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Scaling Up Local Foods: West Central Minnesota Institutional Market Study

Synthesis of Existing Research and Report on West Central Partnership Institutional Market Survey

> Prepared in partnership with West-Central MN Regional Partnership

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Acknowledgements

This report and associated presentation materials are prepared for producers, transitioning commodity farmers, institutions, organizations and agencies supporting local foods in West Central Minnesota. Further research is planned to continue analysis of the results found in this survey and to qualify this study with anecdotal perspectives from participating institutions.

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Executive Summary

The market for local foods is expanding from limited farmers markets to a number and variety of mainstream buyers with significant purchasing power. The ability of local producers to meet demand among institutional facilities such as schools, universities, nursing homes and hospitals is limited by a lack of knowledge as to the amount of prospective demand among such buyers. This report details a review of existing research into institutional purchasing of local foods and the *Scaling Up Local Foods* survey of West Central Minnesota institutions.

Existing research reveals a great momentum for local foods, having seen considerable growth in recent years and are now expanding from primarily direct to consumer sales to reach new markets. However, these new markets are driven by different values than individual consumers. Whereas individual consumers value more environmental and human health factors, product freshness and appreciate supporting local economies, institutional buyers are more concerned with safety, preparation requirements and cost in addition to consumer preference for taste and freshness. Local producers face many challenges in reaching this market including providing sufficient volume and consistent quality of seasonal goods, processing needs, meeting handling and safety requirements and limited storage and distribution capabilities. However, selling to institutional markets can also be rewarding, providing high volume purchases and reliable long-term relationships as well as extensive distributor connections.

The objective of the *Scaling Up Local Foods* survey is to fill the gap between perceived demand and actual purchasing trends in region. Thirty-eight percent of responding institutions report contracting directly with farmers to supply a variety of goods, with another 25% purchasing few goods from farmers and another 25% obtaining local foods through a distributor. Only one institution, representing 13% of respondents, reported not purchasing locally produced foods. Responding institutions are primarily mid-sized and report largely simple scratch capacity, with limited storage and processing of foods, with some at extremely limited abilities and others reporting improved preparation capacity. School districts report a particularly high participation in local food

markets with a greater variety and quantity of goods purchased than other institutions of any size.

Participating institutions report purchasing a wide variety of goods, although quantities purchased are heavily concentrated in produce, such as tomatoes, peppers, squash, cabbage and beans, and fruits, particularly apples. Modest amounts of meats, dairy and breads are purchased by a few institutions. Moreover, these purchases have proven successful so that participating institutions report intentions to expand purchases across the board in coming years. Target areas revealed for improving supply relationships from farmers to local institutions include expanding the volume and seasonal availability of products and processing goods prior to delivery. Obtaining certifications may be necessary to sell to certain institutions or distributors, and working with existing distributors is the preferred mode of sale, possibly for logistical ease of management.

Nonetheless, many of these barriers can be addressed more easily by collaboration among producers to aggregate and market their products. A variety of business models exist that can be adapted to the West Central region to create an accessible supply chain from local producers to area institutions. The local food market is expanding and although many challenges stand between farmers and institutions, there is also a great momentum behind those producers who are prepared to rise to the opportunity.

Background

Institutions such as colleges, schools, hospitals and living facilities serve thousands of meals each day from both small and large scale kitchens. Foodservice facilities (including restaurants) represent 48.5% of food purchases, with retail comprising the other 51.5% of sales in the United States (AURI). In recent years a wide variety of facilities have increased purchases of food from local sources both directly and through distributors. Bon Appetit Management Company introduced its *Farm to Fork* program in 2007 featuring locally produced food. Distributors such as Bix Produce and H. Brooks and Company report around 3-5% of their distribution is local product, with anecdotal reports that a reliable local supply would quickly find a secure market (AURI).

Trends in food markets indicate an increasing popularity of locally grown foods, but a quantitative estimate of the potential amount of purchases is not well known among the farmers who strive to meet those demands. Knowledge about the purchasing trends of institutional foodservice facilities in particular is lacking among local producers. Existing direct-to-consumer markets have well established infrastructure but institutional markets require a different approach to tap its purchasing power. Institutions such as schools, hospitals, nursing homes and such represent a large market for a wide variety of food products that could be supplied locally. However, without greater knowledge of the demand for locally sourced foods in these institutions, this market will continue unserved by the farmers who could supply those foods.

The Statewide Health Improvement Program (SHIP) in both the West Central and Countryside Public Health service areas have started Farm to School initiatives in twentyfive K-12 school districts. In addition, the University of Minnesota Morris campus plans to source half of their food from local and Minnesota producers in the next few years. These programs and the interest level of individual consumers have encouraged more farmers markets in the region, but meeting unknown additional demand cannot be fulfilled without increasing participation from area farmers to produce more for this market.

In order to reveal target areas for improving supply relationships from farmers to local institutions, the *Scaling Up Local Foods* project was planned with the objective to

fill the gap between perceived demand for local foods and the actual purchasing patterns of institutions West Central Minnesota. Evidence gathered from this study may serve to build relationships and business models that reflect the unique needs of the institutional food market in order for local farmers to expand production into this market. Produce and commodity farmers transitioning to institutional market production face unique requirements, but increasing knowledge about this market may help to overcome challenges these farmers face in expanding local food systems in West Central Minnesota.

