RODALE INSTITUTE™

# ORGANIC FARMING ECONOMICS

A RODALE INSTITUTE GUIDE TO FINANCIAL SUCCESS FOR ORGANIC PRODUCERS

“One of these fine days the public is going to wake up and will pay for eggs, meats, vegetables, etc., according to how they were produced. A substantial premium will be paid for high quality products such as those raised by organic methods.” *—J.I.Rodale*

Organic Farming and Gardening ***magazine, Issue One, May 1942***

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This material is based upon work supported by the William Penn Foundation under Grant Award Number 188-17. The opinions expressed in this publication are those of the author(s) and do not necessarily reflect the views of the William Penn Foundation.

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# 1 WHY WE GROW

## An introduction to the financial opportunities and challenges for farmers transitioning to organic.

Organic farmers invest in their most valuable asset, soil, with cover crops that supply nutrients for the next season's cash crops.

Organic farming is the oldest profession. That sounds like a joke, but it's a simple truth. Before there were food factories, agricultural chemicals, or even money, people sustained themselves by raising crops and tending livestock. Today, less than 2 percent of Americans are farming, and even fewer own and work their own land.

The good news is that more than 2,000 farms across the US were in the process of transitioning to certified organic practices, according to the USDA 2022 Census of Agriculture, bringing the total number of certified organic farms to more than 17,000. [1] The number of new farmers under 45 years old increased by 7 percent between the 2017 census and the 2022 one. Many, maybe most, of the new farmers are rejecting the industrial agriculture model, propped up by public subsidies, and embracing smaller, more manageable operations and using organic practices. That's more than a philosophical choice; it's smart business. Diversified, organic farming is more profitable for producers than conventional agriculture.

One reason is that sales of certified organic products are booming, reaching $70 billion in 2023, as consumers become more aware of the benefits to themselves and the environment. Younger people, especially in the group known as Gen Z (born from 1997 to 2012), are concerned about sustainability, transparency, animal welfare, and their own health when making buying decisions, according to a report from the Organic Trade Association.[2] Certified organic products meet those expectations, so the demand seems likely to continue growing.

Certified organic farmers earn substantial premiums for their products over similar items raised conventionally. For commodities such as wheat and corn, organic growers can get more than twice the price that is paid for conventional grains. Organic dairy products sell for about 15 percent more. And consumers have shown willingness to pay extra, when possible, for organic options.

The Rodale Institute Farmer Training programs prepares students to run profitable agriculture operations.

The premiums offset the costs of the certification process and other expenses that organic producers must budget for. The USDA has a variety of programs to support new and transitioning organic farmers, including help with certification fees and grants for conservation practices. Private sector funding for organic producers has grown along with the marketplace, providing farmers with more access to valuable capital.

Rodale Institute's decades-long Farming Systems Trial compares organic and conventional methods on many criteria, such as financial results. The results, based on market pricing, show that raising certified organic commodity crops is more profitable for farmers than raising the same crops conventionally. Diversified organic operations can be more profitable even without the price premium for their crops.

On the following pages, you'll find more details about the economic benefits and resources available to new and transitioning organic farmers and ranchers. You'll learn about how to find public and private funding and crop insurance just for organic producers. You'll see the basic steps of the certification process, and you'll meet a couple farmers who unlocked their path to economic security by transitioning their operations with assistance from Rodale Institute Organic Consulting.

Organic farming is an honorable profession and can be a viable way to support a family. Use the information in this guide to help you achieve your financial goals while bringing healthy food to your community.

# 2 EARNING POTENTIAL

## Market opportunities and rewards for farmers during and after transition.

Transitioning to organic farming is an investment of time, labor, and other resources that may be recouped in a variety of ways. Organic farm products are in greater demand than ever before, and consumers are willing to pay higher prices for them. While the costs of producing organic farm goods may be more than the costs of producing conventional goods, the net revenues for certified organic producers often exceed those of nonorganic operations.

**Soaring sales.** US organic farm sales have grown from an estimated $609 million in 2002, when the National Organic Program was implemented, to $11 billion in 2021, according to a USDA report published in 2023. [3] While organic acreage was still just 1 percent of US farmland in 2019, sales of organic farm products accounted for almost 3 percent of US farm receipts. "US organic farms continue to have higher production costs than the average of all US farms but also higher average total sales and net cash income," the report notes.

**Growing demand.** After adjusting for inflation to 2021 dollars, US retail sales of organic food have risen more than five times since 2002, and in 2023 they reached more than $70 billion. Organic food sales continue to grow at a faster rate than overall food market sales. [4]

**Expanding markets.** Organic farm products are fully in the mainstream. More than 50 percent of organic food sold in 2021 was purchased at conventional grocery retailers, including Walmart and Target. [5]

**Premium prices.** The return on many organic farm products dramatically exceeds that on goods from conventional operations. Organic dairy products are among the most popular categories for consumers in the US, now representing 8 percent of total milk and egg sales. The average retail price in February 2025 for a gallon of organic milk was $4.81 versus $3.49 for conventional, says a report from the USDA's Agricultural Marketing Service. [6]

Demand for organic field crops grown for livestock feed and processed foods keeps their prices higher than those of conventional crops too. Organic corn producers took in 241 percent more per bushel than conventional corn, according to FINBIN data gathered between 2016 and 2020 by the Flanagan State Bank of Illinois, a farm loan institution. [7] Flanagan reported that organic wheat earned a 250 percent premium, organic soybeans a 145 percent premium, and organic hay a 128 percent premium compared with the prices of their conventional counterparts, during the same period. US Census of Agriculture data that includes farm revenues and costs indicates that for most crops, organic farming prices and practices are profitable while conventional ones lead to a net economic loss. (See tables on page 7).

