

**Comprehensive Economic Recovery Initiative:  
Hyper-Local Food Market Feasibility Study: Lansing, MI**

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# Introduction and Project Purpose

For nearly four years I have been an urban farmer participating in the hyper-local food system of Lansing, Michigan. I am not an economist, nor work in marketing, I am a farmer who is ardent in his understanding and support of Lansing's urban farming environment. Through connection and collaboration with other urban farmers, avenues for sale, and affiliated, synergistic institutions, I understand, through a limited business lens, that there is something left to be desired in the fulfillment, resiliency, and circularity of Lansing's local food-system. The reality is that the benefits of urban farming and gardening are celebrated and incorporated into the fabric of our neighborhoods, yet it is rare for the produce and product of these businesses to be found outside of farmer's markets and occasional sales to restaurants; these farms are not celebrated in commercial spheres, chefs seldom peruse markets for the choicest ingredients, and although the urban farming scene in the city is ripe with collaboration and connectivity, it still remains a niche.

Urban agriculture, or simply the production of agricultural products within an urban or suburban setting, has many benefits to communities(U.S. Department of Agriculture, YEAR). In Lansing, these benefits includes the reuse of blighted, abandoned, and brown-field properties, through the Ingham County Land Bank's Garden Program, restoring these sites to productive use. Urban farms provide green-spaces in communities, benefiting neighbors through access to nature, gardening education, and common-spaces to congregate and interact(Elizabeth Henderson, 2011). I have witnessed these benefits first-hand, comprehend their importance to the spirit of community, and am devoted to the success of a system that provides a catalyst for improved communal and ecological health.

I am also all too familiar with the challenges that urban agriculturalists face in establishing markets, which are a necessity for the ongoing operation of these systems. Fundamentally, farm businesses need avenues to provide produce to consumers. Moreover, rewarding market opportunities are required to compensate urban agriculturalists for their time invested in communities. At its foundation, this study explores the market avenues and ultimately the economic viability of urban farming businesses within the geographic scope of the City of Lansing.

Yet, it is more than that. Over the course of the past century and a half, due to urbanization, population growth, and the subsidization of monocrop agriculture, our food system has become overly complex. Urban agriculture provides some solutions to the disruptions in the supply chain illuminated by the COVID-19 Pandemic, effectively

simplifying the way food finds its way to our table. According to a White House Press Release by Susan Helper and Evan Soltas, COVID-19 stopped production of goods for certain industries, namely agricultural goods for the restaurant and hospitality industry. (Helper, 2021). By April of 2021, due to these shocks, stay-at-home orders, and other variables, the private industry saw 8.3 million employment vacancies, which would only rise in subsequent months. The shortage of workers and therefore supply reduced the efficacy and overall ability of complex supply chains to function. The larger the distributor is, the more vulnerable they are to shortages and disruption since they draw from many suppliers, who are also impacted by separate shortages of resources and labor.

Urban farms are a return to a local food production system that, due to its close proximity to markets, is unhindered by a large labor force or distribution centers. Urban farmers can effectively fill in the gaps left behind by periodic shocks to the economy and supply system, and increase the circularity of both local-food systems as well as financial systems. Additionally, although out of the scope of this analysis, urban farms participation in local food systems decreases the distance food travels reducing greenhouse gas emissions and negative environmental impacts.

Simply put, the overarching social and ecological benefits of this system are at stake if urban farmers cannot financially support the labor, tools, and infrastructure utilized in their operation. If profits cannot be generated, urban farming businesses cannot grow and are at risk of remaining a novelty, and not the solution they can be to societal and organizational issues. This project will explore the linkages to additional market avenues, especially those of restaurants, grocers, and institutions, to increase the viability and survival of urban agriculture in the City of Lansing.

## The Lansing Context

In Lansing, there already exists a plethora of urban agriculturalists as well as institutions focused on the vitality of local and regional food systems. Lansing has a robust urban farming scene that provides key societal benefits such as second-chance hiring, youth development and engagement, land restitution, and community beautification. These organizations exist within the same vein by directly supporting farmers and, typically, supplying other vital services to Lansing's neighborhoods. *Figure 1* provides a list and brief description of the key players in the food system which,

through programming and operation, provide resources and market outlets to Lansing's urban farmers.

*Figure 1. Key Actors in Lansing's Food System*

<b>Name: Core Functions &amp; Programming</b>	
<p>Allen Neighborhood Center (ANC)</p> <ul style="list-style-type: none"> <li>➤ CSA Program</li> <li>➤ Incubator Kitchen and Business Spaces</li> <li>➤ Wash Pack and Cold Storage</li> <li>➤ Allen Farmer's Market</li> </ul>	
<p>Eastside Lansing Food Cooperative (ELFCO)</p> <ul style="list-style-type: none"> <li>➤ Wholesale purchasing from local growers</li> </ul>	<p>A natural food grocery that has served the Lansing and East Lansing Area since 1976, and recently reopened at a new location in 2022. ELFCO aims to connect local food producers to consumers through a wholesale model.</p>
<p>Lansing Urban Farm Project (LUFP)</p> <ul style="list-style-type: none"> <li>➤ Tool Sharing Resources</li> <li>➤ Farm Apprentice Program</li> <li>➤ Incubator Farm Program</li> </ul>	<p>The Lansing Urban Farm Project (LUFP) is a Michigan non-profit that seeks to support small and urban farms in the Lansing area and integrate food and farming into larger community building efforts.</p>
<p>Ingham County Land Bank: Garden Program</p> <ul style="list-style-type: none"> <li>➤ Leases land to agriculturalists</li> <li>➤ Tool and Tractor Rental</li> <li>➤ Supplies Farm Resources: Plastic, mulch, seeds, etc.</li> </ul>	
<p>Greater Lansing Food Bank: Garden Project</p> <ul style="list-style-type: none"> <li>➤ Shared Greenhouse Space</li> <li>➤ Provides Seeds and Plant Starts</li> <li>➤ Tool Rental</li> <li>➤ Supplies Farm Resources: burlap, mulch, cover crop seed</li> <li>➤ Knowledge Sharing Through a Network of Gardeners</li> </ul>	