This report intends to identify barriers, opportunities and requirements institutions have in purchasing products from area farmers. The questions addressed reflect the institutional demands in both quantity and quality of foods they purchase. Institutions in this survey are limited to schools, hospitals, nursing homes, community meal sites and related facilities and do not include retail or restaurant facilities. In addition, the use of the term "local" is allowed flexibility according to the varying definitions among institutions. This report refers to local foods in order to emphasize the institutional demand and consumption of local foods rather than any particular mile-circumference or other aspect of the local foods being purchased.

Literature review

Trends in Local Foods

The local foods market is worth over \$1 billion annually and growing. For example, the number of Consumer Supported Agriculture (CSA) programs nationwide has expanded from zero in 1985 and 2 in 1986 to 400 in 2001 and over 1500 in 2010. The number of Farm to School (F2S) programs has grown from zero districts in 1995 and 2 in 1996 to over 400 in 2004 and nearly 2,100 in 2009 (USDA). Nationwide trends reveal that expansions in local food systems are not only consumer driven but also incentivized by changing state and federal policies (USDA). Such policies include the SHIP program that promotes local food purchasing in school districts, as well as incentives in the federal Farm Bill to expand farmers' markets and nutrition programs. The 2008 Farm Bill funds many programs including the Farmers Market Promotion Program and Know Your Farmer, as well as capital loans for farmers and grants for regional markets (Hardesty).

Although most commonly depicted with fruits and vegetables, a wide array of foods are bought and sold locally. Within the local foods market only 13% of participants sell produce whereas 58% represent livestock producers. However, livestock producers have a lower quantity of local sales. The largest share of sales are in produce with 25% of the market, another 26% of sales in fruits and nuts, only 9% in livestock products and 7% of market sales in other goods. Additionally, a larger share of produce growers sell locally with 44% compared to 17% of fruit and nut growers selling their products locally, 7% of livestock producers and 2% of other producers (USDA). Furthermore, the majority of sales of local foods are direct to consumer, outnumbering both retail (including grocers and restaurants) and wholesale distribution (King et al).

Overall, local food sales have increased significantly but remain a small portion of the total food market. Increases have been brought about by value driven "foodie" movements and increased awareness about the consequences of conventional agriculture for human and environmental health, as well as interest in supporting healthy local economies and rural development. However, economies of scale drive the larger market supply chain which is not typically featured in local food systems. Expanding the market for local foods will not necessarily continue through direct sales nor by value driven buyers but could significantly increase by addressing economic factors that dominate the greater market.

Local food supply chains feature many farms with diverse portfolios of products and market outlets, in part to defray fixed costs among multiple sources of revenue and to reduce excess supply. Adequate processing and distribution is vital to reduce constraints and create stable supply chains, in which producers take on more responsibility, often without compensation, but in the end receive on average over seven times the revenue than in mainstream markets (USDA). Costs incurred to bring products to market amount to between 13 and 62% of the retail price, but can be defrayed by common marketing and distribution that does not require excessive unpaid labor on the part of individual farmers (USDA).

Increasing demand for local foods in Minnesota is demonstrated in many ways. The number of Minnesota school districts involved in the Farm to School program has risen sharply from 10 in 2006 to 123 in 2010, representing a wide range of sizes and geographic distribution (IATP, 2011). There has similarly been a significant increase in farmers markets, CSA's and other operations in the past 4 years, in which time the Food Alliance Midwest has expanded to work with over 40 restaurants and 30 institutions to source local ingredients from the region (AURI). This organizational assistance is greatly beneficial in connecting producers and institutions, since increasing interest in local foods does not easily translate to increasing purchases by institutions. For example, a majority of school systems involved in local foods were contacted by proactive farmers rather than independently seeking out suppliers (IATP, 2010). However, once those connections are made they tend to be overwhelmingly successful. Among K-12 schools in one survey, 87% planned to either maintain or increase participation in local foods (AURI). Such positive results are common, another report similarly revealing that 81% of school districts surveyed that would either maintain or increase participation (IATP, 2010).

Minnesota school districts involved in Farm to School programs supply local foods through both distributors and directly from farmers, with slightly more purchasing through distributors (IATP, 2011). Many distributors do not make local foods a priority with so few requests to supply them, and many school districts are limited to purchasing only a few products locally, generally planning for more streamlined and cost-conscious products and unaware of many possibilities for local foods to fit their needs (Berkencamp). These school districts report high quality of foods and excellent overall experiences in purchasing foods locally, but share that barriers still exist in extra labor needed, slightly higher prices and simply finding farmers from whom to purchase their goods (IATP, 2011). These are particularly large barriers for institutional buyers, a demography that presents both great opportunities as well as challenges.