**Higher income.** Even more important, organic producers are netting higher profits from their crops. The Flanagan reports highlighted that organic corn crops earned 163 percent more income per bushel than conventional crops. Organic wheat generated 182 percent more income per bushel, and organic soybeans 145 percent more, compared with the returns of the conventional crops.

While organic yields are sometimes lower than conventional yields, the loss in production is typically between 9 and 25 percent and the price premiums provided for organic crops result in higher gross revenues despite some production loss. The long-term Farming Systems Trial at Rodale Institute has found comparable yields of corn and wheat between organic and conventional crops while organic soybeans are on average 13 percent lower. [8] The graphs below show that the expenses related to organic farming practices (figure 2) are similar to, or even slightly less, than conventional producers spend. Organic farmers earn a price premium (figure 1) that results in higher profits than those of conventional operations.

**Middle step.** While farmers must wait three years after they begin the process of transitioning to label their products as organic, USDA-approved certifying agents, such as QAI, are offering farmers a plan that includes "certified transitional" labels. These have several levels, including "contains transitional ingredients." Products with these labels may not earn the same premium as certified organic products, but it can be enough for some buyers to support a higher cost.

## LEARN MORE

**Flanagan State Bank**
flanaganstatebank.com/organic

**NSF: QAI**
nsf.org/consumer-resources/articles/certified-transitional

# ECONOMIC ANALYSIS OF CONVENTIONAL VS. ORGANIC FARMING

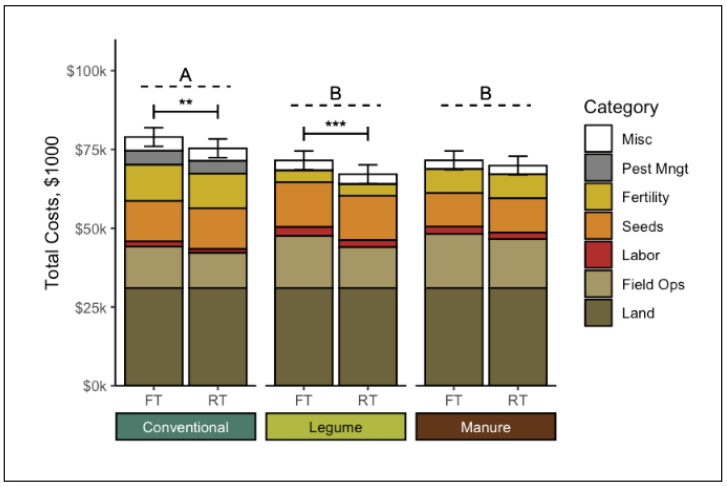
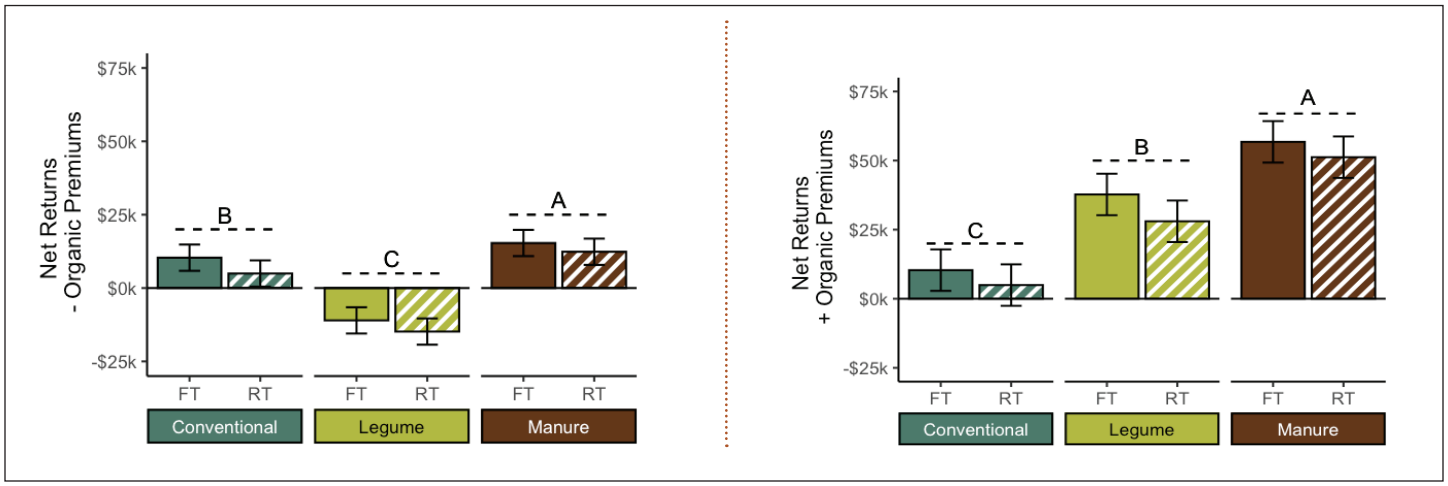



**Figure 1 (left):** Average annual costs for each representative farm with different tillage x system treatments. Total costs include land (brown), field operations (variable and fixed pre harvest and harvest activities: tan), labor (dotted red), seeds (horizontal yellow lines), fertility inputs (diagonal gold lines), pest management inputs (vertical gray lines), and all other costs (interest, insurance, miscellaneous expenses: white). Error bars are standard errors for total costs within each tillage x system treatment.

**Figure 2 (below):** Average annual gross revenue and net returns for each representative farm with different tillage x system treatments (from 2008 to 2013, 2016 to 2020). Gross revenue (A) with and (B) without organic premiums, net returns (gross revenue - total costs) (C) with and (D) without organic premiums. Error bars are standard errors.