➤ Educational Programming & Workshops	
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# The Farmer's Voice

To begin this food-system analysis for the benefit of urban farmers, they are deemed the primary informant of this system's viability. This project is founded on the experiences of urban growers which has been acquired and tempered through multiple growing seasons and market opportunities. Although urban farms are successes in revitalizing communities by returning vacant lots to agricultural use, they simply are not thriving. The primary sentiment of urban farmers is that farming in the City of Lansing is not sustainable.

All farmers interviewed report not providing themselves with a living wage. From first-hand experience, most revenue earned is utilized to maintain production: purchasing seeds, soil amendments, covering infrastructure and maintenance costs, and water. Currently, according to the Massachusetts Institution of Technology's Living Wage Calculator, the living wage for Michigan is \$16.36 an hour, for full-time employment. For the most part, these farms have two to four dedicated farm hands that work between half and full-time, if not more than that.

**"The farm isn't my main job, the farm isn't what pays for my rent."**

The primary purpose of this study is to investigate and expand upon the market avenues for urban farmers to provide the appropriate compensation for their clearly worthwhile endeavor. If these growers are financially secure, the resiliency and circularity of our local food systems will also be secured. If there exists a robust and viable hyper-local food system, the health and wellbeing of our communities will benefit from the myriad social and educational benefits of urban agriculture.

## Current Markets: Benefit or Burden?

To begin this market analysis, we must take a look at the current markets of Lansing's urban farms. Currently urban farms have solidified consistent sales at local farmer's markets. Among these are Allen Farmer's Market, South Lansing Farmer's Market, East Lansing Farmer's Market, and Meridian Farmers Market. Additionally they sell to Community Supported Agriculture (CSA) programs, such as Allen Neighborhood Center's Veggie Box Program, or oversee their own CSA. Community Supported Agriculture is an increasingly popular way for consumers to buy local produce. CSA's are a way that farmers can provide a specific amount of produce to individual

consumers through a purchase of “shares.” This transaction is typically done before the beginning of the growing season(Ziegler, 2015). Moreover, urban farms will occasionally sell to individuals, grocers, and provide educational workshops and programming often in cooperation with larger organizations and institutions.

Of the farmers surveyed, all reported having access to farmers' markets, either currently or in the past. They also reported some of the detriments of farmers markets, among the most prevalent, have been the risk involved. This risk pertains to the nature of this avenue of sale, primarily inconsistent attendance. As farmers harvest and prepare for the market, they make calculated risks in time management, the amount harvested, and what varieties to supply at the market. In some instances, farmers reported acclimating to farmers' markets with a specific quantity of produce, to simply stop selling similar amounts of the same varieties regardless of seasonality.

The most quantifiable way to measure the capacity of urban farms, after their pre-established market sales, is the amount of food waste produced. Regarding farmer's markets, this metric can provide insight into produce remaining unsold. Yet, food waste is not the proper term when considering urban farms and their outlets. Many farms will compost leftover harvest, or donate it to food pantries, non-profit programs, or to other organizations, lending to the circular and philanthropic aspects of urban farming. Farmers are self-reporting food-waste of an estimated 10-25% of what they are harvesting. This includes compost and donation of left-over harvests unsold and directly correlates to a loss of revenue.

**“Last year, I would estimate that hundreds of pints of tomatoes went bad on the vine. We were only selling at the farmer’s market and maybe to a restaurant here-and-there and an individual sale here-and-there”**

A pertinent point of urban farming must be made to understand the constraints in the current system. Urban farmers, in their current iteration, are production, maintenance, sales representative, and social media specialist. Not to mention if one wants to be successful, every opportunity must be explored, which can include collaborating with other farmers and organizations. This is time consuming. To demonstrate the risk of entering new markets, one farmer described their experience of committing over 24 hours of labor (divided between three individuals) to a single day of harvest and preparation, only to make \$9 of sales at the Meridian Township Farmers Market.

Additionally, urban farms are in competition with one another, although they explicitly collaborate to avoid it. The seasonality combined with consumer demand of produce grown hyper-locally limits the diversity of products in the market. In spring, everyone is apt to be selling salad mixes, spinach, and other greens. Again considering the economic law of supply and demand, with multiple producers saturating the market with the same product, consumer sales are more distributed among suppliers. In some cases, urban farms plan to supply markets with specialty and novel varieties, gambling with unknown quantity demands from consumers. However, with a more artisanal understanding of food, such as chefs at restaurants, this strategy may prove fruitful.

**“It’s a challenge to sell to farmers markets and establish a consumer base. Too many small markets in Lansing create issues splitting the consumer base.”**

Farmers Markets do not guarantee sales. Wholesale to grocers has provided somewhat of a consistent avenue for sales but does not generate the amount of revenue needed to sustain working farmers. Communication with restaurants is difficult in addition to the many other responsibilities of growers and has not proven to be a source of steady income for all urban farms interviewed. What steps can be taken to ensure sales outside of farmers markets are more frequent and rewarding? Additionally, what models can be utilized to conserve the time and effort farmers make to sell to these outlets? These questions and the collective sentiments of local farmers are what this project aims to address.