The Institutional Food Market

Institutions can provide long term, steady and loyal customers for local producers who can meet various demands of this unique market. Farmers across the nations have built rewarding partnerships with a variety of institutions in many ways. Rewards include high volume purchases, reliable relationships, more extensive distributor connections as well as educational opportunities. On the other hand, barriers include fixed budgets, preexisting contracts with large suppliers, seasonal availability, handling and processing capacity, vendor approval and sometimes limited facilities or schedules.

Working with foodservice institutions is distinct from retail and direct to consumer markets. Farmers involved in institutional markets can expect greater success if prepared to meet particular requirements of these customers. The following research was conducted in May 2009 by Food Alliance Midwest into the opportunities for local foods in Minnesota, listing first among foodservice requirements high quality products provided on a consistent, dependable basis (AURI). Interest in procuring locally grown foods may be overpowered by the difficulty in obtaining such foods given the natural challenges of weather, variable dates and harvests below expectations. Similarly, extended seasons and variety of products are desired for institutions to plan complete menus around. Local is less appealing if the same products can be obtained with certainty from California growers at a similar cost. In addition, these costs are generally based on wholesale prices and invoice billing, whereas many producers in local markets are accustomed to retail sale pricing.

Other factors that are more unique to operations in the institutional market include stronger handling and processing capacities and an aggregated supply. Whereas direct to consumer markets can sell even small quantities of goods any day of the week in a farmers market, institutional markets purchase large quantities of goods on a particular schedule. Sufficient cooling is critical to ensure that local produce is delivered as fresh within days as cold chain processed produce is when shipped across country after a week. Farmers must also consider the needs of institutional buyers that may prefer certain sizes or pre-processing that other markets do not require, for example sending small servingsized apples to schools as opposed to large apples that are sold retail. Similarly, many institutions are hard-pressed for time and staff and require foods that can easily be prepared and served. A full 13% of Minnesota schools only serve ready-to-use foods, with another 53% strongly preferring such. Only 8% of schools are comfortable working with uncut produce, with another 27% of schools that are able to do so (IATP).

Institutions may find some types of local foods prohibitive if they have not been processed and cannot be easily prepared to serve in large quantities. Because institutions have high volume demand, aggregated supply would help ensure that sufficient quantities of a variety of products are accessible by buyers and can be delivered efficiently.

Finally, many institutional foodservice facilities demand food safety certifications and other legal requirements as part of their protocol in doing business. Distributors and institutions must follow given regulations with which many small farmers do not currently comply. Traceability must be guaranteed for vendor approval as well as liability insurance, particularly if selling to a distributor rather than directly to institutions. Furthermore, partners will benefit by arranging small details outside of meetings. Institutional buyers are also more limited for time than many individual consumers because they are responsible for preparing large volume menus and purchases in addition to managing budgets, staff, deliveries and related approvals and limited to working hours. Farmers reaching out to foodservice facilities may earn loyal customers if they are able to accommodate these particular needs.

Barriers Identified

The unique demands of institutional buyers create a number of challenges that local farmers and institutions both can strive to overcome in forming working relationships. Food and Justice identifies a number of barriers including inadequate kitchen facilities or skilled staff, managing multiple accounts or binding contracts, high price points and minimum orders on the part of institutions. Farm barriers include inadequate processing or storage facilities, inadequate or inconsistent supplies, limited transportation, lack of capital investment or certifications and low price points. Distribution barriers include the perishability of fresh food and high cost of fuels for smaller amounts of goods over a greater number of sources and outlets (Food and Justice).

A variety of strategies can be utilized by all players seeking to create local food connections. For institutions, labor resources has been identified as one of the biggest barriers (Berkencamp). Foodservice managers can exercise creativity in planning menus and training staff in order to more easily handle a wider variety of goods as they come in season, often that have undergone less preprocessing. Rearranging time management and budgets may also be useful as an institution transitions to a different source of foods. Although in many ways buying foods locally will be similar to conventional sources, institutions should expect some differences and may have to prioritize local sources for alternative benefits they provide. For example, the mission of an educational or health facility may align with local foods while the foodservice department is limited to more logistical goals such as serving a certain quantity of meals each day. For those facilities that have less capacity to adapt, managers can request that their existing distributors seek out local sources for their contracts without sacrificing cost or labor, or educate themselves on alternative suppliers for a variety of foods that more easily fit into existing routines.

Producers also have many options to address barriers they face in selling their products to local institutions. In order to secure that their harvest has a secure market, a farmer can speak with buyers or even contract with an institution before planting begins in order to supply the quantity and variety demanded. Farmers should also be in constant communication with institutions or distributors about the expected quantity and dates of harvest that buyers can prepare for. Certain capital investments could make a great difference in appeal for institutional buyers, particularly in processing and storage facilities. Proper cooling equipment and storage is necessary to maintain produce as fresh as that traveling from warmer climates. Processing can add value to products and make them more accessible for institutional facilities. Simple strategies that do not require investment include selection and packaging practices that are geared to facilities as opposed to retail markets. Wholesale pricing, invoicing and delivery practices are also distinct for institutional buyers. Finally, producers must educate themselves to follow management practices that comply with a variety of regulations and food safety requirements that these facilities face. Obtaining particular certifications or creating a risk management plan can demonstrate compliance and make a producer more appealing to institutions and distributors.

