

GROWING ORGANIC: EXPANDING OPPORTUNITIES FOR U.S. FARMERS BY SUPPORTING ORGANIC TRANSITION

EWG
March 2017

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American agriculture is at a unique crossroads. Prices for staple commodity crops like corn, soybeans and wheat have **slid back** from their record-breaking highs between 2008 and 2014. Average farm household income is still well above that of non-farm households, but the decline in crop prices has spurred worry in farm country.

Thankfully, there is a parallel story that couldn't come at a better time for American farmers: organic.

Driven in large part by the multiple environmental and health benefits, Americans' appetites for organic food is seemingly insatiable. In less than two decades, sales in the **organic sector** have grown from \$3.7 billion in 1997 to more than \$43 billion in 2015. This double-digit growth nearly every year makes the organic sector one of the fastest growing segments of the food industry.

Despite the rapid growth of the organic industry and the price premium enjoyed by organic farmers, domestic production of organic food has significantly lagged behind consumer demand. Currently, consumers' demand for organic food far outstrips domestic supply—so much so that major retailers like **Costco report** they sell out of organic products faster than they can get them. While the U.S. proudly stands as the largest producer of conventional soybeans in the world, in 2015 the nation imported more than \$240 million of organic soybeans.

As demand for organic food continues to soar, Congress can play a role in better positioning American farmers to meet it, by making it a priority to increase the number of organic farms and amount of organic acreage. To do so, Congress should

reduce obstacles to organic transition through modest changes to conservation programs in the 2018 Farm Bill to better meet the needs of producers who want to start with or transition to organic farming. In particular, Congress should:

Reform the Conservation Stewardship Program to create “bundles” of conservation practices specific to producers wishing to transition to organic.

Reform the Environmental Quality Incentives Program to remove the lower payment limit for producers enrolled in the Organic Initiative, matching the payment limit set for the general funding pool.

Reform the Conservation Reserve Program to provide greater support for producers exiting the program to put farmland into organic production.

WHAT IS ORGANIC?

Organic agriculture is a method of farming that promotes ecological and public health. Organic farmers avoid the use of most synthetic materials, such as synthetic pesticides and fertilizers, genetically engineered seeds, antibiotics and sewage sludge. Instead, organic farmers rely on a suite of ecological, cultural and mechanical practices to grow food and raise livestock without synthetic inputs.

Organic farmers must abide by rigorous **organic standards** overseen by the U.S. Department of Agriculture and go through a third-party certification process every year to prove that they are complying with the standards.

AN ECONOMIC BOON TO FARMERS

Organic farming is not just a win for the **environment** and **consumers**. It can be quite profitable for farmers who go through the three-year federal certification process because the prices they receive for certified organic products are often significantly higher than those for conventional crops. This difference in price is commonly referred to as the organic price premium.

Under certain circumstances, producers can even save money on daily on-farm expenses by farming organically. However, the promise of expanded market opportunity alone has not been enough of an incentive to encourage a significant number of farmers to transition to organic.

From **2011 to 2014** the price premium for organic corn, wheat and soybean growers was quite significant. Even as corn prices returned to historic averages after their spike in 2012, the difference between organic and conventional corn in 2014 ranged from \$8 to \$10 a bushel. For soybeans, the organic price premium was about \$15 to \$20 per bushel. Between 2011 and 2013, the price premium for organic wheat was about \$2 to \$6 per bushel.

Price premiums for organic commodities remain significantly higher than conventional prices. USDA's **mid-August 2016 report** put organic feed corn at \$7.62 per bushel and organic soybeans at \$17.63 per bushel. Compare that with the \$3.25 and \$9.90 per bushel that farmers **expected to receive** for conventional corn and soybeans, respectively. The organic price is more than double that

of conventional for corn and nearly 80 percent higher for soybeans. Organic soybean meal, primarily used as animal feed, was valued roughly 243 percent higher than conventional soybean meal.

