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IN THE BUTTERNUT BIG TIME: FOOD HUBS, FARMERS, AND THE DEVELOPMENT OF COMMUNITY AGRO-FOOD ECONOMIES

DISSERTATION

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the College of Arts and Sciences at the University of Kentucky

> By Lilian Brislen

Lexington, Kentucky

Director: Dr. Keiko Tanaka, Professor of Sociology

Lexington, Kentucky

2017

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ABSTRACT OF DISSERTATION

IN THE BUTTERNUT BIG TIME: FOOD HUBS, FARMERS, AND THE DEVELOPMENT OF COMMUNITY AGRO-FOOD ECONOMIES

Food hubs, a new model of values-based agro-food enterprise, are promoted by their advocates as a means to simultaneously improve the livelihoods of small and midsized farmers, increase the social and environmental sustainability of the food system, and supply the ever increasing consumer demand for health, local food. Noting the contradictions embedded in the promise of simultaneously generating both social values and economic value, this study explores how goals of promoting positive social, economic, or environmental change are achieved and/or inhibited when implemented though marketbased activities. Through a series of three in-depth case studies of food hubs in the Southeastern United States, the three papers compiled in this dissertation investigate how food hubs work to realize abstract non-financial goals (e.g. 'helping family farmers', 'promoting sustainable food systems') through the mundane work of food aggregation and distribution. Particular attention is paid to the experiences of mid-sized farmers who participate in food hubs, and the historic, material, and subjective processes that influence the development of food hubs and their many stakeholders. Highlighting the tensions and negotiations inherent to the hybrid social-and-monetary work of food hubs, I assert the need for an analytical framework that can account for the more-than-financial dimensions of economic and ethical praxis. To that end, I draw on the theories of J.K. Gibson-Graham to suggest that food hubs are best understood as a form of post-capitalist enterprise situated within a community agro-food economy, wherein reciprocal and interdependent relationships are forged between new economic subjects through deliberate and ongoing negotiation of care via the process and outcomes of diverse economic activity.

Key words: Food Hubs; Alternative Food Networks; Agriculture of the Middle; Diverse Economies; Rural Sociology

Lilian Brislen

5/05/2017

Date

IN THE BUTTERNUT BIG TIME: FOOD HUBS, FARMERS, AND THE DEVELOPMENT OF COMMUNITY AGRO-FOOD ECONOMIES

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DEDICATION

For my grandmothers, Martha Laird Brislen and Clara Szewczyk

"The day will come when, after harnessing space, the winds, the tides, and gravitation, we shall harness... the energies of love. And on that day, for the second time in the history of the world, we shall have discovered fire."

- Pierre Teilhard de Chardin

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"Franny is listening to the program on wolves. I say to her. Would you like to be a wolf? She answers haughtily, How stupid, you can't be one wolf, you're always eight or nine, six or seven." -Deleuze & Guattari, A Thousand Plateaus

The following dissertation, while technically an individual work, is in every meaningful way attributable to the collective efforts, insights, and contributions of a number of human and non-human others deserving of so much thanks.

This project is a testament to the invaluable contributions and support of my committee members Shannon Bell, Lorraine Garkovich, Tad Mutersbaugh. Most importantly, I am immensely grateful for the support of my chair, Keiko Tanaka who is a true friend and advocate. I have stood on the shoulders of giants.

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CHAPTER 1: INTRODUCTION

BACKGROUND

Much like the rapid cycling of fad diets, it feels as if every new agro-food newsletter or conference session points to an innovative best-practice or transformative model for food system development that will overcome the problems of the "conventional" food system. Through urban community gardens or a new online local food sales platform, it is assumed that the food system will be healthier, more socially just, environmentally sustainable, or all of the above. The problem with the 'bestpractices' approach to food system development, as I see it, is the tendency to rush forward with a so-called 'replicable model' without thoughtful consideration of the unique context through which a new local food marketing platform emerges and specific needs of diverse actors involved in the platform to be addressed. With this in mind, when 'food hub' began trending as the buzzword for regional food system work, I was both intrigued and skeptical. Akin to the aphorism "When all you have is a hammer, everything looks like a nail," the food hub model can appear like a one-size-fits-allcommunities solution to the very complex project of building healthful, just, and sustainable food systems.

The term food hub was coined by the United States Department of Agriculture (USDA) in late 2010 to describe an already emergent phenomenon of values-based food enterprises working with small- and mid-sized farms to access larger market channels beyond the farmers markets and Community Supported Agriculture (CSA) programs that typify alternative food networks (AFNs) (Barham 2010). The USDA later defined food

hubs as "a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand." They furthered identified a distinguishing feature of food hubs as an explicit focus on "positive economic, social, and environmental impacts within their communities" (Barham, Tropp, Enterline, Farbman, John Fisk, et al. 2012:4)

Falling in the broad category of mission-driven or values-based enterprises, the identification and integration of non-financial values is a key point of distinction between food hubs and conventional food distributors. Expanding on the values-based nature of food hubs, the first national survey of food hubs conducted in 2013 observed, "food hubs... operate within their own expressed value sets, and these values guide any additional activities that a food hub may undertake"(Fischer et al. 2013: 4). By placing explicit emphasis on non-financial outcomes (e.g. promoting environmental sustainability, improving food access, protecting farmer livelihoods) within the operation of the enterprise, food hubs face the exceptional challenge of balancing the realization of non-financial goals with the financial and logistic demands of the conventional market system (Diamond and Barham 2012).

There is much to be excited about in food hubs, particularly the focus of working with mid-sized farmers. The wholesale focus of food hubs indicate a potential to provide a valuable service to mid-sized farmers who are too small to survive within highly competitive and vertically consolidated conventional food system, yet too big to subsist on the market share available through direct marketing channels (Diamond and Barham 2011; Matson, Sullins, and Cook 2013). The phenomenon of mid-sized farmers falling

through the cracks of our contemporary conventional and alternative food systems is referred to in scholarly circles as the crisis of 'Agriculture of the Middle.' In the United States, the consolidation and vertical integration of commodity markets combined with increasing costs of technology, land, and inputs are forcing all but the very largest, industrial scaled farms out of production (Bell 2004; Hassanein 1999; Lyson, Stevenson, and Welsh 2008). What's more, by moving source-identified (e.g. local) and/or "sustainably" produced food into grocers, institutional dining (e.g. hospitals, public schools), and restaurants, food hubs have the potential to expand access to those foods by communities underserved or excluded by farmers markets and other AFN models (Matson, Sullins, and Cook 2013).

Despite challenges, the US continues to experience tremendous growth in the number of food hubs. The 2015 national survey of food hubs in the US reported a 32 percent annual growth rate in food hub numbers, with over 300 self-identified currently in existence (Hardy, Hamm, Pirog, Fisk, Farbman and Fischer 2016) This rapid growth has also been met with significant public and private support, with at least seven different USDA grant programs are known to support food hub development (Barham, Tropp, Enterline, Farbman, Fisk, et al. 2012). At the same time, the claim to integrating and non-financial values into the operations of a market-facing enterprise also raised eyebrows, as goals of sound business sense and positive social or environmental impact are not known for their easy affinity.

STUDY OVERVIEW

As a rural sociologist with a strong interest in community-based scholarship, I began this dissertation project with the goal of contributing knowledge to support the

work of practitioners and policy makers working to expand and improve the outcomes of community food system initiatives, and food hubs in particular. Noting the challenge of generating both social values and economic value, on a sociological level I was interested in exploring how goals of promoting positive social, economic, or environmental change are achieved and/or inhibited when implemented though market based activities. I outlined a series of comparative studies to investigate and evaluate how food hubs seek to realize abstract non-financial goals through the very specific (mundane, material) work of food aggregation distribution.

The questions that informed this dissertation study are:

Question 1: How do food hubs identify and negotiate the meaning of non-financial goals? How are those goals operationalized in specific food hub practices or policies? **Question 2:** In what ways do the non-financial goals conflict with or complement the market based activities and financial viability of the food hub enterprise?

Question 3: How successful are food hubs in realizing their economic, environmental, and social goals with regards to participating mid-sized farms?

After embarking on this study, the 'mess' of social science research found me (Law 2004a). At the same time I was finalizing my project design, I received a form email from the general manager of Grasshoppers Distribution in Louisville Kentucky, informing me (and all of their suppliers and customers) that they were closing their doors. The subsequent scramble to accommodate for a failed-case study lead to a number of important insights and openings that reshaped my perspective on not only food hubs, but also the contributions of social science research to agro-food systems. The closure of

Grasshoppers, the food hub both geographically and professionally closest to my work at the University of Kentucky, brought home the precarious status of food hubs and other novel approaches to working with agro-food systems.

Working in collaboration with agricultural economists and at the behest of the National Good Food Network, the case study of Grasshoppers Distribution was reformulated as a failed-case study with the aim of capturing, as the title of the resulting white paper stated, the "lessons learned and lasting legacy" of the six year old food hub (Brislen et al. 2015). In particular, working with a team of agricultural economists provided a valuable opportunity to reflect on the unique contributions that sociology can make to both practical and scholarly understanding of values-based agro-food initiatives.

Through the process of conducting the 'post-mortem' assessment of Grasshoppers, I was struck by the strong emotional responses of the interview participants. Farmers, customers, owners, staff and even government employees exhibited an outpouring of personal and political conviction that Grasshoppers Distribution had been more than a business, but a key piece of a broader movement or initiative to build a more resilient and sustainable food system. What's more, I had personal relationships with several beginning farmers who expressed concerns over the success of their next growing season without sales to Grasshoppers. The impacts and consequences of the food hub's operations extended well beyond the sale of 'local' food and were imbricated with the material, political, and subjective (emotional) life of the network of human and non-human actors that contributed to its existence. Moving forward with my study of the 'values' of food hubs, I sought a way forward that took

those more-than-financial aspirations seriously while not succumbing to naive assumptions that they were an inevitable outcome of a local food systems initiative.

This lead me to pursue a theoretically and methodologically grounded approach to the investigation. Rather than taking the replicable-model framework food food hubs at face-value, I wanted to understand food hubs from the ground up and the inside out. Following in the well-established tradition of Actor Network Theory scholars in agrofood studies (Busch and Juska 1997; Jarosz 2000; Latour 2005; Lockie and Kitto 2000; Tregear 2011), this study beings its inquiry into food hubs by asking who and what is assembled, and how are they set into economic relationships? If non-financial values are a defining characteristic of food hubs, rather than assuming a ready-made set of generic social values (environmental sustainability) I wanted to see what, if any, values were articulated by food hub leadership and stakeholders.

Food hub researchers and business consultants produce frameworks and recommendations for an abstract or generic food hub model (LeBlanc et al. 2014; Matson and Thayer 2013). However, as noted earlier, the term *food hub* was coined as a way to categorize an emerging and novel form of values-based agro-food enterprise. While having a term to label these enterprises may make them seem standardized or uniform, that unity is ultimately an illusion. A replicable-model only identifies the aspects which are just that – replicable – but does not capture the unique and adaptive innovations of the actually existing examples of those models. Since no framework is perfect, there will necessarily be overflow, surplus, and subversion of that framework. As a sociologist, I am interested in those aspects of the emergent phenomenon of food hubs that defy easy definition or classification.

RELEVANCE TO THE LITERATURE

The growth of the organic and natural food industry, the re-emergence of farmers markets and other new direct marketing channels, and a rapid growth of interest in locally or regionally sourced foods are the focus of a significant body of scholarly literature on what has been labeled as the 'quality' turn in agro-food systems (Goodman 2003; Goodman, M. E. Dupuis, and Goodman 2011; Guthman 2008; Morgan, Marsden, and Murdoch 2006). Within agro-food studies the term Alternative Food Networks (AFNs) is used as a framework to talk about diverse networks of food producers, food retailers, community leaders and consumers who share in their criticism of conventional systems of agricultural commodity production that emphasizes intensification and consolidation of production and results in the degradation of both ecological conditions and human communities (Sonnino and Marsden 2006). Food hubs and other AFN initiatives are regarded by their advocates as a potential, if partial, solution to the concurrent problems of the loss of family farms, the need for a sustainable food system, and the persistence of food insecurity in the global north (Blay-palmer, Landman, and Knezevic 2013; Horst et al. 2011; LeBlanc et al. 2014).

Agro-food scholarship is ambivalent about the potential of alternative food networks to meaningfully overcome or counteract the negative consequences of capitalist economies (Allen et al. 2003; Bryant and Goodman 2004; DeLind 2011; DuPuis and Goodman 2005; Guthman and DuPuis 2006; Hinrichs and Welsh 2003; Mount 2012). The theory of economic embeddedness is frequently enlisted by scholars investigating the prominence of socio-cultural forces within alternative food network development (Hinrichs 2000; Jaffee, Kloppenburg, and Monroy 2004; Murdoch, Marsden, and Banks 2000; Winter 2003). From this theoretical standpoint economic institutions (e.g. markets) are understood as dependent on and embedded in social networks, and social relations are fundamental to market processes (Bowen 2011; Granovetter 1985; Polanyi 1944). However, the so called 'embeddedness turn' in AFN studies has come under critique for facilitating the oversimplification of the multiple and conflicting dimensions engaged in the processes of alternative food networks(Goodman 2003; Hinrichs 2003; Marsden 2011).

Common usage of embeddedness in study of alternative food networks describes the global food system as comprised of a continuum of embedded (local) and unembedded (global) market relations which engender greater and lesser amounts of trust and reciprocity among those engaged in exchange (Goodman, 2003; Hinrichs, 2003). In response, a number of scholars provide important critique of approaches to 'local' or other alternative food systems that are unreflexive in their assumptions regarding the positive social, economic, or environmental outcomes of local, organic, or other 'quality' food systems (DuPuis and Goodman 2005). Hinrichs (2003:35) argues that, "making 'local' a proxy for the 'good' and 'global' a proxy for the 'bad' "oversimplifies the complex, multi-dimensional processes in which agricultural production is embedded, and obscures more equivocal social and environmental outcomes. This tendency is manifested in what Born and Purcell (2006) identify a phenomenon they term the "local trap," whereby food labeled as "local" is assumed to be inherently ecologically or socially superior to other food products.

Allen et al. (2003:62) refer to AFNs as "works in place, in situations and circumstances strongly influenced by the geographies of urban and rural, of landscape

and region, which in turn have been formed and framed by the structures and hegemonies of the dominant agrifood system." This conceptualization of AFNs as contextually and spatially situated is extended by Sonnino's theory of 'embeddedness in action' which focuses on the processes of embeddedness and asks: "In what exactly are economic decisions and transactions embedded? How does this process unfold, and why?" (2006:62). Understanding the processes by which economic activity emerges from unique context will therefore entail paying attention to both the horizontal (the context of relationships among local actors) and vertical (hierarchical linkages to the broader economic and political systems) dimensions of embeddedness, and the tensions and synergies between the two processes (Higgins, Dibden, and Cocklin 2008). Thus the theoretical and practical aims of this project are to find a way to utilize the insights of critique of AFN scholarship to productive ends; to sit with and in the tensions held within food hubs as a means to generate new insights about both the potential and limits to addressing pressing issues in agro-food systems via market based activities.

THEORETICAL FRAMING

In pursuing a framework that would effectively account for the contextually contingent, intersubjective (relational), ethically driven, and economically grounded activities of food hubs, I chose an emerging approach to agro-food scholarship referred to variously as possible food economies (Holloway et al. 2007), post-capitalist politics of food (Trauger and Passidomo 2012), community food economies (Hill 2014), diverse food economies (Dixon 2011), and "the wild side of agro-food studies" (Carolan 2013). The scholarly work of what I will refer to as "community agro-food economies" draws on post-structuralist theories of economic performativity (Callon 1998, 2007) and diverse

economies (Gibson-Graham1996; 2006), which are in turn heavily influenced by Gramscian notions praxis and counter-hegemony (1971), and Deleuzian theories of becoming, multiplicity, and assemblage (DeLanda 2006; Deleuze and Guattari 1987).

Exploring the interaction of politics and markets, Callon developed the notion of economic performation (or performativity), and of markets as sociotechnical assemblages¹ (or the French *agencement*) (Caliskan and Callon 2010; Callon 1998; 2007). The theory of economic performativity is founded on the notion that the economy is made of things (technologies, policies, non-human others) and statements² (expressions, theories) that are co-productive and co-evolve (Callon 2007; Roelvink 2015). Drawing on insights from Science and Technology Studies (STS) and Actor Network Theory (ANT) (Latour 2005; Law and Urry 2004), this approach asserts that economic statements (e.g. ideas, theories) contribute towards enacting the reality they describe (Callon 2007; Law 1991). Applying theory of assemblage to economic inquiry provides "an understanding of how humans and more-than-humans are entangled in dynamic arrangements that produce action" that constitutes economy (Roelvink 2015:228). Rather than fixed systems with abstracted absolutes or universal laws, markets (as well as the entities that comprise them) are understood as sociotechnical assemblages; gatherings of heterogeneous components that are both implicit/abstract (statements, ideas), and explicit/material (technologies, policies, metrics, natures) (Callon 2007, 2015; Gibson-Graham 2008; Roelvink 2015).

To say that the economy is performative is not to say that the economic world is comprised only of words or ideas, but rather that economic statements have productive power in the world they describe (Callon 2007; Roelvink 2015). As Mitchell (2008:1116)

states, "economic knowledge does not represent the economy from some place outside. It participates in making sites where its facts can survive." Expanding on the actuarial notion of 'accounts', Stark draws attention to both the metrics and means by which we record, measure, evaluate, and justify actions, and economic actions in particular (1998). As he elegantly observes, "in everyday life, we are all bookkeepers and storytellers. (Stark 1998: 133) Our accounts delineate what kinds of value 'count' and which do not (e.g. valid/invalid forms of value), and inform the rationale behind current and future action (Stark 1998). Markets and economic organizations are thereby seen as the outcomes of explicit or implicit performative struggles, drawing attention to the power struggles always already present in all economic activity (capitalist or otherwise) (Callon 1998; 2007; 2015).

From the recognition that what we engage as 'the economy' is an emergent property of sociotechnical assemblages, J.K. Gibson-Graham developed a theory of diverse economies (1998; 2006), which emphasizes the multi-layered, contingent forms of meaning or functionality bound up in economic exchange or practices (Gibson-Graham, 2014). Through studies of actually existing economic assemblages such as fisheries (St. Martin 2006; Snyder and St. Martin 2015), banana markets (Hill 2014), and bio-fuels co-operatives (Healy 2015), diverse economies scholars argue that the contemporary economic system is everywhere and always diverse, "populated by a myriad of contingent forms and interactions... by various capitalist and noncapitalist institutions and practices." (Gibson-Graham 2006:54). Challenging the phenomenon they dub 'capitalocentrism', diverse economies draw attention to the ways in which "capitalism which is actually a specific economic form becomes the very model or

definition of economy" Gibson-Graham (1996:35). The recognition of the diversity of economic practice allows us to explore how alternative forms of market organization and practice can be designed and implemented (Callon 2015).

Gibson-Graham use the insights of diverse economies as a foundation for a postcapitalist politics that challenge the hegemony of capitalist thought, and opens pathways to 'liberate economic difference' (2006:85). In place of a universal, abstract, and purely 'rational' space, economies (in all their diverse forms of labor, value, and exchange) become sites where "ethical decisions can be made, power can be negotiated, and transformations forged." (Gibson-Graham 2006:77). In a specifically performative turn, post-capitalist politics asks "how might we enroll different representations that allow us to step aside from performing the inevitability of capitalist development." (Gibson, Cahill, Mckay 2015:196). While not ignoring the reality of struggles against contemporary capitalist economies, diverse economies allows for the possibility of new ideas, practices, and subjectivities to emerge from the interstices of an economy that is always in a process of becoming (Gibson 2001; Healy 2015; Hill 2014).

A fair criticism of diverse economies, and Gibson-Graham in particular, is the passive rather than explicit engagement with Gramsci's philosophy. Gramsci's approach to historical materialism is defined by a philosophy of praxis that "grasps the world through human activity," and does so with "a patient attention to particularity" (Haug 2000:11 cited in Ekers and Loftus 2007:21). His concept of hegemony underpins much of poststructuralist though via its attention to the way that lived practices (common sense) serve to enact and reproduce dominant world views (Gramsci 1971). Similar to performative understandings of subjectivity (Butler 1997; Mol 2002), Gramsci's

understanding of the person (or subject) is also inherently processed based and relational, asserting that we as individuals cannot be understood outside of our specific socionatural relations in particular places and particular times (Ekers and Loftus 2007).

By allowing for the radical heterogeneity of economic practice, this theoretical approach opens a path for thinking with the struggle and experimentation of such AFNs as food hubs. In particular, Trauger and Passimodo (2012: 283) illustrate how, when seen through the lens of diverse economies, AFNs can be understood to "provide spaces of deliberation about the production and consumption of food . . . [that] reorients the subjects of farming (producers, distributors, and consumers) toward a more integrated, interdependent and cooperative economy of agriculture, even while it is still embedded in a medium of market exchange." Through this kind of 'exploratory thinking practice' scholars can contribute to a vision of food system studies which works to "disarm and dislocate the naturalized hegemony of the capitalist economy" by identifying and exploring new possibilities within and through the interstices of the dominant capitalist/commodity food regime (Gibson-Graham 2006:60).

Tying performative economics, diverse economies, and a philosophy of praxis together is the assertion that by interpreting the world, social scientists cannot help but change it. In a perhaps prefigurative poststructural turn, Gramsci stated that "the mode of being of the new intellectual can no longer consist in eloquence...but in active participation in practical life."(1971:10). From the diverse economies camp, Hill (2014) similarly suggests that we as scholars must see our thinking as a socially productive activity in and of itself. Identifying the 'performative ontology' of scholarly work, this decidedly post-structuralist approach asserts that the methods, theories, interventions, and

prescriptions of social-science research are co-productive of both that which is studied and of scholars themselves as subjects (Gibson-Graham 2006; 2011, 2014; Law 2004). The project of performing new economic worlds is not born of a naive assumption that anything is possible, or that economic wishes really can come true. Rather, a key task for economic theorists and practitioners is engaging in "empirical encounters and creative expressions of the new, the unthought, the unexpected" (Gibson-Graham 2006:60). This requires identifying, articulating, enacting (performing), and otherwise setting in to motion the language, materialities and subjectivities that might bring new worlds into being (Callon 2007, Gibson-Graham 2008, Roelvink 215).

STUDY DESIGN

This project draws on three food hub case studies conducted with food hubs located in the South Eastern United States (as defined by the federally designated agricultural administration region). The case studies are comprised of mixed qualitative methods that were designed to capture rich detail and a broad array of formal and informal practices that constitute the food hub network (Feagin, Orum, and Sjoberg 1991). The research employed qualitative methods of document analysis, participant observation, and semi-structured interviews.