Some of the organizational barriers identified can be addressed more easily through collaboration among producers than by any individual. Transportation is a high cost of fuel for local farmers with multiple small deliveries, as well as time spent making

deliveries and away from the farm. Many institutional buyers have large-volume demand, but are too busy to cut farmers separate checks and intake separate deliveries. A shared delivery system would help keep down fuel costs and streamline time spent sending and receiving goods. Collaboration can also split costs of investments and equipment, standardize processing, and provide a resource for information and marketing. Without such processing and storage facilities or distribution systems in place, the costs to individual farmers, and start-ups in particular, can be prohibitive (Connelly). Some examples of collaboration among producers will be discussed further on in this report. Finally, awareness and education is one of the greatest barriers but also the simplest to overcome. All parties involved in the local food market should be active in both obtaining and providing information that is necessary to work with and expand this food system. Constant effort is necessary to increase awareness of the many barriers identified and educate one another on overcoming these barriers.

West Central Partnership Survey

The University of Minnesota West Central Partnership in collaboration with the Center for Urban and Regional Affairs – Community Assistantship Program undertook a survey in order to identify some of the barriers and opportunities specific to the institutional food market in West-Central Minnesota. The *Scaling Up Local Foods* survey was designed to reveal the needs in building supply relationships between institutional foodservice facilities and local farmers in this region. The scope of institutions was limited to K-12 and higher education, hospitals, nursing homes, residential facilities, temporary housing, adult and child day care, community food sites, community centers and other public facilities.

The survey was sent to over 30 institutions with email contacts identified in West-Central Minnesota, representative of hundreds in region. This mode of survey was selected for its ease of use in order to receive an increased rate of response, however this limited respondents to those institutions with a public and well managed email address. Temporary housing facilities, community food sites and public facilities were not represented by email contacts. Additionally, smaller nursing homes generally did not have such contacts, though many smaller facilities may be jointly operated under one management plan with a combined operator. Eight anonymous respondents represented 5 primary (K-12) schools, one hospital, one university, one hospital, two nursing home facilities, and one facility that includes assisted and independent living as well as adult day care. Two respondents represented multiple facilities, in total resulting in a 15% response rate to the survey invitations sent. Primary schools had a higher response rate than other types of institutions. Results are not weighted below but are analyzed as a whole for insight into the institutional market for profile information, quantifying trends and identifying opportunities for local producers.

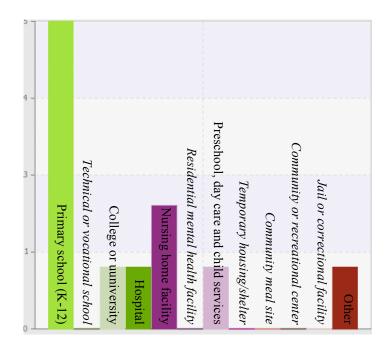


Table 1: representation of local institutions responding to survey

Market demographics

The respondents represented mostly mid-sized institutions as well as some larger institutions: 5 serve between 2,000-5,000 meals per week, one between 5,000-10,000 meals per week, and another serving over 10,000 meals per week. Information is therefore missing about the purchasing trends of small facilities, which could represent a potentially large share of local food purchases, as smaller institutions in fact represent often larger purchases than large institutions. Many explanations may account for this

trend, including the structure of smaller institutions and a possible flexibility to try new vendors or different priorities for food they serve. Government programs or otherwise preexisting momentum within a particular institution appear to have a clear impact on purchasing local foods as well; of survey respondents, primary schools have the greatest purchasing in both proportional and total market share. This means that primary schools purchase local foods at a higher rate than other institutions compared with their size, but even surpass the total local food purchases of much larger institutions involved in this survey.

The majority (5) of facilities had a kitchen capacity for simple scratch processing, with another (1) institution reporting very limited assembly capacity (minimal storage and preparation capacity) and a few (2) reporting an improved capacity for full scratch preparation, being more labor intensive with a full kitchen available. Processing capacity was not well correlated with size of the institution, and indicates that local food suppliers would be best if prepared to serve a variety of needs including the most basic kitchens.

When asked the questions "Do you currently purchase foods locally at your institution?" nearly 38% (3/8) of respondents replied that they contract directly with farmers for a variety of goods and 25% (2/8) reported connecting with farmers for more limited goods. Another 25% (2/8) are able to obtain locally produced goods through their distributors. Only one institution (13%) responded that they do not purchase local foods because they have not found information to pursue this option. Due to the nature of this survey, it is likely that respondents are biased towards purchasing local foods, as those with little interest in purchasing local foods would similarly have less interest in completing such a survey.

Table 2: "Do you currently purchase foods locally at your institution?"

Similar surveys indicate that only 40-60% of institutions (some of these surveys include retail) purchase local foods in some capacity, showing these numbers to be slightly inflated. However, in some ways this region may be particularly strong for local foods and the real proportion could very well be this high. Local food markets are often driven by a few strong leaders, and the existing momentum through local K-12 school districts and the University of Minnesota Morris campus may influence surrounding institutions to follow suit and provide a successful example of ways to connect to local farmers.

