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Tools for Community Self-determination

Next Steps for North Dakota REAP Zones

(CONAC and Southwest)

Ken Meter Crossroads Resource Center March 24, 2015

Prepared for FARRMS Sue Balcom, Executive Director

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Business Model

AFTER THIS SUMMIT, THESE PUBLICATIONS WILL BE AVAILABLE ONLINE ONLY

- 1. A notable segment of respondents are involved in diligent efforts to raise and process food for their own use, and to sell to immediate neighbors.
- 2. Many of these are relatively recent arrivals, coming from places as diverse as Lithuania, Russia, Arizona, California, Minnesota, Montana, Pennsylvania, and Washington State. Since the population of both regions has been declining over time (with CONAC declining 18% over the past 40 years, and Southwest rising only in the past few years) these new residents represent potential opportunities to repopulate each region.
- 3. These recent arrivals have typically chosen North Dakota as a place to live **because they want to get closer to the land,** and feel the state gives them opportunity to lead a fairly self-sufficient lifestyle.
- 4. Most have settled on very small acreage.
- 5. Learning the skills of growing, harvesting, storing, canning, and preparing food for their own use is of central importance to those interviewed.
- 6. Those interviewed place a **high priority on having what many call "real" food,** quality food
 produced by themselves or on farms they know,
 with minimal connection to the corporate food
 processing industries. Several are propagating
 heirloom and open-pollinated seeds in an effort to
 become more independent of prevailing structures.
- 7. Several of those interviewed are **learning farming skills for the first time**, even if they have family roots on the land where they now live. A few have attended formal "Farm Beginnings" training.
- 8. Most of these growers are motivated more by a desire to **insulate themselves from larger systems** they view as unresponsive or prone to collapse, rather than by a desire to make money by farming. Several view an economic or social collapse as a likely eventuality and they would like to have greater means to survive such a calamity.

- Growing at commercial scale appeals only to a select few of these newer arrivals, and they recognize their market options are limited.
- 10. Several respondents noted that well intended food safety regulations interfere with farmers selling to local consumers. These farmers said regulations must be made more supportive of farmers who sell directly to consumers, consistency must be built across jurisdictional lines (federal, state, or from county to county, for example), and should be simplified.
- 11. Several of those interviewed offered very specific recommendations for infrastructure that would support their investments in raising local food.
- 12. Respondents also noted that their **options** for farming are impacted by oil development in North Dakota, which they view as a mixed blessing. Several respondents note that oil and gas have brought new income sources, and say they have not been greatly affected at their own farms and homes since they live outside of oil drilling zones. Yet others have been frustrated with the congestion they experience when they travel to Minot. Several noted that benefits of oil drilling do not accrue to the average rural resident; the largest gains are realized by farms that sell property to oil-related development. Housing prices have risen in some locales, pricing residents out of the market. Many of the oil workers do not live in North Dakota permanently, so much of the earned income is spent elsewhere. Others viewed oil development as subject to the same boom and bust cycles of any commodity industry controlled by outside forces. The deepest concerns about oil development centered around how the oil industry has "defined success" in a way that is inconsistent with traditional rural values, and makes each region's farming heritage appear obsolete. Interestingly, several respondents had abandoned paying jobs in the emerging oil industry so they could focus on gardening and farming.

Recommendations for FARRMS

1. Continue to build social connections, formal social and commercial networks, and communities of practice among these small farmers. This is needed to offset the isolation that farmers experience by working in remote locations with a small group of partners. Strong social and commercial networks will also play a

strong role in helping the REAP regions respond resiliently to changing circumstances.

- 2. Continue to offer training programs to emerging small farmers as requested.
- 3. Work with these respondents, and others with similar needs, to locate or develop small-scale infrastructure that creates new efficiencies in local food trade.

that farmers gain more market power over the long term by aggregating production into larger units, negotiating from a position of relative strength, and engaging food buyers in structures that help ensure fair prices and a stable supply of food for all concerned.



Milking time at the Slavic Heritage Farm near Rugby.

Respondents

highlighted several specific facilities they desire to have access to commercially certified kitchens/ processing space; meat processing; milk processing (cows and goats); produce washing and packing stations near to farms; root cellars; storage areas; and aggregation facilities appropriate to what is currently being produced in the region. Infrastructure priorities are listed below.

- 4. Respondents also expressed a need for **stable access to arable land** at lease or purchase prices commensurate with the income potential from food production.
- 5. FARRMS should **explore the formation of grower collaboratives**, perhaps a hybrid co-op similar to the Fifth Season Co-op in Wisconsin, so

- 6. Respondents requested **assistance in marketing the potential for locally raised foods,** and making their local foods work more visible. This might include labeling, branding campaigns, or regional marketing initiatives.
- 7. FARRMS should **convene federal, state, and county food safety officials** to meet directly with producers to learn about their concerns and to streamline the regulatory process so that obstacles to safe production and sale of healthy foods can be removed.

Several infrastructure ideas loom as most practical:

1. FARM-LEVEL WASHING, PACKING, AND STORAGE. Several interviewees noted the need for better facilities for preparing locally grown foods for market, and for storing them safely until they are purchased. If done properly, investments in such infrastructure might serve several nearby farms at once, and foster a sense of collaboration among those farms. For some examples, see "Making Small Farms into Big Business," www. crcworks.org/scfood.pdf, that includes prototype plans for such farm-level infrastructure, as well as a state-wide investment plan for local foods announced by the state of South Carolina.

2. COMMUNITY KITCHEN SPACES.

Community kitchens, where people can access certified commercial space to add value to raw farm products, and can share food preparation skills, provide essential places for new food products to be created and for residents to work together to share the bounty of the harvest. It is quite possible that area churches already have



Mike and Alecia Pretzer in their Rugby garden.

suitable commercial kitchens that could be made available to members of the food-producing public. Some of these existing kitchens might be networked so that each offers distinctive services, and do not duplicate each other. Community kitchens should also be scattered across each of the REAP regions so that all residents have access to a nearby facility. Few of these will pay their own way immediately, so plans should take into account the likelihood of subsidizing these spaces until commercial activity can be generated to sustain them.

3. PERMANENT LAND ALLOCATIONS FOR RAISING FOOD FOR LOCAL MARKETS & TRAINING NEW FARMERS. As land gets chewed up by mining development and urbanization, it will be essential to set aside farmland of diverse types that can be dedicated over the long term to feeding North Dakota residents. Some of these farms will be training farms that cultivate future generations of growers. Land must be priced at a level commensurate with the ability of farmers to sell food products, rather than at development prices.

4. LOCAL LABELING THAT LETS CONSUMERS KNOW WHICH FARM RAISED THE FOOD THEY SEE AT THE STORE, AND WHICH PROCESSORS MAY HAVE ADDED VALUE TO THOSE PRODUCTS. Increasingly, consumers are expressing concern about the source of their food. In many states, the word "local" has lost its meaning because distributors are selling foods that is easy to locate, when the actual supply of locally grown foods is limited. North Dakota should facilitate the labeling of foods that show both (a) the farm where it was grown, and (b) any processing plants that may have added value to the raw farm products. This way, consumers will be able to decide for themselves whether a food item they are considering purchasing is local enough for their purposes.

Conclusions from Economic Research

See also companion reports:

CONAC ZONE

LOCAL FARM AND FOOD ECONOMY

SOUTHWEST REAP REGION

LOCAL FARM AND FOOD ECONOMY

As one interview respondent eloquently put it, "The people of North Dakota and the state legislature seem to have banked their future on the commodity cycle. I know there's a lot of pleading and saying 'this time will be different' and it will go on for infinity. I just don't see that. Eventually, the other shoe will fall and at that point there is probably going to be a lot of pain on the down side. People aren't really thinking about or aware of it right now."

This comment, of course, refers to both the agricultural and the oil/gas economies of the region. As the commenter understands, each commodity economy has brought significant wealth to North Dakota, and yet each is vulnerable because the producers in each case do not have a great deal of market power since buyers are international in scope, and have little connection to or commitment to North Dakota itself.

The best year on record for North Dakota farmers was 1973, when the state shipped massive quantities of wheat, and some corn, to the former Soviet Union. These shipments were in fact related to oil. When the wholesale price of oil soared to \$40 per barrel (in 2015 dollars), many Americans were caught off guard. Drivers lined up for hours to fill up their gas tanks, at times discovering that tanks were dry once they inched their way to the pump. The new high cost of oil also meant that U.S. consumer dollars were funneled to the Middle East.

The U.S. government sought a resolution to this Oil Crisis by searching for a way to bring dollars back to the economy. Looking globally, they learned that the Soviet Union had suffered some crop failures, and a breakdown in food distribution. The Soviet government was willing to purchase grain from the U.S. in an effort to fill these gaps. Moreover, the Soviets had bank accounts enumerated in U.S. dollars, so their payments would bring dollars back to the American economy. It was understood that U.S. farmers would make considerable money if they ramped up production to suit this market. This was viewed as a "win-win-win" situation, with Soviet consumers gaining access to critical food supplies, the American economy gaining greater command over its own currency, and U.S. farmers earning considerable money.

Indeed, in both 1973 and 1974, North Dakota farmers sold more than \$12 billion of commodities each year (in 2013 dollars), earning 50% margins on these sales, or \$6 billion of net cash income, each year. As Chart 1 below shows, state farmers are selling a total of only \$8 billion of commodities in recent years, so this was indeed a windfall for North Dakota farmers that contributed heavily to prosperity for the entire state.

There has not been a year like these ever since. Net cash income has hovered at low levels, falling below zero for 19 of the past 40 years — nearly half. Since 1989, North Dakota farmers have earned a net of only \$73 million per year from farming. Federal payments have been a far larger source of net income, averaging \$760 million per year.



Sima Ulrich has an urban nursery business.

Chart 1: Net cash income for North Dakota farms, 1969 – 2013 (adjusted for inflation)

What these data do not reveal is that the years 1973-74 were also a significant turning point for North Dakota agriculture. Prior to this era, North Dakota farmers had enjoyed considerable stability. Afterward, they became increasingly dependent on larger equipment, chemicals, and other inputs that had to be imported from outside the state. The farm economy became more of an extractive mechanism, drawing wealth and natural resources out of the state. This also meant that North Dakota youth became yet another "export crop" as young residents learned they would have difficulty making a living in their home state. (See Meter, K (1990). Money with Roots, www.crcworks.org/roots.pdf, for an analysis of these trends nationally.)