The choice of the South Eastern US was informed partially by the desire to engage in community-based research within my region, and partially out of a desire to address a historic geographic gap in agro-food research and support agro-food system development in our region. The food hub case study locations were chosen in consultation with food hub experts from the National Good Food Networks who provided recommendations and made initial contact provided an introduction between myself and

food hub leadership. While the study was initially designed in a single phase, because of the unexpected closure of Grasshoppers Distribution mentioned earlier in this introduction, adjustments were made to accommodate a 'failed-case' study, which is detailed later in this section. As such the research was conducted in two phases, the first from January to May of 2014 and the second from January to April of 2015

Site Selection

Of specific interest to this study are the attributes of the non-financial values (e.g., mission) and market outlets of the food hubs. All three food hubs share a commitment to promoting 'sustainability' and economic development. They also each pursue a unique 'value' within the enterprise. Hollygrove has an explicit commitment to improving food access for underserved urban community members, while Growfood Carolina emphasizes farmland preservation by way of viable farm livelihoods. Grasshoppers Distribution combined all of these considerations in their goal of helping helping Kentucky farmers in the wake of the tobacco transition while simultaneously improving fresh food access in a food insecure are of Louisville, Kentucky.

The three case study hubs were chosen based on characteristics that would allow comparison of 1) types of non-financial goals and 2) primary market outlet (e.g. retail, wholesale, institutional). I hypothesized that these two factors were variables in determining the efficacy of the food hub's efforts to realize non-financial goals, and for their financial viability. A recent study of values based value chains (of which food hubs are a sub-set) in the united states found that beyond inclusion of 'fresh' and 'local' food, the most frequent value claims by VBVCs are environmental sustainability, certified Organic agriculture, promotion of health and nutrition, and supporting community

(Peterson, Feenstra, Orstrom, Tanaka, 2016). According to the 2015 food hub survey conducted by the National Good Food Network, Nonprofit and For-Profit food hubs made up 36% and 38% of respondents respectively, 19% of responding hubs were organized as Cooperatives, and the remaining 7% had other legal structures (Hardy et al., 2016a). The majority of surveyed food hubs (52%) serve both wholesale and direct to consumer markets, while 28% serve only wholesale farm to business or institution and 20% provide only direct to consumer sales. Food hubs also reported using a variety of forms of labor, with almost two-thirds (61%) of hubs reporting they utilize unpaid or volunteer staff (Hardy et al., 2016b).

The two food hubs currently in operation each have a different primary market emphasis (retail for Hollygrove and wholesale for Growfood Carolina), while they are also both in the process of expanding their enterprises into new markets (wholesale restaurant sales for Hollygrove and Institutional sales for Growfood Carolina). Grasshoppers Distribution worked in retail, wholesale, and institutional sales over the course of its life.

Food Hub	Markets	Sourcing	Non-Financial	Farmers
		area	Values	
 Grasshoppers Distribution Louisville, KY 	 CSA subscriptions Online Retail Wholesale to 	Kentucky	 Consumer Food Access Sustainability 	70
 For-Profit 6.5 years in operations (before closure) 	grocers, restaurant • Institutional		 Farmer Livelihoods Economic Development 	
 Hollygrove New Orleans, LA Non-Profit 6 years in operations 	 Retail Store Wholesale to restaurants and small grocers 	Louisiana, Southern Mississippi	 Food Access Sustainability Economic Development 	45
 Growfood Carolina Charleston, SC Non-Profit 4 years in operations 	 Wholesale to small and large grocers, restaurants Institutional sales 	200 mile radius from Charleston	 Farmer Livelihoods Sustainability Economic Development 	50

Table 1 Summary of Key Characteristics of Case Study Food Hubs

Grasshoppers Distribution

Grasshoppers Distribution was a for-profit food hub located in Louisville, Kentucky. The initial mission statement of the food hub was to "provide sales and marketing opportunities for Kentucky farmers, local food entrepreneurs and area residents while offering citizens of West Louisville wholesome and affordable fresh food." The hub's activities focued initially on wholesale sales to restaurants and grocery stores and local schools, and then shifted to a primary focus on direct to consumer sales via a subscription program. This food hub grew to nearly one million dollars in annual sales of local farm products from over 70 different producers, and directed over 2.25 million dollars into the hands of local farmers and food entrepreneurs before closing its doors in late December of 2013. At the time of its closure, Grasshoppers Distribution had been in operation for more than six years and was included in the National Good Food Network's ongoing study of best practices for food hubs.

Hollygrove Market and Farm

Hollygrove market is a non-profit food hub operated under the umbrella organization of Carrolton Hollygrove Community Development Corporation, and located in a historically underserved neighborhood in New Orleans. Their stated mission is to "increase accessibility of fresh produce to Hollygrove, surrounding underserved neighborhoods, and all of New Orleans while promoting sustainability through support of local farmers and the local economy as well as acting as a demonstration site for environmentally sustainable practices." They operate a retail location that offers both a pre-set box, modeled after CSA shares and containing an assortment of fresh produce and the occasional value-added food product, as well as a la carte grocery. Additionally, Hollygrove is in the process of expanding service restaurant and other wholesale accounts. They currently list 45 different food producers they actively work with, representing a broad range of production scales.

Grow Food Carolina

Organized by South Carolina's Coastal Conservation League (CCL) in 2011, this non-profit food hub operates under the umbrella of CCL and is seen to serve CCL's mission of "protecting the natural environment of the South Carolina coastal plain." Growfood Carolina's stated mission is "to help the local food market reach its full potential by providing meaningful opportunities to rural farmers that will strengthen and secure the future of a regional food supply and ensure that local rural lands remain in agricultural use." At the time of the case study Grow Food Carolina was purchasing from more than 50 farms located within a 120 mile radius of Charleston, and it sells exclusively to wholesale markets. They are also expanding their operations to include institutional sales (e.g., schools, hospitals).

CASE STUDY METHODOLOGY

The methodology for this study includes document analysis, participant observation, food hub stakeholder semi-structured interviews, and in-depth semistructured interviews with participating mid-sized farmers.

Document Analysis

In order to capture formal articulation of values and praxis within the food hubs cases, this study analyzed relevant formal and public food hub documents including: official food hub internal policy documents (procurement contracts or producer agreements, product standards or required certifications), food hub business plan, federal grant applications, press releases, web site content, and printed promotional materials. These documents were provided by food hub staff and leadership, or were publically available. The documents provided baseline data for discerning the explicit policies and procedures regarding: (1) the articulation of non-financial goals and (2) the translation of those goals in to particular practices, policies and strategies.

Participant Observation

Over the course of my site visits, I spent approximately 40 hours conducting participant observation at each of the food hub sites. As defined by DeWalt and DeWalt (2011), the purpose of engaging in participant observation in this study was to observe the explicit and tacit ways in which food hubs function, and in which the food hubs'

missions are enacted. With their permission, I shadowed food hub leadership and staff as they conducted the day-to-day operations of the hub, attended meetings of the leadership team, participated in organized volunteer labor shifts, and accompanied farm visits of potential suppliers. Having first identified myself as a researcher, I also engaged in informal conversations with staff, clients, and volunteers. Through these activities, I observed interactions between food hub staff and buyers (i.e., restaurant owners, grocery store buyers, other wholesalers), and interactions with producers (i.e., farmers, value added producers). These observations illuminated some of the unique characteristics of each food hub and provided insight into the informal or unspoken practices and philosophies that appeared to inform the praxis of the hub.

Stakeholder Interviews

The core element of this study consisted of in-depth semi-structured interviews with key stakeholders including food hub staff, leadership, and other key stakeholders, and in-depth interviews with participating mid-sized farmers. Interviews were conducted with food hub staff, leadership, and key stakeholders including: the executive director or chief executive officer; members of the food hub management team (e.g., warehouse manager, marketing director, procurement specialist); members of board of directors; key partners or collaborators. A total of 43 stakeholder interviews were conducted: 14 with Hollygrove Market and Farm, 15 with Growfood Carolina, and 14 with Grasshoppers Distribution). Food hub staff and stakeholder interviews focused on the processes involved value articulation, evaluation, and implementation, as well as the interaction between non-fiscal goals and the financial viability of the food hub. Interviews took place at the food hub, or at a location of the participant's choosing.

Farmer Interviews

Farmers interviewed in this study were drawn from mid-sized farms participating in the food hub that fall broadly into the spectrum of Agriculture of the Middle, and include those producers who report gross annual sales between \$10,000 and \$500,000. Working in consultation with the food hub's directors, producers were selected to create a sample that reflects an appropriate range of years of experience, product, production methods, length of time selling to wholesale markets, scale of operations, and gender and race where possible and appropriate.

A total of 25 semi-structured interview took place on the farms. These semistructured interviews and a concurrent farm tour lasted approximately two hours (though sometimes stretched up to four hours) and covered general farm history, current farming systems and management practices, management philosophy, and current market outlets. The interviews paid particular attention to the principal operator(s) experience working with the food hub, and changes that have taken place on the farm (in the broadest sense) as a result of their participation in the food hub.

Failed-Case Methodology Adaptations

Conducted in collaboration with a team of agricultural economists at the University of Kentucky, the 'failed-case' study followed the same core structure and research questions as the other case studies, but also included specific adaptations to account for the unique circumstance. Accordingly, particular attention was given in all interviews and focus groups to discussion of 1) lasting impacts of both the presence and closing of the food hub and 2) key factors that contributed to the closing of the operation. The qualitative analysis, for which I authored the methodology and protocols, consisted of document analysis, focus groups, and in-depth semi-structured interviews with former employees, suppliers, and funder. In-depth interviews were conducted with former employees, former owners, and former funders. In addition to the farmer focus group, five in-depth interviews were conducted with farmers who supplied Grasshoppers. The major distinctions between the failed-case and the other case studies are 1) including focus groups in the methodology and 2) the inclusion of customers in the study via wholesale and CSA customer focus groups.

Because the enterprise was no longer in operation, business plans and funding applications were access through a combination of requests to former employees, and an open records request to the Kentucky Agricultural Development Board (who held grant and loan applications on file). These documents were analyzed for content regarding 1) the history of the Grasshoppers' development and 2) articulation of the company's goals, values, and mission.

Focus groups were included in the failed-case methodology because of a specific desire to speak with stakeholders as soon as possible following the closing. Additionally, of their unique perspective on the challenges and opportunities faced by Grasshoppers, as well as its lasting impacts, consumer interviews were a necessary component of data collection. One focus group was conducted with former suppliers (six farmer participants), one with former wholesale customers (eight participants), and one with former direct marketing customers (nine participants).

Findings from the overall study, including the economic analysis conducted by my colleagues, were published as an experiment extension publication through the

University of Kentucky (Brislen, Meyer, Woods and Routt 2015). This report (included as Appendix 1) focused on the lessons learned by stakeholders over the course of Grasshoppers' operations, and the broader impacts of the food hub's operations on the agro-food community and economy of Kentucky.

DATA ANALYSIS

This study employed qualitative analysis methods and analytical software in the process of synthesizing findings. For document analysis, all documents or appropriate sections of text (e.g., contracts, business plans, publicity materials) were scanned or converted into PDF documents and uploaded into NVivo 10, a qualitative analysis software. These were then analyzed along two open coding axis: (1) articulation of non-fiscal goals and (2) evidence of the translation of those goals in to particular practices, policies and strategies. Textual analysis of these formal food hub documents allowed for verification among the narrative accounts provided through interviews and formal articulation in documentation.

Transcripts created for each interview and/or focus group, and detailed notation was made during participant observation. Interview transcripts were uploaded into NVivo 10 for analysis. Using an inductive or open coding process (Stauss and Corbin 1998, Corbin and Stauss 2008), the data from interviews were analyzed to along three general concepts informed by the theoretical framing and participant observation: (1) Expressions of non-financial value (2) Expression of financial logic (3) Food hub activities, processes, or practices (4) Characteristics of farm and farmer (5) Impact of food hub participation on mid-sized farms. These thematic groupings were then re-analyzed in a second round of

iterative open coding whereby new categories were developed with reference to observed thematic similarities and differences among the data (Creswell, 1998). For each of the three research papers the open codes were re-analyzed to draw out axial codes or explanatory categories particular to the specific research questions of the three papers (Corbin and Strauss 2008). Notation from participant observations was used to corroborate or refine axial codes and findings as appropriate.

CHALLENGES AND LIMITATIONS

This study includes both the advantages and limitations of a case study approach. While the food hubs included in this study were chosen intentionally, they cannot be said to be representative of all food hubs or even most food hubs as the field is vast and diverse. National surveys of food hubs show that there are a number of ways that food hubs organize as legal entities, and even more ways that those hubs interact with the agro-food system. As we are all too aware, time is the researcher's greatest luxury and scarcest resource. Time available for field work was both practically and financially constrained, in particular for phase two of this study. Thus, the findings represent a snapshot taken over the course of the three months of field work, rather than a longitudinal analysis of unfolding dynamics. As a snapshot, I know only what I was told, could observe first hand, or glean from written records. There are likely deeper levels of contradiction, collusion, convergence and divergence in many areas of process and practice of both the food hub and participating farmers that I was unable to observe in the absence of longitudinal analysis.

The case studies presented in this study look at the formation and operations of food hubs as a values-based enterprise, and the relationships between the three food hubs and their mid-sized farmers. However, many other relationships, associations, partnerships and exchanges constitute both the food hubs. Most notably, only the Grasshoppers Distribution case study included customers of the food hubs. Thus there is great opportunity to further understanding of the negotiation and enactment of nonfinancial goals by a food hub through future study of the exploration of relationships with wholesale, retail, and individual consumers.

This study make no claims to being representative of the experiences of food hubs and mid-sized farmers, but rather looks to the contingent, emergent, and imperfect findings as a key point of departure for further inquiry and discovery. Furthermore, this study does not purport to be a full political-economic assessment of the viability or economic impact of food hubs on regional agro-food economies. To say the global agrofood economy is complex is a gross understatement. I do not attempt in this study to adequately assess the potential of food hubs or other mid-tier value chains to transform the global capitalist agro-food system. This is a project of what Gibson-Graham call 'weak theory' – intentionally limited in scope, with the hope that through those limitations I as a researcher might carve out analytical space to be attentive to openings, to possibilities (Gibson-Graham, 2014).

This study only scratches the surface of two vital issues facing agro-food systems, AFNs, and agrarian nature/society: environmental degradation caused by agricultural production and the historic and contemporary impacts of racism and labor exploitation of US agro-food systems. While there was preliminary exploration of the production

practices of farmers and the procurement practices of food hubs, a thorough and considered analysis of the environmental impacts of food hubs operations is will outside the scope of this study. Future multi-disciplinary research would likely find a very it fruitful line of inquiry.

Finally, it is important to acknowledge that the legacy of racial violence and exploitation in the US agricultural system is vast and ever-present. Effects of the enslavement of generations of African Americans are manifold, particularly in the Southern US, and shape contemporary dynamics of land ownership, access to essential state and federal agricultural services, farm labor, and the social networks and informal dynamics essential to the function of any agro-food system. This is further complicated by the history of US agricultural labor policy and its imbrication with the experience of Hispanic and Latino Americans. Which is to say that this study's engagement of race and labor is regrettably minimal, as to treat to subject with the care and attention it deserves was outside of the scope of this study.

SUMMARY OF PAPERS

The findings of this research project reflected in the three papers compiled in this dissertation reflect my evolving understanding of the tensions and contradictions that emerge from efforts to develop value-based enterprises. As with any research program, the process of reflexive inquiry further shaped these questions, and the findings presented in these three papers contained within this dissertation reflect the evolution in my understanding of food hubs, AFNs and mid-sized farmers as a social category.

I also developed two of the three papers in the context of book projects and special journal editions, each with their own analytical framework to which I saw my work responding and contributing to. The call for papers to which chapter 2 and chapter 4 respond are included in Appendix 2 and 3 of this dissertation so that they may be understood in context. That said, the three papers compiled in this dissertation speak to each of the three research questions in turn.

Chapter 2: Imperfect, Partial, and Interstitial: Gradients of Resistance in a Failed Food Hub

The first paper presented in this dissertation re-visits the findings of the report published from the failed case study of Grasshoppers Distribution. A major finding of this report (see Appendix 1) was the difficulty that food hub leadership faced in negotiating how to balance the need to generate profit to sustain the enterprise and the simultaneous drive to achieve the non-financial goals that drove the food hub's formation. In an article outlining future research needs for food hub studies, Matson and Thayer (2013) pose the question; "What primary drivers are fueling the local food movement and the establishment of food hubs? Are these drivers based more on a social mission or monetary incentives?" This paper takes that question as a jumping off point for a re-framing of the case study of Grasshoppers Distribution. I argue that food hubs are not driven primarily by social mission or monetary incentives, but rather those two dimensions of food hub activities are inseparable and co-productive of each other.

This paper explores how non-financial goals support, conflict, or otherwise interact with a food hub's market based activities. Drawing on Gibson-Graham's theory of diverse economies, I argue for a post-binary approach to AFN inquiry, by pursuing a mode of inquiry that opens to the emergent properties born of a food hub's unique assemblage of actors, actions, resources, and context. I conclude by suggesting that the diverse economies method of reading for difference allows us to take seriously the morethan-financial concerns, motives, and activities of actors engaged in living experiments in community agro-food economy.

Chapter 3: When You Know One Food Hub: Post-Capitalist Enterprise and the Praxis of Care

Acknowledging the contextually specific nature of the origins of food hubs, the case studies of Grow Food Carolina and Hollygrove Market and Farm presented in the second paper demonstrate how two distinct models of food hubs emerged out of unique historical/environmental contexts. Focusing on the negotiation and realization of non-financial goals by food hubs, this paper engages food hubs as a form of diverse economic experimentation. I argue that food hubs are a form of post-capitalist enterprise; a kind of economic assemblage comprised of new sociotechnical arrangements through which a variety of human and nonhuman actors are enrolled.

I conclude that the notion of post-capitalist enterprise is an important contribution to the practice of community agro-food economy: it expands the universe of forms of knowledge, forms of practice and labor, and realms of value that are acknowledged as a component of the economic work of the enterprise: reframing some, remixing others, while also building wholly new tools and terms. As a form of post-capitalist enterprise, food hubs embody the ideals of community economy. Their ethical praxis—realized within and beyond economic exchange - contributes to the construction of the economic world envisioned by the enterprise's community of care (Callon, 1998; Gibson-Graham, 2008).

Chapter 4: Meeting in the Middle: Scaling-Up and Scaling-Over in Alternative Food Networks

Straddling the realms of direct marketing and conventional wholesale markets, Food hubs have been identified as playing a key role in the project of expanding or 'scaling-up' Alternative Food Networks. However, exactly what constitutes 'scaling-up' of AFNs, either in terms of process or end result, is something of a moving target. My particular interest in the third paper is how the process of scaling-up uniquely unfolds for mid-tier value chains working with mid-sized producers (as opposed to highly localized, direct marketing initiatives). How can we understand the role of food hubs, and the farmers that supply them, relative to processes of scaling-up AFNs? Through a case study of mid-sized farmers who participate in food hubs that file, I explore how these farmers experience and navigate the transition. In pursuing this inquiry, I am providing a preliminary response to the dissertation's third question: How successful are food hubs in realizing their economic, environmental, and social goals with regards to participating mid-sized farms?

In this paper I argue that the discourse and practice of scaling-up AFNs have conflated the part (the food hub or values-based food enterprise) for the whole (the food system). Scaling-up has become synonymous with developing a food hub or other wholesale value chain, a singular entity or value-chain that stands in for a much larger and complex network of actants. We have taken 'the farmer' for granted, and thereby missed critical challenges and key opportunities for growing vibrant and sustainable food

systems. I conclude by suggesting that we need to further expand our understanding of how different organizations and different modes or scales of production might develop along different trajectories, and the different types of capacities that are drawn on for this differentiated process.

CONCLUSION

At its heart, this study is seeks to provide a community-based, feminist approach to engaging and thinking with the individuals, collectives, and non-human others that comprise food hubs and their farmers. At times during this project I came to see myself in something of the same light as food hubs: engaged in a hybrid project that is in constant negotiation between the worlds. In my case those worlds are those of an intellectual and a practitioner. While I wear the moniker of intellectual warily, I also believe it is important acknowledge the power and responsibility that come with it. In writing this dissertation, I have had numerous requests from study participants to receive a copy of the manuscript or invitation to any presentations that come of this project. To say that the interest in my work is humbling is a vast understatement. Writing with the knowledge that they will read what I write (Brettell, 1993) evokes a particular kind of reflexivity that is driven, more than anything, by a desire to 'get it right'. While the stories we tell are always partial and imperfect, it is my sincere hope that the stories told here are a testament to the passion, skill, determination, and dedication of the people whose lives and work are the heart of this project.

NOTES

¹ Drawing from the work of Deleuze and Guitari (1987) assemblages are understood as entanglements of heterogeneous and self-subsistent elements (material, discursive, subjective) that engage in complex material and expressive interactions. Through their interactions the elements become "carefully adjusted to one another" (Callon 2007), and the assemblage thereby express capacities unique to the configuration of elements and interactions, both internal and external (Delanda 2006). What's more, the expressed capacities of the assemblage act back upon the assemblage and its elements, thus contributing to a recursive process of becoming (DeLanda 2006). This process of becoming is the result of productive tension between stabilizing (territorializing) and destabilizing (deterritorializing) processes both within the assmblage, and with other assemblages and broader processes with which it engages (Deleuze and Guitari 1987).

² "By statement we mean anything that is thrown, sent, or delegated by an enunciator. The meaning of the statement can thus vary along the way, and it does so as a function of the load imposed by the enunciator. Sometimes it refers to a word, sometimes to a sentence, sometimes to an object, sometimes to an apparatus, and sometimes to an institution." (Labour 1991: 106)

CHAPTER 2: IMPERFECT, PARTIAL, AND INTERSTITIAL: GRADATIONS OF RESISTANCE IN A FAILED FOOD HUB

INTRODUCTION

The rapid proliferation of federal, philanthropic and investor funding of food hubs reflects the popularity of the values-based enterprise model among food systems practitioners. The USDA's "Food Hub Resource Guide," provides the most commonly cited definition for food hubs (Barham, Tropp, Enterline, Farbman, Fisk, and Kiraly 2012:4):

A regional food hub is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand.

According to the USDA, food hubs are "defined less by a particular business or legal structure, and more by how their functions and outcomes affect producers and the wider communities they serve." (Barham et al. 2012: 4). Because of their key position as an intermediary and their specific focus on affecting positive social change, food hubs can potentially play a transformative role in agro-food value chains yet they remain understudied with little empirical data about their broader impacts (Stevenson, Clancy, King, Lev, Ostrom, and Smith 2011).

