not be willing to go through the transitional costs and risks to enter organic. They range in ages from the mid 40s to 87, and all the principles are over 70. This does not preclude all landowners from organic production, but in my case, it is not debatable.

Labor needs, and therefore costs, in organic production are also higher. The labor market for production agriculture is very tight in central Illinois and finding good qualified help is always a challenge. Jack said he is continually short two men in his operation and cannot fill those positions. In our operation, we are always looking for efficiencies in our production practices to reduce labor needs instead of increasing them.

Equipment needs would also increase for me because we are not equipped to plant or harvest small grains and forage crops. We also do not have fences or animal sheds, and this would increase our investment if we entered organic production with cattle in the mix. Jack has three different rotary hoes to use depending upon the crop and conditions he encounters. Most farmers have one rotary hoe at most.

Another challenge is gaining the knowledge needed to enter organic production. Since organic production is relatively small in Illinois, this process is not simple and would again take time. As Jack said, "There are a lot of people selling snake oil in the market and you have to separate the wheat from the chaff." The key would be working with someone like Jack who could counsel us as we moved through the transition.

An ideal farm for organic would be compact and contiguous with natural water supplies available for livestock. As I mentioned previously, our farming operation is so spread out that it would be very difficult to convert all of it to organic. Larger tracts of land are suited best to organic feed grains to lower pollen drift and allow for more efficient fieldwork. If we were to focus on crop production and eliminate the cattle in our operation, we would be better suited, but then we would need to purchase more outside inputs and sell more of the output instead of marketing it through animals.

Marketing Risks

Marketing is always a challenge and organic is no exception. Contract production would be preferable to me for the high value cash crops, while beef production would be a logical outlet for the forages and the other crops produced. Storage of crops is almost a necessity, and again, our operation is not designed for long-term storage of smaller volumes of differentiated crops. Organic marketing channels can be very challenging according to Jack, and all types of problems can disrupt the flow of crops and income. From both the producer's and the buyer's standpoint, insects are a very serious problem in stored grain. I talked last week to a major buyer of white, yellow, and blue organic corn and he said he is finding bug infestation in nearly all organic corn he is trying to purchase. His company has zero tolerance for live insects so he cannot take organic grain with insects. Jack too has had this problem as his deliveries were on buyers' call and he was forced to carry his grain into the summer months. This is another price risk. You can quickly move from very profitable premium organic prices to very unprofitable, discounted commercial prices. In Jack's experience, the risk from grading and discounts has been, and continues to be, significant. You are at the mercy of the buyer

and have little control over timing of deliveries and grading. We experience some of these same risks with food-grade corn, but to a lesser extent.

Risk of Increased Global Competition

During the last five years, I traveled to many areas of the world and one commonality is that both producers and policy makers in every production area in the world are looking for value-added opportunities, and they are eyeing the US and EU organic markets for export opportunities. When I visited with Fidel Castro, he was very interested in trade with the United States. His focus was on organic production of fruits and vegetables because Cuba does not have the money for fertilizer and chemicals so they felt they could export their organic production to the US market to capitalize on the premium prices here. Vietnam, China, the Philippines, and Brazil are a few of the countries with their eye on capturing a larger share of the lucrative US market. As these countries gain access and increase supplies, market opportunities will erode.

Rewards of Organic Crop Production

Now let's focus on the marketing opportunities. Once certified as an organic producer, there are good market opportunities to sell white and blue corn into the specialty food market and the yellow would probably enter the organic feed grain market. Several buyers in the central Illinois/Indiana market are contracting for production of these crops.

Blue corn is selling for \$0.14 to \$0.16/lb or about \$7.84 to \$8.96/bu (see Table 1). Realistic yield expectations would be from 50 to 80 bu/acre, resulting in an income per acre of between \$392 and \$716. White corn should yield from 90 to 150 bu/acre, and prices are about \$5.75/bu, resulting in a range of income per acre between \$517 and \$862. The organic feed market is currently good and one could expect to earn from \$5.00 to \$6.00/bu on a yield range of 130 to 150 bu/acre, grossing \$650 to \$900/acre. These are excellent returns but remember only 25% of the acreage is in corn and soybeans each, rather than 50% each. Food-grade corn yields are generally range from 140 to 200 bu/acre and prices range from \$2.50 to \$2.90 for yellow and \$2.75 to \$3.20 for white.

Table 1. Selected organic and conventional commodity prices, yields, and income potential (estimated).

Crop		Price (per bu)	Yield range (bu/acre)	Income potential (per acre)
Organic	Blue corn	\$7.75-\$9.00	50-80	\$387-\$720
	White corn	\$5.75	90-150	\$517-\$862
	Yellow corn	\$5.00-\$6.00	100-150	\$500-\$900
	Soybeans	\$16.00- \$17.00	20-30	\$320-\$510
Conventional	Food-grade yellow	\$2.50-\$2.90	140-200	\$350-\$580
	Food-grade white	\$2.75-\$3.20	140-200	\$385-\$640
	Soybeans	\$5.00-\$7.50	50-65	\$250-\$487

Organic soybeans are the second cash crop I would produce for the soy milk, soy flour, and soy meal markets. Yield expectations would be in the 20 to 30 bu range. Prices are in the range of \$16 to \$17/bu resulting in revenues of

\$320 to \$510/acre. Conventional soybean yield expectations would range from 50 to 65 bu/acre and price expectations would be from \$5.00 to \$7.50/bu resulting in revenues of \$250 to \$487/acre.

On the expense side of the ledger, I would be saving the cost of herbicides, insecticides, and conventional fertilizer, which could save up to \$100 per acre on corn. However, I would have additional expenses from the practices needed for organic production, for which I have no cost figures. The chemical costs in soybeans are minimal and would be offset with the cost of the tillage operations during the spring and summer. The best option for the forage crops is to keep them on the farm so the primary cash crops from organic farming are from corn and soybeans, which would compromise about 50% of our acreage on a four-year rotation. In other words, divide the revenue from the corn and soy by half to see the multi-year return per acre over the whole farm. This is why cattle in a rotation would make good sense to me if a person has the setup for livestock or is willing to make the investment.

Will It Work?

Organic farming can work if one is really determined to make it succeed. I go back to my first question "Is organic farming a viable business venture or cultural movement?" If a producer is fully committed, prepared to withstand the criticism, financially strong with low debt, preferably owns the ground he farms, and is willing to work extremely hard, he can make a good living farming organically. Organic production reminds me of farming when my grandfather farmed. It is a step back in time from a production standpoint. A producer should switch over gradually, from my perspective, as he develops the skills and knowledge needed to be successful without assuming too much risk.

Does It Fit My Operation?

Having explored this information, I do not anticipate we will be entering organic production soon. Our farming locations are too scattered, I do not own a large enough percentage of my ground to consider organics, my debt load is not low enough to take the risks, and frankly I am not motivated to take on the risks and challenges associated with organic production. If I were younger, I might take a shot at a small acreage, but currently I think our specialty contracts are a better fit for me. I think many producers in the Midwest would look at this from a similar perspective and the outcome would be the same. The current adoption rate would verify that. When I was in Austria last year, the driving force in organic adoption was government subsidies of over \$400 per acre. The percentage of producers in organic production was 7% and has been at that level for several years. One of the most profitable farmers we met was a large organic producer who was also building a potato processing and storage facility to capitalize on the higher prices during the off-season. He was not only a good organic producer, but also a very good businessperson. Absent any outside incentives, I do not anticipate a widespread conversion to organic agriculture in the Midwest, and that is good for the producers in this market, as their prices should stay stable for some time to come.