More recently, North Dakota has looked to oil and gas development as a replacement source of income. For several years, this has created an economic boom for the state, bringing in new population, new income, and global attention. As Chart 2

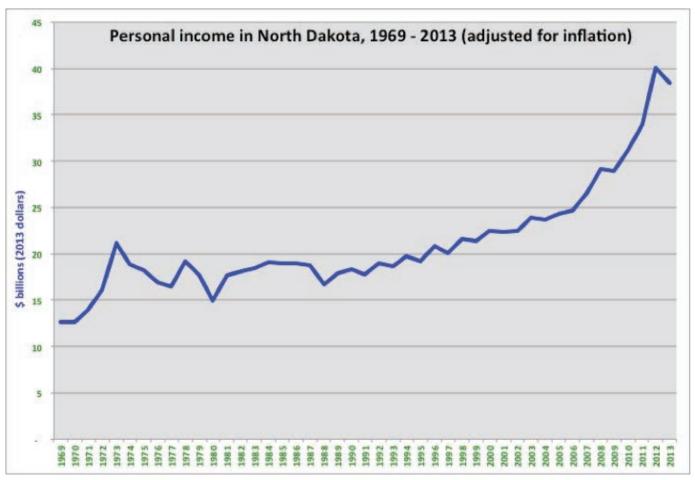
shows, this has held considerable economic benefit. North Dakota in recent years has been one of the few states nationally to run a budget surplus, as oil revenues poured in.

Source: Bureau of Economic Analysis

Yet this global attention also means that North Dakota faces new dilemmas. In the past year, OPEC oil producers have refused to limit oil production, creating a glut on the market and forcing prices to low levels. This appears to be a complex political calculation to both maintain OPEC prominence in the Middle East, and also to undermine North Dakota producers. At this writing the wholesale price of oil has retreated to \$40-\$50 per barrel after scaling as high as \$100 (See http://www.eia.gov/ todayinenergy/prices.cfm). At this price, North Dakota oil and gas producers are finding it is not economic to mine gas and oil; cutbacks of 20% of production are estimated by The Economist magazine. This means considerable disruption for North Dakotans.

-2

Chart 2: Personal income in North Dakota, 1969 - 2013



Source: Bureau of Economic Analysis

Elsewhere in this report, you will find comments made by small farmers regarding the oil industry. Many, even as they acknowledge the new income source. Blame this industry for competing for land, raising the costs of living, creating urban and highway congestion, and for disrupting the state's heritage of rural values. Yet what really strikes these observers is that much of the income earned by oil workers does not stay in North Dakota, because many of the workers are temporary, staying for the fields for a few weeks at a time and then returning home. This is in large contrast to the wealth earned by farmers, which tends to stay in North Dakota.

Moreover, the importance of oil and gas extraction to personal income should not be exaggerated. While income in North Dakota from mining (covering these sectors) has risen impressively since 2009 to \$3 billion, this source of income is still gulfed by capital income from interest, dividends, and rent payments (most likely related to historic wealth earned in the state's farm sector), transfer payments (public programs such as unemployment insurance) government jobs, and jobs in health care. This is shown in Chart 3, on page 10.

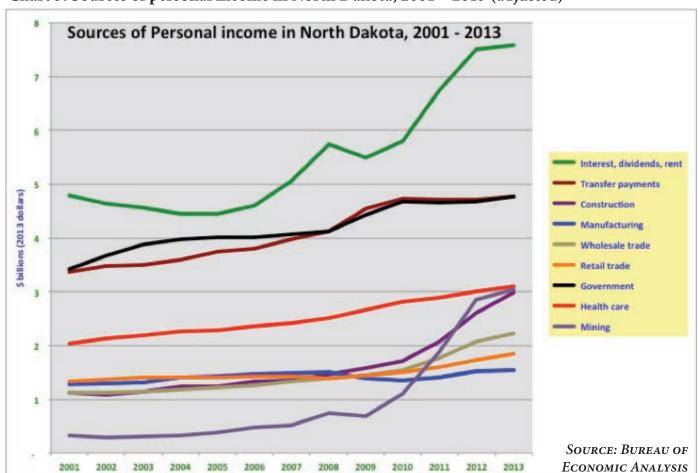


Chart 3: Sources of personal income in North Dakota, 2001 – 2013 (adjusted)

As Chart 4 shows, these overall trends are closely reflected in the Southwest region. If anything they are more accentuated due to the concentration of oil revenue in Stark County.

However, as Chart 5 shows, income trends in the CONAC region are somewhat different due to the fact that agriculture is a more important part of the region's economy. In the CONAC region, income from oil and gas production appears to have reached levels similar to farm income earned in 1973-1974, at least before it peaked. (Once again, this comparison is made in 2013 dollars.)

These data show both the promise and the dilemmas of an export-based commodity economy for North Dakota. Strong peaks are possible, yet also these are dictated primarily by outside players and global market forces. North Dakota itself has little power over these cycles of boom and bust.

Looking strictly at the agricultural economy, our

data show that farmers in the Southwest region have spent an average of \$9 million more to produce crops and livestock each year than they have earned by selling these products over the past 25 years (Meter, 2015, "Southwest REAP Region Local Farm and Food Economy," p. 15). During that time farmers have suffered a net loss in half of the years. They earn \$23 million less farming today than they did 40 years ago. This is fueled by a decline in the livestock sector.

Similar losses plague the CONAC Zone. In this region, farmers have spent an average of \$19 million more to produce crops and livestock than they have earned from the market (Meter, 2015, "CONAC Region Local Farm and Food Economy," p. 16). Farmers have experienced losses in 15 of the past 25 years. Overall, farmers in the CONAC region earn \$168 million less in net cash income today than they earned in 1969. This, too, is related to declines in livestock sales, as well as upheavals in crop markets.

Chart 4: Personal income in Southwest Region, 1969 – 2013 (adjusted for inflation)

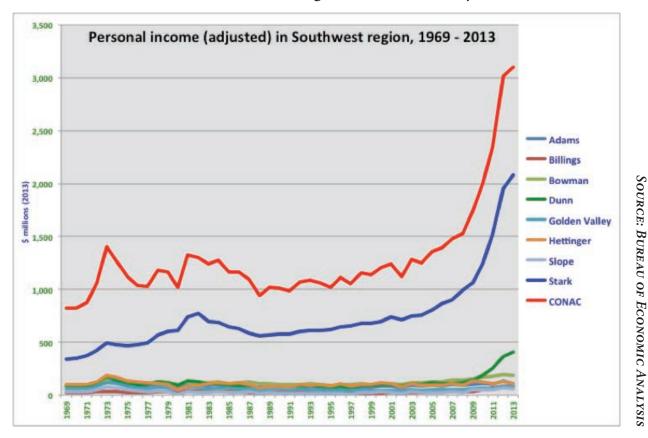
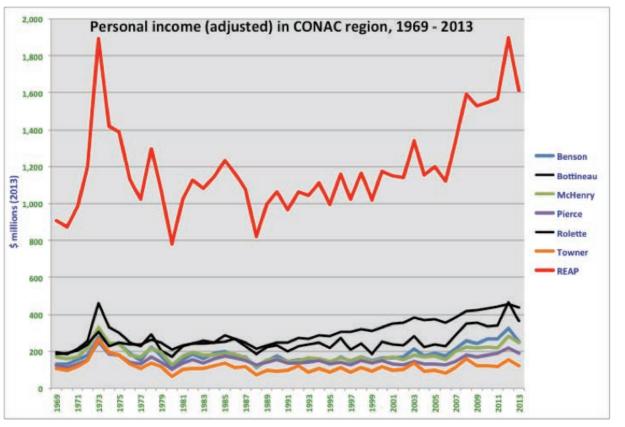


Chart 5: Personal income in CONAC Region, 1969 – 2013 (adjusted for inflation)



SOURCE: BUREAU OF ECONOMIC ANALYSIS

In both regions, federal farm payments have become the largest source of net farm income. These are critical in helping farmers pull through, yet only apply to those farmers who raise crops that are subsidized, so they do not benefit the entire farm economy. Southwest farmers received an average of \$64 million in farm subsidies over the past 25 years, while CONAC farmers received \$105 million per year.

Renting out land has also become an increasingly important source of income for landowners, who often realize they can earn more money by renting land than by actually farming it. Southwest region farmers earned \$35 million in "farm-related income," typically cash rents or custom work, while CONAC farmers earned \$63 million.

As the farm economy of North Dakota has become increasingly dependent upon outside sources for the inputs required to farm, large flows of money away from each region have also resulted. While data are not precise because they are collected for

a different purpose, an estimated \$380 million of farm inputs are purchased by Southwest region farmers from outside sources, while CONAC farmers purchase \$500 million.

Each region also has a substantial market for the food required to feed its own population. Southwest residents spend about \$117 million each year for household consumption, while CONAC consumers purchase about \$109 million each year. Yet in each case, well over 90% of this food is produced outside each region. While these are only rough estimates, since finer-grain detail is not available, this means something like \$105 million is spent by Southwest consumers to purchase food that is produced outside of the region, while CONAC consumers spend \$100 million. Note that in the CONAC region, the amount of farm subsidies currently received by the region's farmers would be enough to feed the entire population for a year once again, a strong sign of how deeply dependent the region has become on public subsidy.

Chart 6: Net cash income for Southwest region farmers, 1969 - 2013

Net cash income (adjusted) in Southwest REAP region, 1969 - 2013

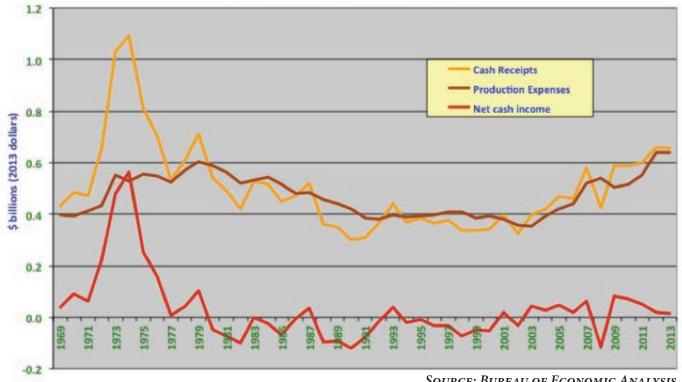
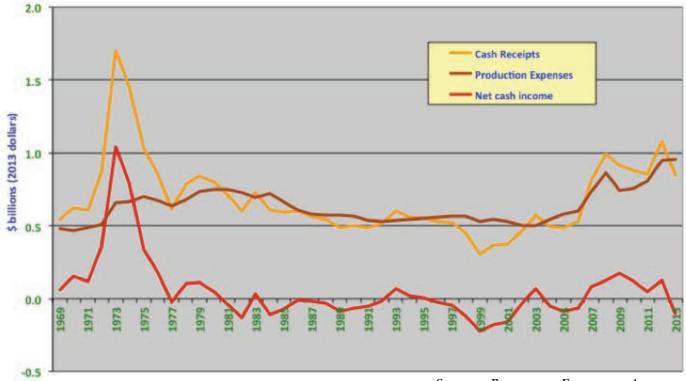


Chart 7: Net cash income for CONAC region farmers, 1969 - 2013

Net cash income (adjusted) in CONAC region, 1969 - 2013



Source: Bureau of Economic Analysis

Losses from each region are quite large, once totaled up. In both Southwest and CONAC, the value of losses absorbed by (a) spending more producing crops and livestock than farmers receive by selling these commodities; (b) the value of inputs farmers purchase from outside sources; and (c) consumer items that are sourced outside. When totaled up, these losses have roughly the same value as the value of all farm commodities sold by farmers in each region.