# Proposed Methodology

The primary informants for this project are urban farmers, the suppliers seeking increased market avenues and revenues. The information provided in the previous section is the general sentiment of urban farmers that were encountered by this project in the 2022 growing season. Throughout the course of the season, the Hyper-Local Food Market feasibility study interviewed four urban farmers within Lansing's city limits, who will remain anonymous in any supplemental quotations or information. These interviews provide information on the current state of Lansing's urban farming scene, its assets, obstacles, and ideas to increase sales. Of these ideas, increasing the consistency of linkages and sales to restaurants and grocers will provide increased revenue and allocate more farm funds to paying laborers a living wage.

Initially the outreach to food business, and submission of surveys, would be digital. However, being informed of, and witnessing first-hand, the obstacles to connection with this ostensible consumer, in-person solicitation for interviews was adopted as the primary vehicle for outreach. To explore more commercial avenues of sale, the project focused primarily on understanding the processes and methods for communication between restaurants, grocers, and their suppliers. The approach to this was geographical, focusing on restaurants and food businesses within Downtown and the Eastside of Lansing (mainly the 48912, 48910, and 48933 zip codes). Twelve restaurants were continuously solicited for interviews throughout the season, with four having participated in the interview.

Other information to be solicited focused on the supply demanded from restaurants, an important link to be made between farm output capacity and supply demanded. For this reason, the restaurants solicited are locally owned and smaller scale. This was additionally beneficial as communication with individuals, as opposed to a corporate entity, is a defining element of this scale and more obtainable and accessible to farmers. The concept of matching the capacity of farms to the capacity of their markets is crucial to building upon existing food systems.

Moreover, to understand the system as a whole, the project solicited interviews from grocers, business and tourism organizations, and food-system program managers. Both farming and food businesses participate in a larger economical system that consists of institutions that aggregate and distribute food, and participate in agrotourism. The two cannot be separated; Institutional input into these systems determines their success within the local and regional economy. Altogether, 20 interviews were

conducted over the duration of this project, including farmers, restaurants, grocers, and organizations with objectives in tangent with the project's goal.

Overall, a general understanding of the operation, challenges, and assets of the participatory members of local food systems can improve the economic resiliency and circularity of this system through concerted efforts. This project aims to increase these efforts and the strategic execution thereof. The findings are intended to be interpreted and utilized by all actors in this system to supplement certain roles, and link others. This report will be disseminated to Michigan State University's Center for Community Economic Development, the Lansing Urban Farm Project, and other integral players in Lansing's hyper-local food system.

# Thematic Analysis of Interviews

A fundamental aim of this project is to assess the feasibility of Lansing urban farmers to pursue a more commercial market avenue, specifically access to restaurants and grocers. Through the interviews conducted, a few common obstacles have been identified, by both growers and restaurant businesses, to developing connection and rapport. As a farmer, I have personally experienced these challenges when establishing points of sale to food businesses in Lansing.

The most pertinent points elucidated through first-hand accounts of growers and restaurateurs are the quantity supplied, on-going and direct communication, and determining the risk and liabilities of entering more commercial markets. This report will also explore the impacts that COVID-19 has had on our national, regional, and local supply chains, both quantifiable and anecdotal. Furthermore, there is hope that all these obstacles can incrementally turn into benefits for urban farmers, as restaurants are trying to adapt and create resiliency to a worsening economy and society after COVID-19.

## Quantity and Capacity

The capacity of urban farms matching the supply needs of restaurants is the largest barrier to continuous sale identified by this study. Every restaurateur interviewed, as well as food-system informants, saw capacity as one of the main obstacles to increase connectivity and sales. If the entire supply of a restaurant is considered, the amount of orders, and volume of orders, would overwhelm the produce supply of urban farms. As a brief example, the majority of restaurants utilize varieties of root vegetables, as their staple ingredients: potatoes, onions, carrots. In most cases, restaurants go through 50-100 lbs. of any of these on a weekly basis.

**“It’s kind of a perk to be a bit more local and a little bit smaller, but with that being said, you need people to grow and get bigger. So does a small urban local farm have the ability to grow in scale?”**

Depending on the size of the restaurant, and menu items, this volume can translate to other varieties of fruits and vegetables. For example, numbers from all restaurant interviews average to 50 lbs. of tomatoes weekly. Greens and salad mixes at around 40 lbs. a week, and romaine lettuce can range anywhere from 25 heads to 200 heads a week. An average of 55 lbs. of cabbage, another example, can be utilized weekly, typically for coleslaw.

Other agricultural products like meat, poultry, and eggs, although not produced by urban farms in large volumes if at all, are supplied weekly 80-100 lbs. and 2,500-3,000 eggs respectively. This is certainly an area where urban farms face constraints and obstacles based on grazing land available, access to feed, and compliance with city ordinances pertaining to raising livestock.

Providing staple ingredients to hyper-local restaurants is often not plausible given the current market access, and the way farmers adapt to meet that demand. At the beginning of the growing season, market risks are calculated based on established or desired markets, crop varieties, and quantity demanded by those markets; essentially market risks exist throughout the entire process and are dependent on the entire process. The majority of urban farmers interviewed in this analysis primarily sell at farmers markets. This manifests in a crop plan that incorporates a wide variety of produce available, in smaller quantities, to increase the likelihood of sales at market. If one were to plan a season in advance to sell to restaurants the planting schedule would facilitate larger quantities of staple crops planted on rotation to replenish after sequential harvest to meet this quantity demand. The logistics differ for both approaches and involve different levels of risk.