Outlining future research needs for food hub studies, Matson and Thayer (2013) pose the question; "What primary drivers are fueling the local food movement and the establishment of food hubs? Are these drivers based more on a social mission or monetary incentives?" This question assumes and promotes the explicit division of social and financial motivations, a binary framework indicative of the large body of

professional and policy discourse regarding food hubs and other values-based enterprises (LeBlanc, Conner, and Darby 2014; Matson and Thayer, 2013). However, as Mark Tilzey deftly argues, evoking 'simple binaries' in the analysis of contemporary movements in agro-food systems both dulls our ability to trace the complexities of the operations of capital, and "subverts our capacity to specify definitions of, and pathways to, anti-capitalistic futures." (Tilzey, forthcoming). To that end, I seek to problematize the binary separation of social goals and monetary incentives with the aim of identifying a politics of the possible in and through a seemingly all-encompassing neoliberal food regime (Gibson-Graham, 1996; Harris, 2009; Holloway, Kneafsey, Venn, Cox, Dowler and Tuomainen 2007; Mccarthy, 2006; Guthman, 2008).

Through the story of Grasshoppers Distribution LLC, a food hub that operated from 2007-2014 in Louisville Kentucky, I seek to show that food hubs are not driven primarily by social mission or monetary incentives, but rather those two dimensions of food hub activities are inseparable and co-productive of each other. By tracing the imperfect and partial attempts by Grasshoppers Distribution stakeholders to create a hybrid social-and-monetary enterprise, I ask how agro-food scholars might pursue a mode of inquiry that opens to the emergent properties born of a food hub's unique assemblage of actors, actions, resources, and context (DeLanda 2006: Callon 2007). Through focusing on these emergent (if ephemeral) attributes of new experimentations in agro-food enterprise we might better attend to what Tilzey describes as the "various gradations" of resistance to capitalism. By following the diverse economies practice of reading for difference in the economic practices of food hubs (Gibson-Graham 2006;

2014; Harris 2009), this chapter explores both the opportunities and constraints for resistance that emerge from the economic and ethical praxis of food hubs.

FOOD HUBS AND THE HYBRIDITY OF AFNS

The work of Alternative Food Networks (AFNs) in the United States is focused on three primary concerns: creating new market outlets that promote the fair distribution of economic value throughout the food supply chain, equal access to 'good food' by all community members, and encourage transparent and democratic management of food production and distribution within the community (Whatmore, Stassart, and Renting 2003: 389). By aggregating products from multiple farms for sale to wholesale and retail markets, food hubs, therefore, expand Alternative Food Networks by extending both the scale of market sales available to small and mid-sized farmers and expanding the accessibility of alternative food products for community members (Diamond and Barham 2012).

Similar to other mission-driven (i.e. values-based) enterprises (Feenstra, Allen, Hardesty, Ohmart, and Perez, 2011; Pullman and Dillard, 2010), food hubs are identified as placing an explicit emphasis on fostering the growth of small and mid-sized farms, and goals of "positive economic, social, and environmental impacts within their communities" (Barham et al. 2012: 4). The volume of sales possible through a food hub, coupled with the price premium afforded by alternative markets promoting 'quality' (local, sustainable, healthy, etc.) provide possible, though partial, solutions to the vertically integrated, large economy of scale markets that squeezing family farms out of the food system.

As evidenced by the theme of the 2016 National Good Food Network bi-annual food hub conference - "Maintaining values while building value"- an elusive yet critical

component of the work of food hubs is the realization and integration of non-financial values into the operations of a market-based enterprise (2016). Researchers from a public policy perspective identify the "transformative" potential of food hubs, but note the inherent tension between working for social change, and the perceived necessities of economic development programs, observing that "social justice does not fit well with business plans or development pro formas." (Connelly, Markey, and Roseland 2011: 318).

However, despite the pervasive struggle to effectively integrate community concerns and market-based activities, researchers and practitioners consistently fall back on notions of viability and success founded in traditional business-school analyses (Blay-Palmer, Landman and Knezevic 2013: 526). Scholarly literature offers up definitions and typologies of food hubs, inventories of food hub services, and analysis of stages of organizational development (Campbell and MacRae, 2013; Horst et al., 2011; LeBlanc, Conner, McRae and Darby, 2014). On a practical bent, there are consultants available to guide food hubs in financial analyses that point to appropriate debt to asset ratios and strategies that emphasize revenue generation, consumer demand, and profitability (Lindsey and Slama, 2012; NGFN 2013; Fischer, Hamm, Pirog, Fisk, Farbman and Kiraly, 2013).

The focus on market functions is echoed by a persistent concern in agro-food scholarship over the dominance of capitalist frameworks and the 'conventionalization' of AFNs (Guthman 2004, Renting, Marsden, and Banks 2003; Jaffee and Howard, 2010). As AFNs have grown in scope and influence, scholars have expressed concern that social and environmental are sidelined by efforts to prove the economic viability of alternative production regimes within the capitalist marketplace (Guthman 2004; Carolan 2005; DuPuis and Goodman 2005). The perpetuation of 'quality' modes of production, assumed

dependent on market premiums, reflects what some scholars identify as a problematic capitulation within alternative food networks to conventional market logics (Goodman, 2003; Guthman, 2004). This phenomenon according to David Goodman, "suggests a certain readiness to accept a terrain of negotiation defined in technocentric terms, and to substitute governance by market forces for other worlds of governance, which give weight to nonmarket relationships based on trust." (2000:217). Thus we come to a confounding paradox whereby the alternative agricultural markets developed as a means to resist capitalist rationalization and industrialization of agriculture are also regarded as a form of conventionalization of alternative food production.

This analytic paradox is indicative of broader debates within contemporary agrofood studies arguing first over the extent of neoliberal roll out in the food sector, and second on the viability of 'alternatives' (Harris, 2009; Hill, 2014). Ann Hill (2014) argues that these debates take an all-encompassing capitalist market place as a 'matter of fact' (Latour 2004), and assess all agro-food initiatives by their relative adherence or subversion of the capitalist economy. Gibson-Graham label this phenomenon as capitalocentrism which they define as "the positioning of all economic identities as fundamentally the same as (or modeled upon) capitalism, or as being deficient or substandard imitations" (1996:6). Hill (2014) and others argue that the capitalocentrism of AFN scholarship coupled with our narrow-minded preoccupation with an assumed dominance neoliberalism limits and constrains our ability as researchers and communities to think and enact new and diverse economic worlds (Gibson-Graham 2008; Healy 2015; Snyder and St. Martin 2015). Similarly, DeLind calls for more attention to the ways in which local food consumption and production integrate into 'place-based practice' and the meaningful and relational parts of daily life (2011).

Answering this call, in the following section I present a re-reading of a case study of Grasshoppers Distribution (Brislen, Woods, Meyer, and Routt 2015). In this re-reading I identify gradations of resistance within the guiding ethos and material/economic praxis of the food hub: the founding impetus and mission of the enterprise, the sources, and forms of resources mobilized, the negotiation of need among actors, and types of transactions facilitated. I suggest that the essential challenge of food hubs is not to defend the purity of Goodman's 'other worlds' of AFN governance against the onslaught of the capitalist marketplace (2000), but rather to grapple with the complexity of how to simultaneously engage in market and non-market economic activities meaningful and transformative ways. The perpetuation of simple binaries, of artificially rigid separation of market and nonmarket goals undermines the emergent potential of diverse economic experiments in community agro-food economy (Harris 2009). To capture the full complexity of forces at play in collective efforts to resist and counteract capitalist domination and of the agro-food system, we need a way to move past the sharp division between alternative and conventional food networks (Lockie and Halpin, 2005; Tregear 2011).

Through the presentation of this case study, I seek to show that Grasshoppers was not driven primarily by either social *or* financial motives, but rather a complex assemblage of social *and* financial components enrolled in an experiment in community agro-food economy (Callon 2007; Roelvink 2015). From the findings of this case study I assert that we cannot divorce the values-based (non-financial) aspirations of AFNs from day to day, lived reality of communities involved in economic exchange and the agro-food marketplace, and conclude that we need a way to think with the multiple, diverse realms of economic activity of food hubs and other innovative projects in community agro-food economy.

GRASSHOPPERS DISTRIBUTION

Grasshoppers Distribution LLC was a food hub established in 2006 in Louisville, Kentucky by four Kentucky farmers seeking to connect regional products with local markets. Grasshoppers underwent many transitions within its lifetime, including changes in ownership, leadership and organizational structure, and major overhauls of the business model. This food hub grew to nearly one million dollars in annual sales of local farm products from over 70 different producers, and directed over 2.25 million dollars into the hands of local farmers and food entrepreneurs before closing its doors in December of 2013. As a values-based food enterprise, the strategies engaged by the leadership, staff, and stakeholders experimented with a number of hybrid approaches to balancing social and monetary goals. While these experiments were imperfect, and constrained by competition with conventional economic precepts (Callon 2007), they also generated interstitial openings in the agro-food imaginaries and had lasting impacts beyond the life of the enterprise.

AN UNCONVENTIONAL ENTERPRISE

Grasshoppers Distribution emerged during a significant period of change for Kentucky agriculture. The story of Grasshoppers Distribution is tied closely to what is referred to in Kentucky as "the tobacco transition." The tobacco transition began in the wake of the 1998 tobacco Master Settlement Agreement (Cross 2006). At the time of the master settlement, and for many generations of Kentucky farmers, tobacco was Kentucky's number one cash crop. The task of reimagining Kentucky's farm economy without tobacco was a daunting task for farmers and agricultural leaders, though it was recognized that innovative steps must be taken to secure the future of Kentucky's family farms. Rather than turning to the global agro-industrial market, the leaders who came together to form Grasshoppers Distribution turned inward to the Kentucky regional food economy as a way to forge a new model of community agro-food economy.

Grasshoppers Distribution was envisioned as a way to connect producers in the rural areas of Kentucky with urban consumers in the state's largest population center. However, rather than simply pursuing the highest financial returns by targeting affluent 'locavores,' the animating vision for the food hub sought to simultaneously support transitioning farmers while improving fresh food security for marginalized community members in Louisville.

"This business will provide sales and marketing opportunities for Kentucky farmers, local food entrepreneurs and area residents while offering citizens of West Louisville wholesome and affordable fresh food... The primary effort of this business is to expand service to the low-income individuals of West Louisville through the current sales relationships already established with the higher income customer base that farmers now serve." – Grasshoppers Distribution Business Plan

The focus on food access informed their site selection in West Louisville. There were explicit plans to partner with urban entrepreneurship efforts on development of a mobile market, as well as a partnership with a non-profit organization who would assist with community outreach and engagement. From its inception, Grasshoppers leaders

recognized that key elements of the mission and values of the enterprise would require support and exchange of resources, expertise, and coordination of activities with partners outside the marketplace.

Grasshoppers Distribution was to "provide an income to family farmers and micro enterprise owners while experimenting with the pricing of products so that we can feed a food access deprived community." The community leaders who participated in the visioning of Grasshoppers sought to connect care for farmer livelihoods with the observed injustices experienced by West Louisville residents. The reference to experimentation with pricing demonstrates an explicit desire to discover new models of economic exchange as a means to realize non-financial outcomes that would benefit the urban and rural communities linked by a shared agro-food system.

Due in no small part to the onset of the US economic recession in 2008, the nonprofit partners who were to focus on food justice and food access initiatives foundered and partnerships dissolved, thus fatally undermining Grasshopper's ability to engage in those efforts. Without partners to support the work of food access, and facing significant challenges in the essential business activities of supply and sales (discussed later), Grasshopper's leadership refined their ambitious mission to focus principally on helping Kentucky farmers. Accordingly, the second iteration of Grasshoppers' business plan focused wholly on small-farm and regional food-system development, stating: "It is the vision of the business not only to become the premier local food distribution business in the state, but to become a model for local food distribution nationwide." The change in scope of social mission was concurrent with an overhaul of the business model, and

Grasshoppers pivoted into a primary focus on a subscription program marketed as a Community Supported Agriculture (CSA) program and online market place.

DIVERSE SOURCES OF CAPITAL

Precisely because of the mission of the enterprise, and despite its for-profit status, Grasshoppers was able to mobilize a variety of resources in the establishment and operations of the enterprise: federal grants, personal savings of the original farmer owners, philanthropic funds, state government grants and loans, private financing from investors, volunteer labor hours and pro-bono professional services. By engaging consumers directly via CSA subscription, Grasshoppers further mobilized financial capital to stabilize the enterprise's cash flow and support its continued growth, while simultaneously leveraging consumers' ideological commitment to provide stability for the mission of transitioning the Kentucky agro-food economy.

However, there was an ongoing struggle between owners, public and private investors, and management regarding the balance of "social mission vs monetary incentive" functions of the food hub. Specifically, the for-profit status and mission of Grasshoppers was a constant topic of debate. Reflecting the capitalist rationalization foreseen by Goodman (2000), some owner/investors believed it was important to develop Grasshoppers as a profitable enterprise as a way to demonstrate the broader 'viability' of regional food systems. An opposing camp argued that grant funds and other non-profit contributions supported the critical role Grasshoppers played in providing technical assistance and hand-holding of producers new to horticultural production and/or wholesale and high-end markets, which provided a competing focus for the staff's time:

"I held, and the company held, the notion of business profitability or, more specifically, for profit, too rigidly. The company's most significant product to date, as it turned out, wasn't return on investment, but was instead the building and facilitating of community, including businesses, around food and around the development of the local food system." – Farmer/Owner

There was a belief that because of the hybrid role of service provider and business partner, Grasshoppers was uniquely positioned to serve the public good by recruiting and incentivizing continued participation by producers in the development of the regional agro-food economy.

In the most practical terms, the short-term financial needs of running a food distributor – payroll, rent, truck fuel, facilities upgrades – outstripped the revenue generated by Grasshoppers' sales. Three years in to the six years of its operation, facing a cash flow crisis, and without readily available or conceivable alternatives, Grasshoppers' leadership turned to state government and university experts for advice. These experts in turn recommended conventional (capitalist) finance strategies in the form of further debt financing and re-capitalization. Through the Series A investor offering, local philanthropists and self-identified 'socially conscious' investors provided financial capital in exchange for ownership in the enterprise. The original operating agreement, which required owner consensus for major decisions, was exchanged for a shareholderled board of directors resulting in a drastic reconfiguration of the governance and culture of the enterprise. While all accounts indicate that the ideological commitment to the social mission of the enterprise did not lessen, the opportunity for more innovative (e.g. diverse and non-capitalist) economic experimentation was curtailed by the dominance of conventional business and economic sensibilities.

DIVERSE TRANSACTIONS

A consistent challenge across the life of Grasshoppers was how to translate the overarching goal of "helping small farmers" into the specific, day-to-day reality of running a food distribution company. The ideal of integrating social values into a mission-driven food enterprise is easy to grasp, but the practicalities seem to be challenging, or at least nebulous. What does it look like, in practice, to 'help small family farmers'? Does this mean offering them the highest price possible? Does it mean having a large impact on a few producers, or a small impact on a large number of farms? This issue was never fully resolved for Grasshoppers Distribution.

For the leadership of Grasshoppers, the price paid to farmers was a key mechanism for realizing the goal of helping farmers. Prices were set on an annual basis by using the previous season's average reported farmer's market prices for the state as a benchmark. Describing the pricing philosophy, on employee in charge of purchasing stated: "I never wanted to go to the farmers and say let's bargain down the price. That was never our intention." Direct marketing prices for produce are typically significantly higher than wholesale prices, and thus the decision to use farmer's market prices as a benchmark is counter to any profit-driven logic. Producers themselves recognized this conundrum, and in interviews cited that the prices Grasshoppers paid, while generous, were "too high" for the wholesale market. Transparent price negotiations were coupled with production planning, whereby farmers and food hub staff agreed on a plan for production/sales for the coming season. These practices combined market and nonmarket sensibilities by reformulating the negotiation of flows of money and information,

thereby allowing Grasshoppers producers avoid the uncertainty of the conventional wholesale market place.

The challenges faced by any produce distribution enterprise (e.g. market development, quality control, consistent and sufficient supply, and distribution logistics) were further complicated by the values-driven mission. In contrast to conventional wholesalers who rely on terminal produce markets or contracts with existing wholesale producers for consistent, 'competitively' priced product, Grasshoppers' mission drove them to work with farmers who were new to wholesale and/or specialty crop production. This in turn meant those producers required significant technical assistance. Though addressing and accounting for these farmer-centered challenges was central to Grasshoppers' mission, the material and financial consequences undermined the wholesale sales of the enterprise. While Grasshoppers' wholesale customers were enthusiastic about purchasing Kentucky-raised products, there were limits to what they felt their own business could accept; they were willing and able to flexible on price, or forgiving of quality and supply challenges, but could not accommodate both. As such, wholesale sales in the first year fell well short of expectations.

Grasshoppers' business strategy departed drastically from the valorization of competitive business logics, and explicitly pursued strategies that would minimize the impact of Grasshoppers' market activities on existing local food initiatives and direct marketing programs. Marketing and sales efforts specifically avoided targeting a typical 'locavore' consumer, choosing instead to cultivate and recruit new consumers to participate in the local food system. Dedicated or 'hardcore' customers were encouraged

to leave Grasshoppers to join a farm based CSA program for the regular growing season, and return to Grasshoppers during the winter months.

LASTING IMPACT

The activities and labor time of Grasshoppers staff and leadership encompassed many activities outside of the realm of market exchange. Training and services offered by Grasshoppers were highly valued by farmers who cited greater knowledge in areas including: production planning, post-harvest handling, packing and grading standards, invoicing, and both production and financial record-keeping. Beyond simply selling the products, staff worked with producers to apply for federal cost-share programs for hoop house construction and other on farm infrastructure funding.

While conventional food distributors may have an interest in 'natural', 'sustainable' or 'local' product, the interest is fickle, and they are unwilling to take on the extra work (and thus expense) of aggregating from multiple local producers. The availability of a buyer dedicated to working with family farms coupled with a consistent demand for wholesale volumes provided key support and incentives for small and midsized producers:

"I think they were kind of ladder for us to develop our skills. They could allow us to move a lot of product at a better price while we still needed that better price." –Farmer/Supplier

The development of producer knowledge and production capacity set the stage for the next level of food-system development in the state. Grasshoppers' staff and leadership also advocated for changes in procurement procedures and policies changes by public institutions. Most notably, the lead-time for public school procurement bids was changed from a couple weeks to six months, which, according to one informant, "was the real game changer for access to [that] institution's buying power. Farmers could plan and plant with this sort of lead time."

Key changes and adaptations also occurred among customers who reported greater awareness of the seasonally available foods in Kentucky and a greater commitment to local and seasonally based eating or procurement:

"In the beginning I used to be upset because they couldn't deliver what I wanted them to. Later on, I realized I had to adapt. That is exactly what we did. So my business became more sustainable. My food costs go lower because I don't have to buy produce that is out of season."- Wholesale Customer

Consumers (both wholesale and private households) expressed a strong belief that state government and community-based organizations should continue to support the development of the regional agro-food economy.

Ultimately, the laudable efforts of Grasshoppers' leadership and staff were thwarted by a combination of logistic and infrastructure challenges, a rapidly changing market environment, inadequate financial resources, and the complexity of spearheading simultaneous efforts to develop regional producer capacity and build an innovative business model from scratch. Unable to reach levels of revenue generation that would support cash flow and debt service needs, the decision was made by the investors to close the enterprise.

The legacy of Grasshoppers lies in the impacts that extended beyond the boundaries (both temporal and material) of the enterprise. A public sector stakeholder acknowledged the key role of Grasshoppers Distribution played in "getting the ball

moving on continued support on local food," and highlighting the importance of investment in and support of regional food system. Despite, or perhaps because of, the closing of Grasshoppers, new public-private collaborative efforts continue to work to foster the growth of the regional agro-food system.

DISCUSSION

Grasshoppers was a collective experiment in possible paths for (re)development of Kentucky's agro-food economy. The leadership and stakeholders of Grasshoppers Distribution sought to build a mission-driven agro-food enterprise that would help ensure a future for family farms in Kentucky while improving the overall vitality of the region's agro-food system. This vision informed the animation and elaboration of Grasshoppers as a hybrid of social and market based enterprise, and mobilized an array of financial, human, biophysical, social, and emotional resources – only some of which are legible from a capitalocentric analysis. This complexity mirrors arguments by Carolan (2006) that the "thoroughly socio-organizational nature" of agro-food systems prohibits their reduction to autonomous rational actors. The strategies, policies, and processes deployed by Grasshoppers Distribution were neither wholly complicit with capitalist ideology, nor did they stand stark opposition to a neoliberal economy.

At the heart of the vision of Grasshoppers was the desire to reconfigure the way that food was produced, distributed, and consumed so as to improve the wellbeing of all the stakeholders involved. Thus it was a political project all the way down. However, the exigencies of surviving in a capitalist market economy were a significant factor in the organization and evolution the food hub. The operation of a food distribution business was integral to the realization of the non-financial goals for the enterprise; serving as a

dedicated and reliable buyer for farmers transitioning into produce production from tobacco was a key means of support for those farmers. The hybrid model of for-profit and non-profit service provision spanning across multiple organizations, coupled with the mission-driven choices of location, customer base, and business model all complicate the classification of the food hub within conventional frameworks.

Scholars attentive to neoliberalization within agro-food initiatives have argued that the creation of alternative or proxy markets (e.g. local food, fair trade, organic) serves to responsibilize citizens, thereby reducing the potential for collective political struggle to individual consumer choice (Guthman 2008; Watts, Ilbery, and Maye 2005). Counter to that assertion, I suggest that the long-term effect of Grasshoppers' hybrid enterprise model was the articulation of the agro-food system as a space for moral and political action as well as economic development. By engaging and mobilizing state and community-based organizations, university experts, and private citizens in the development of the food hub, care for the region's agro-food systems was produced and articulated as a collective concern and obligation (Rolevnik 2015).

The ambitious goals of Grasshoppers Distribution were constrained by the predominance of conventional capitalist frameworks as funders from both the public and private sector encouraged actions/policies that undermined some of the more ambitious and non-market oriented components of the mission. What's more, there was no notion or framework for 'viability' outside of conventional financial success within a for-profit framework and all its trappings, especially profit generation, and capitalization via debt financing (Callon 2007; Gibson-Graham 2006; 2011). The resulting dissonance between perceived monetary imperatives and deeply and collectively held social mission is

reflected in the words of this former owner: "For me, the company was about testing models around scalability and viability in local food system development... If the goal was about profitability, it was about profitability for the sake of the movement." Without effective means to think past or through the conventional market framework, leadership became increasingly beholden to conventional modes of capital investment and thus control (loans and investors), opportunities and will for creative reformulation and negotiation of relationships and exchange dissipated.