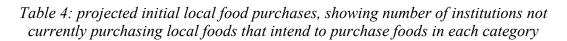
Purchasing characteristics

There is evidence of a wide variety of local foods purchased currently by institutions, though purchases are heavily concentrated in fruits (especially apples) and vegetables compared to meats, dairy, breads and other products. Institutions surveyed reported purchases in many food categories, although detailing quantities of items revealed primarily fruit and vegetable purchases. A notable quantity of apples in particular are purchased directly from farmers, between 20-30 bushels a week or 600 units, as well as rhubarb for fruit purchases. Vegetables were by far the largest purchase category with both the greatest quantity and variety reported, popular possibly in part due to rotating availability as well as accessibility through existing vendors. Purchases included significant quantities (up to 200 pounds per month) of tomatoes and peppers, as well as moderate amounts of squash, cabbage, pumpkin, black and navy beans, potatoes

and sweet corn. Lettuce and carrots were also purchased as available. Meat and dairy purchases were not as common, with a limited variety and quantity reported including up to 100 pounds of beef per month, with more limited amounts of chicken and pork. Dairy purchases were limited to few institutions reporting to up to 75 gallons of milk weekly and between 20-200 pounds of cheese monthly. Local bakeries supply few institutions with bread, but only a matter of dozens of rolls per week. One institution also purchases 50 pounds of wild rice per year, another 40 pounds of honey per year. This summarizes the current purchasing habits by institutions of local foods.

Table 3: current purchasing trends by local institutions, showing the number of institutions that report purchasing each food category locally

Projections to expand local food purchases range from moderate to significant increases, often doubling current trends as well as increasing the variety of foods purchased and extending seasonal purchases. No plans were reported to decrease local food purchases by any institution currently purchasing local foods. For institutions not currently purchasing local foods, the survey reported timid plans for limited fruits and vegetable purchases (10-30 pounds weekly of apples, grapes, pear, tomatoes, carrots, peppers) and beef (80 pounds per week).



Those institutions currently purchasing local foods reported interest for a great variety of goods, but once again was strongest in fruits and vegetables. Institutions reported intentions to double existing purchases of apples and rhubarb as well as expand variety to include modest amounts (20-50 pounds seasonally) of raspberries, grapes and strawberries as well as apples and rhubarb for some institutions not already purchasing these items. Vegetable purchases are planned to increase moderately to significantly including hundreds of pounds annually of squash, cabbage, peppers, pumpkin, black and navy beans, potatoes, tomatoes and sweet corn. There was also a slight increase planned for local purchases of beef, rice, breads and honey.

Table 5: intended additional local food purchases, showing number of institutions already purchasing local foods that plan to increase purchases of each food category

Qualitative factors

For those institutions purchasing local foods, many factors were reported with varying importance in their decision making. Institutions were asked to report how important each of the features listed below were to their purchasing decisions on a Likert-type scale of 1 to 5, each feature then ranked by a simple weighting according to reported importance. The relative importance of each factor resulted as follows:

- 1. Taste and freshness
- 2. Affordable
- 3. Consumer preference
- 4. Consistent
- 5. Nutritional value
- 6. Flexibility
- 7. "Green" value and public relations
- 8. Ease of preparation
- 9. Convenient
- 10. Support local economy

These results contrast interestingly with currently perceived barriers. Similar surveys show that reasons for not purchasing local foods include price, consistency, preparation and convenience, yet these institutions put a relatively low priority on convenience and preparation, indicating that these factors are not necessarily as great of

barriers in this region or were not challenges for the institutions that responded. Affordability is still a high priority, but these institutions already purchasing local foods indicate that it is not a barrier to them. Typical institutions that currently purchase local foods were originally approached by local farmers and were not motivated themselves to seek out local suppliers, indicating that a simple lack of awareness about where to source local foods continues to be a great barrier. These factors were all reported as high importance by the institutions currently purchasing foods locally, with preparation and convenience to the institution reported at a relatively lower importance than quality of the food to the consumer. External factors such as supporting the local economy were not reported as important relative to characteristics of the food itself. Marketing by local farmers or farmer collaboratives can increase this awareness and focus on the nutritional benefits of local foods as well as break the perception of high costs that here are reported as high importance for institutions that purchase their foods locally.

Respondents were further asked to report the importance of various factors when selecting vendors. Results were ranked in a similar fashion with the following hierarchy of importance of vendor characteristics for responding institutions:

- 1. Food quality
- 2. Consistent supply
- 3. Food safety and certifications
- 4. Price
- 5. Packaging (standard size, count)
- 6. Delivery schedule
- 9. Variety
- 10. Payment schedule

