

Barriers and Opportunities:

The Challenge of Organic Grain Production in the Northeast, Midwest and Northern Great Plains

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Abstract: Organic grain supply is an identified bottleneck for value-added processes. Growth in grain production lags other organic commodities and remains a negligible amount of total U.S. cropland. An informal group of companies commissioned the Sustainable Food Lab to give them thorough background on barriers and challenges to organic grain production before acting to address the situation. A literature review and key informant interviews were performed to inform the conversation. Barriers were divided between attracting new growers and optimizing organic production. Successful projects addressing these barriers were also identified and investigated. This report contains those findings and key areas of opportunity to act on social, economic, educational, and research related interventions.

Authors:

Elizabeth Reaves, Sustainable Food Lab
Nathaniel Rosenblum, Stonyfield Inc.

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Introduction

Certified organic production of grain crops is a well-documented bottleneck in the supply chain for organic value added products. Furthermore, adoption of organic practices by grain producers lags behind other sectors of the food system. According to Economic Research Service (ERS) data, between 2005 and 2011 organic acreage of grains increased at an average annual rate of 6.2%, driven by corn increases. Rangeland and Soybeans saw no meaningful increase in acreage in that period. In contrast, certified vegetables increased over the same period at an average rate of 9.6%. Moreover, as a percentage of total acreage, grains play a much smaller role than do other organic crops and products.¹

Consumer demand in this same period has increased consistently. In 2013 the OTA (Organic Trade Association) estimated that sales of organic bread and grain products increased by 12%. Dairy increased by only 8% but was already one of the largest organic markets. In total the organic market accounted for 4% of food sales, but only 0.8% of total cropland; organic soy and corn are among the largest US crops in terms of acreage.² Grains account for 2.6% and vegetables account for 1.8% of total certified organic cropland in the United States. Because of low domestic availability of certified organic grains, dairies and organic processors are importing record amounts to meet the demand. Increasing domestic supply would strengthen organic farming in the US, and could help stabilize the price of this necessary input.³

Though action is needed to address this problem. There is no single solution. Ultimately the reason for the bottleneck lies with the capacity and/or desire of grain and feed producing farmers to grow more organic products. Addressing the problem could either take the form of increasing production on already certified operations or converting conventional farms to organic. A number of companies sourcing organic grains for product production and livestock feed see the benefit in addressing the bottleneck and have asked the Sustainable Food Lab to scan literature and key informant interviews to identify the known barriers and challenges to organic grain production.

Method, sources and limitations

A scan of academic literature and interviews with key informants was undertaken to better understand the current landscape for adoption and expansion of organic grain production. The literature review focused on surveys asking farmers to rate or explain the barriers and challenges to organic grain production. Key informant interviews were used to fill gaps in the literature review. The formal interviews were broad ranging; interview subjects were government officials, academics, extension officers, non-profit association directors, and grain marketers. The research and interviews were limited to the US Midwest, Northern Great Plains and Northeast as this was the area of most interest to the commissioning companies. This analysis is limited by the lack of producer interviews, although many key informants were also farmers. At

¹ USDA Economic Research Service “Organic Production,” Updated: October 24, 2013 Table 3, Available from:

²David Pierson “Organic products grew to \$35.1 billion in sales” *Los Angeles Times*, May 15, 2014. Available from: <http://www.latimes.com/business/money/la-fi-organic-sales-20140515-story.html>

³See Appendix C for price history of Organic vs Conventional prices for Corn, Soy and Wheat.

the time of writing, some states in the regions of interest are not represented in interviews or by survey data, and the states of Maine and Minnesota are overrepresented.

Summary of Literature and Current Survey Research

There is disagreement in the literature about what motivates producers to convert to organic. This may be due to phase of adoption in different regions, though there is a body of research such as Cranfield et al. (2010) that disagree altogether that there are meaningful changes over time in motivations for conversion. Generally, the literature suggests that people convert to organic for a variety of reasons. Padel, reviewing previous literature, identifies four general categories—husbandry/technical reasons, personal health, financial motivations and more general ethical concerns such as stewardship and conservation.⁴ The degree of significance of each factor can be observed as variable between regions. Farmer surveys and listening sessions reinforce this categorization.^{5,6} Though these reasons seem varied and broad, what surveys exist suggest that financial motivations are the most compelling to farmers thinking about converting.⁷ Despite low prices in 2010, and recent record high conventional prices, on average, the organic premium is consistent across all commodities.