As the interviews in this report attest, a small number of farmers in each region have begun to sell food to nearby consumers, as farmers seek more direct connection to those who buy their food, and as consumers seek more direct understanding of where their food comes from. 55 farms in the Southwest region sold at least \$101,000 of food products directly to consumers in 2012, while in the CONAC region, 61 farms sold \$69,000 of food products directly to consumers.

In each region, the number of farms selling direct has increased in the past five years; however, recorded sales in the CONAC have fallen, perhaps due to sampling error, or perhaps due to declining consumer interest.

It seems, then, that the people profiled in this set of interviews, (and very likely others who were not contacted), are responding very thoughtfully to these trends. As people of limited means, they have taken steps to provide new options for themselves and their neighbors, attuned to both the vulnerability they perceive in the contexts where they live, but also their own ability to martial resources to provide themselves with an alternative.

These steps may seem humble, since direct farm sales are only 0.01% or 0.02% of farm sales in each region, but these steps have been taken by residents who are fully cognizant of the need to

replace social and commercial networks that North Dakota once enjoyed, but that have been lost in the embrace of global commodity trade, as well as to build new networks.

As the interviews show, these new growers have found plenty of reasons to embrace small-scale agriculture — bringing their own families together by working and celebrating together, in the process developing local heritage that has become fragile, restoring a sense of memory to the prairies, learning new skills, and connecting fruitfully with their neighbors. For many, this work is fulfilling in its own right, but many also view it as an essential step in creating resiliency should massive systems continue to fail for local residents.

This work should be supported by USDA and the state of North Dakota as a way of repopulating rural areas that have been harmed by the extractive forces of the economy, and as a way of building the social and commercial connectivity that would build economic multipliers as well as heightened resilience.

As the interviews show, however, the success of these small-scale growers will be limited unless the state builds supportive infrastructure. As one interviewee pointed out, "The grain guys, they have the elevators. The cattle guys, they have their auctions." Without such facilities and proper trading mechanisms for local foods from small and mid-sized farms, such growers will always be vulnerable.

Each investment in appropriate infrastructure should be taken with care. None should be built without a comprehensive business plan showing the strength of potential markets and offering a practical path toward sustainability. Many of these projects will require ongoing subsidy from public sources; not because they are bad ideas, but because the prevailing infrastructure, based on commodity exports, does not support their long-term goal. Hybrid businesses that earn income but also draw upon foundation or public investments to achieve a public purpose should be encouraged.



Several infrastructure ideas loom as most practical:

5. FARM-LEVEL WASHING, PACKING, AND STORAGE. Several interviewees noted the need for better facilities for preparing locally grown foods for market, and for storing them safely until they are purchased. If done properly, investments in such infrastructure might serve several nearby farms at once, and foster a sense of collaboration among those farms. For some examples, see "Making Small Farms into Big Business," www.crcworks.org/scfood.pdf, that includes prototype plans for such farmlevel infrastructure, as well as a state-wide investment plan for local foods announced by the state of South Carolina.

6. COMMUNITY KITCHEN SPACES.

Community kitchens, where people can access certified commercial space to add value to raw farm products, and can share food preparation skills, provide essential places for new food products to be created and for residents to work together to share the bounty of the harvest. It is quite possible that area churches already have suitable commercial kitchens that could be made available to members of the food-producing public. Some of these existing kitchens might be networked so that each offers distinctive services, and do not duplicate each other. Community kitchens should also be scattered across each of the REAP regions so that all residents have access to a nearby facility. Few of these will pay their own way immediately, so plans should take into account the likelihood of subsidizing these spaces until commercial activity can be generated to sustain them.

7. PERMANENT LAND ALLOCATIONS FOR RAISING FOOD FOR LOCAL MARKETS & TRAINING NEW FARMERS. As land



Asa, age 7 and Asher, age 4., work with their parents Melanie and James Hoffman to care for the animals on their farm in Foxholm.

gets chewed up by mining development and urbanization, it will be essential to set aside farmland of diverse types that can be dedicated over the long term to feeding North Dakota residents. Some of these farms will be training farms that cultivate future generations of growers. Land must be priced at a level commensurate with the ability of farmers to sell food products, rather than at development prices.

8. LOCAL LABELING THAT LETS CONSUMERS KNOW WHICH FARM RAISED THE FOOD THEY SEE AT THE STORE, and

which processors may have added value to those products. Increasingly, consumers are expressing concern about the source of their food. In many states, the word "local" has lost its meaning because distributors are selling foods that is easy to locate, when the actual supply of locally grown foods is limited. North Dakota should facilitate the labeling of foods that show both (a) the farm where it was grown, and (b) any processing plants that may have added value to the raw farm products. This way, consumers will be able to decide for themselves whether a food item they are considering purchasing is local enough for their purposes.

Interviews with local growers and food businesses

FARRMS commissioned two studies covering the farm and food economies of the Southwest and CONAC Zones. These are separate documents, but the recommendations in this report refer to their findings.

In addition to the economic data compiled for these reports, 16 residents of the two REAP Zones were interviewed by project coordinator, Sue Balcom of FARRMS. Most were interviewed in person; several others filled out brief responses to a questionnaire as part of their preparation for the Farmer Showcase to be held April 14, 2015, in Medora.

Those whose viewpoints were incorporated into this narrative include:

- Rachel Brazil (New Rockford)
- Annie Carlson, Morning Joy Farm (Mercer)
- Ann Gibson, Bohan Seed & Supply (Rugby)
- Fern Gronvold (Rugby)
- Laura Halvorson (Metigrowshe Garden at Camp Metigoshe, near Bottineau)
- James Hoffman (Foxholm)
- Melanie Hoffman (Foxholm)
- Apryl Lunde, Feral Farm (Rolette)
- Lindsay Ostlie, Ostlie's Sunnyside Acres (Carrington)
- Julia Petrovic, Slavic Heritage Farm (Rugby)
- Mirek Petrovic, Slavic Heritage Farm (Rugby)
- Alecia Pretzer, The Double Batch (Rugby)
- Tracie Thompson (Antler)
- Nick Trumbauer (Minot)
- Sima Ulrich (Elgin)
- AriAnna Wingenbach, Dakota Roots Farm (Minot)

Each interview was taped and transcribed. These transcriptions were shared with Crossroads Resource Center for use in this report. Interpretations in this report were made by Ken Meter, based solely upon these transcripts.



Apryl Lunde

Apryl and Kurt Lunde Feral Farm - Rolette

The Lundes own seven acres of land, part of a larger farm that Lunde ancestors settled as homesteaders in the 19th Century. Kurt and Apryl's children are the seventh generation to live on the farm. As Kurt was growing up, the family ran a sheep farm here, selling both meat and wool. They also raised their own hay, oats, and vegetables.

Apryl grew up in Yakima, Wash., lived briefly in Montana, and decided to settle here during a family visit to Kurt's home. She says she started to garden only after she moved to North Dakota. "It just started out as a way to feed our family, and I learned a whole lot of what not to do through trial and error. By reading books, I've gotten a little better and better every year. Eventually I started growing more food than what we needed and I slowly worked into selling food also."

Now the Lundes focus on vegetable production, with 9,000 square feet (0.2 acres) planted to a garden, including a 30-foot by 72-foot high tunnel. They also raise chickens for meat, and have 200 laying hens. The family raises goats for meat, reserving the milk for their own use.

The Lundes sell produce and eggs through a Community Supported Agriculture (CSA) having eight weekly members and seven biweekly members. In addition, several customers visit the farm periodically to buy produce, without joining the CSA.

Future plans include adding a second high tunnel, and cultivating a fruit orchard. The infrastructure Apryl Lunde would most like to access would be a washing and packing facility and a community kitchen.

Apryl adds, "People are realizing that the world could go to a place where producing our own food is going to be a matter of survival." She notes that already there is so much demand for seed and chicks that she has to place her name on a waiting list several months in advance.

Fern Gronvold - Rugby

The Gronvolds live a few miles north of Rugby. "Our farmland is pretty much used right now to grow soybeans and corn, the crops are rotated," Fern Gronvold says. "We actually are renting our land to a bigger farmer," she adds, while the couple places its own focus on gardening. Both also hold off-farm jobs (she is a cook at a local school), but are starting to make plans for a more relaxed future. "We're hoping to retire soon and spend



Fern Gronvold

more money or more time investing in the things that we like to do, which is gardening. We raise corn, potatoes, cucumbers, squash, carrots, onions, and peppers, and we throw in something new every year to try something different."

Fern adds that "I've always dreamed of having a processing business where I can process one item of food and that item would be beets. I've tried several different types of processing. I just peel the beets raw, roast them with different seasonings, boil them, freeze them, and pickle them. I have a secret pickling recipe that no one else has." When she can free up the time, she would like to pickle other vegetables, too. She hopes that once she retires she can devote the time required to build this up as a business.

She continues, "I've tried selling vegetables at farmer's markets and I never really made a lot of money on it. I never put a lot of effort into thinking about how I would do the marketing."

Gronvold feels her farm is part of an overall trend to get back to the basics of life. "The small farms have really dried up and they're getting so corporate that there's very few small farmers that would probably have the potential to have enough land to grow food. Many of her neighbors have

gardens for growing their own vegetables, she adds. "People are really going back to the roots of growing their own food. Even if you grow a small garden, you always have way more than you need because they're so productive and you don't have the time to process it all by yourself."



Julia and Mirek Petrovic with their youngest of five children, Adrian.

Julia and Mirek Petrovic Slavic Heritage Farm - Rugby

The Petrovics have five children aged 13 and younger. Julia says, "We came to North Dakota four years ago and looked up this abandoned homestead (where we live today). We fell in love with it, found the owner, and begged him to let us live here. We fixed up the house, evacuated the raccoons, put up the gardens, put up berry patches, brought animals into the barns and, yeah, I've been living happily after, working hard too."

Mirek Petrovic adds that the family was able to gain access to the former pasture because "A farmstead like this could no longer be used by any modern farmer. Basically, the buildings are too small." But the farm offered plenty of opportunity for a young family that wanted to grow food for themselves and nearby neighbors. Mirek continues, "Let's start with the animals. We have two cows, a horse, about fifteen goats, we have 7 sheep, 140 chickens and about 7 ducks and 2 bunnies, and a dog, and a cat, and a parakeet." In 2014, the family planted "800 tomato plants, close to 200 pepper plants, and about 100 eggplants." We always grow green beans, salad greens, Jerusalem artichokes, squash, zucchini, winter squash, butternut squash, buttercup, watermelons, potatoes, and onions." Julia also bakes custom organic breads and European pastries. They sell these items at a farm stand and at the Rugby farmers' market.