In selecting a vendor to supply these institutions with local foods, respondents put highest priority on food quality, reflecting the importance of taste and freshness of the products. Reliability, reflected by consistent supply and food safety and certifications, was reported as nearly as high of a priority in selecting vendors. Price held a slightly lower importance for a few institutions, with logistical factors such as packaging, delivery, processing and etcetera reported as important factors but at a much lower rate than those previously discussed. Again, while all of these characteristics were reported as important to responding institutions in selecting local food suppliers, quality, reliability and affordability were reported as more important than logistical factors. When asked to report on their preferences to access local foods, institutions ranked each option on a 5-point scale from poor to excellent. Utilizing existing vendors was the most preferred option, followed by supplying directly from the farmer, and lastly supply through a local aggregator. Direct contact with farmers was particularly popular among K-12 schools likely as an educational element that complements the schools' mission. Supplying local foods through existing distributors is solidly the most preferred method, streamlining purchases through current modes of operation and requiring little effort with a familiar system. This mirrors other surveys that show that vendors are the preferred method to purchase local food even in such cases when it may be easier to purchase food directly from producers (IATP, 2011). Reaching a vendor through local aggregator is not a currently preferred method, but is difficult to compare because few such systems are currently in place and is not a well known option at this time. Successful models suggest that a local aggregator could match the benefits of both direct contact with farmers as well as the convenience of a larger distributor with streamlined administration and economies of scale.

Case Studies

In collaborative marketing, farmers may work together in a variety of capacities to reduce initial costs of processing, marketing and distributing, or to meet high demand in particular markets. Small volume growers can be well served by collaborative marketing ventures that aggregate the limited output of multiple small producers to serve the needs of larger-volume customers.

Producers do not necessarily have to utilize intermediaries in order to overcome differences in selling to institutional buyers, but can create farmers collaboratives to share sales responsibilities in overcoming these barriers. Many examples of such aggregation and collaborative marketing can be seen around Minnesota, the region and across the nation. These can also take many forms such as a Co-op, marketing association, produce houses, CSA, and other organizations.

Grown Locally (www.grownlocally.com) is a cooperative of over 20 producers in Northeast Iowa that aggregate their products centrally in Decorah. All goods are handled and stored together until purchased. A main coordinator compiles availability lists of a wide variety of products and takes orders for twice-weekly deliveries across the region. Goods are sold primarily to foodservice institutions, with large-volume quantities and pricing available for fase turnaround.

The Southeast Minnesota Food Network, LLC (www.southeastmnfood.com) is a marketing collaborative of over 90 farms that supplies a variety of locally produced foods to restaurants, retail and institutions. Area buyers can order specialty and organic goods from a central source that combines items from various farms into one weekly delivery and one invoice. The Producers & Buyers Co-op (www.producersandbuyers.coop) is another business that connects local member producers with food processors, transportation and institutional buyers in West Central Wisconsin.

Braise Local Food (www.braiselocalfood.com) is a similar Restaurant Supported Agriculture (RSA) operator that intakes orders from restaurants and determines which associated farms will supply a given portion of each request. The aggregator plays both promoter and mediator between farmers and buyers, with goods collected through a central hub for delivery one or two times weekly. Home Grown Wisconsin is a wholesaler that markets local produce to nearby restaurants. Member farms deliver produce to the south-central Wisconsin warehouse which is then compiled into separate orders.

The Co-op Partners Warehouse (www.cooppartners.coop) in St. Paul serves as a distributor to co-ops, restaurants and other retail facilities. Associated farmers drop off their goods to the warehouse from where they are combined to fill larger orders and shipped in one delivery and one invoice to facilities in Minnesota and surrounding states. Whole Farm Co-op (www.wholefarmcoop.com) based in Long Prairie similarly provides aggregation primarily for consumer, CSA's, and some retail outlets around Todd County.

Green and Green growers send in a list of products they expect to have ready the following week and the aggregator puts together a comprehensive product list for customers to order. Farmers deliver their harvested products to a central warehouse in Madison to inspect, label and sort orders. Green and Green also works with distributor partners that can pick up goods to fill their normal orders.

These models of aggregation and collaborative marketing provide many benefits that can help farmers overcome barriers that would be too large to conquer individually. At the simplest level, combining goods helps to maintain a steady flow of goods at a higher volume that institutions demand. Aggregation can also divide costs for capital investments that all collaborators can share, such as storage facilities, cooling equipment processing and handling capabilities and transportation costs. Combined handling can also maintain a consistent quality of products despite various farms of origin. Rather than individually completing long processes for various certifications, an aggregator can obtain each certification on behalf of the member farms and require that associated producers maintain compliance. Similar requirements for liability insurance and traceability risks in this manner can be divided among many small producers who individually may find these barriers overwhelming. Institutions similarly cannot always trace products purchased from multiple farms, but an organized consolidator may be practiced in maintaining detailed records for all incoming and outgoing goods.

By sharing responsibilities for goods collectively, producers moreover have more time to devote to their farms rather than spending significant amounts of time in processing, marketing and delivery of their products. Collaboration can pool resources and provide a central location for contacts and information about associated farmers. Because simple education and awareness continues to be a significant barrier reported in institutional markets, an aggregator can provide a brand and a single driver for marketing local products, one primary supplier rather than a flurry of small producers that may be more difficult to distinguish from one another. Similarly, a centralized source for contracting lifts the burden of business management from individual farmers to a single contact that can be managed jointly or by a hired professional.

Constructing an aggregated supply of individual products can improve efficiency across the supply chain. If performed by conscientious producers, vertical integration can also preserve relationships and values that otherwise can get lost through outside distribution (Day-Farnsworth). Collaboration provides a one stop source for producers and purchasers to make connections and build buyer relationships with a consistent quality standard and product availability that existing networks may not always provide.