One important factor continually noted in the literature with regard to adoption, is the role that social attitudes and norms in the farmer's community towards organic practices plays in willingness to convert. These data suggest that traditional grain growing regions in the US may be the least amenable to organic production methods, and that grain growers in particular may be the least disposed to transition.

Barriers

Framing the question in terms of barriers, we gain a sense of what might inhibit adoption of organic practices given a population or individual open to organic production, or in the process of considering organic certification. In its 2008 follow-up survey to the Census of Agriculture, USDA asked organic farmers to categorize their 'single largest challenge' by broad categories: regulatory, production, marketing, price or management issues. By far the most common response was "regulatory problems" followed by "production problems."⁸ More detail is required to better understand these barriers.

Unlike the USDA survey, regulatory issues did not surface as a concern in any survey reviewed. The major challenges identified were typically production, marketing or social. Among conventional growers asked about organic production there tended to be more concern about all these challenges than among those transitioning or already organically certified. This likely reflects attitudes about farming organically.

⁴Padel, 46

⁵ John R. Fairweather and Hugh Campbell "The decision making of organic and conventional agricultural producers" Lincoln University, Agribusiness and Economics Research Unit, 1996.

⁶ Khaledi, et. al. "Assessing the Barriers to Conversion to Organic Farming: An Institutional Analysis." *Department of Agricultural Economics, University of Saskatchewan* (2007).

⁷Fairweather and Campbell (1996).

⁸USDA 2008 *Organic Survey* National Agriculture Statistics Service, 2008, Table 36 Available from: http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/Organics/ Accessed July, 11 2014.

Some clear themes emerge from the surveys' questions to conventional producers. First, they are concerned about uncertain profits related to yield losses from weeds, diseases and pests. Second, the transition process is daunting. Third, depending on the region, lack of knowledge or skills in management is noted as a barrier. Finally, at least in Iowa and Virginia, farmers are aware of peer influence inhibiting organic production, likely an understated barrier because of its personal nature.

Surveys addressing challenges faced by organic producers tended to find production and management as the most significant issues. Though categories were not always comparable, yield losses especially from weed pressure, was an often-cited concern. Additionally, access to and price of organic fertilizers was consistently mentioned. The added work and difficulty in finding labor for organic production, was a noted challenge.⁹ In Iowa and Minnesota, accessing land through lease agreements or ownership were challenges as well. Equipment and current farm infrastructure came up as a concern in New York and Minnesota.

Key Informant Interview Summary

Recruitment and Encouraging transition

Key informant interviews highlight the transition to organic farming as a high risk value proposition and complex system change that requires new knowledge acquisition and carries with it valid concerns about initial lower profits and management challenges from farm to markets. Although key informants agree that economic incentives are a significant push-pull for transition, they also agree that the conversion decision cannot be isolated to a single factor, – policy support, development of the markets, attitudes towards organic farming in the agricultural community, institutional development, and social and personal characteristics all need to be considered.

Financial risks for transition farmers include cash flow management and access to capital for seed, infrastructure and equipment investment. Production challenges include the knowledge requirement for shifting management systems and adopting a rotation, cost and availability of inputs, and weed management. Finding buyers for the whole rotation, proximity to markets, relationships with buyers, organic price volatility, lack of price transparency, and high prices for conventional crops are the most significant marketing challenges.¹⁰

Recruitment of both new organic row crop farmers and conventional farmers who may be willing to transition to organic production lacks consistent messaging in mainstream farm press and mainstream agriculture venues for both current farmers and young people pursuing careers in farming. USDA and local granting agency resources for recruitment of new farmers are focused

⁹ Labor inputs go up in organic production systems. For example, ISU estimates that the cost per bushel for labor inputs for organic corn is \$25.20 at an hourly rate of \$12/hr. Estimates for conventional corn is \$10.80/bu at an hourly rate of \$12/hr. The economic advantage to operating an organic farm in Iowa, given the 4-year rotation in this study is a return to management of \$303.56 on 240 acres. The same return to management in a conventional system is \$56 on 240 acres. <http://www.extension.iastate.edu/agdm/crops/pdf/a1-26.pdf>

¹⁰ See Appendix C for graphs of organic prices vs. conventional for wheat, corn, and soy.

on small-scale vegetable production as part of an uptake in grant funding directed towards the development of more regional food systems (CSA, farmers markets, etc.) and less on row cropping and livestock production.