CONCLUSION

Without capitalocentric framing, how can agro-food scholars advance our understanding and support for food hubs and other emergent, hybrid forms of enterprise? Gibson-Graham and other diverse economies scholars offer a post-capitalist framework of community economy wherein reciprocal and interdependent relationships are forged between new economic subjects through a deliberate and ongoing negotiation of the process, aims, and outcomes of economic activity (Dixon 2011; Gibson-Graham 2006; Snyder and St. Martin 2015). Working from a diverse economies framework, Trauger and Passimodo illustrate how AFNs "provide spaces of deliberation about the production and consumption of food...[that] reorients the subjects of farming (producers, distributors, and consumers) toward a more integrated, interdependent and cooperative economy of agriculture, even while it is still embedded in a medium of market exchange" (2012: 283). Though not always successful in their efforts, Grasshoppers Distribution demonstrated this kind of deliberate negotiation enterprise as they worked reconfigure relationships among agro-food system collaborators in order to achieve desired social outcomes which were, in part, dependent on financial dynamics (Holloway et al., 2007).

By allowing for the 'radical heterogeneity' of economic practice, diverse economies theory opens a path forward for thinking with the struggle and experimentation of food hubs (Gibson-Graham 2006; 2011).

Without a new language to think with and through new possibilities for what a community agro-food economy could look like, the leaders of Grasshoppers were left to work with with economic imaginaries dominated by capitalocentric thought (Harris 2009; Callon 2007). For Grasshoppers, 'viability' and success were only conceivable in relation to the capitalist marketplace, thus confounding their ability to conceive of a model of enterprise that could successfully integrate financial and non-financial activities and goals (Hill 2014). The diverse economies method of reading for difference allows us to identify and take seriously the more-than-financial concerns, motives, and activities of actors engaged in living experiments in community agro-food economy (Gibson-Graham 2014).

By taking the hybrid social-and-financial nature of the enterprise's development seriously (Mount 2012), we can open space for the creation of new understandings, practices, and language of economy that can account for rational outside of capitalist systems (Gibson-Graham 2006: 2008). As the business adage goes – metrics get managed. The challenge of resistance for AFNs and other experiments in community agro-food economy is in codifying, adapting, transforming economic discourse to include non-financial means and metrics. (Callon 2007; Gibson-Graham 2008). By taking seriously and naming the diverse economic activities that arose from the food hub's experiment in community agro-food economy, we as social scientists can open new spaces for diverse economic concepts that can be mobilized to support the formation of new and hereto un-thought modes of community economy.

CHAPTER 3: WHEN YOU KNOW ONE FOOD HUB: POST-CAPITALIST ENTERPRISE AND THE PRAXIS OF CARE

INTRODUCTION

In response to concerns over environmental and public health issues, U.S. consumer markets have had a surge in interest in local and sustainably grown products, resulting in rapid growth of Alternative Food Networks (AFNs), including farmers markets, Community Supported Agriculture and new phenomenon labeled food hubs (Allen et al. 2003; Brodt et al. 2006; Mount 2012). Food hubs are a type of mission-driven (e.g. values-based) agro-food enterprise that aggregate product from small and mid-sized farmers and sell those differentiated products into wholesale or other mid-tier markets like grocery stores, hospitals, or restaurants. According to the USDA, the distinguishing feature of food hubs is not their specific business or legal structure, but rather how their activities affect "positive economic, social, and environmental impacts within their communities" (Barham et al. 2012: 4). They are also widely popular among AFN advocates and practitioners. At least seven different USDA grant programs are known to support food hub development, and there are over 300 self-identified food hubs currently in existence (Hardy et al. 2016).

The proliferation of food hubs has also come with a concomitant demand for documenting food hub best practices. For instance, a recently released Food Hub Business Assessment Toolkit is available "for investors and food hubs alike to utilize in the process of evaluating a food hub business' readiness for investment." (Vanderburgh-Wertz and Ram Moraghan 2014). This approach is indicative of the tendency within public policy, community programs, or social enterprise to latch on to the band wagon of

a 'replicable model' (Baker and Temenos 2015; Peck 2011). Critics of a replicable model approach suggest it assumes that community contexts are fungible, and that the particular configuration of practices or policies that constitute a model can be copied across communities (Prince 2010). Within agro-food systems, this same tendency manifests as the assumption that a food hub model can be classified and standardized, and that they will operate within a 'local food movement' whose goals, actors and practices are presumed to be more or less comparable across locations (Cleveland, Carruth, and Mazaroli 2014; DeLind 2011; Feagan 2007; Fonte 2008).

However, a common saying among food hub researchers and service providers goes, "When you know one food hub, you know one food hub" (Pipkin 2016). This aphorism acknowledges the contextually specific nature of the origins and operations of food hubs. Limited research in this area acknowledges the pitfalls in creating ready-made templates for food hub development, noting that readymade replicable models "would be constraining and counter-productive as assets and resource gaps are unique to each locale" (Blay-palmer et al. 2013). The challenge in classifying and replicating food hub models, rather than a detriment, may indicate a valuable strength of the enterprise model's potential for fostering transformation of our agro-food systems.

Working from a diverse economies framework, this paper explores how we can ask better questions *with* food hubs as a means to better understand and thereby support their role in building community agro-food economies (Gibson-Graham, 2011; Gibson-Graham, 2006). Specifically, rather than taking the form, function and desires of food hubs as given, I question the feasibility of a singular replicable model for food hubs by foregrounding the contextually specific factors that shape their emergence and their

operations. Through case studies of two food hubs I show how these enterprises emerge from unique contexts, and engage in economic relationships oriented towards caring for a specific concern interrelated with the community agro-food economy. I conclude that while there may be many shared or similar practices across food hubs, their defining feature is not just how they sell local food, but rather how those practices are interwoven and adapted to care for the specific community based concern that animated the food hub's organization.

THEORETICAL FRAMEWORK

An important question to ask of food hubs is what distinguishes them from the conventional business model of wholesale produce distributor or grocer. To date, responses to this question have been inconclusive. Beyond the involvement of small and mid-sized farms (i.e. local food), and the integration of a socially oriented mission or values (e.g. promoting environmental sustainability, food access), attempts at definition span a broad spectrum. The most prominent framework from the USDA focuses on the organizational structure and market oriented functions of the enterprise:

"A regional food hub is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand." (Diamond and Barham 2012)

Other frameworks from scholarly literature emphasize the intermediate role of food hub operations in a region's food system, such as the following:

A food hub serves as a coordinating intermediary between regional producers and suppliers and customers, including institutions, food service firms, retail outlets, and end consumers. [...] Services provided by a food hub may include

and are not limited to aggregation, warehousing, shared processing, coordinated distribution, wholesale and retail sales, and food waste management. (Horst et al. 2011:224)

These definitions are keen on the practical functions of food hubs, but fail to reflect or capture the mission-driven or more-than-financial dimensions of this form of agro-food enterprise that are a key defining characteristic (Barham 2010; Diamond and Barham 2011; Matson and Thayer 2013). While some scholars are actively grappling with the complex, hybrid nature of food hubs (Campbell and MacRae 2013; Mount 2012; Mount, Hazen, and Holmes 2013), the associated food hub definitions are so expansive as to loose site of the operations of the individual enterprise entirely:

"We define food hubs as networks and intersections of grassroots, communitybased organizations and individuals that work together to build increasingly socially just, economically robust and ecologically sound food systems that connect farmers with consumers as directly as possible." (Blay-palmer et al. 2013:524)

I point to these inconsistences to suggest that before developing best practices or replicable models, it would seem prudent to first establish stronger consensus and/or understanding exactly what is being studied and replicated, or to question the motivation for pinning down replicability in the first place.

The notion of a replicable model for a social enterprise is indicative of what Gibson-Graham describe as a 'strong theory' of economies: "powerful discourses that organize events into understandable and seemingly predictable trajectories" (Gibson-Graham, 2014). Strong theory approaches to economic analysis result in what they further refer to as capitalocentrism: "the positioning of all economic identities as

fundamentally the same as (or modeled upon) capitalism, or as being deficient or substandard imitations." (Gibson-Graham 1996:6). In contrast, Gibson-Graham (2014: S147) promote a 'weak theory' approach to economic thought which "allows for a much wider range of social relations to be seen to bear on economic practices including, to name just some, trust, care, sharing, reciprocity, cooperation, coercion, bondage, thrift, guilt, love, equity, self-exploitation, solidarity, distributive justice, stewardship, spiritual connection, and environmental and social justice." The goal of this diverse economies approach is to trouble naturalized or predictable models via "performative rethinking" of the economy as a means to envisioning and realizing post-capitalist futures through the creation of community economies (Gibson-Graham 2006; 2008; 2014).

The framework for community economy is expansive, and acknowledges the multi-layered, contingent forms of meaning or functionality bound up in economic exchange or practices (Gibson-Graham 2014; Hill 2014; Roelvink 2015). In community economy, reciprocal and interdependent relationships are forged between economic subjects through deliberate and ongoing negotiation of the process of economic activity (Gibson-Graham 2006). These negotiations are guided by four "ethical coordinates of economic practice" (Snyder and St. Martin 2015:46) that inform the dynamics of community economy, and can also shape the specific operations of an enterprise:

- What is *necessary* to personal and social survival;
- How social *surplus* is appropriated and distributed;
- Whether and how social surplus is to be produced and *consumed*; and

• How a *commons* is produced and sustained." (Gibson-Grham 2006: 88). Rather than assuming capitalist rational as a foregone conclusion, opening to diverse economic theory invites us to asks anew where, and by whom, and through what means is

surplus value created and appropriated, what the nature or form of that value is; and how the surplus might distributed through a variety of possible channels (Gibson-Graham, 1996, 2014, 2008). Through that ontological opening, post-capitalist politics identifies the enterprise as a key site of negotiation and political struggle over the ethical practice of economy (Gibson-Graham, 2001). However, an unanswered and critical question is this: What holds together and animates the post-capitalist enterprise when the rapacious drive for capital accumulation is removed? Notions of 'promotion community and environmental wellbeing' lack analytic specificity, nor do they offer a strong foothold from which to organize practical action. I thereby suggest there is need for further elaboration of a framework for post-capitalist enterprise. For this, I turn to Gramsci's philosophy of praxis (1971).

The term 'praxis' is used liberally across agro-food scholarship as short hand for describing practical human activity driven by either implicit or explicit ideology (Goodman, Dupuis, and Goodman 2011; Guthman 2008; Hassanein 1999). Gibson-Graham's (2006) parallel call for attention to the "ethical practice" of economy can be strengthened by a more direct engagement with a Gramscian philosophy of praxis. For Gramsci, praxis consists of actually existing attempts to "grapple with existing reality," out of which new conceptions of the social/natural world might emerge (Ekers and Loftus 2013). Gramsci asserts that the work of intellectuals is to unite those fledgling political conceptions (common sense) into an explicit and unified philosophy of social change (good sense) (Hart 2013; Routledge 2015). Thus new world views are forged through careful attention to "everyday acts of play, production, and reproduction" which are formed and enacted in relation to already existing ideologies (Loftus 2013:193). By

looking to the practical activity of food hubs, and building a grounded understanding of their activities, aspirations, and outcomes, we can engage in a philosophy or praxis that seeks to account for and build on the unique characteristics of the enterprise.

A food hub is both discrete and diffuse – an economic assemblage operating within a wider network of an agro-food economy (Callon 2007, 2015; Harris 2009). The boundaries of the relative influences, inputs, and impact of a food hub are diffuse, but specific practices, policies, and actants can been identified and traced through their actions and outcomes. As Jarosz says, AFNs are not specific to any particular geographic scale, but "constituted out of multiple, contradictory processes and relations which they internalize in place and through time." (2008:234). And so, towards the goal of documenting diversity and deconstructing dominance (Gibson-Graham, 2006, 2008), the following case studies look at what is "assembled and arranged" within community agrofood economies – relationships, practices, and materials (Healy 2015). By better understanding what a food hub is, and what exactly it does, we can generate better understanding both for how the food hub model might be replicated (or not), and the potential for food hubs to function as a kind of post-capitalist enterprise.

CASE STUDIES

"I would just love to see what somebody made work... We need to know how to make this sustainable, how to connect to the community. Nobody has ever been able to help us with that." – Hollygrove Market and Farm Leader

In the following section I present case studies of two food hubs in the South Eastern United States: GrowFood Carolina and Hollygrove Market and Farm. Each of these hubs represents a different combination of the common market outlets,

organizational structure, and social/ecological values among food hubs in the United States. Data is drawn from in depth interviews with food hub staff, leadership, and key stakeholders. Textual analysis was conducted on primary sources for each hub as available. This included bylaws, business plans, grant applications, websites, promotional materials, and press releases. The findings from the textual analysis were used to provide historical support and/or clarification for findings from the interviews.

As stated earlier, the goal of this preliminary theorizing is to think with food hubs as a form of post-capitalist enterprise and foster their fragile becomings. In the following case studies, I gather and assemble narratives that speak to the questions of: who and what is assembled, how are they set into economic relationships, and what are the ultimate goals or outcomes of those economic entanglements (Callon 2007; Jarosz 2000; Latour 2005)? By attending to the ethical practice of the enterprises, I demonstrate that a matter of concern (or perceived crisis) related to the community agro-food economy is identified by an initial group of organizers who then assemble a diverse array of actants and enroll them into an enterprise. The form and functions of the food hub enterprise is then uniquely adapted to care for the matter of concern, thus shaping the ethical praxis of the enterprise. Finally, because the nature of assemblage is one of constant becoming – adaptation and reconfiguration, the ongoing negotiations and tensions of the food hub are an equally important component of the dynamics of the enterprise.

GROW FOOD CAROLINA

"It's always been about the protecting the coastal plain and in that we have water and air land and people and quality of life" – Coastal Conservation League Leader

Overview

GrowFood Carolina (GFC) is a non-profit food hub organized and operated by the Food and Agriculture program of the Coastal Conservation League (CCL) of Charleston, South Carolina. The CCL is a long standing nonprofit organization dedicated to land conservation and environmental preservation in the 'Low Country' of South Carolina, and recognized for its unapologetic commitment to the preservation of open space and resistance to the many mechanisms of expanding urban development. CCL serves as GFCs fiduciary agent and provides a full suite of administrative support. Grow Food Carolina has its own advisory board whose oversees the design and implementation of a wholesale produce distribution enterprise with the mission of creating viable livelihoods for farmers by selling their product to restaurants and other wholesale customers in the greater Charleston region.

The food hub sources and distributes wholesale lots of produce and a few other regionally produced agricultural products (e.g. rice, canola oil) from 80 different farmers and food producers within a 200 mile radius of Charleston. Grow Food has five full time staff members and is led by a general manager who was recruited for the position specifically because of their extensive expertise in wholesale organic produce distribution as well as a strong background in business and financial analysis. They sell to restaurants, grocers, and dining service providers in Charleston, a city known for its culinary scene and distinctive food culture.

Matter of Concern

"The objective of GrowFood is to tap into the existing assets of small-scale agriculture to help create a stronger rural economy, spurring job creation, and

building capacity in rural communities by connecting farm businesses to the thriving local food movement." –GFC Promotional Document

Grow Food Carolina opened its doors in 2011 after several years of planning and outreach by CCL staff and partner organizations, and its mission and activities are understood as a key element of the strategy and work of the Coastal Conservation League's broader mission of preserving rural lands and environmental preservation of the Low Country coastal plain. From the CCL Website:

"Between 1992 and 1997, more than 200 acres of rural land were converted every day to urban uses, placing South Carolina in the top ten states in the nation for rural land loss. We quickly realized that small farmers lacked access to the infrastructure available to industrial farms, and were therefore unable to say "no" when a developer offered to buy their land."

The path to GFC originated in an ethic of land conservation and environmental protection. After years of fighting development, CCL recognized the next step for their organization was to move into the lives and livelihoods of rural communities. As stated by a CCL leader, "We're not an organization that is scared to dive into an area that's not conservation per se, but that directly impacts conservation." Rather than continuously going to battle with developers and politicians, through developing a food hub CCL sought to meet landowners where they were and preserve land from development from the ground up.

The evolution of CCL's strategy from litigation against development to an inclusion of agricultural market development was spurred by the realization that, as one CCL employee put it, "conservation has to address the working landscape and has to ensure the viability of successful farm business in order to work in many of the rural

landscapes." This shift in ethos merges concern for rural lands with concern for rural people, and rural livelihoods.

"You have a landowner who has been struggling doesn't have a good market for the farming product- typically the medium scale farm if they are farming at all anymore- and it's sometimes more appealing to get a minimum wage job and sell property and just accept that as the fate for the town." – CCL Leadership

CCL and GFC leadership are clear at all times that the overarching goal of GFC's work is to promote land conservation and environmental protection. Aggregation, marketing, and distribution of source identified 'local' produce by GFC is believed to directly and indirectly inspire faith in the viability of land-based livelihoods in the South Carolina Low Country. Even though the number of land owners involved in GFC's enterprise is limited, the indirect impacts of growing interest and belief in a viable local food economy is believed to have compounding effects on public and private attitudes towards land preservation and rural development.

Community of Care

The first steps to launching Grow Food Carolina were a series of listening sessions conducted throughout the region to hear the needs of farmers, and promote the opportunities that a regional aggregator/distributor like Grow Food could provide. These events were organized in partnership with the South Carolina Rural Resource Coalition, an economic development organization comprised of a broad array of state and national agencies and organizations related to affordable housing, agriculture, community development, conservation, forestry, heirs' property, and tourism. As outreach and recruitment continued, Low Country Local First (a Charleston-based nonprofit

organization) and Clemson Cooperative Extension both helped with recruitment efforts and lent their credibility and expertise to outreach and recruitment.

"We were bringing together as many different stakeholders as we could because we're really building a case for why local agriculture is important to South Carolina." – GFC Leadership

The early focus on collaboration and partnerships in GFCs evolution has continued throughout its growth as it considers its resource needs and identifies its areas of expertise and specialization within the community's agro-food system. Subsequent partnerships have included coordination of food donations and collaboration on trucking with the Charleston area food bank, and allowing a startup business focused on direct to consumer sales of local food to use the warehouse as a delivery location.

As the vision for a Charleston-based local food wholesaler/distributor formed, CCL leadership sought funding to support the bricks and mortar infrastructure and professional staff needed to get the food hub off the ground. As a testament to the influence and prestige of the CCL supporter base, the warehouse that is now GFC's home was purchased and donated to CCL by a longtime supporter. What's more, the building contained additional offices spaces that are leased out and provide a significant source of revenue to support GFC's overhead and operations.

The startup was further supported by a two million dollar capital campaign funded by local donors and other philanthropic entities, which reveals the strength of community support for GFC's efforts. Interestingly, while some initiatives of CCL generate animosity within the Low Country (for instance CCL's opposing of major road or commercial development), GFC and CCL leadership report that they have received

significant donations from individuals who state that they would never donate to CCL, but that they want to give their financial support to the work of GrowFood Carolina.

Ethical Praxis

"I'm seriously worried that no one is going to farm anymore! If we don't do something soon, we're not going to have any more farmers." –GFC Employee

At its core, the food and agriculture program of the Coastal Conservation League and GrowFood Carolina reflect a belief in the intrinsic worth of farmers and farming to the broader wellbeing of the Low Country. The decision to develop a food-based enterprise focused on working with small and mid-sized producers specifically, rather than with established large-scale produce operations, was informed by two aspects of the value of small farm enterprises relative to CCL's goals: the intrinsic worth of family farms to rural community vitality, and the importance of agricultural production practices in the overall ecological health of the region.

The public discourse developed by CCL and GFC weaves together concerns for environment and rural economic vitality with an explicit critique of conventional/industrial agro-food systems, or what one GFC document describes as South Carolina's "unswerving loyalty to industrial-scale, single-crop, export agriculture." CCL's capital campaign literature frames the root crisis to be addressed by GFC as economic:

"Industrial-scale agriculture has become the national standard as a result of a complex web of federal and state regulations, policies, subsidies and corporate consolidation that favors large-scale farms and makes it nearly impossible for small farms to survive."- CCL Document GFC further argues that small and mid-sized farmers are significantly disadvantaged in the current American agro-food system:

"Due in large part to a well-developed infrastructure system that benefits largescale agriculture, produce distributors, packing sheds and warehouses offer significant advantages to large farmers, particularly in the export arena. This structure is not available for small and mid-sized farms serving local markets." – GFC Marketing Document

Though GFC is operated using many of the same practices and policies of a standard produce distributor, the food hub's commitment to working with small and mid-sized farmers in service to the mission is in direct odds with conventional distributor logic. The extra time, administration, and price premiums required by the farmers GFC works with make the majority of them unpalatable to conventional distributors. While certain logics related to product volume, price point, and farming expertise factor into GFCs choice of producers, by and large the class of farmers GFC works with is chosen because they are the ethically 'right' farmers to serve (relative to the mission), rather than the most profitable or logical farmers to source 'local' food for the marketplace. GFC staff and leadership recognize the paramount importance of supporting their farmers for both the success for GFC as an enterprise, and to the realization of the overarching mission. This care and support occurs both through formal and informal practices.

"Basically my goal was to talk to [the farmer] once a month and be like, I am committed to moving your entire crop and we will give it at this price. And if that price starts to not make sense, we'll talk about it. This is important! Keep going!" – GFC Staff

As the enterprise grew, GFC leadership recognized that informal farm consulting functions needed to be institutionalized. At the time this case study was concluding, GFC was hiring a farmer liaison whose job will be to conduct extensive on farm visits, production planning, and general consulting for GFC suppliers. This serves the dual purpose of supporting the continued growth and success of participating farmers and also supporting GFC's sales by ensuring a regular supply and anticipating supply shortages before the delivery is due.

Environmental Stewardship

In the early stages of GFC's development, the general manager, who has extensive background in wholesale Organic produce marketing and distribution, provided ad hoc and informal consulting for the producers on packing and grading of product as well as encouragement for the adoption of sustainable production methods such as Integrated Pest Management or Organic Certification. CCL and GFC leadership assert that small farms are greater contributors to the goal of environmental sustainability than large/consolidated farm enterprises.

"The only way we're going to see a shift toward organic, that we can be a part of and help facilitate, is through the relationships we have with these farmers. They trust us to get them a premium because their food is local, and they trust us to get them premium because it's organic. And so the building of relationships and of these sales connections really is the platform to do more things in the sustainability arena." – GFC Leadership

At first glance, GFC's willingness to market farm products that are not Certified Organic and produced with conventional (synthetic chemical-intensive) production methods might seem at odds with their strong environmentalist ethos. However, upon further examination the choice fits squarely within the foundational goal of preserving rural farmlands, and is part of a long term strategy to engage farmers, stabilize their enterprise

by providing a reliable market outlet, and then promote transition to sustainable production practices.