For example, consider a growing space of 1,000 square feet, a 20'x50' plot of land, divided into 4 rows. An accurate representation of a farm primarily selling to farmers markets will include half a row each of kale, garlic, snap peas, tomatoes, eggplants, peppers, salad mix, and carrots; this is purely for example and does not include succession planting, especially since most of these crops produce multiple harvests through the course of 3-4 months. For a farm to sell restaurants primarily, to best use this space, they would plan 4 rows of onions, each sown a week apart from the previous in order to provide 50 lbs. of onions for a restaurant over the course of 4 weeks. This would incur a loss of sales to farmer's markets, CSA, and individual sale, as the demand is apt to be more diverse. Given this scenario of what capacity is in relation to the planning process, it is simply difficult for urban farms to meet the demands of all markets simultaneously.

There are opportunities to sell to restaurants with the specialty produce farms currently generate, although in less quantities. One example is habanero peppers, they are utilized as a spice or garnish more than a source of sustenance. As part of this project, the contacts made at restaurants have been shared and utilized by the Lansing Urban Farm Project to coordinate sales for urban farms. Farmers were able to sell and connect to restaurants for weekly or bi-weekly specials. Furthermore, chefs and owners have stated that during the time of these specials, and cross promotion via LUF,

restaurants, and farmers, they saw an increase in consumer presence in their establishment.

**”I’ll take whatever you got, give me whatever you got and I’ll use it.”**

**“Like carrot crispies... I’ll shave those carrots, take them off and drop them in the fryer and utilize this lovely garnish.”**

**“Whenever you have extra stuff, we’ll buy it”**

Restaurant owners and chefs spoke directly of this in interviews, testifying to their willingness to collaborate and engage. Even if the capacity of the farm does not meet the quantity demand of some restaurants, some restaurants may want to utilize what farms have available to use in a ‘spot-light’ feature. This provides the opportunity for promotion and advertisement for urban farms, and subsequently can grow into more avenues for sale. Moreover, more artisanal restaurants are willing to utilize any amount of produce from urban farmers to accent and highlight a dish. At the least, there is the possibility of urban farms to supplement some of the supply, or contribute with specialty produce, for these restaurants.

## Connection

An obstacle mentioned previously by urban farmers, communication has ubiquitously been expressed by restaurant owners and chefs in Lansing as a barrier to ongoing sales with smaller local suppliers. Engagement and consistent communication between multiple hyper-local suppliers, urban farmers, is a challenge for owners and chefs due to time and work constraints. This is also an unexplored option for many, especially those who must order due to managerial preferences.

Throughout the duration of this study, there are instances in which restaurant affiliated interviewees would not show up to the scheduled interview time, would not respond to communication after verbally affirming they would, or would deny request for any dialogue. These instances exemplify the challenge for suppliers to enter this market and maintain those connections.

**“That’s why people (restaurateurs) go to the grocery stores, they save 20% or 30%. How much is your time worth though if you value**



**your time? And a lot of restaurateurs value their time because it's a hustle."**

**"To be honest with you, I would love nothing more than to have more produce and more local products here involved, I just personally don't have the time to go to every farmer and every farmers market. I don't have the time as an owner and operator to do that, and neither does my chef."**

This crucial connection is difficult and sparse, aside from the occasional sales representative, typically also the farmer, who wishes to expand their market. For both the farm and restaurant, time is equated to money. From experience, finding the perfect opportunity to sit down with an owner and a chef requires diligence, if not a hint of luck.

Throughout interviews and discussions with restaurateurs and farmers, there is an express need for consolidation of marketing efforts. Growers have expressed to me their appreciation of this market study, specifically the connections for sales generated by it. Again, it is clear that market exploration is difficult given the work schedule of many urban agriculturalists.

**"I personally find that there's some difficulty in connecting with those farmers to bring their product in, outside of the occasional go-getter that comes in and wants to sell me mushrooms [for example]."**

**"To sell to those avenues that are more commercial like restaurants and institutions, I think there needs to be... a middle-man, point-person, activator."**

As farmers are connecting to restaurants, the intersection of many different factors has to be understood and employed. The restaurants interviewed have shown a bias towards buying more locally, however many restaurants are looking to keep the costs of ingredients and labor down to maximize revenue.

**"Restaurants are a hard, hard sell because they don't know what their sales are going to be, they don't know what's going to walk in the door, so they don't know what to buy from you. And margins in**

**restaurants are so slim that usually your food-cost should be under 20%. So in order for you to charge \$10 a plate, you can only spend \$2 on the ingredients, so in looking at that you have to factor in the labor. There are so many costs at restaurants.”**

## Risk, Liability, and Commercial Certifications

As a business, urban farmers avoid risk wherever possible, to mitigate loss: to their crop, sale opportunities, and ultimately time. Farmers are, as stated prior in this report, the producer, manager of markets, sales representative and media representative for their field of work. The general impression of the urban farmer is over-busy; given the nature of the reality of urban farming, pursuing restaurants and grocers as an avenue for sale presents many risks to what they have established as the status quo. Primarily their exploration of additional market outlets costs valuable time in and of itself. Furthermore, sales that are made to these businesses may be sporadic and financially unfulfilling, especially when generally comparing hours of labor to the revenue generated by the sale. This isn't to mention the obstacle of capacity. To meet a higher quantity of produce and make consistent sales to restaurants, Lansing farms can work together to fill larger orders. Yet, communication between farms is another time-cost to consider.

**“Market is a risk and time consumer. Restaurants we struggle to communicate with. Wholesale and grocery is great, but much less money.”**

Given that urban farmers' primary markets are the farmers market, CSA, or individual sale, new markets present a risk and liability. The potential for loss of time and effort to navigate the obstacles of this new market avenue, and the lack of time and labor already present when pursuant of current markets, is an evident risk many urban farmers are not willing to take.