Land access and tenure for both the new farmers and current farmers are considered a barrier. However, several key informants noted that in the Midwest and Northern Great Plains the majority of prime row crop acres is already in production; the number of new acres available for farmers seeking new land is limited even before cost enters the decision equation. The structural and social issues in place with land lease agreements are also a significant challenge.

Challenges to organic farmers:

The primary production challenges for organic farmers are weeds, soil health and fertility, and increasing incidence of weather volatility. Weed pressure is an issue for all growers and requires regional solutions and adaptive management. Managing for soil health is an ongoing management challenge and lack of access to organic fertilizer inputs in some places is a significant barrier to improving soil health and fertility.

Research and best practices for organic farming are not adapted to producer language nor is it disseminated consistently. Inconsistent knowledge support from a trained agronomist is a significant challenge across all regions, as is the capacity of backbone organizations such as NPSAS, MOSES, extension, etc. to develop farmer learning and mentor networks to develop learning and support communities. In regions where they exist, these networks have successfully created capacity with farmers through mentoring programs, field days, research trials, and agronomic support services. The organic grower requires support and mentorship not just for the first 3 years of transition, but through the first 5-7 years of completing a whole rotation. New organic producers often exit in the first 3-7 years in production.¹¹

The organic grower also faces marketing challenges such as distance to markets, clear and transparent pricing, strong relationships throughout the supply chain, and markets for all grains in rotation, not just cash crops. For example, legumes, such as lentils and chickpeas are an important part of a rotation, but there is a limited US market for these crops.

BARRIERS: ATTRACTING NEW GROWERS

¹¹ Personal Communication. Faye Jones, Executive Director of MOSES. June 24, 2014.

SOCIAL	FINANCIAL	KNOWLEDGE	LAND TENURE
<ul style="list-style-type: none"> • Perception that organic = weeds, lower profits, complex management • Lack of organic success stories in the farming community 	<ul style="list-style-type: none"> • Large capital requirements for new seeding, harvest, drying, storage equipment • Capital requirements for land purchase 	<ul style="list-style-type: none"> • Organic management requires a new set of knowledge • Adapting farming system and learning best practices for a full organic rotation can take 5-7 years • Lack of knowledge about how and where to market grain • Learning curve of certification standards 	<ul style="list-style-type: none"> • Non-operator landlords do not have complete information about organic farming; are distrustful of organic production • Conservation minded landlords lack knowledge of how to stipulate organic in lease contracts • Lease agreements are too short to incentivize investment needed to build healthy organic system
MARKETS	TRANSITION	RECRUITMENT	LAND ACCESS
<ul style="list-style-type: none"> • Organic prices experience volatility • Eroded premiums during recession • Pathway to market, demand, where to sell, and prices not always transparent 	<ul style="list-style-type: none"> • Higher costs of production while still taking conventional prices • Transitioning farmers are hard to identify and bring into transition support programs • Loss of traditional support network not easily replaced in organic community • No market for transition crops • Lack of whole farm crop insurance 	<ul style="list-style-type: none"> • Limited messaging about the benefits of organic farming and market demand in conventional ag forums or with mainstream youth – FFA, 4H, Ag Colleges • Low interest in row crop apprenticeships • Recruitment geared towards small scale diversified vegetable production not grain or dairy 	<ul style="list-style-type: none"> • Cost of land/rent is prohibitive • Good row crop acres are already in production • CRP land is often marginal