Recommendations

This research and survey results lead to some recommendations for local producers who intend to sell to institutional buyers. First of all, institutions are not likely to take it upon themselves to seek out new suppliers for goods. New connections will most likely be made by local farmers who go the extra mile to change the status quo. Furthermore, production must be geared to serve unique customer preferences of institutional facilities. Certain processing needs and logistical protocol are necessary in order to enter this market. Institutions are seeking safe, high quality, fresh foods at a consistent quantity and fair price. Farmers may have more flexibility in delivery and payment arrangements according to the reported priorities, as long as their products meet standards of safety and quality.

Producers may develop partnerships with distributors and institutions and maintain positive relationships by communicating expectations and allowing institutions to better prepare for their needs. For all that a producer can control, they must set high standard for quality of their products. In this way a product may become a brand, and farmers may benefit greatly from efforts in marketing and promotion. In order to ensure consistency of quantity, quality, and limit associated costs, farmers can use various models of aggregation and distribution that mimic larger suppliers while maintaining local benefits. Consolidation also provides benefits for institutions that prefer to buy from fewer vendors, creating less paperwork and certifications to approve in addition to saving producers time and transportations costs with higher volume and fewer trips.

Most farmer-based distribution models to date have experienced slow growth and have struggled to become and remain profitable. A core group of one or more highly committed individuals is imperative to the success of all the business models, as well as marketing and promotion (AURI). Yet the ability to overcome many barriers and other benefits may outweigh the challenges. Collaboration fosters community among member farmers in addition to modest financial support for otherwise challenged small farms, but like any business requires struggle over the start-up years in order to see financial benefits increase over time. Farmers seeking to expand from direct to consumer markets and serve institutional buyers may face difficult times in making such a transition, but

local food systems are already expanding into these areas. There is significant momentum and support for farmers who are willing to meet the demands of this unique and powerful market.

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Appendix I

March 2011 CURA UMN–West Central Partnership Scaling Up Local Foods in West Central MN Institutions

Invitation to Participate in Institutional Survey

This project is designed to reveal the needs in building supply relationships between institutional cafeterias and local farmers in West Central Minnesota. There is an information gap in perceived demand and supply that creates a barrier in the distribution of local foods.

This is a survey of the current demand for local food among food service institutions in West Central Minnesota. Data that will be used to inform producers on the demand and create business plans and infrastructure that serve the needs of these same West Central Minnesota institutions. This will evaluate the regional capacity to distribute fresh produce, meats and grains from area farmers to institutions such as schools, universities, county jails, hospitals, nursing homes, community meal sites and other foodservice facilities.

Your participation ensures greater accuracy in our projections to local farmers and consequently their better ability to serve your institution's needs. This survey should take approximately 20 minutes to complete, consisting of 10 simple but important questions regarding quantity, quality, and logistical needs that determine your institution's food purchases. Please answer all questions to the best of your ability.

Analysis will be shared with local producers in order to scale up production to meet the needs of local buyers. This project is being performed through the West Central Partnership with the University of Minnesota CURA-CAP and Garden Goddess Enterprises.

UMN CURA-West Central Partnership: Scaling Up Local Foods Survey

This is a survey of the current demand for local food among food service institutions in West Central Minnesota. Data will be used to inform regional producers on the demand in order to serve the needs of these same institutions.

Your participation ensures greater accuracy in our analysis for regional farmers and in turn their better ability to serve your institution's needs. Please answer all questions to the best of your ability. This short survey should take approximately 20 minutes to complete. This project is being performed through the West Central Partnership with the University of Minnesota CURA-CAP and Garden Goddess Enterprises.

1. Do you currently purchase any local foods in your institution?

Yes (choose one) If yes, ask blue-labeled questions.

- We contract directly with a local farmer or broker for a variety of goods
- We connect with local farmers to supply some seasonal goods
- Our distributor provides local products (local stock, may be seasonal)

OR

No (choose one) If no, ask red-labeled questions.

- Have not looked into this option
- Have not found information or contacts to pursue this option
- Our distributor does not carry local products and we are satisfied
- Our distributor does not carry local products and we may change contracts
- Local foods do not suit our needs

Yes

2. In purchasing local foods, what importance does each of the following motives play in your decision?

	Not important			Very imp	ortant	
Affordable	1	2	3	4	5	N/A
Convenient	1	2	3	4	5	N/A
Consistent	1	2	3	4	5	N/A
Taste, freshness	1	2	3	4	5	N/A
Nutritional Value	1	2	3	4	5	N/A
Flexibility (menu options)	1	2	3	4	5	N/A
Ease of preparation	1	2	3	4	5	N/A
Consumer preference	1	2	3	4	5	N/A
Support the local community	1	2	3	4	5	N/A
"Green" value and public relations	1	2	3	4	5	N/A

No

2A. What are your perceptions of barriers to purchasing local foods? More importance signifies a factor that is a greater challenge.