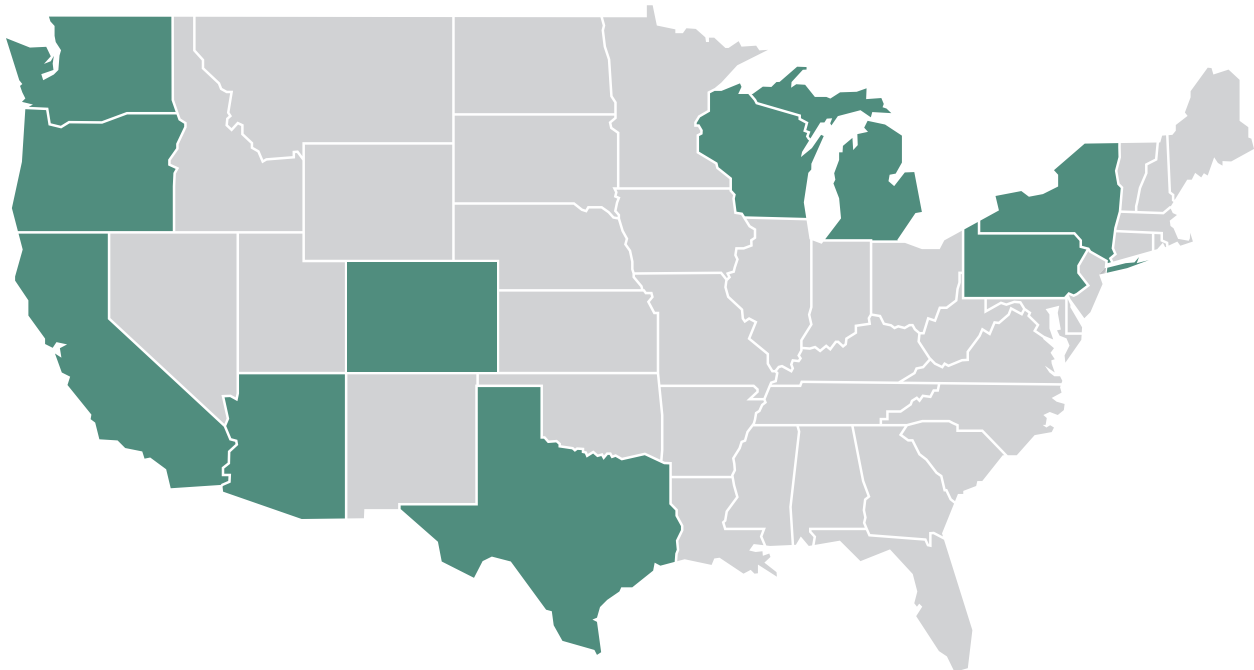
The **USDA's Economic Research Service found** that average operating costs for organic corn producers were 29 percent less than those of conventional corn producers. This is largely because conventional corn growers pay significantly for genetically engineered seeds, synthetic fertilizers and chemical pesticides that organic producers don't use. After factoring in total operating costs—including labor and organic seeds—and capital costs, organic corn production costs \$50 less per acre than conventional production.

Examining data from 2010, the researchers found that despite the additional costs of organic production, organic corn producers would likely see a profit margin of 56 cents to more than 90 cents a bushel. Another one of the key takeaways from their **analysis** was that producers of some organic crops are less likely to work off-farm jobs, even though they farm fewer acres.

SNAPSHOT OF THE U.S. ORGANIC INDUSTRY

Over the past two decades, organic food sales have enjoyed nearly double-digit growth every year. The Organic Trade Association **estimates** that in 2015 total organic sales in the U.S. hit a new record of \$42.3 billion, up 11 percent from the previous year's record level. The association estimates that sales of organic food now account for nearly 5 percent of total food sales nationwide, with almost 13 percent of the produce sold being organic.

FIGURE 1: TOP 10 STATES IN ORGANIC SALES, 2015



State	\$ Million
California	2,436
Washington	626
Pennsylvania	332
Oregon	269
Wisconsin	222
New York	221
Texas	210
Michigan	187
Colorado	155
Arizona	129

Source: USDA NASS 2015 Organic Survey

According to the USDA, between 2004 and 2010 the share of organic sales for most products increased. Foods commonly fed to children like organic spinach, granola, strained baby food and carrots saw the fastest growth. In 2010, organic spinach accounted for roughly 40 percent of all retail spinach sales.