Figure 1: Barriers: Attracting New Growers

BARRIERS: OPTIMIZING ORGANIC PRODUCTION			
PRODUCTION	SERVICES/COMMUNITY	MARKETS	EQUIPMENT
<ul style="list-style-type: none"> • Weed pressure • Weather/climate change (chronic humidity, extreme rain events, drought) • High costs of organic fertilizer • Low supply of livestock manure for fertilizer • Disease and pest management 	<ul style="list-style-type: none"> • Finding farmer networks to share learning • Limited support services technical/financial for organic producers • Loss of conventional farm network hard to rebuild • Fewer co-ops for organics 	<ul style="list-style-type: none"> • Opaque value chain – lack of communication on planting dates, yields, prices, market demand • Few forums for relationship building between farmers and buyers • Distance to markets • Lack of storage/segregation for organic at local elevator • Limited market for non-cash crops in rotation 	<ul style="list-style-type: none"> • On farm storage needs are greater for organic industry • Drying and cleaning equipment needed, esp. in Northeast • Scale appropriate seeding and harvesting equipment is lacking
RESEARCH	KNOWLEDGE/COMMUNICATION	FINANCIAL SERVICES	
<ul style="list-style-type: none"> • Lack of consistent economic and agronomic data for benchmarking and predicting performance • Need for alignment between industry and growers on priority research agenda • Limited publication and dissemination of research in farmer friendly language 	<ul style="list-style-type: none"> • Best management practices for each region not well communicated • Need to better communicate research findings in farmer-friendly language from trusted sources through trusted networks • Traditional extension services are not organic focused • Non-profit farm support services are under-resourced with boots on the ground advisors 	<ul style="list-style-type: none"> • Accessing farm loans for organics can be challenging, banks do not know how to value • Crop insurance is not well suited for organic growers • Need for performance history and county averages to support case for bank loans and crop insurance 	

Figure 2: Barriers: Optimizing Production

Key Places to Intervene in the System

There are two key enabling factors for overcoming the barriers highlighted in this report that emerged from both the literature and key informant interviews. The first is farmer access to a robust network of technical advisors. The research conducted for this study revealed significant regional variability in access to technical advice. The second enabling factor is a bottom-up farmer engagement strategy. There is a high degree of consensus on best practices for farmer engagement. Farmers learn best from each other in networks and prefer to learn in the field. Farmer led research, field trials, and field days with a trusted technical advisor are important components of farmer engagement, learning, and practice uptake. These factors are key components for successful engagement with farmers in each of the different opportunity areas

discussed below. They also require significant investment in human resources; boots on the ground, and therefore they are a high cost investment.

Recruitment

Conventional farmers often hold strong assumptions about organic farming and are daunted by their assumptions about the knowledge required to adapt to a more complex management system. These assumptions are often reinforced within communities where there is a lack of reported organic success stories. Although studies exist comparing different production systems, there is little coordinated messaging comparing the profitability of the two systems. This coupled with inconsistent messaging by farming organizations, the organic industry and with conventional farming organizations like the FFA, mean there is a clear lack of messaging to help producers overcome misperceptions about organic transition. Interviews in the Midwest suggest there are mentorship and apprentice opportunities available, but a lack of interest exists.

Interventions:

- a. Develop coordinated outreach and engagement at FFA conferences, conventional farming conferences and gatherings such as the State Secretaries of Agricultural Annual Conference, with Agricultural College Deans and advisors, and Crop Advisor workshops, to introduce organic as a viable option.
- b. Create consistent messaging about practices, value of organic, and market opportunities in farm press, with extension, and farm radio.
- c. Support farmer leaders to hold field days and speak in peer-to-peer settings about the adoption of organic practices.

Known activities and potential partners: California Certified Organic Farmers (CCOF) has recently started the Future Organic Farmer Grant Fund providing funding to young potential farmers interested in organic production in conjunction with FFA and others.¹²

Markets

Marketers are important players in the market. They provide a vital support system and can improve organic farming adoption by advising on market price prospects, providing advice on what to plant and advice on market prospects based on the quantity and quality that farmers have grown.

Market stability plays an important role in creating confidence in the organic industry. Markets currently lack good publication of prices, production, and acreage to help both growers and downstream buyers predict risk and opportunity.

Innovative contracting and market development has occurred in regions where buyer/grower relationships are strong. Not every farmer wants to manage risk by forward contracting. For example, bigger farms might prefer to contract some of their crop as a hedge and play the spot market with the remainder of their crop. Models such as the one Nature's Path is testing, buying

¹² <http://www.ccof.org/ccof/structure/ccof-foundation/future-organic-farmer-grant-fund>

cropland and renting it to farmers who are paid by yield per acre, is desirable for a different type of farmer.

Clear, consistent messaging about the market demand for organic grain from CPG brands through the value chain to upstream buyers is an important ingredient that needs more attention.

Access to elevators and processors who are able to segregate, sort, store, and transport organic grain is a critical factor to creating market access. A strong message from CPG brands down the supply chain can signal operators that investment in segregation, storage, and efficient transportation is a viable commercial opportunity.