Yet Iulia cautions that consumer interest in local produce is disappointing. "People don't really come out and seek out good produce. They do line up for my breads because I've trained them, but not so much for produce." She adds that she sometimes has difficulties earning money at the farmers' market because a retiree, who does not need the income, will sell at a lower price. "For us, a young family with five children, that's our income. I bring my cucumbers that were picked yesterday, there's not one drop of chemicals in them, and it's a labor of love pretty much, what I grow, because I feed my children with this food and I want to extend that to other families. But it's a dollar at my stand versus a quarter asked by the farmer who is selling right next to me. It's really hard to make a living that way." They looked into selling at a different market, but learned that the costs of insurance they would have been required to buy, and fees for selling at the market, meant it would not have been worthwhile.

According to Mirek, "Our way of farming obviously is way different. Most of the farmers around here are conventional farmers and their families have been here established for a long time. As newcomers, we are not interested in their way of farming. We are looking into growing real food, nutrient dense food on a small scale. It has its challenges, but you know, if you want it hard enough, I guess you can do it and I would encourage anyone else who wants to, you know, to

just try, start a little. We started with a small garden and a couple goats and we have been steadily adding, adding. This year we have close to 2,000 raspberry plants that we planted and 125 honey berries, a couple hundred currants, and 3,000 strawberries. So it's possible that in three or four years you can get to the point where you can derive a significant income from your farmstead."

The Petrovics draw upon cultural roots from their home country of Russia. "We're Europeans to the core," Mirek says. We grew up and went to college in Russia. After college I came to America to participate in a cultural exchange program at an American summer camp. Three years later, we got married, but we lived on the East Coast for about 7 years. Then we decided to take a cross-country trip. We packed our kids into the trailer, traveled through 18 states, worked on 12 farms, learned a bunch, and then we were in North Dakota working on a dairy farm near here when we spotted this property."

At first the family owned only hand tools. So their neighbors helped them get established. "One day we had an order placed with the local greenhouse. We had 300 seedlings waiting for us, and there we were standing in front of this area where we wanted to plant." They could barely break the ground with their limited tools. "So we're standing over there scratching our heads, thinking, 'What are we going to do?' Then it was a godsend. An angel neighbor came by and he brought his equipment. Then another neighbor came by, bringing another piece of equipment. They tilled it and leveled it for us, so in about a day we were ready to plant our 300 seedlings. That was awesome, that was amazing."

Still, the Petrovics find that in ways life was better in Europe. "I grew up in a country where we didn't have supermarkets. Most of the food was raised by people on small plots. We very seldom bought produce from the store because it never looked very good. But you know, our health was very good, we were much healthier. The Petrovics noticed that with modernization in their home countries came some of the same diseases that Americans struggle with. "As soon as the same

system of food production came, you know, with the big supermarkets in the Czech Republic, and we can attest to this because we spent 5 months over there a couple years ago, people are experiencing the same problems. Cancer is on the rise there. So are diabetes and obesity."

Julia adds, "We need a food hub — an outlet for farmers to sell, you know. The grain guys, they have the elevators. The cattle guys, they have their auctions. What do the little organic guys have? Nothing. So we would like to present this idea. I know a lady, she grew 3,000 pounds of onions last year and her soil is just so great for onions, they were huge delicious beautiful onions. She's got this organic garden right in front of me and she goes, 'Julia, I don't know what to do with those onions.' I said, Kathy, you know, my soil is not really great for the onions, I can buy some. I can't buy all of them, I can't buy all 3,000, but I can buy some. Just to support her and to show her, not to discourage her. Well, next year she said, 'You know, I'm not growing them anymore because I had no outlet to sell them.' And she's one of the examples of people that if we had a food hub over here, she would bring her onions and get her money for it and these onions would go to people who would appreciate having them."





Ann Gibson

Ann Gibson Bohan Seed & Supply - Rugby

Ann Gibson is another newcomer to North Dakota. "I came to Rugby about two and a half, three years ago from Arizona, where I was born and raised. My father was a cotton farmer so I grew up on a farm. There's an awful lot of tourism there. All the farms turned into malls and they kind of went away. I spent all my life looking for a place to get back to the farming life." She found that opportunity when she came to visit family. "My daughter married a farmer and moved up here. I came up to visit and I fell in love with North Dakota. I knew that this was the place that I wanted to be so I got a job and moved up here [to her current a farm] after living in town."

Much of the appeal of living in North Dakota was the chance to be more independent. "To me the focus needs to be getting back to the small, sustainable farms that individual families love and operate and care about. I believe it's going to come back to a more balanced place where there are more local people growing local foods. I think we're going to be forced to, because it's going to be

the only way we're going to eat. That's why I got into the seed business."

Gibson views her seed business as a way to conserve both heritage seeds and a small farming heritage. "Farmers and agriculturalists on large scale, they'll tell you 'we have to feed the world, it's our job.' That's okay. I'm not going to argue with that. That's a whole other topic, but it's the small scale farmers and the backyard gardeners who have been tasked with preserving the sovereignty of our seeds and preserving these old heirloom type vegetables and to keep them going. Do you know how we're going to keep them going? Keep planting them, and keep harvesting them, keep taking the seeds out of them and replanting."

Her own small seed business is, she adds, "in the sprout stage or the seedling stage. It's called Bohan Seed and Supply. That's a sort of a morph of my mother's maiden name. I sell open pollinated seeds. Those are the seeds that if you take the seeds out of that tomato and put them in the ground and the plant comes up, the tomato that is produced from that plant will be like the one you took the seed from. If you plant a hybrid, there's no telling what you'll get. So it's important to keep these open pollinated varieties pure, keep them every year. They will naturally adapt. I do a lot of talking about how to save your seeds and why you should and I'm more and more focused because when I first came here from Arizona, the first thing I noticed is we're in Zone Three. There were no really good varieties that were meant just for this really cold short season. So I started looking for these and as I started finding them, I realized, I can't be the only person having this problem and so I decided that I would just start collecting the good ones and selling them."

After consulting business experts, Gibson set her course on growing in small steps. "I really got a lot of good direction from the people up in Bottineau at the college up there about getting a business plan together getting loans if you need them. But I've decided I don't really want to go into debt with this business. I'm not doing it just to make money. A lot of what I'm doing is focused on teaching people to

preserve these seeds before they're gone, because if you quit planting them and you don't propagate them, they'll go extinct just like an animal will and we can't afford to have that happen. So yeah, I'm hoping to make some money but my main focus has been to teach people."

Yet her business is also a path toward a farm of her own. "My dream farm is a small-scale sustainable farm, not large because I don't think large is necessarily the answer anymore, where I can grow almost all my own fruits and vegetables and raise my own meat. That's my idea and in return everything that I put out to the soil and everything that goes through me and through my home and through my process and back out again so you're kind of closing the loop. If you have excess it goes out to the commons."

Gibson questions whether the oil and gas industry really benefits North Dakota as much as some imagine. "I still have family who live in Arizona. I have an aging father who I go back to visit a lot. I take the cheap airline that goes from Minot to Mesa. That's a direct flight and I'm noticing there's an awful lot of people working in those oil fields who don't live in North Dakota. They live in Arizona, they live in Oregon, and they live in California. You can hear them talking on the planes and in the airport, saying we work two weeks on and two weeks off and we go home. It's frustrating because a lot of that money that people keep telling you, 'Oh, it's lifting the economy and it's generating all this,' well actually they're taking that money out of here. They're not spending that money in North Dakota. The only people that have really been truly benefiting from the oil in North Dakota are the people who happen to have been living on a farm that is now an oil field, which is sad. Most of them don't live here and they're not spending that money except in Walmart and you can't even get anything off the shelf in there because they're empty. I can tell you from the perspective of someone who works for the sheriff's department that that kind of concentration of mostly men in one place in this state [brings] crime and drugs and that's not something that's benefiting the state either. I sure as heck haven't seen my gas prices going down so as



Sima Ulrich

far as I am concerned, this has done nothing, for at least this part of North Dakota."

Sima Ulrich, Prairie Rose Greenhouse and Nursery - Elgin

"I come from Lithuania. I came here to work in the oil fields. That is where I met my husband. He has lived here all of his life. When we decided to get married, we both quit our jobs and starting gardening inside the city. I started working a greenhouse job, and my husband worked here locally."

Ulrich adds, "We started out with just a little garden and my mother in law's yard. We grew more vegetables than we could possibly eat ourselves. Then we figured that maybe we need to do something [with the surplus], maybe try to sell it. We tried farmers' markets and it was a pretty good success. Then we started to look for more spots. Our main operation is the greenhouse. We start bedding plants there, and sell them out of the greenhouse."

She says that she could grow much more produce

if nearby residents made a conscious choice to buy locally produced food, even if it cost a bit more. "Our main barrier right now is to find the buyer for the produce. We could easily expand production, actually. We have more property to expand on but we just don't do it because there is no market for it. People are more interested in Bismarck. In smaller towns, people are still more oriented on the price tag."

Ulrich also questions the oil economy, because it overlooks the region's need to grow its own food. "My personal opinion is that the oil is not going to last forever. It's going to run dry sometime and that's going to be a real hard hit on the economy and on North Dakota. Then you're going to need food from somewhere."

Nicholas Trumbauer - Minot

Originally from Pennsylvania, Trumbauer says, "I currently live in Minot. I moved here in the winter of 2006, so I've been here for 7 years. We have been farming for three years. We have about an acre in production. Mostly it's produce. We do some herbs, we do a lot of melons and a lot of squash. This year we got to do a lot more onions. We do a lot of our marketing at farmers' markets."

While farming is in Trumbauer's background, it was not something he learned from his immediate family. "The farming in my family, I guess like a lot of families now, skipped a generation. My grandfather was a dairy farmer in Berks County, Pennsylvania, and I grew up spending time on his farm. None of my aunts and uncles had any interest in farming but it came back around with me, I guess."

The decision to move to North Dakota came slowly. "We were graduating or getting ready to graduate from college, Betsy and I. We decided we wanted to move out west and get away from the East Coast. We had originally planned on moving to Montana. At the time I was involved in a dog



Nicholas Trumbauer

club training Labs and a couple of my co-trainers said, 'Hey, you might like North Dakota. We've been there a couple times.' So in the summer of 2005, we came out and spent a couple of weeks in Harvey and Minot; just kind of seeing the countryside and we thought, hey we'd give it a shot. And we've been here ever since."

While he has gained good access to land, he would like to make a more stable connection to a farm. "For the most part I can grow everything I want to grow. I'd like to scale some things up, to be able to grow garlic in a bigger way. That would be financially advantageous but in order to do that, I need to find a place where I can [count on staying] because you plant garlic in the fall. I need to be able to trust the land ownership that I would be able to get it in the spring from the same place. Other than that, the only other crop that requires a lot of space is sweet corn and that market is pretty well covered in my area. So for the most part it would just be garlic and maybe planting some onions in a bigger way."