Tensions and Negotiations

"I think it is an economical model and we're not yet through figuring out how to make it an economical model. I don't think Grow Food will look like Grow Food does now in five years. Not because it's not working, but because I just think it needs to evolve." – GFC Leadership

As Grow Food Carolina enters its fifth year of operations, one of the key points of tension and/or negotiation playing out in GFCs evolution is the definition of 'viability' for the food hub from both a mission and an enterprise perspective (e.g. financial self-sufficiency). GFC is a successful food hub by most traditional financial indicators; the enterprise has hit key financial benchmarks set by the advisory board, annual sales experience steady growth, and the enterprise has new customers and market opportunities presenting themselves at every turn. However, the long term feasibility of attending to both the community based mission of preserving rural lands and serving small and mid-sized farmers on one hand and prioritizing financial benchmarks of a break even analysis is up for debate.

"People here hate that we're a non-profit. If we're making any revenue at all, they think that it's an entitlement – tax payer dollars. So telling people that we are going to consistently operate on that model, and consistently look for 'hand outs'... they'll be like then farmer's shouldn't exist if they can't make what they need to make. And I'm like "really? Because we've been paying... YOU have been paying farmers your whole life" -GFC Leadership

As discussed in the previous section, GFC receive significant philanthropic support precisely because of the 'public good' nature of the work – rural land

preservation and local food system. In the terms of diverse economies, we can see the community agro-food economy, and its enrollment of farmers, farm lands, and consumers, as a kind of commons. In more classical economic terms, the work of GFC, and in particular its care for farmers and farm lands, is an important contribution to the public good that is the region's agro-food system. As the food hub evolves and its operations grow, maintaining connection and understanding with the farmers (who are after all the focus – their tenure, their management decisions) is key to continuing the project of building a diverse agro-food economy.

HOLLYGROVE MARKET AND FARM

"It's a big story. It's more than just a farm market. It's a story of a community pulling itself up by the boot straps and fixing its own problems" - TCC Leader Overview

Hollygrove Market and Farm (HGMF) is a non-profit retail grocer and distributor located in the Hollygrove neighborhood of New Orleans. Though it is organized as an LLC, it is wholly owned and operated by the Carrolton Hollygrove Community Development Corporation (CHCDC), and in close partnership with Trinity Christian Community (TCC), two non-profit organizations based in and serving the Hollygrove neighborhood. Incorporated in 2008, HGMF has grown from a once a week produce pick up for 25 people hosted at folding tables amidst post-Katrina devastation, to a seven day a week retail market that features urban farming, community gardening, and a full range of food offerings including fresh produce, dairy, meat, and value added food products. The food hub is located on the site of a refurbished plant nursery at the edge of the

Hollygrove Neighborhood¹. On the grounds are a two story building which includes a retail grocery enterprise on the first floor with HGMF offices on the second floor. The market and farm also includes 12 community garden plots in raised beds, a quarter acre of urban farm, and a utility building used for the storage of farm equipment.

The stated mission of HGMF is to "increase accessibility of fresh produce to Hollygrove, surrounding underserved neighborhoods, and all of New Orleans while promoting sustainability through support of local farmers and the local economy as well as acting as a demonstration site for environmentally sustainable practices." The market operates a retail location that offers both a pre-set produce share as well as a la carte grocery service, and are currently expanding operations to sell to restaurant and other wholesale accounts. The Box', a set selection of fresh produce that emulates a typical CSA share, has been HGMF'S principle offering and focus since its inception. The market's procurement manager makes weekly orders of wholesale lots of produce from small and mid-sized farmers in the region and curates a desirable assortment and reasonable volume of product. This share is on sale six days a week for the set price of \$25, which is less than the produce would cost if purchased separately at regular retail prices while still providing a financial return to the market. The market buys from 45 different farmers and food producers in southern Louisiana and Mississippi that represent a broad range of production scales.

¹ According to interview participants the market is located across the street from a baseball field that was informally enforced as "white's only" in the Jim Crow era south adding additional layers of semiotic and spatial complexity to race and class relations of HGMF

Matter of Concern

The Hollygrove neighborhood, developed in the late 1940s, is predominantly African American and historically a working class neighborhood that experienced a slow rate of repopulation following Hurricane Katrina, compared with other, more affluent neighborhoods (Kato and McKinney 2014). On August 28, 2005 the New Orleans Food and Farm Network (NOFFN) partnered TCC and enthusiastic help from community members in the Hollygrove neighborhood to install 17 vegetable gardens and urban orchards across the neighborhood. These gardens were meant to kick-start urban food production and organizing around community food access. The next day, Hurricane Katrina hit the gulf coast and left Hollygrove torn to pieces under 6 feet of water.

"When Nagen was mayor...it came across pretty clear: 'Plan for recovery of your neighborhood or your neighborhood is going to be gone. We will clear it and make it into a green space.' So that was part of it. But the other part of it was people just knew they had to band together locally or else their neighborhoods were not gonna come back" - CHCDC Leader

In the aftermath of the storm, neighborhoods across New Orleans began to selforganize and plan for recovery through grassroots resident associations, which was a distinct shift to decentralize management and (re)development of the city (Olshansky et al. 2008). In 2007, the Carrollton-Hollygrove Community Development Corporation was formed with the simple but ambitious goal of bringing people back home to the neighborhood by supplying needed resources and technical assistance.

"CHCDC addresses issues related to Hollygrove revitalization: community organizing, eradicating blight, economic development, and marketing Hollygrove as a livable, vibrant New Orleans neighborhood. A major part of

this revitalization work is to address issues relating to access to healthy, fresh, affordable food." – CHCDC Grant Application

The principle efforts of both TCC and CHCDC in the early years following Katrina was on housing restoration and facilitating the return of residents to the neighborhoods. A block captain program was initiated that identified neighborhood residents serving as embedded liaisons for other residents seeking to return to their homes and provided support and resources for navigating the complicated and often treacherous landscape of post-Katrina recovery efforts (Wooten 2012).

The residents and leadership of Hollygrove were confronted with a difficult question; how to rebuild a neighborhood after a human exacerbated natural disaster strikes. What is the heart of a community? What is it that calls us home? In particular, leadership of the CHCDC saw themselves as confronted with both the challenge and opportunity of rebuilding a community that was systematically marginalized (economically, environmentally, socially) in pre-Katrina New Orleans, and largely starting from scratch:

"Frankly politicians don't listen to us anyways, the city doesn't listen to us. It's evidenced by the fact we don't have any [public] grants. [The city] wasn't really paying attention. So we have to certainly fix the problem ourselves."- TCC Leader

As written in a CHCDC in a funding application, "The neighborhood, once known for poverty, drugs and crime, now had a chance to re-envision itself, creating a newer, healthier milieu."

Through feedback from block captains, and a grassroots community planning initiative, CHCDC then identified food access, and fresh food access in particular, as a priority.

"We're beginning ask a lot of questions around the neighborhood; what is it that limits the community? One of the things that came about, one of the big issues was lack of food access; there wasn't enough grocery stores." - TCC Leader

As recounted in a grant narrative prepared by the Carrolton-Hollygrove CDC, "In those days, no matter how much money one had in his or her pocket to buy food, no one knew what was open and where to go." Following hurricane Katrina, the New Orleans area lost 21 of 36 major supermarkets, and racial disparities in supermarket access that existed pre-Katrina were further exacerbated (Rose et al. 2011). Though grocery stores would eventually come in to the area as recovery progressed, 'good' food access was emblematic of more than just the presence of a food retailer in the community.

Community of Care

"Hollygrove - the community I grew up in, that I love - the incidence of people with a limb chopped off because of diabetes or heart problems or other foodrelated, diet-related illnesses were astounding. So we thought, why don't we start doing healthy stuff?"- CHCDC Leader

The connection between HGMF leadership's concern for food access in a socially and economically marginalized neighborhood, and the choice to source exclusively from small and mid-sized farmers from the region is not readily apparent. Following the story for HGMF's establishment, the reasoning involves a combination of the ethical

disposition of individuals involved, the influence of key community partners, and shear practicality of needing to get produce in the box.

Interview participants described a close knit group of community leaders working on Katrina recovery across the city who shared ideas and banded together to realize a shared vision of the future.

"After the storm... we were a small network of people, we're trying to rebuild the city, so we all knew each other, we hung out and we're all trying to envision what it would be like to rebuild the city differently, but that maintained the same character of New Orleans... We still want to maintain our same distinctiveness. We could do things better in the future than we did in the past." – CHCDC Leader

As part of that re-imaging process, the leaders who spearheaded the formation of Hollygrove Market and Farm found themselves reading and discussing, among several authors, the writings of the iconic agrarian Wendell Berry, and in particular an Orion article titled The Idea of Local Economy (Berry 2001). The following passage from this article is worthy of quoting at length, as it is easy to imagine how its sentiment and ideas resonated with sweat-soaked and mud-streaked community organizers searching for answers in the wake of Katrina's devastation:

"If the government does not propose to protect the lives, livelihoods, and freedoms of its people, then the people must think about protecting themselves...

How are they to protect themselves? ... For several good reasons, they are beginning with the idea of a local food economy... They want to use the local economy to give consumers an influence over the kind and quality of their food, and to preserve land and enhance the local landscapes. They want to give everybody in the local community a direct, long-term interest in the prosperity, health, and beauty of their homeland."(Berry 2001) CHCDC leadership looked at several potential models and partners for brining fresh food access into the neighborhood. They approached Crescent City Farmer's Market with the hope of establishing a traditional farmers market in the neighborhood. According to one leader:

"It just didn't work, mainly because there weren't any farmers. The farmers had been destroyed [by the storm] number one, and number two there were no real truck farmers in Southeast Louisiana. The farmers all grew soy beans and rice and...the only farms available were small family farms that you could buy produce from."

CHCDC then looked to the Louisiana Public Health Institute's Steps to a Healthier New Orleans (STEPS) program which worked with 13 neighborhood corner stores across the city to stock and promote the purchase of healthy food choices including fresh fruits, vegetables and low-fat dairy and/or whole grain products (Winkler-Schmit 2007). However, while initially optimistic about the STEPS' approach, community leaders were ultimately dismayed with the program's lack of fresh produce and general lack of impact. Having run out of options for existing partners, when the opportunity to lease the former nursery site arose, the head of the CHCDC board decided to make the leap into running their own "hole in the wall."

At the same time, a key partner for CHCDC was the New Orleans Food and Farm Network (NOFFN). As the lead partner in the ill-fated garden installations with TCC, NOFFN was engaged in a number of gardening and 'urban farming' initiatives across the city. NOFFN offered training in production and marketing, and encouraged neighborhood associations, and specifically CHCDC, to establish farmers markets and other localized market outlets for urban grown food. In the first several years of HGMF's operations, NOFFN managed the urban farm and community garden plots on the site of HGMF and used it as a site for training and other programing.

While the food enterprise plans were incubating, the CHCDC's primary focus continued to be on housing redevelopment, and helping neighbors transition back to Hollygrove from wherever they'd fled after the storm. The mission as the board saw it was straight forward: "help homeowners get back into their homes and rehab their homes." In conceiving and developing the food market, CHCDC board members believed they could build an enterprise that could not only support its own operations, but generate profits that could fund housing development and other community building efforts of the CDC.

"We really felt that the market would be a money maker and that it would make money for the CDC and we were able to cover all our expenses." – CHCDC Leader

Ethical Praxis

Within the market's operations, a number of programs have been implemented (to greater and lesser degrees of success) with the goal of making the market and farm a viable and valued resource for residents of the Hollygrove community. In support of HGMF's mission of providing particular care for the Hollygrove neighborhood, Hollygrove residents (regardless of their income) receive a 20% discount off all purchases from the market (including the box). Further support of the goal of providing increased access to the fresh locally sourced produce to low income residents of all of New Orleans, the 20% discount is also extended to customers using Supplemental Nutrition Assistant Program (SNAP) benefits to make their purchase. While the discount

programs have been a permanent fixture of the market's operations, HGMF and CHCDC leaders have sought other ways to support and encourage participation by residents. By far the most popular program HGMF offers is their volunteer labor program whereby volunteers can sign up for a four hour shift at the market and take home 'the box' at the end of their shift. However, this program is utilized primarily by young single people living outside of the Hollygrove Neighborhood.

Beyond market sales, community garden plots are provided to neighborhood residents on the market grounds and gardeners can sell their products on a specially designated 'community table' in the market place, or even occasionally to the market for inclusion in the box (most typically bunches of herbs that can be grown in volume on small garden plots). Additionally HGMF has in the past secured modest grant funds to offer community outreach and education programs that included cooking classes focused on the use of fresh and seasonal produce.

Tensions and Negotiations

"Until you have some black faces around there, it's going to always be looked at as that is not for us."- CHCDC Leadership

As is likely obvious from the above discussion, HGMF continues to search for ways to effectively serve the residents of the Hollygrove neighborhood. The market has been very successful in attracting customers from across New Orleans who are drawn to the 'local food' and the community-oriented ethos. Both TCC and CHCDC leadership are quick to acknowledge that the success of the food hub has contributed to a broader change in the reputation and perception of the Hollygrove neighborhood by New Orleans residents.

"Hollygrove had such a bad reputation and finally something good was in Hollygrove that people from all over the city, it was like, I will go to Hollygrove for that. And like, you Google Hollygrove and the market pops up, instead of a murder. So I always called it the welcome center for Hollygrove. And so, but – the other is that it wasn't indicative of Hollygrove." – CHCDC Leadership

Staff and leadership all express their dismay and frustrated confusion with the lack of widespread interest or enthusiasm for the market from Hollygrove community members. Despite efforts at outreach and marketing, HGMF leadership recognize persistently low level of patronage of the market by Hollygrove residents, and have sought answers and guidance from on how to better engage and serve the community.

Through partnership with Tulane University (located in New Orleans), HGMF participated in a semi-experimental research project to identify specific reasons for low neighborhood participation. Researchers found that "dismal participation by the local residents was not a result of conscious avoidance but rather due to lack of awareness." (Kato and McKinney 2014:216). The challenge, as HGMF staff and leadership see it, is in how to find the appropriate balance between making choices that are best from a market based perspective, and those that would best serve the needs and desires of community members:

"I find that when neighborhood people do shop here, they're kind of looking for different stuff than I'm normally ordering... they want like 20 bunches of mustard green. I don't necessarily even stock mustard greens all the time. I try to have them in a la carte because I know that that's an appealing thing for the neighborhood people, but if they don't come, then I'm not selling them. You know what I mean? And it's taking up space of something that I could be selling to other people who are more interest in shopping here." – HGMF Staff

The lack of neighborhood residents in HGMF staff is an additional and key point of tension and negotiation, though the causes are complex. Trinity Christian Community is perennial host of a large contingent of Americorps volunteers, and hosted even larger contingents of volunteers during the initial labor-heavy stages of post-Katrina recovery. As such, CHCDC relied heavy on volunteer labor, and Americorps volunteers in particular, for the initial development of HGMF. Because of their extensive work in the food hub's start up, early staff of the food hub was drawn almost exclusively from former AmeriCorps volunteers who were college educated whites from outside the neighborhood (and outside Louisiana).

"Honestly, we had some employees that basically were running the market ...they weren't from Hollygrove...To be able to look for a position for someone from Hollygrove, like somebody who worked in stock room... You got to have [the board's] input because you don't know these people...I don't think [they were] prejudiced at all...But I think it was easier for [them] to work somebody who had work experience as opposed to somebody who didn't. And so it became the norm for the market ... so this is why people from Hollygrove think it is not for them..." – CHCDC Leadership

On the market-facing side of the enterprise, the retail operation faces competition for both suppliers and customers from profit-oriented local food purveyors – some of which pop up even in the ranks of HGMF employees. While the intricacies of this particular story are outside the purview of this paper, in the winter of 2014 HGMF endured a one two punch of poor financial management by a hired consultant, and the sudden departure of two staff members with the express intent of starting a competing local food enterprise using HGMF suppliers and clients. The resulting financial turmoil nearly resulted in the market closing its doors for good. One HGMF staffer, who had

been holding on to a month's worth of un-cashed paycheck at the time of our interview (itself a testament to the passion of HGMF staff for the enterprise) recounted her amazement at the generosity and commitment of participating farmers:

"I had to call farmers saying, I know you have a check of ours... but long story short, I don't have money in the bank right now... I was in tears with people. But a lot of people were really understanding. One farmer said 'The important thing is that you guys stay in business, and if that means giving you free produce that's what we'll do.'"

The near-closure, while extremely stressful to staff and leadership, served to re-energize the commitment of some ambivalent board members, and focus the attention of staff and leadership on instituting essential administrative systems and capacities necessary for the continued success of the market. In considering the future, conversations with HGMF and CHCDC leadership often return to the value of HGMF to the overall image and reputation of Hollygrove as a neighborhood, and the continued hope that they could somehow figure out how to make it all work.

DISCUSSION

"I see other communities they want to jump straight to a food hub help and I'm like, do you have a farmer network? All your farmers, do they have capacity? Do they understand how to grow the kinds of vegetables that that the consumers want? Is there any kind of network established, and is there trust in the community?" – Grow Food Carolina Leadership

Comparing the farmer and farmland focused efforts of GrowFood Carolina with the community re-development yearnings of Hollygrove Market we see how the food hubs' economic praxis was formed in response to their unique community context as a means to care for a concern or crisis that is in some way entangled with community agrofood economy; the economic praxis was simultaneously an ethical praxis. Though they share many similar practices (e.g. tools) and types of actors, the unique configurations, expressed capacities, and desired outcomes vary greatly between these two food hubs, thereby indicating that there is no easy path to forming a replicable model for food hubs. There is, however, a way to think with food hubs as form of post-capitalist enterprise, and to find strength and possibility in the contingency of their ethical/economic praxis which I will discuss in the remainder of this paper.

In their case study of the Mondrogon cooperatives of Spain, Gibson-Graham (2006: 104) identify the essential characteristic of the enterprise as the "ongoing debate and reevaluation of their economic choices in the lights of a specified set of ethical principles." Within the stories of these food hubs, we observe the same kind of tensions and negotiations regarding the ethical praxis of the enterprise. By debating and adapting policies regarding agricultural production methods for participating farmers at Grow Food Carolina, and struggling to address racial disparities in Hollygrove, we see food hub leadership and stakeholders are engaged in continuous reconfiguration of the practical economic activities of the enterprise as a means to better serve the mission. However, instead of being guided by abstract or universal ethical principles, these negotiations are grounded in what can best be described as an ethic of care (Puig de la Bellacasa 2011, 2012).

Building off Latour's matters of concern (2004) and drawing from feminist theories of care (Engster 2005; Toronto 1993), Puig de la Bellacasa (2012) argues that unlike the abstract worry of concern, matters of care are defined by ethically and politically charged practice. Care does not simply passively respect an ethical principle,

but is instead an active commitment to the resolution of concern through "everyday doings" (Puig de la Bellacasa 2012:100). Connecting care with practical activity, we hear further resonance with Gramsci's the philosophy of praxis discussed earlier in this paper. By explicitly acknowledging the role of care, the framework of a post-capitalist enterprise can expand the boundaries of economic praxis to include both productive and reproductive activities, thereby attending to the production of community agro-food economy (Routledge 2015). In contrast to a fixed spatial boundary within which that activity happens (i.e. mileage based definitions of 'local' food), the community of community economy in this sense is an emergent property of the practices of care in an economic assemblage (Dixon 2011).

Engster argues that in order to be effective, care must be attentive, responsive, and respectful towards the particular "circumstances and tastes" of those engaged (2005). In particular, the concept of responsiveness calls for ongoing dialogue among those who would engage in care in order to discern the precise nature of their needs, and to monitor the effectiveness of the caring activities (Engster 2005). In acknowledging care for someone or something we are obligated to ask: How will care occur, and for whom or what? Who will do the work of caring? As researchers, what are we encouraging care for? (Puig de la Bellacasa 2011). Focusing on concrete acts of care rather than adherence to abstract ethical principles or allows us to consider how we might develop a new mode of accounting that considers and assess the realization of more-than economic goals by food hubs and other AFN enterprises.

In summary, I propose that food hubs are best understood as a form of postcapitalist enterprise. What distinguishes a post-capitalist enterprise from their

conventional counterparts is the intentional proliferation of economic diversity that fosters the development of community economy. Snyder and St. Martin stress that community economy is comprised of "economic concepts and practices that foreground community and environmental wellbeing" (2015:46). By extension, we can understand community agro-food economy as consisting of a wide array of economic activities that foster the wellbeing of an agro-food system as a whole. I further submit that this proliferation of economic diversity is a product of tensions and negotiations regarding the ethical praxis of the enterprise, and that those negotiations are founded in matters of care.

CONCLUSION

Instead of applying readymade social constructs to our exploration of food hubs (or any values based enterprises) I suggest that we as social scientists need to engage in exploratory thinking with food hubs (Gibson-Graham, 1996). Through a 'performative ontology' social scientists can translate the common sense implicit in the stories of the food hubs collective struggles to care for their communities into the good sense of a framework for building community agro-food economies (Callon 2007; Gibson-Graham 2008; Hill 2014). As the case studies and discussion illustrate, care and its realization is necessarily contingent, and cannot be forced into an easily replicable model. Explicitly integrating a central animating matter of care into our understanding of both food hubs specifically, and post-capitalist enterprise generally, thus works against the rationalizing forces that invariably come with surviving in the midst of contemporary capitalism (Callon 2015; Mitchell 2008). This is consistent with a notion of care, as Puig de la Bellacasa states: "Care eschews easy categorization: a way of caring over here could kill over there. Caring is more about a transformative ethos than an ethical application. We

need to ask 'how to care' in each situation."(Puig de la Bellacasa 2011:100). Care, in its particular manifestations, is not universal; it is not fungible, and cannot be easily exchanged across locations. Care can be a function of economic exchange, but not easily exchanged through economic means.

The particular challenges faced food hubs are 1) How to realize specific forms of community oriented care through the mundane (yet still extraordinary) labors and processes of food distribution, and 2) How to effectively account for those mission-driven activities within the structure of the enterprise, and to their stakeholders. Which is not to say that market based, revenue generating activities aren't also essential; the leaders and employees of the food hub case studies presented have their own economic necessities, thus existing in the "awkward position as activists making a living off their cause" (Rogers and Fraszczak 2014:321). In this food hub are, perhaps, and example of Law's hopeful monsters; "places where the necessary incompatibilities, inconsistencies and overlaps come gently and creatively together."(Law 1991:17). If we seek to realize new economic futures, if we have a "speculative commitment to contribute to livable worlds" (Puig de la Bellacasa 2011:100), then our contribution as social scientists can be the care and protection of the new ideas and language that are essential in the realization of those new worlds.

CHAPTER 4: MEETING IN THE MIDDLE: SCALING UP AND SCALING OVER IN ALTERNATIVE FOOD NETWORKS

INTRODUCTION

An old farmer adage says that what you lose on margin you can make up in volume. However, for mid-sized farmers in the United States this is increasingly not the case as they continue to fall through the gaps in the agro-food system. Too small to compete in global commodity markets governed by economies of scale, these farms are also too large to subsist on the volume of sales possible via their local farmers markets, thus falling into a phenomena scholars refer to as a crisis of agriculture of the middle (Kloppenburg, Hendrickson, and Stevenson 1996; Stevenson et al. 2011). Straddling the realms of direct marketing and conventional wholesale markets, food hubs have the potential to provide key services and opportunities to mid-sized farms who fall in this gap.