Interventions:

- a. Encourage forums for value chain engagement between farmers, buyers, mills and CPG brands to build relationships across the supply chain and build confidence that the market is accessible, stable, and that demand is strong.
- b. CPG companies may need to co-invest with elevator and mill operators to improve segregation, storage, and transportation capabilities.
- c. Support the development of marketing co-ops (i.e. OFARM) in order to pool grower access to marketing, markets and leverage resources from CPG companies seeking co-investment opportunities with growers and processors.
- d. Develop markets for transition grains that provide incentive to farmers to transition and an additional demand signal for elevators and processors to improve segregation infrastructure.
- e. Develop markets for whole rotations, including non-cash crops such as chickpeas and lentils. One use for less desirable crops in the rotation is to divert to on farm livestock, supporting a source of much needed organic fertilizer.
- f. Develop a system for better communication across the supply chain on planting dates, prices, demand, and volume data (yield per acre).

Known activities and potential partners: Successes in marketers working with growers to produce new high value organic crops exist. For example Montana Flour and Grain producing Kamut Wheat and sharing some risk with growers. OFARM helps successfully market grain from around the country through creating connections between growers. New contracting models are being developed by Nature's Path and Perdue Agribusiness. Meg Moynihan at the Minnesota Department of Agriculture publishes yearly survey data on organic farming production and profitability for the state, the only known case.

Research Barriers

Despite a growing number of people and programs (research, extension, academic) interested in organic research as well as an increase in certified organic farm research acres on Land-grant University campuses, research needs, interests and staff and programs dedicated to organic are poorly coordinated. There are generalizable research issues, such as weeds, soil health, adaption to weather volatility and the need for better seed varieties that are common aspects of all research programs. A coordinated research agenda requires prioritizing research topics that are generalized across the US, but tested to show outcomes at the region level. Industry can be helpful because it has a broader perspective that can help to unite research needs. Additional

incentives from industry to encourage research and fund necessary field trials on very specific production barriers are needed to support the expansion of organic research. In many cases research farms struggle to maintain operations before research is conducted. Increased federal funding for organic in the 2014 Farm Bill is an opportunity to leverage public/private partnerships and is a potential boost for Land-grant University research.

Most research remains inaccessible to farmers. It is either hard to find or not translated from academic to lay language. Farmers need to access information in multiple formats: online, at workshops, through field days, and in print.

Interventions:

- a. Organic community identifies the top needs of their customers as an assessment that the research community can respond to directly with proposals or indirectly by integration into state and federal grant proposals.
- b. Continue to host forums, such as the Organic Valley Research Forum, for researchers and industry to come together.
- c. Improve existing online platforms for organic research or establish a separate entity that functions as a clearing-house for research needs to support a coordinated approach to prioritizing a common industry agenda that aligns with growers' needs. Through this process research needs are easily analyzed for patterns in order to inform both the priority setting and to help industry target resources.
- d. Support the delivery of research to farmers through on-farm demonstration plots and mother/daughter trials at growing on a region scale.
- e. Improve capacity of eOrganic, or other online platform as an organic communications network with the goal to create a trusted source for organic knowledge that is broadcast widely to both the organic and mainstream farming community.

Known activities and potential partners: eOrganic already combines much extension research but could be improved to incorporate a broader range of participants.¹³ OFRF is looking to understand research needs systematically in the coming months and years.¹⁴ CERES Trust continues to provide funding and has occasionally gathered all organic related research together.¹⁵

Transition

Our research indicates that organic management is knowledge intensive and often requires significant investment in knowledge acquisition in addition to new equipment for planting, harvesting, drying, and storage. In the northeast equipment must also be modified and scaled to smaller farms. Transitioning acres to organic can be a slow, phased process. Most farmers will slowly take acres out of conventional to mitigate risk and learn new management techniques through trial and error.

Conventional farmers are used to having a support network of fertilizer dealers, crop advisors, and equipment dealers that they lose when they transition and do not have a ready organic

¹³ <http://eorganic.info/>

¹⁴ Contact Brise Tencer for information on OFRF future projects

¹⁵ <http://cerestrust.org/organic-research-outreach-north-central-feb-2014/>

network to replace their conventional advisor network. Transition farmers are most likely to revert to conventional within the first 3-5 years when they are still adapting their rotation. Production and financial mentorship is needed to support the transition farmer during and beyond the 3-year transition period.