When Trumbauer first arrived, he was struck by land ownership patterns that were new to him. "Family farming in Pennsylvania is a lot different than family farming out here. Where I come

from is southeastern Pennsylvania just north of Philadelphia. There a small family farm is 15, 20 acres. My grandfather's farm was 70 acres, and that was actually pretty big. So first of all, it was kind of a shock to come out here and see that a family farm is several thousand acres. Where I come from is still this isolated Pennsylvania community. You still buy a lot of your stuff locally and you see farm stands everywhere. It's definitely a big business in a way there; it's a big-small business so to speak. It was quite a shock coming out here to North Dakota and seeing that here it's wheat, flax, sunflowers, and soybeans."

With this experience, Trumbauer questions the wisdom of trading either grain or oil as commodities. "The people of North Dakota and the state legislature seem to have banked their future on the commodity cycle. I know there's a lot of pleading and saying 'this time will be different' and it will go on for infinity. I just don't see that. Eventually, the other shoe will fall and at that point there is probably going to be a lot of pain on the down side. People aren't really thinking about or aware of it right now."

Trumbauer thinks small-scale production can play an important role, but for different reasons than many of its advocates. "The only thing I can say about what farming will look like in 30 years with great certainty is that it will not look like it did 30 years ago. When I engage in conversations centered on the idea of local foods I often find that some participants in those conversations are caught up on some notion of a glorious agricultural past that at least for the most part probably never existed." He finds much to praise in large-scale farming. "I will not become a Luddite. What might be labeled our current conventional agricultural practices are likely more productive, and less environmentally damaging per calorie produced than they have ever been before. That does not at all mean that they cannot be improved upon, or that there are no limitations to the sustainability of the dominant agricultural practices. I think a more local and small-scale food production system can play a major role in dealing with some of the potential problems that our current system might face."

The current era is a beneficial one for small-scale development, he adds. "The small-scale farming technologies that are coming out are making life so much easier. I think in general that's what allows us to compete price-wise with places like California. The small-tech stuff, you know, the small-scale pickers, the small-scale weeders, on top of varieties that produce a lot heavier and are better suited to small-scale operations. I feel like the opportunities for small-scale growers operating three or four acres are growing, and will continue to do so."

If North Dakota were to grow more of its own food, Trumbauer adds, it could bring great resilience. "Chief among those potential problems is the likelihood of a dwindling supply of cheap petroleum. I do not know what technological advancements might lie around the corner, so it is possible that some extremely cheap and abundant source of energy will arrive shortly and allow us to build something new that is totally unimaginable to us now. I admit that, but I don't find it likely. So it seems to me that perhaps we'll be in a situation where the culinary luxuries of tomatoes in January and year-round citrus fruit become increasingly less affordable. A local food system could provide an enjoyable seasonal flexibility."

Yet he feels that in the future, more centralization will be required. "I would be remiss if I did not include one other idea which I feel will be most unpopular with a lot of local foodies. If our goal as a local foods movement is to increase our resilience and lighten our environmental impact then current notions of at-home food preservation (canning and freezing) and preparation (cooking) will probably have to be traded for models of more centralized food processing locations (restaurants and food hubs). Locally owned and managed restaurants, I feel, will have to be central to any local foods system that is intended to last because doing so provides efficiencies of scale and reduces the need for the extreme redundancy of large individual household kitchens."

Finally, Trumbauer concluded by cautioning that he is still young and does not have a crystal ball.

"For the reader of these responses, it is important to note that the author is only 34 years old and is essentially being asked, when you have lived twice as long as you have now, what will agricultural be like? Having experienced a vast amount of change in the first thirty some years the most tempting and probably the most accurate response is an, 'I don't know.' I have hazarded some guesses, but it would not surprise me to find every bit of it completely inaccurate. Yet to ignore the entire set of ideas labeled as local food just because we can't accurately predict the future, or even worse, because others think they can, would be a major failure of our imagination. For the time being, I think it is worth keeping small scale, local food systems around as an egg in a different basket."

Melanie and James Hoffman Hoffman Farm - Foxholm

Melanie Hoffman recalls that "We moved here almost 7 years ago. I'm originally from Minnesota and James is from California. I grew up in the city, and he grew up on a farm. We have 15 acres total. We looked at the abstract not too long ago and this land has been homesteaded since the late 1800s." James Hoffman added, "It goes back at least 100 years, when this town was founded around the railroads. They also had coal mining up in the hills.



Melanie and James Hoffman

There used to be a hotel, and it used to be kind of a booming town 100 years ago. Now it's mostly just houses, a church, and a barn."

Melanie continues by describing the land they own. "We have property on both sides of the river. On this side, we have three acres of pasture that had horses, cows, goats, and all sorts of livestock from previous owners, as well as us. Across the river it was mostly alfalfa fields and now we use a portion of that. We rent to some friends for their organic garden and we have our own little garden in that area also. I shouldn't say organic. We use organic methods, but...yeah [we don't use the word organic since we are not certified]."

For James Hoffman, farming in North Dakota blends both old skills and new skills. "I grew up on a third generation farm, growing fruit out in California with my dad. I drove tractors and worked with the trees. It was different than crop farming here in the Midwest. We managed a lot of equipment running, and irrigation, and things like that."

It is Melanie who envisions acres of fruit trees. "I've always wanted to have an orchard and that's where we've had a little difficulty. We have apple trees and most of them have died. It's a work in progress. We're still learning how the weather works here and what grows well here. There are not as many varieties of fruit that grow here." James clarifies, "That can tolerate the cold here. And also deer, something we did not have in California. Here the deer will chew your trees pretty good if you give them a chance."

James Hoffman adds that the couple's quest is made possible by holding off-farm jobs. "With the scale of farm economy and increased efficiency, you have to be farming thousands of acres in order to be able to afford the half-million dollar equipment and everything. [The costs just keep] growing. In order to [farm] small scale, it has to be your hobby, because it's not economical. If you're supplementing your family's groceries then you can do a hobby garden, farm chickens. But if you're going to monetize small-scale farming, that's a whole lot more difficult. You've got to find those

small niche markets, to sell at the local farmers' markets or form a CSA."

Finding those niches is not always easy, Melanie adds. "I do think there is a market for the small farmer. It's just that getting into that market is difficult. When you buy fresh from the farm, you cut out the middleman and that's the one thing I really loved about coming to North Dakota. Just getting our food from Mexico. I just can't fathom how that is a good idea. When I first moved here, I was disappointed that there wasn't a food coop or a Whole Foods-type store in town, but as I started getting to know our neighbors and asking around and finding the different foods, instead of going to a grocery store to buy my meat and different things, milk or whatever, I would drive down the road to the farm, and so I would get to see the cow that was milked. I get to see the farmer that raised the cow and I know that our money is going towards helping this family live. A lot of times if you're selling straight to your customers, you're able to charge a more livable price. Instead of getting a small amount for a million chickens, you get a little bit more for a home grown, organic chicken. But I think finding the market is one of the hardest things that small farmers face."

Growing food for one's own family and for close neighbors also brings larger insights, James says. "It seems that you can't grow something without growing your own appreciation for the whole system related to food and without getting large amounts of education on what's good food, and what's not good for your body and degrades your health.

Yet Melanie adds that this also brings challenges. "If you're used to the processed foods and whatnot, going back to eating real food, a lot of times there is an adjustment to your palette, it can make you go crazy. But I think once you work that out of your system, then you can appreciate the flavor of real food. After all, we vote with out pocketbooks. Where you put your money is where things will grow, so if you stop spending money on the factory farm chickens and start seeking out your neighbors for good chickens that you know are taken care of

and fed a good diet that a chicken was meant to eat, your money is going towards them rather than the big corporations. I think that will start showing them that that's not what we want."

Melanie continues by pointing out that growing food is something almost anyone can do. "Everybody thinks you have to have 20 acres, a large amount of land in order to do this. Well, I have a lot of friends who do this on one acre or less. I know people that do it in the city. Homesteading doesn't have to be a big huge production. You can homestead wherever you are. If you have an apartment, you can container grow, you can have herbs and grow your own produce. If you live in town and have a back yard, you can petition your city to let you have backyard chickens."

James Hoffman is cautiously optimistic about the oil industry, but he has some concerns, as well. "We got here before the oil boom really started and we've kind of ridden with it as it swelled. It changed the town, and the region. Looking back, everyone will have a different opinion on whether it has been a good thing or a bad thing. It's a mix, of course. The money and the jobs are so good that the rest of the country is benefiting. From everywhere, people are coming and getting good jobs. Now, if we poison all our drinking water for a few centuries, maybe we'll think it wasn't worth it, but I think it's going to be...time will tell, one way or the other, but I think it has been really great for the area."

AriAnna Wingenbach Dakota Roots Farm - Surrey

AriAnna Wingenbach and her husband Jerry have 55 acres of land that they have owned for ten years. "We have five kids. I stay home, so we were kind of scared to make the jump to build a house here. Finally, we did. Three years ago we moved out here right during the flood. We lived in our camper like everyone else while we were building. We planted



AriAnna Wingenbach

the hay land and trees, and put up the barn, but we still rent out 40 acres."

Like many others, Wingenbach began small and reached out for new markets one by one. "I planted raspberries and I would like to do market gardening. I'd also like to put raspberries in our high tunnel when it is up, to see if I can get a longer season for selling raspberries. I'll probably also grow tomatoes and peppers. I have an interest in getting chickens for eggs for myself; and meat for myself; and I would also hope to sell some. But I know just to have a coop all year round, that's going to cost me money too to have it insulated and heated with electricity. I have a lot of growing yet to do in this."

"We put real water in because the well water is pretty high in iron and we didn't want to ruin everything in our house. We had to pipe it quite a ways ourselves. We plan to use our well water for irrigation. We finally got a loan to hook up our hydrants so we can irrigate."

The fact that farming small-scale has become a rare pursuit makes it more expensive, AriAnna adds. "I think it's probably harder to farm now. In the old days, everybody had smaller farms. Things were produced to help you, even the little mechanized items, the little teeny corn planters were easier to

come by. Now, it's expensive to find something small like that, so the cost of farming is high." While she views larger farms as important, she finds herself drawn to the challenge of raising food for neighbors, not simply planting commodities to sell. "I don't think there's a bad thing about big farms; I think it's easier to market one thing. It's just different and things go a longer distance. We don't have fresh food around here." That even extends to her own land. "We have wheat, which I'm proud of, that's great. Our renter grows it, that's great, but that doesn't do me a lot of good right now."