Let us take into consideration some of the production obstacles faced by farmers when pursuing the more stable and defined sales to restaurants and grocers. Liability insurance being one. Defined In these terms, liability is the lawful accountability for the services and products they provide. To engage with some restaurants and most

grocers, local farmers must have liability insurance to prevent penal action and lawsuits from third-parties and increase the revenue they generate through broad market outlets.

Many of the restaurateurs interviewed through this study see this as a minor obstacle, while others see it as a necessity to engage in the local produce supply chain. Logistically speaking, this is difficult for urban farms that generate only enough revenue to maintain operation. Until the economic capacity of urban agriculture can create living wage jobs, and maintain the current capacity of individual farms, liability insurance is certainly considered another obstacle that is too difficult to overcome.

**“So there’s a whole lot of barriers too, economically, for any real restaurant to turn to [local]. For example I have a friend that grows heirloom tomatoes and if I wanted to buy them all that’s an issue, because the health department wants to know how they’re grown and the soil health. All these questions come down to if I serve this food in my restaurant, are people going to get sick?”**

As mentioned previously, urban farms without access to walk-in cooler space and licensed kitchen facilities face challenges in labor management and loss of revenue due to the shelf stability of their product. In other words if not harvested and delivered at the peak of freshness, and without the aid of methods of preservation, farmers face the risk of quality and liability as their product ages. The process of spoiling not only includes the degradation of their product, but also exposure to harmful microbial influences that present a health risk.

Another step urban farms can take to ensure their product and its packaging reflect the growing practices, and therefore specific commercial and material quality, is organic certification. Offered through the USDA, certified organic foods are grown and processed according to guidelines that outline overall soil quality, raising practices, pest and weed control, and the use of specific fertilizers and application practices (McEvoy). Although many urban farms are not organic in name, their practices are less environmentally invasive, such as no-till methods and crop rotations.

It is a chicken before the egg scenario, which comes first? Market avenues, especially ones that are more stable, sustainable, and mitigate waste such as restaurant orders and grocers, would generate the income to assist in obtaining critical infrastructure, licensure, and insurance to overcome the obstacles that the markets themselves present. Urban growers recognize this paradox when approaching these more commercial avenues of sale, and identify collaborative ways to deal with them.

Primarily this includes the collective ownership and use of cold-storage, licensed spaces for product preparation, and specialized sale efforts conducted by individual farmers throughout the Lansing urban farming scene. This is a concept that this report will revisit in the Implications section.

**“So you’re telling me yours costs 10% more... if it’s 20% more in the truck (from a regional supplier), but then when you order a truck in bulk you get cheaper prices. There’s 10% waste in there, there’s 10% [of the order] that got through [inspection] somehow.”**

**“But what you’re talking about is less handled, much nicer crop. To me there’s value in that. I’m not going to lie to you, I’m sure I’m in the minority.”**

**“The convenience isn’t always convenient with a *long* supply chain of people getting it to you, instead of just two people.”**

There is hope, however, restaurants see the commercial and gastronomical value of the quality of produce generated in the hyper-local food system, and the benefits thereof, particularly fewer food miles as well as the simplicity of these systems when compared to their current regional suppliers. The issue that restaurant procurement faces is the overcomplexity of food systems, leading to a loss of viable and quality ingredients compounded by the stages of production, harvesting, storage, and shipping necessary to the operation of regional supply chains. Not to mention, the COVID-19 pandemic ravaged the efficacy of this system, causing restaurants to adapt in order to survive.

## Obstacles become opportunities: The Impact of COVID-19

With the onset of the COVID-19 Pandemic, businesses closed, many small businesses taking the brunt of subsequent stay-at-home orders. The Lansing City Pulse reports, in September of 2020, that over 70 businesses in Lansing, East Lansing, and Okemos have either permanently or temporarily closed since March (Kaminski 2020). Earlier that year, in July, Yelp conducted a data analysis that shows nearly 16,000 affiliated restaurants have permanently closed, which is 60% of all restaurants that closed their doors at the beginning of the pandemic (ibid). The public is still waiting for some to recover.

Local supply chains can help restaurants survive severe economic shocks through collaboration and advocacy. Order and delivery of produce from regional distributors is more expensive than purchasing from a grocer, yet saves time and guarantees the quantity of food required by restaurants. The same can be said of delivery versus purchasing from local farmers; connecting with farmers takes time, farmers may offer similar pricing points, and their capacity to provide the quantity needed on a consistent basis is unproven. With the disruption and delays to the food-supply chain it was difficult for restaurants to obtain supplies in a timely fashion and with consistent quality.

Additionally, the pandemic and subsequent inflation have not only influenced the price of food and its transportation. Restaurants are claiming a 20%-30% increase in labor costs. The Bureau of Labor Statistics reports that 24% of establishments have increased wages and salaries, paid wage premiums, or offered paid bonuses in light of the COVID-19 pandemic (U.S. Bureau of Labor Statistics, Feb. 2022). Specifically, within the accommodation and food service industry, of which restaurants and other food businesses are a part, nearly 46% of these establishments have increased wages, accounting for over 60% of employment in the industry (U.S. Bureau of Labor Statistics, Feb. 2022). One explanation could be, seeing that the national unemployment rate reached 13% during the pandemic, employers have had to increase their wages to stay competitive in the job-market (U.S. Bureau of Labor Statistics, June 2022). Restaurants are clearly no exception, exhibiting a greater turnover in chefs and staffing than before.