The **2015 Organic Survey** by the USDA's National Agricultural Statistics Service showed the 12,818 certified organic farms in the U.S. sold a total of \$6.2 billion in organic products that year. The number of certified organic farms increased by almost 18 percent between 2008 and 2015, even though the number of acres increased by only about 6 percent, from 4.1 million acres to 4.36 million acres. Total organic sales almost doubled between 2008 and 2015. In 2015, California led the nation with \$2.4 billion in organic sales, followed by Washington and Pennsylvania.

The organic boom has not just been good for organic farmers and businesses. It has also generated downstream economic benefits for organic hotspots—counties with high levels of organic production and activity. A **recent paper** by Dr. Edward Jaenicke, an agricultural economist at Penn State, identified 225 U.S. counties as organic hotspots. He found that organic

activity in these counties boosted median household income by more than \$2,000 while lowering a county's poverty rate by as much as 1.35 percent.

FALLING BEHIND IN THE GLOBAL ORGANIC RACE

Despite the rapid growth of the organic industry and the United States' position as the global leader in production of crops like corn and soybeans, the number of organic farms in the country has struggled to keep pace with consumer demand.

According to the USDA's most recent **Census of Agriculture**, in 2012 roughly only 0.6 percent of American farms and farm acres were classified as organic. In 2011, organic corn acres were 0.3 percent of the total, wheat was 0.6 percent, rice was 1.8 percent and soybeans were 0.2 percent. In the USDA's **2015 Organic Survey**, the share of farms and acres increased slightly

to 0.66 percent. By comparison, more than 5 percent of **European farmland** is in organic production.

In **November 2016**, the U.S. boasted an impressive trade balance of \$4.56 billion. But when it comes to organic production, the U.S. is running a deficit. Many of the most heavily imported organic products tend to be foods grown in tropical and sub-tropical climates, such as coffee, bananas, olive oil and avocados. But some organic staples, such as soybeans and corn, are ideally suited to U.S. climates and could see far greater domestic production with the proper encouragement.

The gap between supply and demand means many American organic food companies have turned to foreign suppliers to meet demand for staples like soybeans, corn and rice. **According to analysis** by the Organic Trade Association of data from the

TABLE 1: ORGANIC SOYBEAN IMPORTS BY COUNTRY (IN \$1,000)

Rank	Country	2012	2013	2014	2015
1	India	12,729	29,819	74,365	77,818
2	Ukraine	0	0	16,608	71,856
3	Argentina	7,276	8,681	14,183	26,055
4	China	38,923	48,472	39,523	20,867
5	Canada	29,748	18,603	16,996	19,026
6	Turkey	167	387	11,654	12,966
7	Romania	166	2,826	0	5,142
8	Russia	0	35	254	2,903
9	Netherlands	631	0	2,091	1,025
10	Uruguay	0	447	131	766
	<i>Remaining countries</i>	536	966	8362	1752
	Grand total	90,177	110,237	184,168	240,175

Source: EWG, from the **USDA Foreign Agricultural Service's Global Agricultural Trade System**

TABLE 2: ORGANIC CORN IMPORTS BY COUNTRY (IN \$1,000)

Rank	Country	2011	2012	2013	2014	2015
1	Romania	0	0	545	11,604	53,460
2	Turkey	0	0	0	6,797	36,355
3	Argentina	0	0	21,282	3,677	10,303
4	Canada	0	0	1,826	6,420	7,436
5	India	0	0	0	684	2,652
6	Netherlands	0	0	0	6,519	2,217
	Remaining countries	0	0	12,966	0	290
	Grand total	0	0	36,620	35,700	112,712

Source: EWG, from the USDA Foreign Agricultural Service's Global Agricultural Trade System

USDA's Global Agricultural Trade System, in 2014 the U.S. imported roughly \$1.2 billion worth of organic products. For comparison, organic exports were roughly \$550 million.

