Farmer viewpoint: Organic sector offers unique sustainability model for all agriculture

Like most farmers, I'm a fan of tools. Having bought a fixer-upper of a farm, there's a list of construction projects that seems to grow at the bottom more quickly than things are crossed off at the top. In my opinion, no tool has revolutionized farm construction more than the cordless drill.

As a farm kid, I recall that most things were held together by nails (and sometimes baler twine). Screws were relatively rare – they were more expensive, slower to install, and if a pilot hole was required, you'd need to be within reach of electrical outlet or prepared to carry along a brace and bit. Nowadays, screws are almost everywhere. Cordless drills have made them easier and faster to drive than a nail, with far less skill required; they're still a little more expensive than nails, but by golly, if it's held together by screws, it's not going to come apart!

There are drawbacks, of course, in addition to the extra expense. Cordless drills lack the finesse of a screwdriver, so stripped heads or snapped screws are more common. There's nothing quite as frustrating as a long walk back to the house to switch up a dead battery with only a couple screws left to drive. And if something *does* need to come apart–with nails, even if a hammer wasn't handy, it was nothing that a bit of leverage or a well-aimed kick couldn't solve – with screws, in the absence of a screwdriver, you're, um, pretty much screwed.

Still, the cordless drill holds a place of honor here: it's the go-to tool. The hammer and nails come out for the big building projects, and screwdrivers only get used in places where the cordless drill is too large or clumsy to do the job.

All this came to mind after reading Marc Brazeau's recent musings on the Genetic Literacy Project on "full tool-box" agriculture. He posits that "full tool-box" conventional agriculture can be more sustainable than organic farming with its "restricted tool box" because it can employ all of the sustainability-enhancing techniques of cover cropping, diverse rotations, polycultures and integrated pest management *plus* continue to use the GMO seeds, synthetic chemical pesticides, and fertilizers prohibited by organic standards.

Bringing these "Conservation Agriculture" techniques to mainstream agriculture is a laudable goal, and one I fully support. I'm inspired and excited by the conventional farmers I see adopting these techniques and wish they received wider recognition.

The challenge is that although "full tool-box" farmers could do this in *principle,* they rarely do so in *practice.* The biggest challenge, paradoxically, is that full toolbox. I enjoy the feel of a hammer in my hands, I love exercising my nail-pounding skills, but when something needs fastened quickly and fastened well, I'll usually reach for the cordless drill. Farmers have the choice to employ cover crops to build fertility, but fertilizers have the guaranteed promise of immediately available nutrients right on the label; they can use IPM to manage pests, but the sprays will knock 'em dead for sure; they can plant all the crops they want, but corn and soy are going to generate the most profit per acre. The alternatives are more risky, take longer to show returns, are more expensive or are less convenient. Those with a broader

perspective, a long-term vision, and a willingness to defy convention will blaze the trail, but most others will hang back and ask, “what’s in it for me?”.

That is precisely where, despite all the scorn directed at them by critics, the organic standards have a positive impact. They are, of course, based on a larger set of principles (a topic for another post), but one of their greatest impacts is to reach out and in effect say, “if you’ve got a cordless drill in your toolbox, that’s all you’re going to use, and soon enough everything in sight will be screwed and when the batteries run out you’ll have forgotten that nails exist, much less be able to swing a hammer.”

In addition, this “restricted toolbox” can drive innovation: organic farmers have maintained and improved cover cropping and other practices precisely because the other tools weren’t available. The full-toolbox paradox is also well-illustrated by antibiotic use in organic dairy cattle: the topic continues to generate hot debate in organic farming circles, but no one can deny that the prohibition spurred the development of new alternatives. (I explore this issue in more depth in this post).

At the end of the day, it doesn’t matter how many tools are in the toolbox if most people just pull out the most convenient ones most of the time. While it’s important to realize that other factors, even the “cordless drills,” can drive positive innovation (the role of herbicides in no-till production is a good example of this), the problem, as we’re now beginning to realize, is that over-reliance on these convenient, highly-effective tools can have negative impacts.

While Brazeau criticizes a study for failing to account for the positive impacts of high-input/high-yield agriculture, he likewise fails to address the inherent compromises and threats. What’s the tradeoff between fewer acres farmed and hundreds of thousands of people possibly losing access to safe drinking water? Agricultural scientists have recognized this fact, and they are struggling with ways to convince farmers, particularly conventional ones, to use “little hammers” instead of the “one big sledgehammer.”

One of the best ways to encourage change is to incentivize it–to offer more money for using the hammer instead of the cordless drill. Ideally, it should be a market-driven premium: those who benefit from being able to take things apart without a screwdriver, or those who enjoy the aesthetics of nails can pay the associated costs. Again, this is another advantage offered by the organic system: the standards encourage adoption of certain practices and reward those who follow them.

No system is perfect of course, and the intent of this post is not to advocate that everyone should go organic. Nor is it to claim that organic production is the one and only path to sustainability. But rather than dismissing organic standards as arbitrary restrictions and the organic market as a distraction that overshadows conservation agriculture, we should recognize the role that they play in guiding farmers’ behaviors and decisions. For all of its imperfections and contradictions, the organic sector is still the predominant model of moving a set of sustainability-focused intentions from principle to practice. Understanding the context and the motivation of organic farmers and consumers can help develop the required strategies to expand Conservation Agriculture to, as Brazeau puts it, “where the farmers is.”

Rob Wallbridge is an organic farmer and consultant based in Western Quebec. He advocates for high-quality organic food and informed communities in agriculture. Follow him on Twitter as @songberryfarm and on his blog, The Fanning Mill.