Like many others who were interviewed, Wingenbach does not like the emergence of the oil and gas industry. "We're both from North Dakota and we liked the way it used to be. We didn't think about leaving very often. I always said I liked Minot because I could get anywhere in 15 minutes. Now, I really can't stand going to Minot. We just went out west this weekend and it was hard to see. Going through New Town and that area and what was just such a beautiful area is just fast-paced and it's tough to watch. We are not benefiting one bit from this. Everything is more expensive.

Rachel Brazil Brazil Family Farm -New Rockford

Rachel Brazil and her family "do some small-scale farming near New Rockford, North Dakota. We're starting out with vegetables and we have a small flock of chickens as well. Our garden is less than a quarter of an acre. My husband works full time at a lumber yard, and we have two sons who are 7 and 4." She supplements her farming with other income as a consultant, and also is a working artist.

The family is farming several scattered plots. "Actually, it's more like we have a selection of farms

or several gardens. Right now we are eating it all ourselves. We got about an acre of property on the edge of town that's a series of lots connected to each other with the hopes of developing an orchard area. It's really wet and nobody wants to build on it, but for me having training in ecology, it's like, "We'll grow trees there. The trees will suck up the water." So that's going to be really interesting to learn about that without really tilling it up because you don't want to till that ground. We're going to learn some innovative permaculture techniques for developing that land for agriculture. Then we have some meat birds that we are raising for ourselves this year at a friend's farm. Oh, and we have a small plot by the river too, of 90 tomato plants. Last year our tomato garden didn't work because of the weeds. This year we put weed barrier down. We go down every three days and pick them." While she has some special recipes that might lend themselves well to value-added processing, she is not always sure that is what she wants to do. "If we were to market our tomatoes, we wouldn't market them as fresh products unless we had a whole bunch of them. Instead, we're going to do it value-added. We make tomato jam, and we make a tomato juice that is fantastic. I don't know if I would ever sell it, though, because that's what gets me through February, the darkest of time."

Brazil took the Farm Beginnings course as a way to improve her skills and learn how to reach out to others. "The reason I took the class was to help us integrate some of the things we really value with food into our life and learn how we can rely on that not just for ourselves but also encourage other people and get a little income. I work throughout the year doing contract work with writing and marketing, but I don't want to work in the summertime, I want to garden. So I get to make that choice. We market our products through direct sales to people we know. I've had lots and lots of people say, 'You're raising chickens, I want some,' and I say, 'Next year. Let us try it out, see how it goes.' We sell at a farmer's market in Sheyenne and we're trying to get a farmers' market started in New Rockford, but I have to get some other producers and growers to go along with us. I suppose, if we broke it down, I would be in

marketing, my 7-year-old son Jackson would be in sales, because he talks to people and the next thing you know, he's got a business deal and he's selling stuff to them and he's a cute kid, people give him money. I don't know how sustainable this is long term, but for right now, it works well. So he was at the farmers' market two weeks ago selling eggs. He had a white dry erase board that said, 'Fresh eggs, 3 dollars a dozen, standing out by the road. He was waving as everyone else is packing up to go home, and he was delighted when one person just passing through the town, a construction worker and a truck utility worker, pulled over. The man got out, paid him 4 dollars for a dozen eggs, got back in his truck and left. So he stopped just for the eggs. That's a teaching experience, a learning experience for the whole family."

The family is focusing on a discrete number of products right now. "We have raspberries this year, and we also want to grow cabbages. We want to grow the things that, in our mind, you could never have too many of. Cabbage can turn to sauerkraut and you can have it all year long. You could never have too much raspberry jam. We would really like to transition to more of the orchard-type products. June berries would be great. My son Oakley loves the June berries. He tried them at the Carrington research center and said, 'Mom, please, please can we grow these?' Being able to transition to that seems like the greatest challenge right now."

Although Brazil is a newcomer, she feels some of the most special moments of her life came on a farm, and she wants to build that sense of belonging here. "Neither one of us are from here which kind of feels strange sometimes. I grew up in suburbia and hated it. I commuted 25 miles to work as a teenager in high school. That was just what you did. I dreaded it every day. I knew that I had this affinity for nature because my grandparents lived a little bit out of the suburbs, almost in farm town. They had a really big garden. One of my fondest memories is picking concord grapes there in August when the grapes were still popped from the sun. If we ever get concord grapes from the store, I take them outside and set them out in the sun till they get hot before I eat them



Rachel Brazil because oh, it's just good. That's where I felt most like myself."

Her husband's family also built a special sense of heritage by staying close to the land and their food, which expresses itself in a story about beets. "My husband did not grow up on a farm, but the generation up was a ranching family. Many of them still live in northern California. His father's family was a large farm family, ten kids, lived in a farm house, raised cattle, did dairy, did all sorts of different things. The mother had every job of preserving food. [My son] Jackson tells a story that her pickled beets were very special. She only brought them out to help keep the grumpy tired papa happy. Whenever he got really, really mad, that's when the beets came out, to make everything okay."

Brazil says the chance to create a new vision for agriculture is compelling. "Over time I realized that what we are doing in this agricultural community is redefining farming. We're urban farmers in a rural community, and that's kind of different because most farmers are outside of town growing crops and raising animals. Our neighbors next door used to be farmers. They moved into town because they were done. Now we're here raising chickens in our backyard. And that's okay, they actually enjoy watching our chickens. They were sad when we had a little one hatch that was part of an educational project incubating eggs. It turned

out the chicken was a rooster and so we butchered him because we can't have roosters in town. Our neighbor was like, 'Where did that funny little chicken go?' Because he'd just run all over the yard and he was a riot, but now he's in the freezer. He's a fryer now."

Stories like these fuel her basic sense of why it is important to grow food in the community. "What I really, really value are the relationships that get built around food. There are times where it's like, 'Oh, those tomatoes are cheaper here than they would be from Joanna that we buy from at the farmers' market.' But you know what? I want Joanna's, because I know the story behind it."

Knowing the practicalities of food, she adds, is a kind of literacy she is pleased to find her children cultivating. "I feel like food literacy [is truly important]. I love the fact that I can take my kids to the supermarket like we did today. We went down to Jamestown. My kid picked up a daikon and he said, 'What is this? Can we get it?' And I said yeah, we got some carrots to pickle, grab it. And I said we also need some ginger and he walked over to the ginger, picked it up and said, 'Ginger is a root.' And I'm just like 'Hey!' I feel like that is imperative, the level at which people understand their food choices and exercise their power with those food choices will determine what things look like 30 years from now. Another story: we had cow tongue the other day. My youngest goes 'Oh!' Because he saw it as a tongue. Later, we prepared it. We cooked it, we brined it, took about a week to process it, we sliced it up served with crackers and cheese and Oakley goes, 'I love this meat! I didn't know you could make tongue into meat."

This extends to holidays, and the chance to celebrate what the community has done for itself, rather than what is viewed as commercially successful. "Last November at Thanksgiving I had been out of work for about 6 weeks because I was ill and had my tonsils taken out," Rachel adds. "So we didn't have anything for money. We're sitting here thinking, do we want to buy Thanksgiving dinner on our credit card, because then we could have whatever we wanted, or do we want to see

what we have, and see what we could come up with?" They put their heads together and came up with a homegrown menu. "So what we had for Thanksgiving dinner was wild duck. I think we had three of them that Mike smoked that he hunts, we had potatoes from the farmer's market, we had pumpkins that came from the farmer's market, we had our own pickles of different kinds, we had buffalo berry Jello. We made our own gelatin with buffalo berries and homemade whipped cream. It was just the four of us. We sat down at this Thanksgiving dinner and looked at everything and could tell a story behind each food that was there. We could remember when we bought that, who we bought it from, where we gathered it, who we gathered it from, and it was like, 'This is what Thanksgiving is about.' And it was more valuable than anything we could have put on a credit card. So I think that for me there is so much value in the relationships that come from the food that you grow and that you eat that you share with others."

For Brazil, redirecting agriculture reflects ways she has redirected her own life. "When we kind of came into the Farm Beginnings program, I was at a point of transition. I had left a big job and was trying to find a way that we could make things work for our family. We were getting used to a new normal and there were times in the first couple classes I was like, 'Grazing management, I don't care.' You know, I mean, really, it doesn't matter to me. But when we had the holistic management part, it was like 'oh' and it aligned with some other things I'd been reading about organizing your home and building a family."

Like others, she is not entirely enamored by fossil fuel development in her new state. "What we see [with the oil and gas industry] is just way more traffic. We got here just prior to the big boom. What used to be a really quiet drive an hour away to the large city to go get stuff that we need, there's a lot more vehicles now. Even today, I had to pass a truck, which I hate doing. The whole time, I am singing a song to myself, 'I hate passing trucks.' I really, really do. That's why I left the suburbs because I hated the traffic. Just south of us in Carrington, the intersection is now really, really

busy and somewhat dangerous."

What concerns her the most, Brazil continues, is the way oil and gas have altered our notions of progress and success. "We traveled in summer to visit family and people think, 'Oh my goodness, these North Dakotans, they have money.' We're not from that situation. My husband could go work in the oil field and that crossed his mind when I was at that point of transition and quit my job. He thought, 'Boy, do I need to go and work to provide for my family?' He decided that his time with his kids right now is more important. So farming really helps us solidify our values a little bit more in midst of this emerging stuff. My concern with [oil and gas] is the development of the public opinion of success and progress. All of a sudden, this is what success looks like. It kind of feels like, 'So does what I'm doing [as a farmer] really matter economically?' But people need to eat something other than McDonald's every day."

Tracie Thompson Thompson Farms - Antler

Relatively late in life, Tracie Thompson discovered a new passion: growing food. "My husband has farmed for 31 years. His father farmed before that and I have never farmed. I just wanted to play in the dirt. I moved to North Dakota in 1986."

Her ambition to "play in the dirt" led her to a small commercial enterprise supplying local groceries. "Now I have a high tunnel that is 30 by 72 feet. I grow for three supermarkets. I started this because when my daughter was born, I decided I should probably feed my own kids instead of going into a store to purchase my food. The closest grocery store is 18 miles away. I started very small, and evolved into this high tunnel. I have a garden in my yard that feeds my family. My high tunnel is to market to my three grocery stores. I start seeds in February, and in March and April I start seeding cold crops. In April I get my other crops in here.



Tracie Thompson

On Tuesdays, I pick all my orders. Wednesdays I deliver. So it's kind of a vicious circle for three months." Yet, she adds that this brings solid rewards. "It keeps me out of an office chair and keeps me out of trouble."

Thompson feels that regulations have become burdensome. "It's easy to farm. But it's not easy to follow regulations. Everybody has different regulations. Fresh food means something different to everybody. I want to sell to a grocery store, so I am certified for that. I can also sell to nursing homes and schools. Anything that is fresh and unprocessed. That means I can sell this tomato whole, but I cannot slice it in half and then sell it because at that point, it's considered a processed food. Years ago, you could just go sell your produce, everybody knew it was fresh. That's not so anymore."