Different letters indicate significant differences across systems (Tukey HSD, $P < 0.05$), while asterisks indicate significant differences between tillage treatments within each system (at $P < 0.05$).



# 3 EXPENSE ACCOUNTING

## The fixed and variable costs of organic farming.

Reduced fertilizer and pesticide expenditures can offset higher labor costs in organic systems.

Certified organic agriculture comes with some expenses that differ from those of conventional operations. Organic farmers must pay for certification when they apply and for ongoing annual renewal, but these costs are often minimal compared to other operating expenses, and some states may offer a reimbursement program. The reduced fertilizer and pesticide expenditures organic farmers typically have can offset the higher labor costs that are common in organic and transitioning farms. Here are details about some of the expenses organic and transitioning producers need to prepare for.

**Certification costs**. Remember that the USDA doesn't inspect or certify organic operations itself. The agency sets the standards, but the process of verifying compliance is conducted by independent, third-party organizations. They set their own fees, typically based on the size, type, and complexity of the operation. Certification costs generally range from a few hundred to several thousand dollars. In most cases, farmers pay an initial application fee, annual renewal fee, assessment on annual production or sales, and inspection fees. These fees are not assessed during the transition period but rather when the farm has submitted an application for organic certification. Some states have reimbursement programs to offset the cost of certification.

**Labor needs.** Because organic farmers rely on mechanical methods to manage weeds, they tend to spend more on labor than do conventional operations, which primarily use synthetic herbicides. Note that federal immigration policy and declining interest in farmwork among younger generations have created an agricultural worker shortage of both skilled and unskilled labor, which increases demand for workers and the costs of hiring them.

**Regulatory compliance.** All types of agricultural producers must comply with state and federal regulations, and certified organic producers have an extra level of regulatory compliance to manage in order to meet the federal organic standards. This may result in the need for additional or new recordkeeping and reporting systems.

**Production costs.** Well-run organic operations tend to be more profitable than conventional ones, but the expenses are often higher. A survey of the five-year (2016 to 2020) average of farming costs found that organic farmers incur corn production expenses that are 109 percent higher than those incurred by conventional growers, and they spend 127 percent more on growing soybeans. Production costs for organic wheat and hay are 146 percent higher and 112 percent higher respectively, according to "Organics Make $ense," a report by Rich Ritter of Flanagan State Bank. [9] Another study, which was conducted at Rodale Institute and reviewed costs and revenues from 2012 to 2020 in different farming systems, found similar results, but the costs in the conventional grain crop farming system were higher than those in a diversified organic farming system that used composted livestock manure as a source of fertility. [10] The higher costs in the conventional system resulted from the use of chemical inputs such as fertilizer, pesticides, and genetically modified seeds, all of which have increased in price recently. (See figure 2 on page 7).

The highest-cost activities for organic farms include operating the preharvest machinery for labor-intensive tasks such as plowing, disking, and harrowing, cultivating fields and rows, sowing seeds, and applying compost or manure. Conventional growers have significantly higher seed, fertilizer, and chemical treatment costs than organic growers, but they spend less on fuel and repairs, as well as labor. Organic producers tend to have higher fuel and capital costs because they use more field operations, particularly tillage, to manage weeds. So while organic production may come with higher costs, but, as noted on page 7, organic crops sell for premium prices, which results in higher profits for farmers.

**Storage needs.** In some areas, the infrastructure for the organic food system still lags behind the production of organic crops. That means growers often need to pay a premium for certified organic grain storage or build their own. Existing bins will require cleaning out in order to eliminate contamination from previous conventional crops.

**Transitional period.** Farmers must implement organic practices for three years after the date of the last application of restricted materials before they can be certified. During that time, the crops may be sold as "certified transitional" in some cases, but more often as just conventional. During this transitional period, producers are taking on the higher costs of organic production and lower yields without earning the premium that comes with certification. Ritter's report estimates a $100 to $200 per acre loss for commodity grain growers during the transition. The losses will be recouped over time, but he recommends that farmers set aside an emergency fund when they begin the certification process. Careful planning and growing crops that are more conducive to organic production can mitigate or in some cases eliminate those losses.

## LEARN MORE

**Understanding Organic Pricing and the Costs of Production:**
attra.ncat.org/publication/understanding-organic-pricing-and-costs-of-production

# 4 PUBLIC SUPPORT

## Government-supplied financial aid for organic and transitioning producers.

For more than 40 years, the Rodale Institute Farming Systems Trial (left) has generated agronomic and economic data that helps farmers, scientists, and policy makers understand the impact of agricultural practices. The Pennsylvania Department of Agriculture, led by Secretary Russell Redding (right), supports Rodale Institute research and farmer training programs.

The budgets for the USDA and its subsidiary agencies include a variety of programs designed to help organic and transitioning farmers and ranchers to manage the expenses of certification and responsibly care for the land.

**Cost share.** The USDA's Organic Certification Cost Share Program provides producers and handlers of agricultural products who are obtaining or renewing their certification with up to 50 percent of the certification costs paid during the program year, with a maximum of $500 per certification (set in 2020). The cost-share assistance can be used for expenses including application fees, inspection costs, user fees, sales assessments, postage, and more.

**Conservation coverage.** The USDA's Natural Resources Conservation Service (NRCS) has an Environmental Quality Incentives Program (EQIP) that provides financial and technical assistance to farmers who "implement practices and activities in their conservation plan that can lead to cleaner water and air, healthier soil and better wildlife habitat, all while improving their agricultural operations." EQIP grants are available to all producers, including organic and transitioning farmers. The EQIP Organic Initiative has a smaller budget, but it is focused exclusively on certified organic and transitioning operations. Grants through this initiative can fund a wide range of projects that are standard for organic producers, such as rotating crops, grazing plans, and establishing buffer zones between cultivated fields.