The USDA defines a food hub as a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand (Barham, Tropp, Enterline, Farbman, John Fisk, et al. 2012). Noting the "skyrocketing consumer demand" for local food, United States Secretary of Agriculture Tom Vilsack identified food hubs as offering "critical" services to farmers, and stated that the success of food hubs "comes from … sound business sense and a desire for social impact" (USDA 2013). The volume of sales possible through a food hub, as well as the price premiums available in alternative markets promoting 'quality' (local, sustainable, healthy, etc.) (Mount 2012), provide partial solutions to the challenge of

vertically integrated, large economy of scale markets that are squeezing mid-sized farms out of the food system (Kirschenmann et al. 2008).

Food hubs are also identified as playing a key role in 'scaling-up' Alternative Food Networks (AFNs) by expanding the social, economic, and environmental impacts that smaller scale AFN outlets like farmers markets and community supported agriculture are believed to provide into new areas of the food system (Hardy et al. 2016). Across public and scholarly work the goals of scaling-up are identified as: expanding ideologically driven (social, environmental) impacts of AFNs (Connelly 2010), improving accessibility of 'good' food for consumers (Farnsworth et al. 2009; Friedmann 2007), and/or the more straightforward proposition of increasing sales to meet the growing demand for 'local' foods (Clark and Inwood 2015). While community based organizations, researchers, and government agencies readily adopt 'scaling-up' as a goal for AFNs, there is no consensus on the particulars of what constitutes scaling-up in practice (Blay-palmer et al. 2013; Clark and Inwood 2015; Farnsworth et al. 2009; Lev and Stevenson 2011; Mount 2012). Moreover, mid-sized producers positioned to both contribute to and benefit significantly from scaling-up AFNs will face significant and little understood challenges if they are to contribute to this goal (Mount 2012).

Through a brief review of the current scholarship on scaling-up AFNs, I suggest that scaling-up is both an objective process between enterprises, and a subjective and contingent process among actants within an agro-food network (Jarosz 2008). I then present a case study of mid-sized farmers who participate in food hubs, and explore how these farmers navigate processes of scaling-up both relative to their participation in a food hubs, and within their individual farms. I conclude by suggesting that in order to

effectively develop local food systems, we must recognize that Farmer and Farm are not monolithic categories, and I call for further research into the unique experiences of midsized farmers who are both scaling-up and scaling-over to participate in regional food systems.

REVIEW OF SCALING-UP SCHOLARSHIP

Alternative Food Networks is a framework used by agro-food scholars to describe a broad range of initiatives that focus on creating new spaces of agro-food economy outside of the conventional food system that promote: the fair the distribution of economic value (surplus) throughout the food supply chain, equal access to 'good food' by all community members, and transparent and democratic management of food production and distribution within the community (Jarosz 2000; Tregear 2011; Whatmore, Stassart, and Renting 2003). Values-Based Value Chains (VBVCs), which include food hubs, are a variation of AFNs that work to extend the impact of AFNs beyond direct marketing and move products differentiated by quality and/or non-financial value (e.g. environmental sustainability, 'fair' pricing to farmers) across regional or national wholesale distribution systems (Clark and Inwood 2015; Renting, Marsden, and Banks 2003; Stevenson and Pirog 2008). The complications and contradictions of seeking to realize social, environmental, or economic change via market exchange are manifold, and they are also outside the scope of this paper (for review see, DeLind, 2011; DuPuis & Goodman, 2005; Guthman, 2004; Hinrichs, 2003). Summarizing the tension inherent in the growth of AFNs succinctly, Connelly (2010:314) states that "the key challenge facing local food initiatives is how to scale up to the point of transforming (rather than merely 'informing') the much larger conventional food system."

Frameworks describing the process acknowledge that the scaling-up AFNs occurs not through the enactment of a single entity (e.g. a food hub), but rather as a process across a network of stakeholders. Diamond and Barham (2011) identify the four key activities of VBVCs as: developing producer networks, marketing differentiated farm products, managing infrastructure, and negotiating with buyers to secure a fair return to producers. Day-Farnsworth and colleagues' further state that "scaling-up local and regional food systems requires the development of organizational and production capacity across the local food supply chain." (Day-Farnsworth et al., 2009: i). However, the emphasis on 'organizational and production' capacity does not explicitly account for the interpersonal or subjective dimension of the network building (Carolan 2005; 2006). What's more, common frameworks for the *practice* of scaling-up local food systems focus almost exclusively on technical, regulatory, and financial capacities within the network such as: access to capital (Barham, Tropp, Enterline, Farbman, Fisk, et al. 2012), cold-chain infrastructure (Fritz and Schiefer 2008) or enterprise budgets (Matson et al. 2013; Vanderburgh-Wertz and Ram Moraghan 2014). Furthermore, while the participation of mid-sized farmers in the project of scaling-up AFNs is assumed in these analyses, it is by no means given (Mount 2012).

As Mount (2012) astutely argues, reductionist approaches to scaling-up assume that the benefits to farmers participating in farmers markets and other direct marketing channels of AFNs are scale-neutral, and will thus invariably accrue to mid-sized farmers in scaled-up ventures. Researchers studying the confluence of the crisis facing mid-sized farmers and the significant growth of values-based value chains argue that "addressing the needs of agriculture of the middle requires the pairing of different kinds of supply chains with different kinds of products." (Diamond and Barham 2011:102). Said another way, they suggest that agriculture of the middle requires value chains *of the middle*, and vice versa. Mount (2012: 117) calls specifically for further research in into the experience of mid-sized producers who participate in the scaling-up of AFNs, stating that it "is necessary both to understand the barriers and adaptations that are required of the participants, and to clarify the relevance of local food for these commodity-producing farms." If mid-sized farmers need food hubs, and food hubs need mid-sized farmers, we need to understand better the dynamics of those interactions and relationships.

Studies of national and international scale VBVCs that work with mid-sized farmers specifically underscore the critical importance of strong relationships and trust between stakeholders to their long term viability of and efficacy (Campbell and MacRae 2013; Carolan 2006; Jarosz 2000; Morris and Kirwan 2011; Pirog and Bregendahl 2012). Stevenson and Pirog (2008) assert the importance of "process-based trust", meaning the fairness and consistency of the value-chain's formal procedures and processes (Dyer, 2000, p. 180 cited in Stevenson & Pirog, 2008). Individuals in a supply chain come and go, thus rendering trust fickle or contingent. In a later study, Lev and Stevenson (2011) found that midsized producers moving into VBSCs require a significant degree of what they term "acting collectively", or mutually supporting social relations among stakeholders in the value chain. Similarly, Rogers and Fraszczak (2014) conclude that interpersonal contact not only strengthens value chain relationships, but may also enhance loyalty and further enrollment of producers in the work of the AFN. Taking together, these studies suggest that the objective and subjective processes of a VBSC and AFNs are inseparable.

Rather than taking the participation of mid-sized farmers for granted, we need greater understanding of their motivations, deterrents, challenges, and opportunities relative to their participation in food hubs specifically, and AFNs generally (Mount 2012: Stevenson and Pirog 2008). In the rest of this paper I will seek to show that this means not just developing scale-appropriate logistics and infrastructure, but also careful consideration of what the negotiations and relationships between mid-tier AFN stakeholders look like. This study engages a preliminary exploration of scaling-up from the perspective of mid-sized farmers; asking who they are and where they come from (historically, economically, and subjectively) before exploring the particulars of their experience of scaling-up via their participation with a food hub. By exploring the experiences of mid-size farmers participating in food hubs, this paper seeks first to contribute insight into how food hubs can best support and assist mid-sized farmers, and second to leverage those insights towards a greater understanding of the broader project of scaling-up AFNs.

CASE STUDY

The profile that follows is a drawn from interviews conducted with mid-sized farmers selling to two food hubs (one located in Louisiana, one in South Carolina) as part of a larger study of food hubs in the Southeastern United States. A total of 20 farmers were interviewed for this study These farmers were chosen in consultation with food hub leadership because they were engaged in farming as a primary source of livelihood and because they were actively supplying the food hub. Data for this analysis is drawn from in-depth, semi structured on-farm interviews. Interviews lasted between two and four hours, included one or two principal operators of the farm enterprise, and in one case also

included two representatives of a small grower's cooperative. Additional in-depth interviews for this larger study were conducted with food hub staff and leadership, the full findings from which are presented elsewhere (Brislen, Forthcoming), but which contribute to the findings presented in this paper. Transcripts were generated for all interviews, coded via an iterative process along axial codes of: personal history of the farmer, history of the farm enterprise, motivations for participation in the food hub, opportunities and challenges of working with the food hub (Corbin and Strauss 2008).

PROFILE OF THE FARMS AND FARMERS

As might be expected, the financial benefits of expanding into wholesale markets were a leading factor for all of the farmers interviewed in this study choosing to participate in a food hub. In particular, a uniting theme was the function of food hub sales as a kind of holistic risk mitigation strategy for the farm enterprise. In a similar vein, a notable finding of the interviews is that of the twenty farms interviewed, only two reported that sales to the food hub were their first foray into a non-conventional market outlet, though diversification into several non-conventional markets within a short time span was common. Additionally, none of the farms utilized a food hub as their soul market outlet, or even a majority outlet for farm sales. Recognizing that food hub sales are one of several strategies that farmers use serves to situate food hubs within a broader phenomenon of scaling-up that is not dependent on one market outlet, but rather the simultaneous growth or expansion of a number of outlets across AFNs (Mount 2012).

A common challenge for all the farmers profiled in this study was the search for a scale of production that was financially robust and which aligned with their vision for

'good' farming. However, the definition of 'good' and the scale of production necessary to be successful varied between farmers, and the farmers interviewed for this study fell into two broad categories of farm/farmer type: heritage and first generation. In the section that follows, I will describe the distinguishing characteristics of the two categories, and elaborate how heritage farmers used food hubs to diversify beyond commodity markets while first generation farmers used food hubs to diversify beyond direct market outlets.

HERITAGE FARMERS AND FARMS

Fourteen of the twenty farmers interviewed are classified as heritage farmers, meaning they were raised on a farm, and/or are currently farming with a family member (Brislen, Tanaka and Jacobsen 2016). While most took over the farm enterprise directly from the previous generation, four of these fourteen farmers had worked their way back into farming after the previous generation exited farming:

"I never really quit with the idea that I was going to farm even though everybody kept telling me not to and all. I saved just enough amount of money to buy a little bit of the land back."

Only two heritage farms came from a history of produce production. Ten farmers of the heritage farmers were formerly involved in conventional commodity production, including cotton, rice, sugar cane, broiler chickens, corn and soy. Of these former commodity farmers, five made the decision to differentiate and find a market for a specialized or niche version of the commodity: organic or heirloom rice, fluid milk bottled on site and made into cheese, sugar cane made into syrup rather than sent to the sugar mill. Four farms transitioned fully out of commodity production and into produce

production. Two farms simultaneously operate conventional commodity and specialty or niche production.

The motivations of heritage farmers to work with the food hubs, and AFNs generally, track closely with scholarly literature describing the process of squeezing out agriculture of the middle (Lyson and Guptill 2004; Lyson et al. 2008). While not as drastic or discrete as the experiences of phenomenological rupture described by Michael Bell (2004), these farmers shared a common story of disenchantment with the business as usual of conventional agricultural markets. These farmers experienced a kind of diseconomies of scale in the conventional commodity market, and came out the worse for wear:

"We grew thousands of acres of cotton. And after years of beating myself to death in stress and work and trying to get bigger and bigger and bigger... After it was all said and done we were averaging about \$16,000 a year."

Thus these multigenerational farmers saw the food hubs as an opportunity to diversify beyond commodity markets and the risk inherent in them.

True to the principles and practices of VBSCs, farmers cited the ability to develop and maintain mutually beneficial relationships with those who would buy their farm products as a key appeal of the food hub. They reported a strong appeal of a market system that allows for greater transparency and collaboration among stakeholders:

"I saw the fall in commodity prices coming at some point and we needed another crop to help. Something that no one in China or on the Chicago Board of Trade could control. It was strictly between me the grower and the consumer, and if we got together on the process no one else could force us up or down." Rather than being ideologically driven to construct a farm enterprise that aligns with the environmental or social values of AFNs (Allen et al. 2003; Bell 2004), these farmers are drawn to the food hub as a means to survival.

While expressing a general interest in food hub sales as a form of economic risk management, heritage farmers also have a distinct understanding and experience of risk. Namely, what's at risk is family heritage:

"We've had to look at it differently because we've been very land rich and cash poor. I'm seventh generation on this plantation and I've got to figure out how to keep it going to the next one... and sometimes you got to think out of the box to get that done."

These producers are quite literally thinking about seven generations, just not necessarily in the same way that other AFN participants do. Leaving the "devil they know" of conventional markets (and the access to government programs that come along with it) for the "devil they don't" of specialty produce and a regional market is not only objectively risky, but fraught with subjective changes (Carolan 2006; 2005). I offer that these farmers engaging in a process that is both materially and subjectively distinct from first-generation and smaller scale counterparts. Rather than scaling-up production to produce larger volumes of product for wholesale buyers, these growers are working to *scale-over* their already large scale of production in to new specialty markets and alternative outlets.

To change from commodity production to participation in AFNs (either by changing o produce or other specialty crop production) also requires leaving that highly developed network of technical, financial, material, and social support behind.

Describing the multi-dimensional nature of this risk, one farmer stating: "[My father], he was still real, standoffish about it. Well, there isn't any guarantees. There isn't necessarily the crop insurance to help you in case of a disaster."

Considering the relative risk that scaling-over to AFNs represents for heritage farms, food hubs can serve as a kind of proof of concept for non-commodity farming: a dedicated market outlet can allow the next generation of farmers the opportunity to experiment: an opening for a new way to think about farming. Additionally, the opportunity to negotiate price directly with food hub staff allows farmers the position of being a price 'maker' rather than 'taker', often for the first time.

FIRST GENERATION FARMERS AND FARMS

Six of the mid-sized farmers interviewed fell into a general category of firstgeneration farmers; some came to farming as a second career after military or private sector employment, and two undertook farming as their first career. These farmers reported that they were drawn to farming because of the ideological appeal of farming as a vocation, citing the appeal of independence and self-reliance, connection to natural systems, contributing directly to the health and wellbeing of their community. All of the first-generation farmers entered directly into produce production, and all engaged in a variety of direct-marketing programs (farmers markets, you-pick, Community Supported Agriculture) before adding sales to a food hub to the mix.

First-generation farms were of a smaller scale than the heritage farms (both financial and in terms of the literal size of the operation), and used participation in the food hub as a way to expand their sales while still relying principally on direct-marketing outlets. These farmers expressed a desire to increase sales as a means to stabilize the enterprise both through more stable revenue, and by hiring employees to better manage labor demands of farming:

"I would like to be able to buy another 10 acres of production land... And to set it up to make it more of a real business with a couple of the employees. Where it's not just totally reliant on me and mom everyday no matter what. I mean, it's producing more, selling more of everything and just making sure we stay with our head above water..."

The choice by first-generation farmers to expand their enterprise into food hub sales was informed in part by the financial necessity to increase revenue, but also as a form of risk mitigation against such factors as uncertain farmers market sales and low retention rates among CSA subscribers. A number of these farmers reported a perceived saturation of the farmers markets and CSA markets in their area, and saw food hub sales as an important component of their economic diversification strategy.

Discussing the experience of selling to both farmers markets and a food hub, these farmers agreed that both outlets were valuable to their enterprise:

"Both of them have their good and bad. It's really easy to get everything loaded up and delivered to [the food hub]. You don't have to do anything else. You're going to sit at the farmer market some days and you think, boy, this wasn't worth a day. I mean, you got to look at in totality."

In the absence of robust federal agricultural insurance programs for small and mid-sized farmers and for diversified specialty crop producers in particular, market diversification is one of few strategies these farmers can undertake to buffer their enterprise against both economic and natural-disaster related risk.

BUILDING TRUST AND RELATIONSHIPS

For all the farmers, there was a delicate balancing act of growing in step with their production ethos, and finding the best mix of market outlets to mitigate risk while not spreading themselves too thin. Overall, food hubs were seen as providing a key connection to dense urban markets that would are technically and/or practically challenging for farmers new to regional food systems to access. As described by one heritage farmer:

"[Out here] you can only access the Farmers' Markets over here, only so much that the restaurants and stores and like the rural small schools and stuff. That's where the food hub has really helped me..."

However, the food hubs weren't the sole or even primary outlet for any of the farmers, nor did the farms or the food hub managers wish for that to be the case. Through this we see that part of the scaling-up process necessarily involves diversifying relationships at all points of the AFN.

Making the move to enter wholesale produce production requires an immense amount of trust on the part of producers that the food hub staff and leadership will live up to the promises they make. Asserting his trust for the food hub staff, one farmer stated: "They've always been able to move whatever they say they can move. And I always have been satisfied with the price." It is one thing for food hubs to say 'we're here to help family farmers' – it's quite another thing to prove that they are committed long-term to deliver all that 'helping farmers' requires. As Carolyn (2006: 328) notes, "trust is more than merely what people say. It also must be understood in the context of what people do." For larger scale, and more established heritage farmers, the challenge is not

expansion of their production, as they reported that land and equipment are readily available, but confidence that they will be able to access enough markets to absorb all they can produce and generate the revenue that the farm enterprise requires:

"[The food hub] said that they would really like us to be a part...because no one else in the state that they knew of was going to do the type of volume that I was considering doing, and being able to meet their demands for packaging and timeliness and stuff like that. They were a big part of me pulling the trigger and actually going for it."

For these food hub farmers, making good on the promise to 'move what they say they'll move' is the first crucial step. It shows producers that they won't be left on the hook with a truck load of winter squash and nowhere to sell it.

Beyond following through on purchasing commitments, farmers identified regular and clear communication with food hub staff about all aspects of the relationship as a valuable component of trust:

"You got to communicate with me, I cannot work without communication. I'm used to talking to [the food hub produce buyer], and [they're] used to talking to me. We communicate, now we understand one another... We communicate and that means you can trust me, and I will trust you."

In an operation with as many variables and moving parts as a food hub, it is easy to understand the paramount importance of robust, two-way channels of communication. Not only do producers need to understand the particulars of the order they have committed to delivering, but they're also looking to the food hub to keep them abreast of evolving market conditions so they can get the right product in the ground. In turn, the food hub staff rely on those growers to update them on growing conditions and to communicate honestly and in a timely manner if for any number of reasons (bad weather, poor seed germination, or devastation from a pest) the farmer will not be able to follow through on an order. Because food hubs are committed to sourcing from within a specific geographic region, and thus from a limited set of farms, good communication with each farmer is essential.

Farmers also suggest that participation in a food hub can help open doors to other more traditional wholesale buyers, in particular grocery stores. These farmers report that some traditional wholesale buyers see successful participation with the food hubs as a capacity-building step that reassures the buyer that the farmer is sufficiently familiar with industry standards and a reliable supplier. The food hubs included in the study provide various forms of assistance to aid the transition to wholesale specialty crop production either from raising commodities or from small-scale produce production, as much of the technical assistance needed is similar across all farmer types. This support includes education on post-harvest handling, coordinating one on one consultation for food safety certification, referrals to technical assistance providers like cooperative extension agents, and facilitating bulk purchasing of key supplies like cardboard boxes.

Of particular importance for both the food hubs and farmers is pre-season production planning. This includes not just negotiations on how much the farmer will plant for sale to the food hub, but a broader conversation that decodes urban food ways and informs producers on what's in demand and why – e.g. suggesting 'baby' collard greens in demand by chefs that need to be harvested earlier. This kind of knowledge exchange is an important 'value add' that food hubs bring to the relationship.

FARMER, FARM, AND FARMING

All of the farmers interviewed demonstrated a strong sense of pride in what they produced, and saw their farm's products as a reflection of their personal values. For some this manifested in their choice of production methods that aligned with their environmental ethos, while for others the choice of specific product or commitment to producing for their community was most important. There appeared to be a subjective opening that occurs when former commodity growers make the shift to growing food rather than commodities. As one former commodity grower observed, "you treat things differently when you [grow and] processes it yourself. When you're responsible for [the final product] you just don't look at it the same way, you really don't." These producers appeared to be drawn to products that reflect the history and heritage of farming in their region, and the farmer's personal food ways: historic rice varieties that were the foundation of the Carolina colonial agricultural economy, a petite heirloom boiling peanut beloved by the grower for its sweet taste. A farmer who continues to engage in commodity production shared the following heartfelt story about his choice to set aside a few acres for heirloom beans to sell to the food hub:

"You know growing up all my life, Gramama would put three butter beans in the hole and I would push each one of them with my hand and cover it up. And she would say 'that's good bubba'... I've always love them. So once we moved over here with all this irrigation, I just had to try."

The choice to produce these foods was not purely economic or 'market demand' driven, but tied into more culturally contingent factors. While just over half of the farmers interviewed (eleven) expressed an explicit commitment to environmentally sustainable production methods, every farm interviewed expressed a strong attachment to the quality and reputation of their farm's product. For the eleven farmers who identified environmental sustainability as a key component of their enterprise, the exact attributes or practices varied significantly between farms. Only three farmers were certified organic, and the eight other farmers stated they were engaging in 'natural', 'chemical free' or otherwise sustainable production practices as they understood them. Underlying environmental ethos for some farmers were based in concrete concerns for individual human health: "Well basically, you just look around, and when anybody talks to you either them or somebody in their family had cancer...that's including myself." While others were linked to overarching critiques of industrial production methods: "T'm not using chemicals. For me it's not because I think it will sell better, it's because I don't want to poison the earth any more than it already is, and I don't believe it's necessary."

Farmers who did not explicitly identify as environmentally sustainable felt confident in their production choices, and identify, as one farmer phrased it, as "conventional with a conscience." These farmers report that they do receive queries from both wholesale (e.g. food hub) and direct marketing customers about their production methods. Resistance to requests to transition to organic or other sustainable methods is based not on ideological or ethical opposition, but practical concerns. They assert that they are doing the best they can given the region's hot and humid growing conditions, the availability of labor, and the scale of production they need to remain financially viable:

"I have had people who beg me to do organic stuff. I've thought about it, but I can't afford to have land three years out of production. [Plus] I don't have enough time to cultivate every third day or whatever...It's all we can do to make a crop when we throw everything at in and the kitchen sink."

The predominance of non-certified sustainable production among food hub producers as well as the notion of "conventional with a conscience" are noteworthy. While outside of the scope of this study, both phenomena warrant further study as to the processes by which self-prescribed parameters of sustainability or "conscience" conventional production are constructed and negotiated both within the farmstead and among farmers and their buyers.