In 2015, the U.S. imported roughly \$240 million worth of organic soybeans, making soybeans the second-leading imported organic product behind coffee. The top suppliers of organic soybeans to the U.S. were India, Ukraine, Argentina, China and Canada, with India and Ukraine contributing over 60 percent of the total. By comparison, the U.S. had only \$72 million in organic soybean sales that year.

Beginning in 2015, the U.S. saw a big spike in the amount of imported organic yellow dent corn, also referred to as field corn, used predominantly to feed organically raised livestock. Prior to 2013, the U.S. did not import much in the way of organic corn. But in 2013 and 2014, the U.S. began importing tens of millions of dollars worth of organic field corn. In 2015, the U.S. imported over \$112 million of organic corn with the lion's share coming from Romania, Turkey and Argentina.

It is widely cited that California produces as much as 80 percent of the world's almonds, yet according to USDA the U.S. imported \$58 million worth of organic almonds in 2015, largely from Spain and Italy. With regards to imports of organic rice, the U.S. averaged \$25.7 million in imports between 2011 and 2015, with the vast majority coming from Thailand and India. Meanwhile, despite large production volumes of organic apples in the U.S., imports of organic apples grew from roughly \$5.7 million in 2011 to \$67.7 million in 2015—an increase of more than 1,000 percent.

As nations like Russia, Romania and China continue to expand organic production, the U.S. will need to get serious about investing in growing the number of organic farmers or run the risk of American farmers falling further behind in the international marketplace. This raises a fundamental question: Why should the environmental, economic and public health benefits of organic farming be realized in other countries when we could be meeting the rising demand for organic food here at home?

BARRIERS AND CHALLENGES FOR EXPANDING ORGANIC PRODUCTION

To better understand why U.S. organic production lags behind that of other countries, it is important to look at the financial, institutional, cultural and technical barriers that prevent growers from transitioning to organic in greater numbers.

Financial Hurdles to Transition

Moving to organic production systems often carries upfront costs during the three-year transition period. However, the federal government does not offer dedicated or specific financial assistance to farmers transitioning to organic. Instead, growers wanting to transition to organic must tap into a patchwork of state and federal programs to meet their financial and technical needs.

States such as **Minnesota** do offer some financial assistance to help growers transition, and federal programs managed by the USDA's **Natural Resource Conservation Service** and **Farm Service Agency** are applicable to growers who would like to transition to organic. However, most programs have been designed with certified organic producers, not transitioning producers, in mind.

In the private sector, many companies are offering transitioning growers a transitional price or long-term contract for their product. Others are **pooling their resources** to finance transition costs for growers and some certifiers, such as **CCOF** in California, are certifying products as Certified Transitional.

In contrast, many European nations have been able to expand organic acres by offering assistance through organic transition support programs. In fact, early studies indicated that European transition subsidies could increase the organic farming sector by 300 percent.¹ These subsidies not only provide financial assistance for growers during the transition period but also send a signal to farmers about support for organic production systems.

Labor- and Knowledge-Intensive Farming

Many conventional producers resist transitioning to organic because organic methods tend to be more **management- and knowledge-intensive** than those of conventional farming. **Craig Chase and his Iowa State colleagues** suggest that the likely constraint to converting to organic production is the increase in management it requires.

Organic farmers rely more heavily on labor, farm management and ecological farming practices to manage nutrient needs, weeds and pests. Balancing complex organic crop rotations, weed and pest management, and maintaining soil health and nutrients requires greater planning and more hours of fieldwork. Organic crop producers must have an in-depth understanding of how to build soil fertility and manage their particular nutrient needs through the use of cover crops, crop rotations, compost and animal manure.

Organic dairy and livestock producers must overhaul how they manage their herds, from their disease prevention strategies to their feed sources. Therefore, organic dairy and livestock producers must have a greater understanding of pasture-based grazing

systems and organic feed to provide animals with adequate nutrients while at the same time conserving natural resources. Organic producers must be able to select breeding stock best suited for their region and operation, know how to manage their herds to prevent disease, and raise their animals in a way that reduces stress and meets the rising bar for animal welfare.