Sometimes, she believes, people miss obvious answers because they are in the habit of turning to others for answers. "I can grow potatoes for the schools and the biggest issue is who's going to cut them up. Really? We have kids sitting in school in home ec class. They could cut potatoes and we

would know what our children are eating."

She feels the state has exceptional potential to feed itself. "In the state of North Dakota, with farming, we could feed ourselves if we chose to. We choose to send it to Third World counties instead. Years ago we would feed our families first before we chose to send it elsewhere. We have the capability to do it here, we just have to teach people how to grow food for themselves. One day, there's going to be a shortage. Everybody is growing crops for fuel. We have to grow for food and think of ourselves before we think of high-powered vehicles. If the government continues to let us grow our own food on a small-scale basis, we should be fine."

Thompson is willing to show others what she knows, but she finds that people are reluctant to roll up their sleeves and work on their own behalf. "The only concern I have is we have so many young farm families. I go to a farm credit services meeting for women every year and these same women that I have known all these years, they all have back yards. If we could just get them to grow their food. They think they have to work with a college, or work with a grant program. We have a long enough growing season if people would use their heads. You can grow, you don't even need a high tunnel. If you get a piece of plastic and PVC pipe and a heater, you can keep things from freezing. I'll stand there for free and tell you what to do, but you've got to do it."

Like others interviewed, she has a skeptical view of the fossil fuel boom. "I view the oil and gas industry as a joke. They're too focused on oil. We aren't focused on how we're going to survive as humans, what we're going to eat. All of our farmland is going to produce oil or fuel and North Dakota is not seeing many of the benefits from the oil that is being produced here."

Laura Halvorson Metagrowshe Garden at Camp Metigoshe - Lake Metigoshe

Laura Halvorson serves as garden coordination for a camp ministry, where she is involved in both growing food for the camp and also training others to raise food for themselves. "This is my third summer. Altogether we have about a quarter acre including the garden, the raspberry patch, and the high tunnel. Then we have a chicken coop." When youth attend the camp in the summer, they are assigned gardening chores. "Every single camper here attends a garden session. They each get a work project to do. It might be weeding, it might be turning the compost pile, it could be bringing wood chips in for mulching, all sorts of different things. Then we gather as a group again to harvest and sample. Usually they get to sample between 2 and 6 things right there in the garden. Whenever we've harvested them, we bring them up to the kitchen for the cooks to prepare." Campers also see the foods they have grown on camp menus. "We use all of our produce during the camping season. We serve it to all of the campers and the staff, so almost all of our salads are provided, potatoes and carrots and things like that. Once the camping season is done, we use the produce in our retreat center for retreat groups and for staff. We also bring produce once a month to the food pantry in town."

Halvorson has seen many cases when learning how to garden was the key to kids' interest in eating fresh vegetables. "When the youth see something growing, they get really excited and they want to know what it is. They want to know what it tastes like. They'll try just about anything if they get to actually see it and pick it and try it right on the spot. I've seen kids who will eat a ton of lettuce as they're harvesting out in the garden. Then we wash it and we bring it to the kitchens and its served at the next meal, and they won't take it necessarily. My own nephew, as a child, would not eat any vegetables at all. He visited the garden and now he likes veggies. I've heard stories of campers who



Laura Halvorson

have had parents contact me, asking "How did you get my child to like peas?"

While Halvorson gained some sense of gardening when she was young, her skills were primarily honed when she served overseas. "I grew up with a dad who loved gardening so I didn't do much in the gardening then, but it was always a part of our household. I really got interested in gardening when I was a peace corps volunteer and lived in Nicaragua for a few years. You ate what you grew and it was just a new way for me of thinking about food. I started some gardening projects in our community. Most people there rely on corn and beans and sorghum for their livelihood, but I got a few people started with vegetable gardening and that was fun."

After returning back to the States, Halvorson and her husband got an opportunity to move to North Dakota. "My husband took a call to be executive director of a ministry here. Prior to this, we had been living in South Dakota. He was a pastor there. We both took the farm beginnings program there. We were thinking about, 'Can we start a small farm or can we integrate it into work we're already doing somewhere?' So this made a lot of sense when we moved up here."

Halvorson's work allows her to take a playful approach to her year. "I start planning the garden in January, February. Then in the spring we have a gardening retreat at our retreat center. I bring in guest speakers and we have different topics that we cover. Some of the topics we covered last year were container gardening, trellises, how to plan out an annual or perennial bed, and natural gardening techniques. Not necessarily organic certified but natural." She opens these retreats to others who want to learn gardening skills. "The retreat is open to the public. Anyone who wants to is invited to participate. It runs for two days, usually in March or April.

As a mission camp, the camp also has connected the gardening they do to a broader concept of religion. "We also have devotions that are biblical in nature that connect the gardening with God and we also have a very small worship service together as a group. Growing your own food shows care for creation. You're taking an active role in creation and if you are gardening with natural techniques, you're taking care of the Earth. I think that ties in a lot with scripture."

Halvorson also considers this to be an expansive time to pursue small-scale gardening and farming. "I'm new to farming, so I don't really know what it was like to try and farm many years ago. My experience has been that there's a lot of support right now. There are a lot of organizations that have information and resources available. There are companies and organizations that are looking to provide funding for fresh food and local foods and that's been very beneficial. I'm thinking and I'm hoping that the pendulum is swinging away from the conventional farming and more towards the local foods and grow your own and being involved with where your food comes from. I'm very optimistic, I don't know if it will really happen or not but I have that as a huge hope, and I also hope that I have a role in developing people who are interested in growing their own food."

And she has seen her charges spreading the word in their families. "I've had a number of kids leaving the garden, saying, 'When I get home, I'm going to ask my mom if I can plant carrots, if we can have strawberries at our house, if we can start a garden next year.' A large number of kids say that, and what has been really interesting for me is how much impact it's had on the staff." So the staff themselves become learners in the process. "Our summer staff are typically college-age students so they're ages 18-22, and a lot of them have zero connection to their food. They're used to eating school lunches or they're used to eating in their university cafeteria and they don't necessarily have this connection to their food. Some of them complain at the very beginning, 'We have to bring our kids down to the garden, ugh.' By the end of the summer, those same ones that complained at the beginning are coming to me saying, 'I've learned so much in the garden. It's been one of my favorite things at camp to do with the campers, and now I want to grow something myself."

While she is cautious abut speaking up, Halvorson also raises some gentle questions about oil and gas development. "It is a tricky situation for us in our positions to address publicly. I think on the one hand, it's been positive for the economic development of the state. But also, as somebody who is very tied to the land, and tied to the concept of creation as a gift to us, I have a really hard time with how the Earth is being treated with all of the extraction, and all of the chemicals that can be used in the process, and all the spills that happen and such. So I would say in my personal opinion, the benefits do not outweigh the negatives. I think there is a lot of harm that is being done. It seems like the cost of living is going up in the area. I have seen 8-12 new [oil and gas] wells go in at the bottom of the hills. We've heard people talking about increased traffic, and I'm curious to see what happens to the water resource in the state, what is really the impact is going to be with communities selling their water to an oil extracting company. That's very concerning to me."

Summary of key conclusions from interviews

CONCLUSION 1. A notable segment of the respondents are involved in **diligent efforts to raise and process food for their own use,** and to sell to immediate neighbors.

Mirek Petrovic sums up the attitude that many of these emerging farmers have. "We farm differently and we are looking into growing real food, nutrient dense food, on a small scale."

For Julia Petrovic, the concern was to create work that allowed her to keep a focus on her family. "As a mother because I am passionate about farming and growing and being outside and digging in the dirt and planting. I have 5 children that need my attention on a daily basis, so that is critical for me."

Fern Gronvold, a school chef at school a near Rugby, says "People are really going back to the roots of growing their own food."

Apryl Lunde notices this demand when she attempts to buy inputs. She notes that already there is so much demand for seed and chicks that she has to place her name on a waiting list several months in advance.

Ann Gibson holds a vision of a future in which cycles are closed for local benefit. "My dream farm is a small-scale sustainable farm, not large because I don't think large is necessarily the answer anymore, where I can grow almost all my own fruits and vegetables and raise my own meat. That's my idea and in return everything that I put out to the soil and everything that goes through me and through my home and through my process and back out again so you're kind of closing the loop. If you have excess it goes out to the commons."

CONCLUSION 2. Many of these are relatively recent arrivals, coming from places as diverse as Lithuania, Russia, Arizona, California, Minnesota, Montana, Pennsylvania, and Washington State.

Since the population of both regions has been declining over time (with CONAC declining 18% over the past 40 years, and Southwest rising only in the past few years) these new residents represent potential opportunities to repopulate each region.

Many have come to North Dakota because they perceive the state as welcoming, but also because land prices are more affordable than in other parts of the U.S. Many have chosen to live here so they can engage with the land, and learn farming and other food skills.

For many newcomers, starting a small farm or gardening operation has been an important path to creating an independent income stream, even if relatively small, that offers them more choices in their lives. Many have left more lucrative work (including work in the oil fields) because they wanted to have more time with the land and with their families. Many view growing food as one of the few paths open to them to get established in their communities, both socially and financially.

It would appear that longer-term residents are more likely to remain in occupations that have sustained them, and are less interested in tackling a new venture. Yet some retiring workers view farming or food processing as a viable activity in their senior years, and some longer-term farmers are eager to raise food for people they know.

CONCLUSION 3. These recent arrivals have typically chosen North Dakota as a place to live because **they want to get closer to the land,** and feel the state gives them opportunity to lead a fairly self-sufficient lifestyle.

Tracie Thompson attributes her interest in farming to an effort to get close to the soil. "I just wanted to play in the dirt."

This quest for closeness extends to a feeling of connectedness to life, and to neighbors. Rachel Brazil recalls that "We sat down at this Thanksgiving dinner and looked at everything and could tell a story behind each food that was there. We could remember when we bought that, who we bought it from, where we gathered it, who we gathered it from, and it was like, 'God, this is what Thanksgiving is about.' And it was more valuable than anything we could have put on a credit card."

Mirek and Julie Petrovic also found that their quest to build a small farm elicited unforeseen assistance from their neighbors, who came over to plow and level a field that the Petrovics were about to plant.

Many respondents mentioned the importance of building relationships of trust through moments like these. Melanie Hoffman said, "As I started getting to know our neighbors and asking around and finding the different foods, instead of going to a grocery store to buy my meat and different things, milk or whatever, I would drive down the road to the farm, and so I would get to see the cow that was milked. I get to see the farmer that raised the cow and I know that our money is going towards helping this family live."

Laura Halvorson took this a step further into a religious domain. "Growing your own food shows care for creation. You're taking an active role in creation and if you are gardening with natural techniques, you're taking care of the Earth."

CONCLUSION 4. Most have settled on very small acreage.

Farmers and gardeners interviewed work small plots of less than a quarter acre, and some work several acres. In large contrast to the prevailing agricultural economy, one respondent referred to a 20-acre farm as a "large" farm.