DISCUSSION: SCALING-UP AND SCALING-OVER

Among the mid-sized food hub farmers profiled, I observed significant variation among the personal and enterprise history, scale of operations, and production ethos of farmers. Instead of an undifferentiated group of mid-sized farmers with a common scaling-up experience, the needs, benefits, philosophy, and assets of farmers varies with a number of dimensions of their personal and enterprise history. Specific to environmental outcomes, there was a wide variance regarding what constituted sustainable practices, and low levels of certification or other verification of production practices. These factors informed a variety of motivations for participating in a food hub, as well as their economic, material, and subjective experience of 'scaling-up'. While the financial (i.e. sales) opportunity afforded by the food hub was the leading factor in all farmers' motivation to work with the food hub, the choice was also simultaneously informed by a variety of non-financial factors: perceived risks of both staying in or leaving the conventional agricultural system, technical challenges of engaging in new kinds of

agricultural production (e.g. produce), personal beliefs regarding what constitutes 'good' farming.

Acknowledging the differences between kinds of mid-sized farmers will be important for the continued development of food hubs, and to broader efforts to scale-up AFNs. Mid-sized farmers are undergoing distinct processes of growth or adaptation, with their own unique sets of challenges and negotiations of which the food hub is but one component. While smaller producers can help round out a food hub's product offerings (e.g. providing meyer lemons that chefs love from a handful of trees), the backbone of a food hub's offerings come from mid-sized producers who can be counted on to provide consistent volume of quality product (Diamond & Barham, 2011). Mid-sized farmers who have historically participated in the conventional agro-food system already operate at a financial and material scale of production necessary to supply wholesale markets. These farmers don't need to grow more (scale-up) they need to grow differently (scaleover).

In the introduction I discussed distinctions between processed-based and interpersonal trust in the development and enactment of VBVCs (Rogers and Fraszczak, 2014; Stevenson & Pirog, 2008). For the farmers in this study, trust of the food hub is based not only on following through on economic agreements (process), but also through demonstrating a commitment to work with the farmer outside of the terms of economic exchange (interpersonal). Technical assistance and social/cultural knowledge sharing both played an important role. I further suggest that the trust exhibited by these mid-sized farmers is intrinsically linked to its inverse: risk. To confer trust in a person, an

organization or a process implies that one is conceding vulnerability to the risks born out of the possible violation of that trust.

While farmers moving out of conventional agriculture may not initially share the non-financial values of AFNs (e.g. environmental sustainability, social justice), they do come to AFNs and food hubs with their own set of non-financial values. The heritage farmers in this study were motivated by concern for the family's agrarian heritage, as demonstrated in their motivation both to preserve the family farm and in their choice of culturally or historically significant crops. Understanding what is at risk for mid-sized farmers, and how it is placed at risk when scaling-up or scaling-over, will be essential to the continued development of AFNs. The collective, collaborative nature of successful VBSCs requires the consistent enactment of trusting and respectful relationships; and these intersubjective ties might in turn foster the enrollment of value chain members in the broader project of scaling-up AFNs in the most holistic sense.

CONCLUSION

While the process of scaling-up AFNs is multi-dimensional, the discourse and practice of scaling-up has become synonymous with developing a food hub or other wholesale value chain; a singular entity or value-chain that stands in for a much larger and complex network of actants. In this paper I have suggested that in the practice of scaling-up AFNs we risk conflating the part (the food hub or values-based food enterprise) for the whole (the food system). In particular, I suggest that in order to increase the scale and scope of AFNs, we need further research and consideration of the unique experiences of the mid-sized producers who provide the 'good food' upon which scaling-up depends.

Agro-food scholars and AFN advocates too commonly refer to 'family farms' or 'small farmers' as if they were a monolithic category of social actor. Because of this, we continue to approach the development of local food systems with a Field of Dreams mentality – if we build market demand, the alternative farmers will come. Yet the findings of this study indicate that the economic, geographic, and cultural history of the farmstead play a significant role in what growth and change are materially, economically or socially possible; what is seen as feasible or desirable by the farmer(s) (Bell 2004). In this profile of food hub farmers, I offer that we see not one process of scaling-up, but several parallel processes of meeting in the middle; a process both of scaling-up production for new entrant farmers, and scaling-over for established, multi-generational farms moving out of commodity production.

The promise of AFNs has always been for a food-system that delivers more than just market demand (Mount 2012; Renting et al. 2003; Tregear 2011). Rather than an exclusive focus on materially or logistically focused process, an effective framework for the scaling-up should consider how to improve the ability of all partners in the agro-food network to 'make a living' (Watts, Ilbery, and Maye 2005) while also increasing the entire networks' overall stock of non-financial values such as social justice, environmental health, and community vitality (Renting et al. 2003). By fostering the growth of community agro-food economies, food hubs create space for the exploration new forms of agricultural knowledge and realization of new ways of being a farmer (Carolan 2006). Transitioning to work with food hubs requires these farmers to do farming differently, and by doing farming differently, they become a different farmer (Bell 2004, Carolan 2006). While not dismissing the importance of addressing

organizational and technical capacities, I suggest that 'scaling-up' – growing the breadth and depth of alternative food networks and their associated ethical values- will also require building new knowledge, new relationships, and new ways of being for all members of the food system, and farmers in particular.

CHAPTER 5: CONCLUSION

OVERVIEW

Months after the doors had closed and the equipment had been sold off, after finding new jobs, new CSA's to subscribe to, or even years after a farmer had walked away from the enterprise, I watched as a slow well of tears threatened to overwhelm the eyes of interview participants retelling the story of the life (and demise) of a Louisville Kentucky based food hub. These were not tears for financial loss or professional hardship, but rather a common sentiment of how fervently they wanted the food hub to 'work', how much Kentucky "needs this." A year later, on a crisp and sunny winter day in South Carolina I sat on a picnic bench with a staff member from Grow Food Carolina. After asking what they felt purpose and role of Grow Food is in the community, I listened as their voice waivered and brow furrowed. "I'm seriously worried that no one is going to farm anymore! If we don't do something soon, we're not going to have any more farmers."

Over the course of studying three food hubs for this dissertation, I regularly witnessed deeply emotional responses from both food hub employees and farmers to the ostensibly mundane work of produce wholesaling. In writing the three papers compiled in this project, I grappled with the insufficiency of standard analytical and theoretical frameworks for understanding food hubs, and the experiences of the stakeholders who engage with them. Neither wholly capitalist or anti-capitalist, conventional or alternative, the actors engaged in the work of food hubs are promiscuous in their economic, philosophical, social, emotional and environmental doings (Mount 2012; Gibson-Graham 2011)

The theoretical work of agro-food studies can at times feel far removed from the application. While debates over the relative conventionalization of or neoliberal rationalization of alternative food networks are academically productive (DuPuis and Goodman 2005; Guthman 2008; Lockie and Halpin 2005; Renting et al. 2003), they do not easily or necessarily translate into recommendations for community practitioners seeking to foster new sources of livelihood for mid-sized farmers or new means to access healthful foods for marginalized communities. The challenge I undertook in this dissertation was to find ways to use the theoretical insights to inform practice of building community agro-food economies (Dixon 2011). In that sense I liken myself to a mechanic rather than an engineer; testing theoretical tools developed by others in the field and reporting on the usefulness (Callon 2007). I seek to understand how theoretical frameworks help or hinder individuals as they come together to act collectively towards a shared vision for a just and sustainable agro-food system.

The case studies presented in this dissertation are a view from the trenches, an attempt to speak to the lived experiences of those individuals actively working to build community agro-food economy. Taking the call to work against left melancholia to heart (Hill 2014), this project represents my best effort to engage in a mode of critique that is simultaneously analytically rigorous in its formation, fearlessly optimistic in its implementation, and pragmatic in its recommendations. Perhaps not surprisingly, optimism is the most challenging of those mandates to maintain. There is a necessary (and frightening) vulnerability in optimism; to make room for hope one must also remain open to failure. In practice my optimism took the form of curiosity; what might I learn if I engaged food hubs and their stakeholders on their own terms without a predetermined

framework of skepticism (Law 2004b). How could I engage in this optimistic curiosity while not simultaneously succumbing to naiveté? To conclude this project, I'll present a synthesis of the key themes that tie together this dissertation. Drawing on those themes, I then conclude this chapter with recommendations for future work for both researchers and food system practitioners.

SYNTHESIS

Throughout this project, my aim has been to explore what the unique contribution that applied social scientists might be to fostering the growth of community agro-food economies. A shared interest of the three papers presented in this dissertation is the hybrid or multi-dimensional nature of food hubs, particularly in that they are a form of market-facing enterprise that simultaneously seek to realize non-financial (social, environmental) goals. This investigation was structured by three overarching research questions:

Question 1: How do food hubs identify and negotiate the meaning of non-financial goals? How are those goals operationalized in specific food hub practices or policies?

Question 2: In what ways do the non-financial goals conflict with or complement the market based activities and financial viability of the food hub enterprise?

Question 3: How successful are food hubs in realizing their economic, environmental, and social goals with regards to participating mid-sized farms?

Through the history of Grasshoppers Distribution (Kentucky), the ongoing activities of Grow Food Carolina (South Carolina) and Hollygrove Market and Farm (Louisiana), and the farmers working with those food hubs, I explored that multidimensionality by tracing the objective and subjective, financial and non-financial, material and non-material factors that shape the formation and evolution of food hubs (DeLind 2011; Goodman, Dupuis, and Goodman 2011; Sonnino 2006). I offer that a food hub is not a standard business model attuned to the capitalist market place that can be replicated endlessly without concern for context. Nor is it an engineered economic machine that can be purchased and upgraded with sufficient capital to solve straight forward problems. Through this project I have come to understand food hubs as a form of post-capitalist enterprises which contribute to the community agro-food economy through an ethical praxis of care.

There are both openings and limitations that come with a market-based strategy for reforming the agro-food system (Bloom and Hinrichs 2010; Guthman 2008; Hinrichs 2003). Through the failed-case study of Grasshoppers Distribution, I concluded that the key challenge facing food hubs is how to reconfigure relationships among food hub collaborators in order to achieve desired non-financial outcomes which are, in part, dependent on financial dynamics. I suggest that the essential role of collaboration and interdependence among supply chain partners is a key distinguishing factor that demonstrates food hub's partial resistance to neo-liberalization of the agro-food sector (Harris 2009).

A second and closely related goal of this project was to gain a better understanding of the methods or processes by which non-financial goals are identified, negotiated, and realized by values-based enterprises. To this end, the second paper asked what could hold together an enterprise when the rapacious drive for capital accumulation is removed. By identifying key similarities and differences between the case studies of

Grow Foods Carolina and Hollygrove Market and Farm, I identified the key commonality of an ethical praxis founded in care (Puig de la Bellacasa 2011, 2012; Tronto 1993)I began the process of elaborating the characteristics of the of post-capitalist enterprise. Through the case studies. I suggest that the diverse origins and configurations of food hubs and their ethical/caring praxis are a source of resilience for this form of postcapitalist enterprise (Hill 2014; Trauger and Passidomo 2012). Because the realization of care is itself contingent (Puig de la Bellacasa 2012), an emphasis on care is a means to resist the economic homogenization that capitalist economic rationalization seeks to enforce.

The diverse economic openings created by the ethical praxis of food hubs, alluded to by the findings of chapters 2 and 3, are observed in the phenomenon I label 'scalingover' among mid-sized farmers transitioning out of conventional agricultural markets and into participation in projects in community agro-food economy fostered by food hubs. Because the ethical praxis of food hubs engages both financial and non-financial means, it creates the opportunity to engage stakeholders who are experiencing economic marginalization, and further enroll them in collaborative endeavors to realize nonfinancial goals. This phenomenon occurs with mid-sized farmers who come to the work of food hubs (and thus community agro-food economy) from different historic, economic, political and material positions but whose implicit critique of the dominant agro-food economy is born from a shared experience of economic marginalization.

Through problematizing the dominant discourse of 'scaling-up' alternative food networks I further seek to demonstrate the limits of conceiving of AFNs as a singular phenomenon, or their growth and success as a singular process (Stevenson and Pirog 2008). Challenging the popular discourse of 'scaling-up' AFNs, this study shows that there is not one, but many simultaneous processes occurring in the development of community agro-food economy. In this instance growth or development of community agro-food economy does in part mean the expansion of financially driven economic activity, but also equally entails the enrollment of actors in the enactment of the full array of diverse economic activity of the food hub (which is centered on an ethical praxis of care). By focusing on generating livelihoods from within the conventional economic system, food hubs have the ability to engage stakeholders who would likely not be interested in engaging in more radical projects of re-distribution of value and resources (e.g. land). An important question remains as to whether these engagements with community agro-food economy can serve as a spring board to broader and deeper engagement with issues of justice, sustainability, or other more radical reconfigurations of the social/economic system.

CONCEPTUL IMPLICATIONS

Carrying forward the findings of this study, this study has a number of implications for future work in regional food system development and the theorization and study of Community Agro-Food Economies. Most significantly, this dissertation contributes to a new economic discourse for food hubs and family farms by troubling assumptions about the origins, central functions, and outcomes of food hubs, mid-sized farms, and the broader community agro-food economy to which they contribute. Moving forward with food hub research, and the work of community agro-food economies broadly, I argue that we must move beyond the ontologically restrictive binaries like of for/non-profit and conventional/alternative. In the following section, I will summarize the key contributions of the findings of this dissertation to the re-conceptualization of food hubs and family farmers within the frameworks of diverse economies, community agrofood economies, and post-capitalist enterprise.

Community Agro-Food Economy

A key theoretical contribution of this study is the introduction of a framework of community agro-food economy and post-capitalist enterprise for understanding and furthering the work of food hubs. An overarching theme of this study is the limits imposed by conventional/alternative binaries that persist in Alternative Food Network and broader agro-food scholarship despite acknowledgement of their inadequacy and inaccuracy (Renting, Marsden, and Banks 2003; R. Sonnino and Marsden 2006). In order to move beyond those constraints, I offer the notion of community agro-food economy, a sector-specific interpretation of Gibson-Graham's concept of community economy (Gibson-Graham 2006, 2014) In community economy, reciprocal and interdependent relationships are forged between new economic subjects through deliberate and ongoing negotiation of the process and outcomes of economic activity (Dixon 2011; Trauger and Passidomo 2012). I further suggest that 'community' in this sense is an emergent property of the practices of care and exchange in an economic assemblage born of diverse economic activities that are working, if imperfectly, though a wide array of economic activities that foster the wellbeing of an agro-food system as a whole (Callon 2007; Gibson-Graham 2008).

Food Hub

At their foundation, food hubs distinguish themselves from conventional food distributors through the mediation of financial goals by the overarching mandate to attend

to the unique matters of care that drive the food hubs non-financial mission (Diamond and Barham 2012). They are hybrid enterprises that draw on extensive partnerships with community-based organizations, government agencies, and other public and private agencies for funding and technical support. Once formed, these post-capitalist enterprises contribute to the fostering community agro-food economy through diverse economic practices such as unconventional approaches to price negotiation, collaborative production planning and market development, integration of volunteer labor, and political advocacy. Most importantly, they open the possibility for inter-subjectivity among value chain partners – though that outcome is not guaranteed, and must be continuously tended to.

Understanding food hubs as a form post-capitalist enterprise expands the universe of forms of knowledge, forms of practice and labor, and realms of value acknowledged as a component of the economic work of the enterprise: reframing some, remixing others, while also building wholly new tools and terms. What's more, partial, failed, and contradictory efforts at building community economy are efforts nonetheless, and carry their own unique lessons and insights (Healy 2015). Centering care in our understanding of the post-capitalist enterprise is a form of performative ontology – a way of thinking with the affective desires of food hub stakeholders and taking their concerns and desires seriously (Hill 2014; Healy 2009). A care-centered understanding of economic performativity is a first step towards a new accounting (affective accounting) that could foster the emergence of new economic worlds.

Family Farm

The findings of this study clearly show that 'farmer' is not a monolithic category. As discussed in Chapter 4, mid-sized farmers have a unique experience of integration into food hubs, a process both of scaling-up production for new entrant farmers, and scalingover for established, multi-generational farms moving out of commodity production. In researching mid-sized farmers we must draw distinctions between the farmer (age, race, gender, education), the farm (bio-physical properties, infrastructure, geographic context), and farming (technology, knowledge, labor). Rather than collapsing this multiplicity into a monolithic category (e.g. farms), we would benefit from acknowledging that the qualities (material, subjective, and performative) of farmer, farm, and farming are distinct, co-productive, and emergent properties of the ever-evolving farm assemblage.

A key recommendation of this study is the continued research and consideration of the unique experiences of the mid-sized producers who provide the 'good food' upon which scaling-up depends. Future research should engage in extensive exploration of the subjective (person), material (biophysical, technical), and economic (in all its diverse forms) processes that produce assemblages of farmer/farm/farming, and how they evolve with and in AFNs. In particular, the experiences of former commodity growers will give great insight into the particular opportunities and challenges afforded in and through scaling-over to AFNs. These insights can in turn inform effective technical assistance, loan or grant programs, and general outreach and engagement for a wide array of types of service providers seeking to support an agriculture of the middle.

IMPLICAITONS FOR FUTURE WORK

A key challenge moving forward for the work of community agro-food economies is the inadequacy of existing economic language to think with matters of care and talk about ethical praxis and collective desires for more-than-economic impact. In particular, limiting notions of success of viability to profit generation hamstrings the potential for innovation and transformation of a community's agro-food economy. Agrofood scholars can support continued experiments in post-capitalist agro-food enterprise and other new ventures in community agro-food economy by identifying hybrid, novel, and otherwise diverse approaches to economic practice that engage both financial and non-financial means and ends. By naming and describing new economic practices, social scientists can help create the discursive tools to further the development of community agro-food economy. Assisting in the articulation of holistic frameworks for viability or success requires attention to the contingent or contextually specific dimensions of care that can serve as a counterpoint to blind profitability put forward by capitalist economics.

In particular, as food hubs gain popularity as a 'best practice' in agro-food system development, the model also gains the attention of 'social investors.' The influx of capital investment may be inevitable. While I suggest we should not write off 'social investing' writ large, I also assert that without the analytical framework and language to talk about the more-than-financial dimensions of food hubs and other forms of post-capitalist enterprise we risk destroying those emergent properties before they have a chance to fully evolve and establish themselves. Without new frameworks that adapt to the specific community needs, or to reconfigure what constitutes viability for an enterprise the work of food hubs will quite literally become business as usual.

Much like the 'local trap' warns us not to assume that local foods necessarily carry with them any social or environmental benefit (Born & Purcell, 2006), the findings of this project also show that food hubs and other post-capitalist enterprises cannot presume that non-financial values will automatically arise from their operations. In the three hubs studied, connections between the means and ends of the food hubs' ethical praxis were rarely, if ever, explicitly articulated to the full contingent of stakeholders who are enrolled in the ethical/economic praxis of the food hubs. Intersubjective and contingent manifestations of care among stakeholders required for a vibrant community agro-food economy require intentional and continual cultivation. The contributions and responsibilities of all food hub stakeholders to the realization and manifestation of care must be made explicit and understanding cannot be presumed. We must be coconspirators of care, actively acknowledging the ways in which care is manifested and each other's contributions to it.

RECOMMENDATIONS FOR COOPERATIVE EXTENSION

The hybrid nature of food hubs and the contextually specific dimensions of farmer/farm/faming explored in this dissertation present exciting opportunities and challenges for those who work to support the growth of community agro-food economies, and in particular for the work of Cooperative Extension. A hybrid approach to service provision leverages limited financial and human resources to their highest and best use. Food hubs can benefit from hybrid modes of service provision. In particular, Cooperative Extension leadership can spearhead coalitions of service providers, public agencies, and private enterprise (i.e. food hubs) that coordinate integrated capacity building networks that leverage food hub operations as an organizing framework. Thoughtful identification

articulation of an agro-food community's unique needs (e.g. concern) is essential to effective ethical praxis for a food hub; a conversation which extension can and should be a key contributor.

Second, Cooperative Extension agents and specialists are well positioned to provide essential insight and assistance for mid-sized farmers who are exploring their place in community agro-food economies. The contributions of extension agents and specialists can keep food hubs from trying to re-invent the farmer education wheel while also identifying timely technical assistance needs that can connect directly to emerging market opportunities for producers. Engaging the distinction between farmer, farm, and farming, this study supports the expansion of farmer training and enterprise development that include considerations of personal history, philosophy, and a more-than-financial approach to identifying and engaging new economic opportunities. Because of their familiarity with both conventional agricultural systems and deep connections to the communities they serve, extension agents are well positioned to lead mid-sized farmers through a scaling-over process. In line with the need for new economic language, explicit acknowledgement by service-providers of the more-than-financial dynamics of farmers' decision-making legitimizes those values and might promote deeper engagement by farmers in the ethical praxis of their community agro-food economy.

REFLECTION

As stated earlier, I seek an approach to agro-food scholarship represents what I think of as a form of pragmatic optimism. When Gibson-Graham call for a new economic language, it is not a call for wholesale abandonment of current economic thought (Gibson-Graham 2002, 2014). Instead, it invites the enrollment of previously excluded or

newly created categories, concepts, and frameworks that add to the universe of what can be counted as economic activity (labor, exchange, value)(Gibson-Graham 2006; Harris 2009; Healy 2015; Snyder and St. Martin 2015). New economic language is the creation and negotiation of discursive space, and that takes time. The findings of this project are tentative, and hopeful. While food hubs and their participants may be imperfect in the undertaking, we can learn from the emergent properties of these experiments in community agro-food economies from to mobilize future activities.

Food hubs do more than sell local food; they create new material orderings of land, food, and humans. Built on the common structure and understanding of an 'enterprise,' food hubs evolve and adapt to the particular socio-cultural, bio-physical, and economic context of the community from which they emerged. Instead of viewing these food hubs, as discrete, bounded entities within the 'local food movement, I suggest that we engage them as assemblages- experiments in community agro-food economy. This form of diverse economic experimentation can seek out the interstices of the capitalist economy driven food system as we currently understand it and identify those cracks as points of departure, as moments of becoming for post-capitalist agro-food systems.

APPENDIX A: GRASSHOPPERS DISTRIBUTION: LESSONS LEARNED AND LASTING LEGACY

Grasshoppers Distribution: Lessons Learned and Lasting Legacy

Lilian Brislen, Timothy Woods, Lee Meyer, Nathan Routt

Agricultural Experiment Station

SR-108

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EXECUTIVE SUMMARY

OVERVIEW OF GRASSHOPPERS

Grasshoppers Distribution LLC was a food hub in Louisville, Kentucky, that was established in 2006 by four Kentucky farmers seeking to connect regional products with local markets, which grew to nearly one million dollars in annual sales of local farm products before closing its doors in December of 2013. Grasshoppers underwent many transitions in its lifetime, including five general managers, several changes in the business model, and a switch from consensus-based farmer/owner leadership to an investor-led board of directors. Over the course of its operations, Grasshoppers worked with more than 70 different food producers and directed more than 2.25 million dollars into the hands of local farmers and food entrepreneurs. Substantial public funding from state, national, and federal sources supplemented additional funds from private investors in an effort to make Grasshoppers work.