**Price protection.** To help organic producers navigate volatile pricing, the USDA's Farm Service Agency (FSA) offers marketing assistance loans. These provide interim financing to help organic growers meet cash flow needs so they aren't forced to sell crops when market prices are low. FSA offers loans to organic producers for land ownership, operating costs, or recovery from losses caused by natural disasters or quarantine. FSA also

supports infrastructure for organic producers with farm storage facility loans to build or upgrade storage facilities for eligible commodities, such as fruits, vegetables, and grains.

**Land management.** FSA's Conservation Reserve Program pays farmers annually for removing environmentally sensitive land from agricultural production and planting species that benefit the ecosystem. You don't need to be certified organic or in transition to participate, but these practices are common among organic producers even without the payments and may be a mechanism to manage the land without restricted chemicals during the 36-month organic transition period.

**Project grants.** The USDA's Sustainable Agriculture Research and Education (SARE) program provides grants to farmers to test new ideas through field trials, on-farm demonstrations, marketing initiatives, or other strategies. The projects must be focused on agricultural innovations that promote profitability; stewardship of the land, air, and water; and quality of life for farmers, ranchers, and their communities. The program's goal is to develop sustainable practices that other farmers can use. The maximum amount of the grants varies by region. In the Northeast region, the grants range generally up to about $50,000.

**Transition help.** NRCS has dedicated $70 million nationwide to the Organic Transition Initiative to assist producers with conservation activities and practices required for organic certification and may provide income reimbursement for dips in production during the transition period. The Organic Management Standard 823 (OMS 823), a new interim standard available through NRCS, provides conservation contracts to producers who are certified organic or in transition. The parameters of OMS 823 include managing and improving natural resources on land that's in and adjacent to organic production using methods that integrate cultural, biological, and mechanical practices that foster the cycling of resources, promote ecological balance, and conserve biodiversity. Producers can get three-to-five-year conservation contracts starting at $75 per acre for simple row crop operations above 1,000 acres, $210 per acre for simple row crop operations under 1,000 acres, and up to $2,100 per acre for farms raising specialty crops, fruits, and/or vegetables.

**Mentor system.** The USDA's Transition to Organic Partnership Program (TOPP) connects experienced organic farmers as mentors with producers transitioning to certified organic. Mentors must have at least three years of experience as certified organic farmers and have an understanding of the challenges and benefits of organic production and certification. The mentors can earn a $3,000 annual stipend—and more if mentoring more than one farmer or if bilingual. The program is free to transitioning farmers and includes in-depth, direct technical assistance with developing an Organic System Plan, setting up a recordkeeping system, and preparing for the first inspection.

## LEARN MORE

**Organic Certification Cost Share Program**
fsa.usda.gov/resources/programs/organic-certification-cost-share-program-occsp

**EQIP Grants**
nrcs.usda.gov/programs-initiatives/eqip-environmental-quality-incentives

**FSA Loans**
fsa.usda.gov/programs-and-services/farm-loan-programs

**Conservation Reserve Program**
fsa.usda.gov/resources/programs/conservation-reserve-program

**SARE Grants**
sare.org/Grants

**Organic Transition Initiative**
nrcs.usda.gov/programs-initiatives/eqip-organic-initiative

**Transition to Organic Partnership Program**
organictransition.org

# 5 PRIVATE FUNDING

## Corporate and nonprofit resources for farmers during and after the transition.

Farmers who want to transition to certified organic practices can access a wide range of funding resources that help mitigate the costs of conservation efforts, farm infrastructure, and other needs.

A wide range of investment and nonprofit groups are putting their money into supporting organic producers. Here is a sample of them. You can find a more comprehensive listing at the Regenerative Food Systems Investment forum (rfsi-forum.com).

**Aggie Bonds** are established through a federal-and-state partnership that allows private lenders to earn federal and/or state tax-exempt interest on loans made to beginning farmers. Aggie Bonds typically offer first-time farmers rates that are 1 to 3 percent lower than the rate of a commercial farm loan. The funds may be used to purchase farmland, equipment, buildings, and livestock. The loans are currently available in 16 states (AR, CO, ID, IL, IN, IA, KS, MN, MS, MT, NE, ND, OK, PA, SD, WI). Other states offer similar types of financial support through their own programs. The National Council of State Agricultural Finance Programs has collected links to various state beginning farmer loan programs and other useful information on its website at stateagfinance.org

**Agriculture Capital** invests in farmland and food infrastructure to encourage greater access to healthy food, restore habitats, revitalize rural communities, and mitigate the effects of climate change. It currently supports regenerative organic operations in California, Oregon, and Washington, accounting for more than 20,000 acres of farmland.

**Fair Food Fund** is a nonprofit engaged in "impact investing" that funds farmers and other local food entrepreneurs who "provide their communities with vital nourishment, economic opportunity, and environmental stewardship." It focuses on people who are often overlooked by traditional investors. To date, it has invested more than $700,000 in farmers growing in Michigan and the Northeast. [11]

**Food Animal Concerns Trust offers** Fund-a-Farmer grants to support humane, pasture-based livestock and poultry farmers. Eligible projects are awarded to farmers transitioning away from confinement, improving pastures, and generally improving the well-being of their animals. In 2024, FACT awarded 87 grants of up to $3,000 each.

**Foodshed Capital** prioritizes lending to low-income, BIPOC, female, immigrant, and LGBTQ populations, as well as other borrowers who have historically faced difficulty accessing capital through traditional lenders. It also focuses on producers who use regenerative practices, foster soil health and biodiversity, and provide nutrient-dense, culturally appropriate food for their foodsheds. Foodshed Capital partners with Rodale Institute in the administration of the BIPOC Farmer Micro-Grant Program.