	Not important			Very Import		
Cost	1	2	3	4	5	N/A
Availability (product exists locally)	1	2	3	4	5	N/A
Reliability (quantity of demand is met)	1	2	3	4	5	N/A
Labor and preparation	1	2	3	4	5	N/A
Liability, safety regulations	1	2	3	4	5	N/A
Convenient delivery	1	2	3	4	5	N/A
Convenient invoices	1	2	3	4	5	N/A
Other (write-in)	1	2	3	4	5	N/A

2B. If you were to purchase local foods, what importance would each of the following motives play in your decision? Please rank each factor on a scale of 1 for low or no importance to 5 for high importance.

	Not important			Very impo	ortant	
Affordable	1	2	3	4	5	N/A
Convenient	1	2	3	4	5	N/A
Consistent	1	2	3	4	5	N/A
Taste, freshness	1	2	3	4	5	N/A
Nutritional Value	1	2	3	4	5	N/A
Flexibility (menu options)	1	2	3	4	5	N/A
Ease of preparation	1	2	3	4	5	N/A
Consumer preference	1	2	3	4	5	N/A
Support the local community	1	2	3	4	5	N/A
"Green" value and public relations	1	2	3	4	5	N/A
Other (write-in)	1	2	3	4	5	N/A

Yes

3A. Approximately what quantity of each product does your institution currently purchase locally? Please fill in, to the best of your ability, the top three products in each category, including units (pounds, quarts, etc.) and the weekly or monthly timeframe.

- Vegetables (Tomatoes, potatoes, peppers, carrots, etc.)
- Fruits (Apples, pears, strawberries, grapes, etc.)
- Meats (Beef, pork, fish, poultry, etc.)
- Dairy (milk, cheese, yogurts, etc.)
- Breads
- Other (write-in)

- **3B.** Consider if you would like to decrease or increase local food purchases. What quantity of each product are you considering to purchase locally in the next few years? Please give estimate of total purchase, not additional quantity desired. Again, please fill in a best estimate including units and weekly/monthly timeframe.
 - Vegetables (Tomatoes, potatoes, peppers, carrots, etc.)
 - Fruits (Apples, pears, strawberries, grapes, etc.)
 - Meats (Beef, pork, fish, poultry, etc.)
 - Dairy (milk, cheese, yogurts, etc.)
 - Breads
 - Other (write-in)

No

3. What quantity of each product are you considering to purchase locally in the next few years? Please fill in, to the best of your ability, the top three products in each category, including units (ie: pounds, quarts) and the weekly or monthly timeframe.

- Vegetables (Tomatoes, potatoes, peppers, carrots, etc.)
- Fruits (Apples, pears, strawberries, grapes, etc.)
- Meats (Beef, pork, fish, poultry, etc.)
- Dairy (milk, cheese, yogurts, etc.)
- Breads
- Other (write-in)

4. How important is each of the following factors when selecting a vendor? Please rank each factor on a scale of 1 for not important to 5 for very important.

	Not important			Very important		
Price	1	2	3	4	5	N/A
Food quality	1	2	3	4	5	N/A
Consistent supply	1	2	3	4	5	N/A
Variety available	1	2	3	4	5	N/A
Packaging (standard size, count)	1	2	3	4	5	N/A
Preprocessing	1	2	3	4	5	N/A
Flexibility	1	2	3	4	5	N/A
Delivery schedule	1	2	3	4	5	N/A
Payment schedule	1	2	3	4	5	N/A
Food safety and certifications	1	2	3	4	5	N/A
Other (write-in)	1	2	3	4	5	N/A

5. What are your preferences for accessing local foods (either current or desired practices)? Please rank the following factors on a scale of 1 for less preferred option to 7 for most desired.

	Poor		Exce	llent		
Direct contract with farmer	1	2	3	4	5	N/A
Contract with local aggregator (co-op)	1	2	3	4	5	N/A
Supply through existing distributor	1	2	3	4	5	N/A
Other (write-in)	1	2	3	4	5	N/A

6. Approximately how many total meals does your facility serve weekly? Choose one.

- Less than 500 meals/week
- 500-2,000 meals/week
- 2,000-5,000 meals/week
- 5,000-10,000 meals/week
- More than 10,000 meals/week
- **7.** Which of the following most accurately describes your processing capacity? Please select the closest match.
 - Heat and serve (we purchase mostly processed food)
 - Limited assembly (minimal capacity to store and prepare food)
 - Simple scratch (improved capacity to store and prepare food)
 - Full scratch (more labor intensive, full kitchen assembly available)
- 8. What best describes your institution? Please choose one.

Primary (K-12) school Technical or vocational school College or university Hospital Nursing home facility Residential mental health facility Preschool, day care and child services Temporary housing/shelter Congregate meal site, community food services Community or recreational center Jail or correctional facility Other (write-in)

9. \	Would you be ir • Yes	nterested to learn about the results at the completion of the survey?No
		willing to be contacted for a short follow-up conversation formation regarding your institution's local foods purchasing?No
	•	contact information if you would like to follow-up with this survey, or ther comments here:

Thank you for participating in this survey! Your responses provide essential data that farmers in West Central Minnesota will use to better serve local institutional demand.