Loss of Seed and Animal Diversity

As organizations like the **National Organic Coalition**, **Organic Seed Alliance** and others have noted, the federal government has largely stopped funding “classical” breeding of seeds and animals that are intended to remain in the public domain. Instead, most land grant universities rely on the use of techniques like genetic engineering and prioritize research that can be patented. Therefore, it has become increasingly difficult for farmers to access high-yielding seeds and breeds that are adapted to local conditions and designed with organic systems in mind. While companies like **Clif Bar and Organic Valley** are trying to reverse this trend by endowing organic breeders at land grant universities, expanded federal support will be needed to ensure that farmers who want to transition to organic are able to find the highest quality, locally adapted seeds and breeds for their operations.

NOW IS THE TIME TO EXPAND ORGANIC PRODUCTION

Increasing organic acreage in the U.S. is one of the best hopes for meaningfully expanding market opportunities for American farmers, while at the same time lowering the environmental footprint of agriculture and providing consumers with

healthy food. This would better position America’s farmers to meet the ever-growing demand for organic food and be a boon to growers who have seen conventional commodity prices for corn, soybeans and wheat slide back to historic averages.

Funding for organic farming has traditionally centered around research, data collection, conservation and extension to meet the technical, scientific and agronomic needs of producers, but in recent years this has not always provided a clear enough runway for farmers who want to transition to organic. To do this, Congress should reduce obstacles to organic transition through modest changes to conservation programs.

Environmental Quality Incentives Program Organic Initiative

The **Environmental Quality Incentives Program**, or **EQIP**, **Organic Initiative**—overseen by USDA’s NRCS—provides financial assistance to organic producers and those transitioning to organic who want to implement conservation practices on their farms. Financial assistance under EQIP is tied to a specific conservation practice, such as planting cover crops or developing an organic transition plan. Payments come after the conservation practice has been established and the producer works out a plan with the NRCS.

But financial assistance to participants in the Organic Initiative program is limited to \$20,000 per fiscal year and no more than \$80,000 over a rolling six-year period, whereas payments made through the general EQIP pool are capped at a much higher level—\$450,000 between 2014 and 2018. In addition to the payment cap discrepancy, financial assistance through the Organic Initiative represents a fraction of total EQIP obligated funds.

According to the **National Sustainable Agriculture Coalition**, in 2012 the \$13.2 million in financial assistance provided through the Organic Initiative represented just 1.34 percent of total EQIP financial assistance. Congress should eliminate the separate payment limit for the Organic Initiative program so that producers looking to use this program as they transition to organic are not impaired by a payment cap far below the levels enjoyed by participants in the general EQIP pool.

Land Exiting the Conservation Reserve Program

The **Conservation Reserve Program, or CRP**, is a federal program managed by the USDA's Farm Service Agency that pays a farmer or landowner a yearly rental payment in exchange for removing environmentally sensitive land from production and planting crops that improve environmental quality. Nearly 24 million acres of land are **currently enrolled** in the CRP.

Land coming out of the CRP that is well suited to farming offers the organic sector a unique opportunity to bring land into organic production without the normal three-year transition period, as long as land owners have not used any prohibited methods or substances on those acres. For instance, between 2007-2016 **nearly 13 million acres** exited the program. While some of those CRP acres may have gone into organic production, most did not. New farmland will continue to be enrolled over the next few years, however the Farm Service Agency is anticipating a higher-than-average exit of 4.3 million acres per year from the CRP between 2020 and 2023, compared to the 2 million acres in average annual exit between **2009 and 2015**.

Congress should create incentives to ensure that farmable land coming out of the CRP is brought into organic production. One way Congress could help facilitate the transition process would be to expand the **CRP Transition Incentives Program** to make the transition payments available through this program available to any farmer wishing to transition to organic, not just some of them, as NSAC has described. Congress should also consider creative ways to augment the **one-time payments** available through CRP Performance Incentive Payments and Signing Incentive Payments so that they can be available to growers transitioning CRP land into organic production.