This is both a practical necessity and a preference. With land costs high, most emerging farmers would have difficulty purchasing larger units

of land. Moreover, since many are just learning farming skills, it is most appropriate for them to learn these skills while tending smaller properties, scaling up only as they gain experience and have assurances of a steady market with some access to negotiating prices on terms that cover their costs of production.

Many are gardening or farming intensively, and extending the growing season using high tunnels or other technology.

Most of those interviewed are content to consider farming a part-time activity that supplements other income sources, though a few have successfully entered commercial production at a somewhat larger scale. For most, the economy of interest is trade with immediate friends and neighbors.

Rachel Brazil's family is farming several scattered plots. "Actually, it's more like we have a selection of farms or several gardens. Right now we are eating it all ourselves."

Many respondents noted that after starting small as beginning farmers, they were quickly raising more food than they could use. Sima Ulrich recalls, "We started out with just a little garden and my mother in law's yard. We grew more vegetables than we could possibly eat ourselves. Then we figured that maybe we need to do something [with the surplus], maybe try to sell it."

CONCLUSION 5. Learning the skills of growing, harvesting, storing, canning, and preparing food for their own use is of central importance to those interviewed.

Having these skills is viewed as central to survival, important in cultivating a sense of personal independence, and an essential core of family heritage and cohesion. Some view this as a spiritual calling.

Rachel Brazil enjoys farming with her family because her children rapidly pick up skills through their involvement with the land. "My 7-year-old son Jackson would be in sales, because he talks to people and the next thing you know, he's got a business deal and he's selling stuff to them and he's a cute kid, people give him money."

The owner of a seed business, Ann Gibson, says that "It's the small-scale farmers and the backyard gardeners who have been tasked with preserving the sovereignty of our seeds and preserving these old heirloom type vegetables and to keep them going."

Learning the skills of farming also seems to be central to the interest kids have in eating fresh foods. Laura Halvorson reports that "When the youth see something growing, they get really excited and they want to know what it is. They want to know what it tastes like. They'll try just about anything if they get to actually see it and pick it and try it right on the spot."

Brazil also noted that her son began to make intellectual connections we would not have made if he were not experienced in the garden. "I like to take my kids to the supermarket like we did today. We went down to Jamestown. My kid picked up a daikon and he said, 'What is this? Can we get it?' And I said yeah, we got some carrots to pickle, grab it. And I said we also need some ginger and he walked over to the ginger, picked it up and said, 'Ginger is a root.' And I'm just like 'Hey!'

CONCLUSION 6. Those interviewed place a high priority on having what many call "real" food, quality food produced by themselves or on farms they know, with minimal connection to the corporate food processing industries. Several are propagating heirloom and open-pollinated seeds in an effort to become more independent of prevailing structures. Many see interesting economic potential in providing farm-fresh food to their neighbors.

"Farm fresh food is the REAL food," one respondent said. "Deregulation of dairy and raw milk sales will provide both quality nutrition

for local communities and a potential for good farm business ventures for a lot of small farms throughout the state. There are plenty of families that live in cities who are seeking quality dairy products that do not come from a supermarket."

Indeed, for many, the appeal of living in North Dakota was the chance to be more independent. As Ann Gibson recalls, "To me the focus needs to be getting back to the small, sustainable farms that individual families love and operate and care about. I believe it's going to come back to a more balanced place where there are more local people growing local foods. I think we're going to be forced to, because it's going to be the only way we're going to eat. That's why I got into the seed business."

AriAnna Wingenbach became involved because she felt available food options were insufficient. "We don't have fresh food around here." That even extends to her own land. "Our renter grows wheat, that's great, but that doesn't do me a lot of good right now" because it is not for her to consume.

Others, like Apryl Lunde, cast the need for creating better food choices as a fundamental confrontation with human limits. "People are realizing that the world could go to a place where producing our own food is going to be a matter of survival."

CONCLUSION 7. Several of those interviewed are **learning farming skills for the first time**, even if they have family roots on the land where they now live. A few have attended formal "Farm Beginnings" training.

Many of the interviewees who are taking the most fundamental risks are those who have entered farming only in the past few years. Many are imbued with a strong spirit of experimentation and collaboration. They are open about their successes and failures, and many are quite open to sharing their knowledge with their neighbors.

One clear example of this is Apryl Lunde, who said, "By reading books, I've gotten a little better and better every year. Eventually I started growing

more food than what we needed and I slowly worked into selling food also."

Tracie Thompson was only one of the farmers to express her enthusiasm for training others to farm: "I'll stand there for free and tell you what to do, but you've got to do it."

CONCLUSION 8. Most of these growers are motivated more by a **desire to insulate themselves from larger systems** they view as unresponsive or prone to collapse, rather than by a desire to make money by farming. Several view an economic or social collapse as a likely eventuality and they would like to have greater means to survive such a calamity.

Tracie Thompson warned that "One day, there's going to be a shortage. Everybody is growing crops for fuel. We have to grow for food and think of ourselves before we think of high-powered vehicles."

Melanie Hoffman viewed the current situation as a chance to send market signals. "After all, we vote with out pocketbooks. Where you put your money is where things will grow, so if you stop spending money on the factory farm chickens and start seeking out your neighbors for good chickens that you know are taken care of and fed a good diet that a chicken was meant to eat, your money is going towards them rather than the big corporations. I think that will start showing them that that's not what we want."

Rachel Brazil mentioned that as she learned how to farm in new ways, her conception of agriculture began to shift in fundamental ways. "Over time I realized that what we are doing in this agricultural community is redefining farming."

CONCLUSION 9. Growing at commercial scale appeals only to a select few of these newer arrivals, and they recognize their market options are limited.

AriAnna Wingenbach began with very humble hopes for her farm, and a limited vision of selling food she raised. "I planted raspberries and I would like to do market gardening. I'd also like to put raspberries in our high tunnel when it is up, to see if I can get a longer season for selling raspberries. I'll probably also grow tomatoes and peppers. I have an interest in getting chickens for eggs for myself; and meat for myself; and I would also hope to sell some.

On the other hand, Tracie Thompson also started small but found she could build a discrete but interesting commercial niche. "I started this because when my daughter was born, I decided I should probably feed my own kids instead of going into a store to purchase my food. The closest grocery store is 18 miles away. I started very small, and evolved into this high tunnel. I have a garden in my yard that feeds my family. My high tunnel is to market to my three grocery stores."

Those with larger aspirations also note that many of their rural neighbors are not yet persuaded that it matters to purchase from local farms, especially when the cost is higher. Sima Ulrich said, "Our main barrier right now is to find the buyer for the produce. We could easily expand production, actually. We have more property to expand on but we just don't do it because there is no market for it. People are more interested in Bismarck. In smaller towns, people are still more oriented on the price tag."

Others, like Ann Gibson, feel the risks of taking on debt amidst an uncertain economy are not worth taking. "I've decided I don't really want to go into debt with this business. I'm not doing it just to make money. A lot of what I'm doing is focused on teaching people."

Nick Trumbauer shied away from commercial visions because of the instability of the commodity economy. "The people of North Dakota and the state legislature seem to have banked their future on the commodity cycle. I know there's a lot of pleading and saying 'this time will be different' and it will go on for infinity. I just don't see that.

Eventually, the other shoe will fall and at that point there is probably going to be a lot of pain on the down side. People aren't really thinking about or aware of it right now."

James Hoffman pointed out that farming at a small scale requires holding another job.

"In order to [farm] small scale, it has to be your hobby, because it's not economical." This makes it difficult for anyone to go to scale, due to the pressures of retaining a day job.

Finally, Rachel Brazil noted that, although she hopes to produce value-added products someday, she might hold one product off the market simply because it holds so much personal value to her family. "We make a tomato juice that is fantastic. I don't know if I would ever sell it, though, because that's what gets me through February, the darkest of time."

CONCLUSION 10. Several respondents noted that **well intended food safety regulations interfere with farmers selling to local consumers.**

These farmers said regulations must be made more supportive of farmers who sell directly to consumers, consistency must be built across jurisdictional lines (federal, state, or from county to county, for example), and that regulations should be simplified.

One respondent stated, "We need consistent health department regulations. We also need more freedom in direct-to-consumer sales. Regulations and the lack of market access are the biggest barriers."

Another added, "We need to allow the local producer and their customers to engage in voluntary contracts of products and services without unnecessary government interference. Guidelines should be general in nature and provide protection for both the producer and customer. If the state of North Dakota is interested in growing local foods, then the state government has to step up."

One respondent stated, "Information on food safety policies is vague and difficult to obtain. I find I get the run-around rather than getting answers."

Another simply said, "Nix the certified kitchen requirements. Change the raw milk laws."

CONCLUSION 11. Several of those interviewed **offered very specific recommendations for infrastructure that would support their investments in raising local food.**

Nick Trumbauer pointed out that having the proper tools, and other supportive infrastructure, helped create new possibilities. "The small-scale farming technologies that are coming out are making life so much easier. I think in general that's what allows us to compete price-wise with places like California."

To Julia Petrovic, it is a matter of fairness. "The grain guys, they have the elevators. The cattle guys, they have their auctions. What do the little organic guys have? Nothing."

Several respondents offered very specific ideas for local foods infrastructure they would like to see developed:

- Affordable land for small-farm start-ups
- Meeting rooms
- A commercial kitchen to create value-added projects
- Cold storage facilities to rent
- Root-crop storage facilities
- Washing and packing facilities for vegetables
- One couple purchased an old building, in urgent need of repairs, to turn into a food hub. They plan to have storage areas, a light processing facility, a certified kitchen, and a café that cooks with locally produced ingredients.
- Producers need to form a solid network

- More media exposure to help educate consumer on the virtues of local food
- A grocery co-op
- Local processing for dairy products from goats and cows
- More meat processors
- Poultry processing
- More labeling details for consumers to easily compare and know where food is both grown and processed
- More research into the idea that local food is healthier than certain other foods such as those processed or grown in other countries

CONCLUSION 12. Respondents also noted that their options for farming are impacted by oil development in North Dakota, which they view as a mixed blessing. Several respondents note that

oil and gas have brought new income sources, and say they have not been greatly affected at their own farms and homes since they live outside of oil drilling zones. Yet others have been frustrated with the congestion they experience when they travel to Minot. Several noted that benefits of oil drilling do not accrue to the average rural resident; the largest gains are realized by farms that sell property to oil-related development. Housing prices have risen in some locales, pricing residents out of the market. Many of the oil workers do not live in North Dakota permanently, so much of the earned income is spent elsewhere. Others viewed oil development as subject to the same boom and bust cycles of any commodity industry controlled by outside forces. The deepest concerns about oil development centered around how the oil industry has "defined success" in a way that is inconsistent with traditional rural values, and makes each region's farming heritage appear obsolete. Interestingly, several respondents had abandoned paying jobs in the emerging oil industry so they could focus on gardening and farming.



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