The certification process is both expensive and technically challenging. Farmers generally lose money during the transition period without a developed market for transition grains. Crop insurance premiums don't cover new organic producers at same rate as experienced ones (at 65% of county average).

Decision support tools exist to assist growers in costing out transition and developing the right rotations to mitigate risk. For example, Iowa State's decision support tool helps the farmer plan rotation so that in year one of certification out of their transition period the farmer has a cash crop (corn, soy) for sale.¹⁶ The more choice that the farmer has in how to mitigate risk and manage transition the better. Coordinating and providing access to a range of options for the farmer is needed.

When conventional farmers transition they need to replace chemical fertilizers with organic fertilizers. Green manure is one option that requires adapting management. Livestock manure can be challenging to source. Farmers can benefit from integrating livestock into their organic system. This is also a new management challenge, but can reduce input costs in the long-term as well as contribute an additional value added product to farm income and an option for non-cash crop grains in rotation.

Interventions:

- a. Risk mitigation – supply chain works together to provide forward contracts, technical service, certification support to reduce risks, and low interest funds to support infrastructure and equipment investment.
- b. Expand the availability of decision support tools and the suite of options available to the grower as they plan transition. Buyers, technical service providers, processors should all have these resources as they approach, or are approached by farmers seeking transition support.
- c. Support equipment sharing programs when feasible.
- d. Grow the number of programs that identify transitioning farmers and partner them with certifiers prior to certification to ensure that they are on track to meet standards.
- e. Develop a market for transition grains that supports the farmer during transition and doesn't erode organic market.
- f. Support mentor programs that offer financial and production support to new farmers through 5-7 years of transition.
- g. Develop crop insurance solutions that offer better support for organic transitioning producers.

¹⁶ Iowa State University Ag Decision Maker. <http://www.extension.iastate.edu/agdm/decisionaidsall.html>

Known activities and potential partners: Various activities in Minnesota appear to be at the forefront of helping transition farmers, though not specifically geared toward grain producers. Minnesota’s is primarily production as a state is grain and dairy:

- Transition cost-share a pilot project of the MN Department of Ag. covers $\frac{3}{4}$ or certain costs up to \$750/year, focusing on education and connection with certifiers.¹⁷
- “Tools for Transition” is a 4-year project of the U of MN to understand whole farm financial information during the transition.¹⁸
- “Principles for transitioning to organic farming” is another program of the U of MN to develop e-materials for best practices in transitioning to organics.¹⁹

Production

Weed pressure, seeding rates, soil health and fertility, disease and pest management, and weather volatility are the greatest factors contributing to variability in yields, and the quality of product. Variable harvest, cleaning/drying, and storage methods also affect quality. Expanded capacity for on-going farm trials to improve each of these areas is needed. Farm trials serve a dual research and outreach purpose. Production challenges and solutions require a dynamic outreach strategy that includes producer-friendly resources accessible in multiple formats, field tours, conferences, and workshops.

Access to organic fertilizers (livestock manure) is a challenge for many organic growers. Marketing challenges of rotation crops relates to livestock in the system—with more livestock more of the rotation can be used for “added value” right on farm.

Interventions:

- a. On-going farm trials to improve weed management, soil fertility, and seed varieties that are adapted to organic management systems and that are more climate resistant.
- b. Education strategy that translates key best practices, adapted to each region, and translated into producer-friendly language.
- c. Outreach strategy that engages farmers through field tours, conferences, and workshops.
- d. Design outreach and support strategies to assist growers integrating livestock into farming system. This provides access to needed organic fertilizer and can provide a value added use on the farm for less valuable crops in the rotation.

Known activities and potential partners: Many activities are underway to perform on-farm trials for organic production. They are primarily provided at land-grant institutions and supported by many independent groups such as NOFA and Iowa Farmers Associations supporting farmers to develop their own production research. Non-profits and marketers will be invaluable partners in pursuing work on production challenges.