**Iroquois Valley Farmland Real Estate Investment Trust** provides farmer-friendly leases and mortgages to organic operations. Since its founding in 2007, it has directed $95 million in investments to more than 65 farmers caring for 30,000 acres in 19 states.

**Mad Capital**, an affiliate of the nonprofit Mad Agriculture, offers loans to farmers for the costs of transitioning to organic, operating expenses, land acquisition, and equipment and infrastructure. Its Perennial Fund raised $10 million with 42 investors and has supported organic farmers tending about 31,000 acres, primarily in the Midwest.

**No Regrets Initiative** brings together the investment company Cienega Capital and the nonprofit Globetrotter Foundation to provide funding for regenerative organic farmers and ranchers. Launched in 2016, it has financed farms in many US states.

**Potlikker Capital** provides funding to stabilize and grow farming and ranching businesses that belong to BIPOC operators. It offers resources and assistance in implementing regenerative organic farming practices and offers an agroecology/agribusiness internship program to develop the next generation of American BIPOC farmer entrepreneurs.

**SLM Partners**, an asset management firm, invests in farmland and partners with local operators to build regenerative, resilient, and profitable land systems. Founded in 2009, the firm manages more than $600 million that finances organic farming in the US, forestry and orchard crops in Europe, and mixed- and carbon-farming projects in Australia.

## LEARN MORE

**Aggie Bonds: National Council of State Agricultural Finance Programs**
stateagfinance.org

**Agriculture Capital**
agriculturecapital.com

**Fair Food Fund**
fairfoodnetwork.org/what-we-do-old/fair-food-fund-entrepreneurs

**Food Animal Concerns Trust**
foodanimalconcernstrust.org/factprogramsforfarmers

**Foodshed Capital**
foodcap.org

**Iroquois Valley Farmland REIT**
iroquoisvalley.com

**Mad Capital**
madcapital.com

**No Regrets Initiative**
noregretsinitiative.com

**Potlikker Capital**
potlikkercapital.com

**Regenerative Food Systems Investment**
rfsi-forum.com

**Rodale Institute BIiPOC Farmer Micro-Grant Program**
rodaleinstitute.org/education/bipoc-farmer-micro-grants/

**SLM Partners**
slmpartners.com

# 6 PROTECTION PLANS

## Crop insurance for organic and transitioning producers.


Crop insurance helps protect farmers from losses due to natural causes and dramatic changes in market prices.

The federal government helps mitigate the risks in the business of agriculture by supporting farmers through crop insurance and related programs. Organic producers can access these resources, and new ones are available just for them. This summary will help you get started.

**Risk management.** The USDA's Risk Management Agency (RMA) administers a suite of tools that protect farmers and ranchers from a loss on their crops due to natural disasters or even a decline in the market price. Crop insurance is sold and serviced by private insurance companies, but it's regulated by the federal government. Farmers can design a risk management strategy that best fits their operation without having to price shop.

**Revenue protection.** Producers can insure their crops against yield losses due to natural causes, such as drought, excessive moisture, hail, wind, frost, insects, and disease, and revenue losses caused by a change in the harvest price from the projected price. Producers can select the amount of average yield they wish to insure. That may range from 50 to 75 percent (in some areas up to 85 percent). The projected price and the harvest price are determined in accordance with the Commodity Exchange Price Provisions and are based on daily settlement prices for specific futures contracts. The amount of insurance protection is based on the greater of the projected price or the harvest price. If the harvested plus any appraised production multiplied by the harvest price is less than the amount of insurance protection, the producer is paid an indemnity based on the difference.

**Contract pricing.** RMA sets the coverage level for organic crops. But certified organic farmers can add the contract pricing option to their policies. This allows them to substitute their individual contracted price in place of

RMA's set crop insurance price. Contract pricing gives farmers a higher guarantee without having to increase their coverage level. Using a contracted price allows organic producers to individualize crop insurance coverage for their operations. Most crops are eligible for coverage up to at least 1.5 times RMA's certified organic price, which is based on a factor of the conventional board price.

**Whole-farm coverage.** All the commodities on one farm can be covered by a Whole-Farm Revenue Protection (WFRP) policy. This program is for any farm with up to $17 million in insured revenue, including farms with specialty or organic commodities (both crops and livestock), or those marketing to local, regional, farm-identity preserved, specialty, or direct markets. Since this policy is based on revenue (rather than on yield), claims cannot be finalized until after taxes have been filed for that crop year. That means payments are more delayed than with the traditional crop insurance program.

**Premium assistance.** Producers who have insurance coverage on grain or feed crops in transition to organic or certified organic are eligible for RMA's Transitional and Organic Grower Assistance (TOGA) Program. It provides producers with crops in transition to certified organic up to 10 percentage points of subsidy for crop insurance costs.

**Small scale.** RMA's Micro Farm program is like a WFRP policy because it provides a risk management safety net for all commodities on a farm under one insurance plan. But this program is tailored for farms with up to $350,000 in approved revenue, including farms with specialty or organic commodities (both crops and livestock), or those marketing to local, regional, farm-identity preserved, specialty, or direct markets.

**Alternative crops.** Organic growers often raise unusual types of crops. Insurance is typically unavailable for crops that are not commonly grown in a region, but in areas where RMA does not normally offer coverage for a specific crop, a farmer can still get it by submitting a written agreement, which is a document requesting individual coverage for crops not insurable in that county. The documentation includes three years of crop history, a planting schedule, and the distance to the end market.