**“I’ve raised my prices here... once in the last four years, because things are good. There was no reason to raise them until COVID, even at first things were okay, then things started to get a little strange, the supply chain started failing.”**

Restaurants need to adapt and strategize to meet these economic perils influenced by periodic, natural or human induced, shocks to our societal systems. The restaurants interviewed have developed methods to hybridize their procurement of ingredients. With owners reporting that the price of ingredients has increased 20%-30%, roughly the same as their labor prices, it’s a necessity. Through experience in trial and error, a chef’s procurement of supply reflects the flexibility needed to navigate competitive pricing for similar quality of ingredients, and also the due diligence required in the art of cooking. Lansing area restaurants purchase large quantities of staple ingredients, yet have choice suppliers for specialty goods, among whom are urban and peri-urban farmers.

**“...All our food costs have gone up by 20-30%, and our labor has gone up by 20-30% we can’t add 50%, I can’t charge you \$15 for a \$10 item.”**

It’s a balancing act; restaurants need to mitigate substantial prices per plate in order to make revenue, they loathe the idea of charging more for staple menu items for fear of losing business, they need to pay wages that reflect the living wage to retain their work and talent force. Urban and peri-urban farms can fill the gaps created by future disruptions to the supply chain, leading to increased avenues of sale and revenue generation. Due to little to no delivery fee or inconvenience, guaranteed freshness of produce, and direct communication and sales relationships, urban farming businesses contend to be a more viable supply option than traditional distributors in some cases.

For urban farms, which remain in an economically embryonic state of being, this means growth and development, in other words an increase in capacity and therefore success. Although the pandemic has presented many challenges, it has presented opportunities to restructure how our supply chain is organized. With concerted effort, local supply chains can develop and thrive; with increased revenue, urban farms can survive, develop, and expand.

# Implications of research

The findings from interviews with farmers and food businesses point to the need for strategic and organized efforts to increase the linkages, capacity, output, and business liability of urban farms. To understand how these developments can occur, this portion of the project began with an interview with an anonymous contact with Michigan State University Foundation, and another with MSU's Center for Regional Food Systems. With their combined experience of over a decade of economic analysis and farm-to-institution program management, avenues for exploration were elucidated.

The two apparent avenues for further research and connection are through regional food-systems and smaller institutions, both able to connect suppliers to early care, youth care, elder care facilities, district schools, restaurants, grocers, and other avenues for market.

## Understanding Supply Chains

Other pertinent topics stressed by these informants is the importance of focusing on appropriate sized facilities and institutions to match the output that is generated by urban farms. For one, an organized and collaborative effort on the part of smaller urban farms can allow them to increase their opportunities for sale. However the interviewees alluded to the need for an entity to aggregate and distribute product to increase opportunities for sale at higher capacity, essentially a food distributor. This is a key factor that can increase the viability and resilience of Lansing's hyper-local food system.

To learn more, I asked restaurateurs how they currently supply their location(s). Local food businesses typically source their ingredients regionally. Some suppliers have been found ubiquitous across all interviews, while some are more specific to the interviewees based upon their professional networks. Below is an account of these supply organizations, and the life cycle of each.

Better understanding of this cycle and supply chain organizations can lead to the emulation of it, and the development of strategies to avoid unwanted consolidation, and best serve the hyper-local food system in Lansing.

Figure 2. Most Common Suppliers of Restaurants in Lansing

<p><b>Gordon Food Services:</b></p> <p>Currently services the Midwest, Eastern, and Southern portion of the United States. Beginning in Grand Rapids as a butter and egg delivery business, GFS would expand over the course of the next 125 years to the supply-giant it is today</p>
<p><b>Van Eerden Co.:</b></p> <p>Founded in Grand Rapids in 1920, this food delivery service focused on supplying the Great lakes Region, and has grown to supply across the country. Van Eerden began purchasing small produce companies in the mid-1900s, and continued this trend more recently in the 2010s. Looking to expand its supply from Michigan, Van Eerden strategically purchased producers Simon Leeman Fruits and Vegetables, Frog Holler Produce, and Preferred Produce.</p>
<p><b>Lipari Foods:</b></p> <p>A regional distributor founded in Detroit by butcher Jim Lipari in 1963. By the 80s, they had diversified the variety of products sold and expanded their distribution. In 2018, a Miami-based equity investment firm, H.I.G. capital. Currently, Lipari services 27 states and owns approximately half a million square feet of warehouse space.</p>
<p><b>Indianapolis Fruit Company:</b></p> <p>Established in 1947, the Indy Fruit Co. delivers fruits and vegetables to retail partners throughout the Midwest. In 1997 they merged with Piazza Produce, another produce wholesaler in Indianapolis, and in 2019 was incorporated into FreshEdge, a united coalition of food distributors, also founded in Indianapolis.</p>
<p><b>Cherry Capital Foods:</b></p> <p>A perfect example of an up-and-coming Michigan based distribution service. Founded in Traverse City, MI, in 2007 by Evan Smith the current CEO, Cherry Capital Foods sources 90% of their inventory from within Michigan. Their mission is to grow a movement that focuses on regional foodsheds and supporting the Michigan economy and environment. The goal is connecting local food to local food businesses, ensuring a circular economy within Michigan and its communities.</p>

Other distributors noted are R. Hirt Jr. Company in Detroit, Willow Brook Farm, Brighton Farms, Stone Circle Bakehouse, and Elegance Distributors in Eaton Rapids. The capacity and purpose of each vary, ranging from specialty production to distribution services that benefit local farmers and foragers.



The majority of regional and national supply chains focus on maximizing profits through the sale of large quantities, and supply from the largest farms in the country, and abroad. The only exception would be if a food-aggregation business attempts to differentiate themselves from their competition by purchasing and selling more locally. For the most part, they do not exist at a community based level, as they are supplying their stores and clients with as much produce as they can procure.