¹⁷ <http://www.mda.state.mn.us/food/organic/transitioncostshare.aspx>

¹⁸ <http://eorganic.info/toolsfortransition>

¹⁹ <http://www.reeis.usda.gov/web/crisprojectpages../1000447-principles-for-transitioning-to-organic-farming-e-learning-materials-and-decision-case-studies-for-educators.html>

Land

Cost of land in addition to availability is both an entry barrier and an expansion barrier. In the Midwest and Plains, most of the acres suited for large scale row cropping are already in production. Cost of land and access to additional rented acres is prohibitive for all farmers who rely on leased land as part of their farm operation. It is challenging for an organic farmer to invest in the necessary components of a healthy organic rotation when the cost of leased land is high and the ability to maintain a lease for a specific duration of time is uncertain. Landowners are often resistant to renting to organic farmers because they assume lower productivity and residual weed issues. Non-operator owners who are amenable to organics and sustainable agriculture often are not empowered to act on their land. One of the options available to farmers is to put a portion of their land into organic and maintain the other portion of their land as conventional. This also allows the farmer to manage risk if concerned about potential yield and profit loss while transitioning total farm to organic.

CRP land is frequently marginal land, but in cases where it is not, it is ready organic acres. Farm support groups are working with growers on best practices for transitioning CRP acres to organic.

Interventions:

- a. Outreach and education on organic farming with non-operator owners of leased land.
- b. Work with farmers to identify CRP land for transition to organic acres.
- c. Network young farmers and transitioning farmers to impact investors and farm transfer programs (i.e. Iroquois Valley Farms).

Known activities and potential partners: WFAN (Women Food and Ag. Network) runs the “Women Caring for the Land” program which targets women landowners interested in conservation and organics for workshops to empower them in lease agreements and making management decisions.²⁰ The National Young Farmers Coalition is the leading voice for young beginning farmers and is adept at helping farmers gain access to land, and has gathered many resources on their webpage.²¹ American Farmland Trust and other land trusts encourage conservation/working farmland easements. MOSES supports farmers to help transition CRP acres to organic production.

Policy

Growing the percentage of the federal budget designated to support research, outreach, and technical aspects of organic farming is an important component of expanding organic farming. The government also provides an important function as a source of trusted agricultural data. Increasing federal dollars dedicated to organic agriculture can help leverage private sector investment in increasing organic agriculture. There is a need to develop a survey that is dedicated to polling organic and non-organic producers at a regular interval, along with pricing and production reporting. Crop insurance remains a challenge for the organic producer. The newly adopted federal mandate that RMA (Risk Management Agency) find a way to provide crop

²⁰ <http://wfan.org/our-programs/women-caring-for-the-landsm/>

²¹ <http://www.youngfarmers.org/landlinks/>

insurance to organic producers will require additional research, creative thinking, and multi-stakeholder buy-in. GMO and pesticide drift are also concerns of organic farmers who may not be able to sell into a market due to contamination. The USDA has begun to establish protocols, but they place the burden on the non-GMO farmer to modify planting schedules and setbacks in response to their GMO neighbor. Better policy solutions for coexistence are needed and the burden should not be placed exclusively on the organic farmer.

Interventions:

- a. Work with the RMA and OTA to identify research needs, fill research gaps, and develop a plan for packaging meaningful crop insurance for organic farmers.
- b. Lobby for more funding to train and grow the number of organic crop advisors.
- c. Lobby for increases in USDA funding for organic grain research.
- d. Propose mandatory Pesticide Drift and GMO Drift Registries.
- e. Propose compensation mechanisms for farmers who can't sell crops due to GMO and pesticide drift contamination.
- f. Lobby NASS for improved, timely producer survey data, and pricing, productivity, and economic data on organic grain production.

Known Activities and Potential Partners: A Gree multi-stakeholder taskforce on data has been researching tools to use crop insurance to promote conservation techniques. In addition, they are leading an initiative to work with USDA on combining data on conservation and production, and making it widely available for the use in developing better insurance products with special focus on whole farm insurance.

Data Collection and Measurement

Consistent data gathering across the whole supply chain is needed to inform decision-making and understand the different variables (region, demographics, buyer relationships, etc.) that contribute to the barriers.

The research conducted for this analysis identified barriers that are generalizable to US grain production as a whole, but that vary greatly by region in how they are being addressed. This thorough study reveals that the data currently available is not comprehensive enough to weigh the barriers by order of magnitude, or reveal which intervention, where, with what type of farmer would have the greatest impact. A coordinated effort will require analysis that is consistent across the industry to better support decision-making, target interventions, and measure progress towards goals.