## LEARN MORE

**USDA Risk Management Agency**
rma.usda.gov

**Micro Farm Program**
rma.usda.gov/en/Fact-Sheets/National-Fact-Sheets/Micro-Farm-Program

**Revenue Protection**
rma.usda.gov/en/Policy-and-Procedure/Insurance-Plans/Revenue-Protection

**Whole-Farm Revenue Protection**
rma.usda.gov/about-crop-insurance/fact-sheets/whole-farm-revenue-protection

**Organic Agronomy Training Service: "Crop Insurance for Organics" Webinar**
courses.organicagronomy.org/p/crop-insurance-for-organics

7

# CASE STUDIES

## The financial impact of transitioning to organic for two operations.

**Rodale Institute organic consultants have helped dozens of operations across the country manage all aspects of the process of earning and expanding organic certification. The consultants offer guidance in financing, marketing, and recordkeeping, as well as daily farming practices and crop planning. Here are enlightening stories from two farms that have made the transition to organic, Springwood Organic Farm and Moon Valley Farm (page 18).**

Transitioning to a certified organic operation has kept a family-owned dairy operation solvent.

## SPRINGWOOD ORGANIC FARM, KINZERS, PENNSYLVANIA

### FARM FACTS

Springwood Organic Farm, Kinzers, Pennsylvania

712 acres (232 owned, 480 leased)

Products: Liquid milk, cheese, beef, turkeys

Herd size: 418

Certified organic since 1997

In the 1980s, Springwood Farm maintained a herd size of about 175 head with 80 daily milking cows. It was producing around 14,000 cwt (an industry term for 100 pounds of fluid) of milk annually, which was selling for $12.50 per cwt on average. This was the highest volume of milk the farm had ever produced; however, the operation continued to lose money due to high feed and animal costs. The low price per cwt and the annual revenue of $183,000 left the operation unprofitable.

In 1994, the family operating Springwood decided to seek organic certification. During the three-year transition period, the farm maintained the $12.50 per cwt price for its milk, but milk production decreased dramatically. The farmers attribute this to feeding the herd more on pasture and reducing commercial grain feed. To counteract the loss in production, the dairy increased the milking herd. This didn't generate more milk profits, but it did increase the expenses for organic feed. Like many transitioning farmers, Springwood was incurring the costs of organic production without earning the price premium that consumers pay for certified organic milk. Profits from the farm's organic turkey operation sustained it through transitioning the dairy.

Springwood found renewed success by pasturing its dairy herd and selling its milk as "Grass-Fed Organic," while increasing its herd milking rate.

In 1997, Springwood obtained organic certification and began selling milk to Natural by Nature, a regional organic distributor. Springwood immediately began earning $17 per cwt. Conventional milk prices at the time were $13.43 per cwt, giving Springwood a 27 percent premium on its organic milk.

After becoming certified organic, Springwood began transitioning its herd to 100 percent pasture raised. In 2013, the operation was certified "Grass-fed Organic" by Pennsylvania Certified Organic, allowing Springwood to compound its price premium with two levels of certification. The price for its milk reached $39.34 per cwt in 2022.

Herd milking rates are critical to dairy profitability. When the percentage is low, that means a high number of head within the dairy herd are absorbing costs but not producing milk and generating income. At Springwood, the herd milking rate decreased to 43 percent in 1997 after the farm became certified organic. The price premium for the milk may have helped buffer Springwood from the severe financial issues that are typically associated with a low percentage. By 2022, Springwood had dramatically increased the size of the herd, as well as increased the milking rate to 71 percent, demonstrating increased efficiency over time.


For Moon Valley's Emma Jagoz, organic certification became a vital marketing tool to reach new customers.

# MOON VALLEY FARM, WOODSBORO, MARYLAND

## FARM FACTS

**Moon Valley Farm, Woodsboro, Maryland**

**70 acres, 25 acres certified**

**Products: Specialty and staple vegetables and herbs**

**Certified organic since 2018**

Moon Valley Farm is a 25-acre certified organic diversified vegetable and herb farm operated by Emma Jagoz. The farm sells to customers in the Maryland; Washington, DC; and Northern Virginia areas directly to consumers through a CSA and an online farmers' market, to chefs, and wholesale to institutions. The farm's CSA shares also include aggregated products from other local producers.

Moon Valley transitioned different parcels of land to organic, starting with multiple small, rented plots comprising 15 acres. These first parcels were certified in 2018, and more of the farm earned certification in 2020. Jagoz had always farmed under organic standards, even before the operation was certified. Because of this, the farm's cost of materials and supplies measured as a percentage of production sales (also known as the cost of goods sold, or COGS, percentage) was not significantly greater during transition. The COGS percentage decreased from 8 percent in 2019 to 5 percent in 2020, possibly due to the efficiencies that came with increased scale. The farm's operating expenses increased from 14 percent in 2019 to 17 percent in 2020. This may be attributed to the impact of price fluctuations during the 2020 pandemic and to increased expenses in the first year of permanent land ownership.

Moon Valley Farm's total sales grew from $501,865 in 2019 to $924,754 in 2020, demonstrating that it was able to scale the business using organic certification to reach new customers. Annual sales hit $1.16 million in 2021 and $1.17 million in 2022. As a percentage of total sales, the total labor cost stayed relatively constant throughout the transition and in a healthy range, from 36 percent in 2019 to 37 percent in 2020. As expected, the total labor cost grew as sales increased.