A recurring theme in food supply chains appears to be the buy-out of smaller companies by larger ones. Naturally, with growing produce companies, that growth corresponds to an increase in demand for supplies to generate revenue and develop delivery capabilities, however this growth can lead to the merging of smaller scale distributors with national food corporations.

Clearly the smaller the distribution service, the more space there is, ideologically, to incorporate ideas of environmental sustainability and advocacy, economic resiliency, circular economies, and agricultural education initiatives. With enough effort, and pun intended, the seeds for a resilient local food distribution network can be sown in the Greater Lansing Area.

## **The Search for Institutional Knowledge: 10-Cents a Meal**

Looking for more examples of local food distributors, or generally food system actors, I reached out to the Farm to Program Consultant at the Michigan Department of Education to discuss the 10 cents a meal program. The program was piloted eight years ago as part of the Child Nutrition Program. Grantees are participants in the Child Nutrition Program, this includes schools, day cares, and nonprofits.

Originally there were strict guidelines for the Child Nutrition Program regarding meal count documentation. However, the 10-cents a meal program now covers anything that educates about food, food systems, and market-fresh produce. This allows grantees to purchase foods sourced from co-ops, farmers, or even grocers, as long as the packaging reflects it is local. They supply the program through larger industrial farms, distributors, and some grocers.

However the 10-cents a meal grantees are lacking a connection to farmers, particularly urban and peri-urban. One of the largest challenges developing systems to accurately record and communicate with farms selling produce through the program.

More advocacy is needed to connect farmers to institutions and create a network of food-hubs and aggregators operating on a more localized level.

The regional food-supply systems across Michigan noted by 10-Cents a Meal are: Cherry Capital Foods in Traverse City, Eastern Market and Keep Growing Detroit - in Detroit-, and Valley Hub which is operated through Kalamazoo Valley Community College.

With organized and prevalent food acquisition taking place locally, in Lansing, participation in the larger regional food system will be more viable, from a labor and time management perspective. However, regarding the overall sentiments and ideas interviewees have shared with me, I believe the local food system is less-so facing an issue of scale and capacity, but primarily one of organization and strategic collaborative efforts. This led to outreach to Valley Hub and Keep Growing Detroit, the smallest in scale of the aforementioned supply and distribution organizations. The following is a description of each organization, their work in their respective food-system, and relevance to Lansing's hyper-local food scene.

## **Keep Growing Detroit: Model for Collaborative Action**

Keep Growing Detroit (KGD) focuses on creating food sovereignty within the city of Detroit. Officially founded in 2013, KGD has been building upon their programmatic capacity and the community of growers they serve. They provide resource and education based programming to bolster the efforts of urban agriculture which supports more than 2,000 urban gardens and farms within the city. They lead by example, operating a 1.38-acre urban farm dedicated to teaching urban agriculturalists and community members to increase their access to farm-fresh produce. As a grassroots organization, they focus on the health and wellbeing of the community, reducing the volume of produce sourced by residents through more traditional and large-scale supply chains, creating economic resiliency through hyper-local sources.

Active Garden Resource Program (GRP) members consume an average of 1.5 cups of fruit and 2 cups of vegetables daily. GRP members produced over half of the produce they consumed during the growing season. 89% of GRP members report saving money on fruit and vegetables through their participation in the program.

Grown in Detroit (GID) is Keep Growing Detroit's market branding. In 2021 the GID program supported 32 growers, 66% of which were Black, Indigenous, and People of Color (BIPOC). GID sells these growers produce at three market outlets collectively earning \$61,050, averaging \$1,908 for each grower involved. Prior to the pandemic,

KGD generated higher revenue through these market avenues. Currently GID growers offer their produce through an organized Community Supported Agriculture program, an Online Farm Store managed by KGD, and collective and collaborative sales at Eastern Market in Detroit.

GID is currently expanding the value-added portion of its repertoire by incorporating value-added products in their Community Supported Agriculture program. These products are supplied through local BIPOC food entrepreneurs who utilize the seasonal produce offered by GID growers. Through initiatives to accept EBT, CashApp, and Double Up Food Bucks, as well as partnerships to increase donation, KGD ensures that this system is circular and bolsters the food security and sovereignty of Detroiters.

## **Relevance:**

It is clear that Keep Growing Detroit is an organization attempting to reimagine the current food system. This energy and sentiment is shared in Lansing as well. There are organizations that exist in Lansing that support urban agriculture yet not to this scale. Allen Neighborhood Center (ANC), located in the heart of the Eastside (the 48912 zip code) provides market space for growers to sell their produce, as well as connectivity with and through the grant-funded Hunter Park GardenHouse which provides educational programming incorporating urban farmers as both students and mentors.

Furthermore, ANC oversees a food business incubator space, including a commercial kitchen, cold-storage, and small-business assistance. This is a potential market, as these food-businesses are likely to match their quantity needs to the current capacity of urban farms within Lansing. Moreover, their licensed commercial kitchen presents an opportunity to generate value-added products from fruit and produce, also increasing shelf-life and storage capacity. Additionally ANC oversees a Community Supported Agriculture program which utilizes food supplied by local farms within a 50-mile radius of Lansing. Allen Neighborhood Center additionally facilitates fitness programming, youth development programming, and health & housing assistance.

The newly established, or re-established, Eastside Lansing Food Co-operative, previously the East Lansing Food Co-op, provides another market avenue for urban farmers for wholesale to a grocer. Currently they are seeking out more diversity of produce provided, as well as opportunities to sell shelf-stable, value-added products.

Although collaborative efforts exist to make the hyper-local food system more viable, there is no consolidated effort. KGD is one organization that provides a plethora of programming to increase the viability and linkages of urban farms to the community. Additionally, they support pre-existing food programs throughout the city, with the ultimate goal of the increasing engagement with urban farmers within their respective communities. They are wholly focused on the development of hyper-local food systems, with urban producers at the forefront of the movement.