Conservation Stewardship Program Should Focus on Transition

The **Conservation Stewardship Program, or CSP**, is the largest federal conservation program by acreage in the U.S., with 70 million acres of farm and forest land currently enrolled. Unlike EQIP contracts, CSP contracts are awarded to producers for five-year periods and producers receive an annual land use payment for the environmental benefits they produce for all five years. On top of annual payments, producers receive technical assistance from NRCS staff to help them address their conservation challenges and meet their CSP contract requirements.

To be accepted, producers must demonstrate that they are already employing certain conservation practices on their farms, as well as propose additional conservation practices, or enhancements, that they will employ. If they are awarded a contract, producers are then paid yearly to maintain and improve on their environmental practices as well

as adopt the enhancements agreed to in the contract. CSP payments are capped at \$40,000 a year for individuals and \$200,000 for the life of the five-year contract—\$80,000 a year and \$400,000 for the life of the contract for joint operations. A supplemental payment is also available for producers willing to plant resource-conserving crop rotations. For fiscal year 2016, the NRCS has made available more than \$150 million for producers to enroll 10 million new acres through the CSP.

The program is designed with working farmland in mind and enrollment covers the entire farm, as opposed to other conservation programs that may focus on keeping farmland out of agricultural production or assisting producers with project-specific conservation needs. While it is possible for a CSP contract to be awarded to a producer who happens to be transitioning to organic, there is no dedicated organic transition funding nor a specific element within the program directed solely to organic transition.

Given both the mechanics and the mission of the program, the CSP is ideally suited for facilitating the transition to organic farming systems. Congress should direct the NRCS to better utilize the CSP for driving transition.

Below is a blueprint for doing that.

Putting CSP to Work for Farmers Transitioning to Organic

Many elements of the CSP make it ideally suited for organic transition. When producers begin to transition to organic they halt the use of prohibited materials like synthetic pesticides and fertilizers. Those practices among others

could fulfill the CSP requirement that applicants employ existing conservation practices and continue those conservation practices during the lives of their contracts.

The CSP also includes a wide array of enhancements that are critically important during the organic transition period such as planting cover crops; using nitrogen provided by legumes, animal manure and compost; using non-chemical pest management for livestock and field crops; mulching and composting; alternating crop rotations; and transitioning crop land to grazing land. These enhancements are currently available to growers looking to enroll in the CSP and the NRCS has already grouped many of these enhancements into “bundles” for organic producers. However, there are no dedicated organic transition bundles within the CSP intended to meet the needs of a producer transitioning to organic production and Congress should remedy that.

In addition to annual land use payments to assist producers with organic practices, technical assistance would help address the knowledge and technical barriers to transitioning that were previously mentioned. Meanwhile, the five-year contract period could help producers defray some of the costs associated with the three-year transition period, as well as the two years after certification when yield, soil health and conservation needs are still being addressed.

To make this program successful, Congress should learn from the EQIP Organic Initiative and insure that organic transition CSP contracts are treated the same as

general CSP contracts. As a condition of their contracts, producers should be required to complete the USDA organic certification process during the term of their CSP contracts. Congress should also make clear that funding for this program is in addition to expanding resources for other organic programs that could help drive organic transition like those aimed at research, data collection and extension—not in lieu of it. Lastly, Congress should provide the Secretary with the authority to cap enrollment of organic transition bundles per year if the Secretary determines that such a cap would be necessary to mitigate any significant erosion of organic commodity premiums.

CONCLUSION

The organic trade deficit presents organic businesses, farm groups and Congress with an opportunity to expand market opportunities for U.S. farmers, while at the

same time addressing the public health and environmental footprint of American agriculture. If we are to meet the growing demand for organic food in the U.S. with domestic supply, the federal government will need to play more of a role in expanding the number of organic farms and farm acres in this country. Congress should begin by embedding organic transition into existing conservation programs. Meanwhile, Congress and the administration could make better use of tax incentives, small business grants and existing loan programs to also facilitate transition.

¹ N.H. Lampkin and S. Padel, *The Economics of Organic Farming—An International Perspective*. University of Wales, Aberystwyth, UK: CAB International, 1994, 467.