Jagoz believed that marketing was an area of the business that would benefit from organic certification. From the beginning to the end of the transition, the percentage of total sales devoted to marketing diminished from 2.5 percent in 2019 to 1.1 percent in 2020, likely due to a large increase in sales. Prior to transitioning to organic, the farm's marketing expense in 2018 was

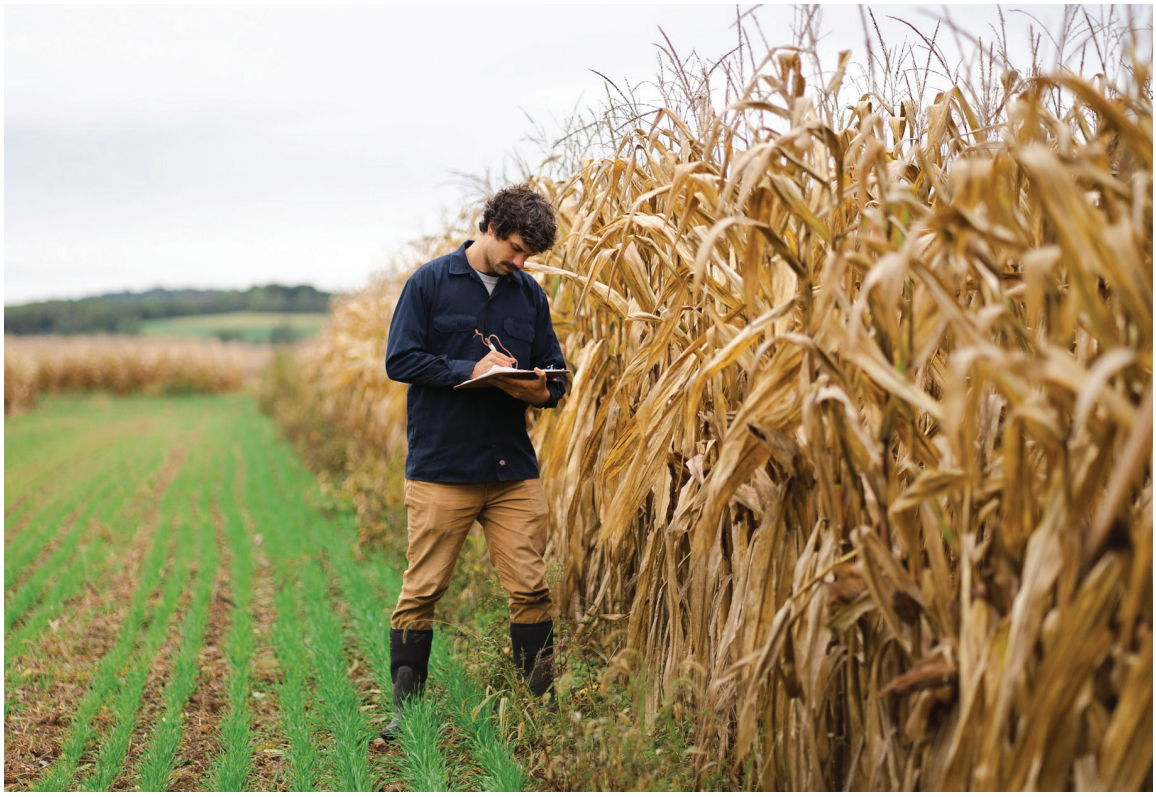
Direct-to-consumer sales of herbs, flowers, and strawberries helped support Moon Valley Farm's transition to certified organic.


$2,265, or 0.9 percent of sales. The total jumped to $12,446 in 2019 and then decreased to $10,248 in 2020. Jagoz intentionally increased spending for marketing that coincided with the organic transition, identifying the farm's products as "transitionally organic" and sharing the timeline for organic certification with customers.

Building on the success so far, Jagoz is actively working to scale the business to meet her $10 million sales goal by expanding the growing area from 25 to 70 acres, increasing aggregation from other producers, and adding more wholesale accounts.

# 8 CERTIFICATION PROCESS

## The basic steps of transitioning to certified organic



Organic farmers must keep detailed records of their operation's inputs, which may be reviewed during regular audits by certifying agents.

**Implement organic practices.** Before land can be certified organic, farmers must stop applying synthetic fertilizers, pesticides, and other prohibited materials for three years. This 36-month process starts at the application of the last prohibited material.

**Choose a certifier.** The USDA sets the standards for certification, but it does not inspect your operation. It has authorized more than 80 independent, third-party organizations to conduct the audits. Most USDA-accredited certifying agents are permitted to certify farms and businesses anywhere in the world, and farmers, ranchers, and processors may work with any USDA-accredited certifying agent they choose. The USDA does not regulate fees for inspections and audits. Some certifiers charge a flat rate based on acreage; others have a baseline fee and then scale up depending on the size of the operation and its sales.

**Make your plan.** Certification begins with an Organic System Plan (OSP), a document that describes the products to be certified, inputs and materials used in the production process, detailed projections for the harvest/production quantities and sales, and maps of the farm's fields and facilities. An applicant must complete an OSP for each of the four "scopes"—crops, livestock, wild foods, and processing—for which they are seeking

The Rodale Institute research team continually monitors soil health to generate information organic farmers can use to improve their results.

certification. The scopes have their own OSP requirements. Many certifiers offer fee-based help with preparing your OSP. Rodale Institute Organic Consulting provides assistance to farmers across the US as they plan for, complete, and update their OSPs. The USDA also offers a template for a Transitional Production Plan that can help farmers learn how to document their organic practices in preparation for completing an OSP. Many certifiers have standard forms that will help with developing and documenting the OSP.

**Prepare for your inspection.** The certifier you select will go over your plan to ensure it meets the National Organic Program standards. If your OSP is approved, an inspector from the certifier will visit your operation to verify that the practices match the details of your plan. The inspector provides a detailed report to your certifier, and you may need to make changes if your certifier finds you do not fully meet the NOP's or its own requirements. After the inspector submits a final report, you will find out if your certification has been approved. The whole application and inspection process may take six months or more, depending on the complexity of the operation.

**Stay updated.** Certifiers require yearly inspections to maintain approval. Any changes to the operation must be reflected in a revised OSP and approved by the certifier. Communicating with your certifier before any significant variance from your OSP is the best way to ensure you maintain your certification.