Most organizations in Lansing with similar programming are not wholly focused on urban farming in their primary mission: save the Lansing Urban Farm Project, currently just an all-volunteer board with programming being developed, and the Greater Lansing Food Bank's Garden Project, which includes urban gardening as well as agriculture. Emulating these KGD programs, tailored to the specific realities of Lansing, can provide outstanding benefit and synergy within the current hyper-local food system.

This model has some relevance when considering the collaborative and combined efforts of urban farmers. All farmers interviewed believe that a model for collaborative efforts and sales. This would be especially helpful when considering the time consuming aspects of farmers markets, the current major avenue of sale. Collaborative efforts could potentially relieve farmers of the labor demands involved in the plethora of tasks and specialties each one must utilize to be successful alone. This is an idea, and sometimes presumption, that some food-businesses had conjectured about for urban farmers in Lansing.

**“I love the idea of pooling farmers together to have more product. But then it is, who handles the financial piece? Who does the selling to me?”**

**“Use yourselves to pair together, with one delivery, and one person is responsible for doing that. And then the next farmer is responsible for doing [something else], almost becoming a community of farmers that get that product into stores.”**

Essentially with this model, farmers can organize to sell through different avenues under one banner, and divide the revenue among the individual farms involved. This would allow for a focus on growth and development, for increased sales,

or for other tasks that increase the capacity and efforts in which these farms operate for the benefit of our communities.

Simply put, if one entity can communicate and coordinate with farmers regarding harvests and delivery to markets, and act as a cooperative sales representative at these markets, urban farms collectively have more time and labor to focus on production, maintenance, and pursuing other avenues of sale with restaurants, grocers, or institutions. A system could be developed using this division and specialization of labor in Lansing.

## **ValleyHUB: Model for Commercial Aggregation**

ValleyHUB is part of Kalamazoo Valley Community College's (KVCC) Food Innovations Center and was constructed in 2016, with operation beginning in 2017. It began as a pilot program spurred on by Bronson Hospital's 2014 goal to source 70% of its food locally, for non-patient cafeteria access. At the end of the pilot's annual duration they were shy of 20%.

After Bronson's pilot, they combined resources with KVCC to start a food hub. ValleyHUB was created, and from 2017-2019 it began to build its networks for supply and sale. Sales during the pandemic were meager, as is reflected by many other organizations and businesses. However, this year, 2022, the food hub has netted nearly \$500,000 in sales, with Bronson contributing approximately \$2,000 weekly.

There are 30 farms linked to ValleyHUB, all within a 50 mile radius to Kalamazoo. The hub purchases everything from produce, eggs, and dairy, to value added products. This product is supplied to an array of institutions and food businesses. Currently ValleyHUB provides produce and value added products to coffee shops, early childcare facilities, elder care facilities, Bronson Hospital, four natural grocery stores, and 15 restaurants, at the time of this project's inquiry.

At its foundation, Valley Hub is a food aggregation and resource center for local food systems. They provide storage and processing facilities, and partner with other businesses to create value-added products. The professionals that oversee the hub's operations include an outreach and communications team, an educational, resource-focused farmer support team, as well as production and processing facility management. This eases the friction throughout all steps of the food system by providing consulting and connection for farmers to build their business through certification, packaging, and processing. The hub creates points of sale, and purchases products from suppliers wholesale, removing the burden of liability from the farmers.

They engage in general processing and value-added processing to increase their sales and viability of market avenues.

## **Relevance:**

ValleyHUB is a prime example of a food hub working in tandem with farmers to bolster the financial resilience and security of current hyper-local food systems in the Kalamazoo area. With a combination of both the vision of Keep Growing Detroit and Kalamazoo Valley Community College's ValleyHUB, Lansing can reshape and promote a resilient and circular hyper-local food economy that eases the burden on urban farmers. This is the most feasible way to promote both the social, educational, and ecological benefits of urban farms whilst increasing their economic viability through the establishment of an official aggregating organization or business.

Although it is newly revitalized, the Eastside Lansing Food Co-op has the potential to increase the market avenues of local farmers, by developing lines of communication and sales with restaurants in the Greater Lansing Area. Their willingness to purchase their supply wholesale from growers is already projected to be economically beneficial to farmers, and ease the burden of marketing their own produce for consumption.

An efficient way to build upon the hyper-local food production system in Lansing is through a method of aggregation. The current markets and capacity of farms leave a limited supply to be provided. Yet through a wholesale grocer and aggregator, growers are able to guarantee that 100% of their harvest will generate revenue, instead of either being sold, donated, or wasted after a farmers market. An aggregator with the proper facilities including walk-in cold storage, packing capabilities, and a commercially licensed kitchen, has the capability to provide a stable flow of capital to growers while still making a profit. More capital to farmers, means more seeds to sow, more time and hands to harvest, and expansion of growing space.

Although it would take approximately 5 years, if this model is any indication, an aggregator will be a beneficial link in the preexisting urban farming pipeline of Lansing. This while also being in congruence and fulfillment of the mission of organizations such as the Greater Lansing Food Bank and Ingham County Land Bank, increasing the success of such an initiative through partnership. Other organizations will be more able to incorporate beneficial aspects of urban farming into the fabric of the community, continuing, with predictably growing frequency, educational programing, community organizing, and second-chance hiring to name a few. In the same vein as dividing and

specializing labor and consolidating efforts, an aggregator will facilitate the distribution of local foods and provide increases in sales for participating suppliers, allowing them to focus on survival, development, and expansion.

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