OPPORTUNITIES			
MARKETS	RECRUITMENT	TRANSITION	PRODUCTION
Interventions should work cooperatively with supply chain to bring reliability, stability and fair pricing to farmers to promote trust in the organic market.	Potential interventions should focus on engaging farmers, youth, and using multiple types of communication channels.	Interventions need tools to identify transition farmers and focus on the long transition (5-7 years) it takes fully adopt an organic system.	An increased number of farm trials with a goal to improve yield and quality are needed.
<ul style="list-style-type: none"> • Build relationships across the supply chain • Encourage the development of marketing cooperatives • Develop markets for transition grains • Develop markets for whole farm rotation (not just cash crop) • Build system for better communication across the supply chain on planting dates, prices, demand, and volume data 	<ul style="list-style-type: none"> • Engagement in conventional farming forums at policy level (i.e. NASDA) and farmer level (i.e. FFA) • Consistent messaging about organic in farm press, with extension, and farm radio • Train and use farmer leaders as advocates • Support FFA, 4H, and agriculture colleges to incorporate organics into curricula • Use farmer to farmer engagement strategy to demonstrate benefits of organic farming and convince new farmers to go organic 	<ul style="list-style-type: none"> • Mitigate risk – develop whole farm crop insurance, innovative types of contracts, technical service, certification support, and low interest funds • Support equipment sharing programs where feasible • Develop a planning/management tool for the transition • Develop a market for transition grains • Support mentor programs (5-7 year timeframe) • Insure access to a robust network of technical advisors 	<ul style="list-style-type: none"> • On-going farm trials for weed management, soil fertility, and seed varieties • Strategy to communicate best practices, in producer friendly language • Outreach strategy that engages farmers through field tours, conferences, and workshops.
POLICY	RESEARCH	LAND	
Interventions should work cooperatively with supply chain to bring reliability, stability and fair pricing to farmers to promote trust in the organic market.	Industry-institution-grower alignment on priority research issues and strong dissemination of research results and organic best practices.	Interventions need to focus on educating landowners on the benefits of organic farming and building relationships between growers and landowners.	
<ul style="list-style-type: none"> • Build relationships across the supply chain • Encourage the development of marketing cooperatives • Develop markets for transition grains • Develop markets for whole farm rotation (not just cash crop) • Build system for better communication across the supply chain on planting dates, prices, demand, and volume data 	<ul style="list-style-type: none"> • Establish a coordinated research agenda for high level priority industry and grower needs. • Industry funded research supporting longitudinal, on-farm trial at the regional scale • Improve capacity of research communications network industry-institutions-growers 	<ul style="list-style-type: none"> • Support outreach and education to non-operator landowners • Network young and transitioning farmers with impact investors 	

Figure 3: Opportunities

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Sources: Key Informant Interviews

Name	Organization	Position
General		
Nate Lewis	Organic Trade Association (OTA)	Senior Crop and Livestock Specialist
Jessica Shade	The Organic Center	Director of Science Programs
Becky Lipton	Organic Alberta	Executive Director
Leigh Adcock	WFAN (Women Farmer Action Network)	Executive Director
Northeast		
Tate McPherson	Maine Seed Company	Owner
Robert Perry	NOFA-NY	Grain & Field Crops Coordinator
Ellen Malory	Maine Extension	Agronomist
Rick Kersbergen	Maine Extension	Agronomist
John Chartier	MOFGA (Maine Organic Farmer and Gardener Association)	Aroostook Co. Agriculture Specialist
Midwest		
Kristine (Kris) Moncada	U of Minnesota Extension	Research Scientist
Jeff Jacobsen	North Central Regional Association of State Agricultural Experiment Stations	Executive Director
Leah Miller	Small Farm Institute	Executive Director
Faye Jones	MOSES	Executive Director
Rob King	University of Minnesota Economics	Agricultural Economist
Amber Anderson Mba	Iowa Organic Association	Executive Director
John Bobbe	OFARM	Executive Director
Meg Moynihan	Minnesota Dept. of Agriculture	Organic Program Director
Northern Great Plains		
Wes Gibbs	Montana Flour and Grain / Montana Organic Association)	Big Sky Organic Feed / Board Secretary (MOA)
Pat Carr	North Dakota State University	Research Scientist