## LEARN MORE

**Organic Standards and Regulations**
ams.usda.gov/rules-regulations/organic

**Five Steps to Organic Certification**
usda.gov/media/blog/2012/10/10/organic-101-five-steps-organic-certification

**Organic Certifier Locator**
http://www.ams.usda.gov/resources/organic-certifying-agents

**Rodale Institute Organic Consulting**
rodaleinstitute.org/consulting

9

# SURVEY SAYS

## A report explores how farmers perceive the financial barriers of transitioning to organic.

Monitoring the impact of organic practices on soil health helps farmers prepare for inspection during organic certification.

When Rodale Institute and Stroud Water Research Center wanted to learn about farmers' attitudes and plans around adopting organic and water-friendly farming practices, the researchers conducted a survey of farmers in the Delaware watershed. The 101 producers who responded shared a variety of insights.

The majority of survey participants were from Pennsylvania (58 percent), followed by New Jersey (14 percent), Delaware (7 percent), and New York (4 percent). Overall, 87 percent represent the mid-Atlantic region of the United States. Based on farmers' responses, survey results were categorized as organic or nonorganic. The respondents were split in their responses, with 48 percent indicating not organic and 45 percent indicating organic. If respondents indicated "transition to organic" or "not certified but follow organic practices," they were categorized as organic. Six farmers indicated a split operation, meaning their responses fell in both the not-organic and organic categories. This likely means they either instituted both types of practices on their farm or had multiple fields or farms that were treated differently.

For more than half (54 percent) of respondents, farming is a primary occupation, while 69 percent report that only half or less of their family income comes from farming. Just 19 percent of the respondents earn all their income from farming. This is consistent with USDA data indicating that farmers increasingly earn the majority of their income from non-farm sources.

More than 68 percent of respondents who farm organically have considered incorporating a new conservation or organic practice into their farming plan, while only 45 percent of conventional and 43 percent of mixed-operation farmers report doing so.

## TIPS FOR FARMERS TO BE PROFITABLE AND STAY IN BUSINESS

The goal of any farming method is to stay in business and thrive economically. Following are some tips to consider:

**1.** Be aware when prices and costs change; be flexible and change prices accordingly.

**2.** Get new things to market so you don't look like everyone else.

**3.** Keep a close eye on costs but don't compromise quality; if you have an exceptional product, people will pay for it.

**4.** Do market research, know who the customers are and what they want, and educate them about production costs.

*—Courtesy of Rich Ritter, Flanagan State Bank*

Farmers were asked to select the top three out of sixteen potential barriers that they perceive as the greatest challenges to transitioning to a new water-friendly conservation or organic practice. The potential barriers included lack of knowledge, lack of practical experience, lack of technical expertise, lack of time, complexity of the practice, equipment costs, labor costs, up-front costs, training costs, crop insurance costs, certification costs, financial risks, management risks, unstable markets, unstable federal funding, and other.

Among nonorganic and mixed operations, financial risks were named as the top obstacle to instituting new water-friendly organic practices. Equipment and labor costs were the next most frequently reported concerns. Results suggest that financial risks and concerns over the various costs associated with implementing these practices rank as top barriers for conventional and mixed-operation farmers, while organic operators appear to perceive economic challenges and cost risks as more moderate barriers. Of interest here is the fact that conventional and mixed-operation farmers expressed less concern over lack of knowledge and lack of practical experience compared to cost risks, whereas these are top concerns and perceived barriers for organic operators.

Reducing inputs and converting to organic management is financially beneficial for farmers; however, farmers are often unwilling to make that transition due to the financial uncertainty. A shortage of labor appears to be related to their financial concerns. Farmers may not be able to afford additional labor, or they work one or more jobs in addition to running their farms and don't foresee having the time to invest in a new practice. Either way, the lack of labor is viewed as a financial burden.

With financial risk as a major factor that farmers perceive as a barrier to adopting new water-friendly organic practices, work is needed to reduce the risk and concern. Often the farmer bears the financial risk and majority of the cost to implement these practices, but because they provide a societal benefit, it may help for the risk to be shared equally by society. If farmers would not feel the financial burden, they may be more inclined to implement best management strategies.

# 10 WHAT'S NEXT

## Build the future of your certified organic business with the help of available resources.



Organic agriculture produces healthy food for people, supports a balanced ecosystem, and is profitable for farmers.

Launching any new business takes long hours of hard work, unwavering determination, and faith that your effort will lead to success. You also need a sound financial plan based on realistic expectations of the expenses, income, and profits. For new and transitioning organic farmers, the Organic System Plan that is required for the certification process is a solid foundation for understanding the economics of the operation.

The demand for certified organic products and the premiums consumers will pay for them creates a profitable business model for farmers. They can also count on help in getting started from a variety of sources. The USDA offers many types of financial support to new and transitioning organic producers, including cost-sharing and price-protection programs. Organic producers can find farm loans and crop insurance designed specifically for their needs. Nonprofit organizations and other private sources of capital are now funding organic operations.

Even experienced farmers may find navigating the certification process and connecting to the many available financial resources to be challenging and time-consuming. The USDA's Transition to Organic Partnership Program pairs mentors with new and transitioning farmers to help with information and guidance.

For the highest level of support, consider Rodale Institute Organic Consulting. The team of experts supplies comprehensive help with just about every aspect of operating an organic farm. Along with guidance on soil building, weed management, and crop rotations, the consulting team aids in preparing the Organic System Plan and other steps in the certification process, identifying buyers and markets, and accessing financial resources. Ready to start building your successful future as a certified organic farmer? Go to rodaleinstitute.org/consulting for all the details.

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## FOR MORE INFORMATION, VISIT RODALEINSTITUTE.ORG


Thank you to the the William Penn Foundation for their support of this work, funded under Grant Award Number 188-17.


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