Grasshoppers Distribution as an enterprise was a true pioneer in seeking how to best promote and provide regionally produced foods in Kentucky. They opened their doors just before the onset of the Great Recession and worked to adapt to new challenges and opportunities as public interest in local food expanded at the same time the new and existing food businesses sought to take advantage of the same growing but nascent market opportunity. As such, Grasshoppers forged new paths in discovering the unique opportunities and challenges to regional food-system development in Kentucky.

This report examines the story behind the evolution of Grasshoppers and points to key challenges the enterprise faced as well as its lasting impact on the Kentucky agriculture

and food sector. It is our hope, and the hope of those former Grasshoppers stakeholders who participated in this study, that lessons shared here will support the efforts of future regional food-system development projects in Kentucky and farther afield.

SUMMARY OF CHALLENGES

Following the history of Grasshoppers Distribution, annual overhauls of its business model and the almost as frequent change of top management were central challenges to developing expertise and efficiencies. At the start of operations, there were few ready examples of successful food hubs to emulate, and a general state of undercapitalization restricted up-front investments in adequate infrastructure and expert personnel. This situation was compounded by the absence of a plan based on sound knowledge of existing supply and demand; reasonable benchmarks for growth and evaluative metrics; a lack of capacity (technical knowledge and built infrastructure) both within the organization and the regional food system as a whole; and an inclination to place the social mission ahead of the best interests of the enterprise itself. Furthermore, these factors were interlinked and served to exacerbate each other.

RETAINING AND IMPLEMENTING EXPERTISE

Finding and retaining qualified staff in key leadership roles was a significant challenge faced by Grasshoppers. This challenge was caused primarily by a lack of adequate working capital to invest in such expertise and the strain placed on a series of managers tasked with developing the enterprise. The complex business model that Grasshoppers worked to develop required a high level of expertise in a number of specialized fields for tasks such as setting up protocols and logistic systems, inventory and warehouse

management for highly perishable products, and day-to-day operations of a subscriptiondelivery service. Though the core of the business model was wholesale produce aggregation and distribution, at no point in its existence did Grasshoppers have a member of the management team or board of directors with a specific background in that type of business. High levels of staff turnover combined with frequent changes to the business model and underdeveloped supply-side capacity resulted in management and quality control issues that affected customer relations and overall performance of the enterprise.

Rather than a learning-by-doing approach to developing the business, an early investment in a staff person or consultant with intimate knowledge of fresh-produce wholesaling and supply-chain management could have been a more efficient use of financial resources for investors and mitigated the burn-out of staff and management. However, it is important to acknowledge that acquiring expert staff or services comes with significant cost and may present an early and significant fundraising hurdle for new enterprises.

CLEAR PLANS AND EVALUATIVE METRICS

While the initial values-based mission of Grasshoppers was clear in the abstract (to help small farmers and assist underserved consumers in accessing local food products), developing and implementing a specific plan for how that mission would be achieved was challenging. Frequent, almost annual, changes to the business in response to capital shortfalls and a changing market environment posed a serious obstacle to developing efficiencies and expertise within the enterprise. Without a thorough understanding of the conditions of available supply, the particular needs and scope of existing demand, and the logistic and built infrastructure required to connect those two, a significant portion of

Grasshoppers' time and capital was expended in changing the business model to address challenges as they arose.

These issues were compounded by the logistic complexity of housing several different types of business lines without the infrastructure or expertise to evaluate and achieve efficiencies within them. Grasshoppers was at various points and often concurrently operating a subscription produce box service, an online specialty grocery delivery service, a trucking service, wholesale aggregation and distribution, value-added food manufacturing, and a production consulting service for farmers. In essence, Grasshoppers never knew exactly what business they were in or how to evaluate the specific activities they were engaged in, and thus weren't able to make strategic decisions based on a unified vision.

MISSION VS BOTTOM LINE

A consistent challenge across the life of Grasshoppers was how to translate the abstract overarching goal of helping small farmers into the concrete, day-to-day reality of running a wholesale food-distribution enterprise. For the leadership of Grasshoppers, price paid to farmers was a key mechanism for realizing producer development. Many producers we spoke with recognized that the prices Grasshoppers paid, while generous, were too high and seemed at odds with a business model dependent on tight margins. Additionally, Grasshoppers' leadership adopted a policy of avoiding competition with farmers on any front within the local food market. For example, while the practice of targeting customers outside of the traditional local food market, as well as encouraging customers to join

farm-based CSAs, may have seemed ideologically important, it went against the needs of the enterprise.

DOUBLE DUTY OF FOOD SYSTEM DEVELOPMENT

Developing a high quality, diversified wholesale horticulture or custom-meat enterprise does not happen overnight and demands a highly specialized set of skills, knowledge, and infrastructure (both on the farm and off). While the enterprise was able to secure public and private funds to pay for infrastructure and operations, technical assistance was late in coming from key partners for the suppliers and customers they served. In a very real sense, the staff and owners of Grasshoppers had to build the food-system foundations on which their business was expected to stand—the necessary preconditions to support such an enterprise were simply not there.

As a values-based enterprise, Grasshoppers' mission included a broad set of social and environmental goals that motivated managers and staff to go the extra mile in providing technical assistance and general support for producers. For example, Grasshoppers' management recognized a deficiency in farmers' capacity for wholesale production and post-harvest handling, which in turn impacted Grasshoppers' ability to procure quality products appropriately packed and ready for market. To address this issue, and also as a public service, the staff of Grasshoppers conducted farm walks, assisted with production planning, and facilitated technical assistance around food safety, post-harvest handling, wholesale production, and accessing government programs. The variability of growers in size, marketing skills and production expertise required a very extensive and costly level

of support. The competing demands of these goals on staff and management's time diluted the effort on the core business needs of the firm.

SUMMARY OF FINANCIAL ANALYSIS

- Growth in debt and even involvement in grant programs changed the financial control of the firm. Producers had less and less opportunity to direct the entity as continued losses required them to have to seek outside funding to cover operating costs.
- The solvency position steadily eroded. This situation placed Grasshoppers in a difficult position as they sought to pursue new growth and market opportunities.
- Ordinary net income—revenue from the sales of products less cash expenses were always negative. This situation necessarily led to erosion of equity in the firm and the eventual closure of the business.
- Outside grant funding and creative equity financing were not sufficient to cover the ordinary net income deficits. Support for the public good dimensions was either not enough or the management and marketing challenges were too difficult to overcome to allow Grasshoppers to become a viable concern.

SUMMARY OF LEGACY

Grasshoppers was a truly innovative enterprise that forged a new path for regional foodsystem development in Kentucky. The owner/investors and employees accomplished important foundational work for the Kentucky food-system, including developing producers' skill and capacity, building consumer demand, and elevating regional foods within the local and statewide political sphere.

Consumers reported greater awareness of the variety of food products available in the region and a sustained commitment to supporting regional food system development. On a wholesale level, restaurateurs reported moving toward a more seasonal approach to their menu planning and a continued interest in working with regional food products. As a result of efforts to coordinate regional procurement, the school system changed to a sixmonth lead time on bids, which, according to one informant, "was the real game changer for access to [that] institution's buying power. Farmers could plan and plant with this sort of lead time."

The greatest long-term impact of Grasshoppers Distribution is undoubtedly in the arena of producer development. Training and services developed by Grasshoppers were of high value to participants and set the stage for the next level of food-system development in the state. Producers cited greater knowledge and capacity in a number of areas, including production planning, post-harvest handling, packing and grading standards, invoicing, and both production and financial record-keeping. For many producers, Grasshoppers provided their first sales outside of direct marketing and served as a key stepping stone for scaling up their operations. While the immediate opportunities for regional producers seeking to sell outside of direct marketing channels in the Louisville area is uncertain, there is significant interest on the part of both producers and consumers in continuing to build a vibrant regional food system.

SUMMARY OF RECOMMENDATIONS

SOUND PLANS

Grasshoppers started operations with limited startup capital and without an accurate assessment of the existing capacity of regional producers (including infrastructure and technical knowledge of wholesale production) or an adequate set of logistic and qualitycontrol systems to manage the aggregation of products from multiple small producers. Employing an expert in wholesale produce distribution (if not as a manager then as a consultant) to establish the necessary protocols can provide needed foundation of the enterprise to ensure a baseline of efficiency.

Those who want to start a new enterprise should think carefully and critically about the minimum financial, human, and material resources needed to set the enterprise up for success and must have the patience to wait until they are in place before opening the doors. Additionally, we strongly recommend that all enterprises establish clear metrics coupled with defined targets and timelines for conservative growth. This approach allows managers and ownership to focus on the business that they're in and avoid the distractions of other services or opportunities that could be offered.

A SUCCESSFUL FOOD HUB IS HELP ENOUGH

Food hub leadership should identify a strategic and parsimonious set of core services that address the highest needs within the particular context of that region's existing agro-food system. Recognizing the core competencies of the food hub allows management to focus efforts on innovation and efficacies while having the confidence that success as an enterprise, in and of itself, is the realization of the food hub's mission. As we heard from farmers working to find new markets after Grasshoppers' closure, the greatest opportunity Grasshoppers provided was serving as a reliable and high-volume buyer (relative to direct marketing channels). Though the additional services were appreciated, it was Grasshoppers' activities as a food aggregator and distributor that were, in the end, the greatest help to farmers.

A FOOD HUB, NOT AN ISLAND

As previous studies have shown, successful food hubs thrive within an integrated system of support that includes extension, public health agencies, nonprofits, state services, and national programs (Pirog & Bregendahl, 2012). While there were attempts on the part of Grasshoppers to partner with public, private, and non-profit organizations, those partnerships fell well short of the needs. Strategic and committed support, beyond financing, from partner agencies and organizations allows food hubs to focus on the business at hand and supports the broader development of a vibrant regional food system.

Acknowledging that not all regions have equal access to the same level of agricultural support services and technical assistance, there will inevitably be instances where a food hub must take on additional food-system development activities in order to fulfil their goals and mission. In this case, it is recommended that these activities be conceived of as a separate business line and managed accordingly. Time spent on those activities should be financially accounted for either through grants or other outside investment in such activities or by direct financial subsidization by the other business lines.

INTRODUCTION

Grasshoppers Distribution was a food hub in Louisville, Kentucky, that opened for business in 2007 and grew to nearly one million dollars in annual sales of regional farm products before closing its doors in December 2013. The enterprise was launched by four producers who saw a need for agricultural diversification in a post-tobacco era and burgeoning opportunity in regional and sustainable food markets. This paper examines the story behind the evolution of the business and points to lessons that may be learned by others involved with similar efforts.

While it is true that mistakes were made, our investigation shows that Grasshoppers Distribution was led by a committed and passionate group of individuals who did everything in their power to make Grasshoppers a success. Unfortunately, their efforts were thwarted by a combination of logistic and infrastructure challenges, a rapidly changing market environment, inadequate financial and human capital, and the complexity of spearheading simultaneous efforts to develop regional producer capacity and build an innovative business model from scratch.

Grasshoppers Distribution as an enterprise was a true pioneer in seeking solutions for how to best promote and provide regionally produced foods in Kentucky. They opened their doors just before the onset of the Great Recession and worked to adapt to new challenges and opportunities as public interest in local food expanded at the same time the new and existing food businesses in the area sought to take advantage of the growing but nascent market opportunity. At the start of operations, there were few ready examples of successful food hubs to emulate, and a general state of undercapitalization restricted upfront investments in adequate infrastructure and expert personnel. Despite challenges

in the areas of supply side development, logistics and distribution, and a changing market environment, Grasshoppers made significant improvements and had meaningful impact on participating producers and clients along their almost seven-year lifespan.

While a few challenges were specific to Grasshoppers, we believe that those involved in other food-hub initiatives will find many similarities between their experiences and the story of Grasshoppers Distribution. It is our hope, and a hope stated many times by former stakeholders who participated in our study, that the lessons learned from Grasshoppers will help strengthen future initiatives and contribute to the continued work of building vibrant regional food systems. The closing of Grasshoppers marked the end of an important chapter in the story of regional food-system development in Kentucky, but the story is far from over.

ABOUT THIS STUDY

In collaboration and coordination with stakeholders in Kentucky and across the nation, a small team of researchers from the University of Kentucky embarked on this post mortem study to capture the story of Grasshoppers and share the lessons learned with those interested in continuing the work of regional food-system development. This project was supported with funds from The University of Kentucky and The Wallace Center.

TEAM

The research team was comprised of four researchers at the University of Kentucky. Dr. Tim Woods of UK Agricultural Economics and Nathan Routt, M.S. of Kentucky Center for Agricultural and Rural Development (KCARD), conducted the financial analysis. Lilian Brislen, a Ph.D. candidate in Rural Sociology, and Dr. Lee Meyer of UK

Agricultural Economics conducted the qualitative analysis. Findings presented in this report represent the synthesis of these two lines of inquiry.

METHODS

This report presents two complementary approaches to telling the story of Grasshoppers. The main body of this report presents findings from a qualitative analysis, which is supported and confirmed by the financial analysis included in the Appendix to this report. Our intent is to provide a narrative of the history of the enterprise and provide insight as to why events unfolded the way they did.

QUALITATIVE ANALYSIS

In order to capture a comprehensive assessment of the strengths, challenges, and lasting legacy of Grasshoppers Distribution, our study included focus groups with former suppliers and clients, in-depth interviews with former staff and owners, and content analysis of formal business documentation (business plans, grant applications, and loan applications) made available through an open records request to the Kentucky Department of Agriculture and the Governor's Office of Agricultural Policy.

Three focus groups were conducted: suppliers (farmers and value-added food producers), wholesale clients (restaurants and institutions) and CSA subscription clients. Each focus group lasted one-and-a-half hours and contained six to ten participants. We also conducted nine in-depth interviews with former staff, owners, and investors, lasting two hours each. Follow-up inquiries were made via email to interview participants.

QUANTITATIVE FISCAL ANALYSIS

Historical financial data were provided by Grasshoppers Distribution and the Kentucky Governor's Office of Agricultural Policy, which included quarterly income statements and balance sheets for the Grasshoppers enterprise. Annual data were provided for 2007 through 2009 and quarterly data until the venture closed following the fourth quarter of 2013. A longitudinal analysis of this data was conducted to explore the financial health and progress of the business. Financial ratio benchmarks were used, based on observations from other food hubs in a recent Food Hub Benchmarking Study coordinated by the National Good Food Network (NGFN) (Fischer et al., 2013; NGFN Food Hub Collaboration, 2013) as well as five year averages for small-to-medium-sized produce wholesalers in the southeast U.S. (Sageworks 2014). Ratio analysis was used to explore issues of liquidity, solvency, efficiency, and profitability. Findings from this analysis are contained in the Appendix to this document.

HISTORICAL CONTEXT

One cannot tell the story of agriculture in Kentucky without including some portion of the history of tobacco. Grasshoppers Distribution emerged during a significant period of change for Kentucky agriculture, and in many ways the story of Grasshoppers Distribution is tied closely to what many in Kentucky refer to as "the tobacco transition." The tobacco transition began in the wake of the 1998 tobacco Master Settlement Agreement, in which 46 states settled with four major tobacco companies for a total of \$206 billion (to be paid over 25 years) to recover expenses incurred through the deceptive marketing of tobacco products and related public health costs (Cross, 2006). States were allowed to use the settlement funds at their own discretion, which led Kentucky and

North Carolina, two states for which tobacco was the economic foundation of their agricultural economy, to set aside a portion of those funds to aid farmers in transitioning away from tobacco production.

The need for transition assistance to farmers was compounded by the Fair and Equitable Tobacco Reform Act of 2004 which abolished the 64-year-old tobacco quota program. The purpose of the quota program was managing supply through poundage quotas and acreage allotments set annually by the USDA. The Reform Act established the Tobacco Transition Payment Program (TTPP), which provided annual payments for ten years to eligible tobacco quota holders, ending January of 2014 (Mathis & Snell, 2012). The National Tobacco Growers Settlement Trust, also known as "Phase II" of the master settlement, was negotiated to compensate tobacco quota owners and tobacco growers for revenue losses resulting from declines in demand (Jones et al., 2007). However, the program ended in 2004 because the tobacco companies were able to take a \$1:\$1 offset due to the passage of TTPP, which they also funded.

At the time of the master settlement, tobacco was Kentucky's number one cash crop, and though Kentucky was number two in tobacco production (behind North Carolina), it ranked first in number of tobacco growers and quota holders (Cross, 2005). The small-farm legacy of Kentucky is often credited to the tobacco quota program, which allowed small-acreage farmers to produce a crop for a guaranteed buyer at a fair price. A common anecdote in Kentucky was that the tobacco quota paid for the rest of the farm expenses and allowed small farmers to keep farming. The task of reimagining Kentucky's farm economy without tobacco was a daunting task for farmers and agricultural leaders,

though it was well recognized that innovative steps must be taken to secure the future of Kentucky's family farms.

In 2007 when Grasshoppers was started, there was tremendous interest in the transition of the tobacco enterprise. When the buyout replaced the guaranteed price program in 2004, it was clear that farmers were going to need to find alternative enterprises. This need gave hope to farming advocates that a revolution would take place and relatively small Kentucky farm operations that had been growing two to ten acres of tobacco would replace the 'golden leaf' with vegetables or other high-value specialty crops. Because of the lack of markets and infrastructure, investment in supply-chain infrastructure was needed. In the minds of many, Grasshoppers Distribution would help fill that gap for producers serving the Louisville Metro area.

GRASSHOPPERS DISTRIBUTION'S HISTORY

The animating vision for Grasshoppers was a for-profit business that would serve as a model for how to grow a regional food economy that addressed issues of food insecurity and access while supporting small and mid-sized family farms. According to a former owner/investor, the concept for Grasshoppers was to reach out into the rural areas of the state and connect those producers with the markets provided by the largest population center. By providing an all-in-one enterprise serving both buyers and producers of regionally produced food, Grasshoppers was envisioned by its founders and subsequent investors as a key first step in building a vibrant regional food market in the Louisville Metro area. Over the course of its operation, Grasshoppers offered Louisville community members and food businesses year-round access to regional produce, protein, and value-

added food products. Grasshoppers worked with more than 70 different farmers and food producers and directed over 2.25 million dollars into the hands of producers in the region.

OWNERSHIP

Grasshoppers was founded in 2006 by a group of four farmers who shared a common understanding of the pressing need for new high-value market outlets for Kentucky's family farms in the wake of the end of the tobacco program. These four farmers were initially connected through their membership in Community Farm Alliance (CFA), a statewide nonprofit farm and food advocacy organization. CFA, in partnership with the West Louisville Food Working Group, conducted the preliminary feasibility study for a food-based enterprise to serve the "food desert" region of West Louisville, and the study activities and findings served as the initial impetus for the formation of Grasshoppers Distribution.

In the first years of Grasshoppers, the owners were highly involved in the organization and operations of the business. Each owner bought a unique and important set of skills and resources to the table, including direct marketing, organic horticulture, Community Supported Agriculture, operating a mid-sized meat-processing facility, and integrated value chains. As full-time staff was brought on and the operations grew, owner involvement in operations lessened, and responsibility for overseeing operations fell largely to the four subsequent general managers. One of the original owners sold their share of the business after the second year of operations, citing concerns over the continued viability of the operation and an unwillingness to take on the additional debt needed to keep the enterprise afloat.

Midway through the life of the business, in 2010, a major capital shortfall lead to Grasshoppers very nearly shutting its doors. Instead, a new general manager (the fourth) led a major recapitalization effort through a Series A investor offering. This change led to the reorganization of Grasshoppers' ownership into an investor board to which the general manager reported. The original operating agreement, which required a consensus of all owners for major decisions, was exchanged for a shareholder-led board of directors with voting rights proportional to ownership stake. The investor board consisted of five voting members, though total membership fluctuated as members stepped down and were replaced at a later dates. Board composition included one representative of the original farmer-owners, the general manager (whose title switched to president after the investor offering), who held a voting ex-officio position; two Series A investors; and non-voting members (up to two additional seats) who either possessed expertise in an appropriate field or were financial stakeholders (lenders). A Series A investor served as board president. There were ten additional Series A investors, including the two remaining original owners not present on the board and holding a total of 55.1 percent of ownership. In the winter of 2013 the board voted to bring on a consultant to take over management and restructure the enterprise. This consultant served first as interim president and then president (i.e. the fifth general manager in our account) and later also made a Series A investment.

FINANCE

The initial funds for the startup of Grasshoppers came from a USDA Value Added Producer Grant that was leveraged in part by a modest investment by each of the four farmer-owners in addition to significant commitments of in-kind labor from the owners and staff of a partner nonprofit, Community Farm Alliance (CFA). The process of writing the grant served as the initial organizing and planning process and clarified the vision and business structure for Grasshoppers. Grasshoppers Distribution also applied to the Kentucky Agricultural Development Board (KADB) for additional start-up funds but were turned down. A decision was made to move forward with beginning operations with only the VAPG funds and the sweat equity of the owners and CFA partners. Grasshoppers made a second successful application for grant funds from the KADB during the second year of operations. The KADB was the single largest supporter of Grasshoppers, providing two loans totaling \$235,000 dollars and two grants totaling \$200,980 dollars over the course of the five subsequent years of Grasshoppers' operation.

Advocating for the relevance of Grasshoppers to counties surrounding the Louisville Metro area, Grasshoppers' owners and leadership also approached individual county agricultural development boards and solicited their fiscal support of the enterprise. They ultimately received a total of \$65,500 from 17 counties, and with the funding came an implicit assumption that Grasshoppers would make a good-faith effort to work with producers from those counties. Some informants felt that the need to seek out additional sources of funding to capitalize the enterprise drove the geographic scope of their product sourcing, rather than considering the practical needs of efficient distribution and the bestqualified producers.

The four original farmer-owners provided initial financial investment on top of significant sweat equity in the establishment of Grasshoppers' operations, as well as taking on personally guaranteed debt to finance continued operations at points of financial crisis for the operation. Over the winter of 2009/10, after the departure of one of

the owners, two of the farmer owners took a personally guaranteed loan from a private bank for \$30,000, and all three farmer owners personally guaranteed a \$35,000 loan from the Kentucky Agricultural Development Board. Later, in 2010, one farmer-owner provided an additional \$40,000 bridge loan by leveraging personal assets during a time of acute cash-flow crisis. At the time of Grasshoppers' closing in 2013, a balance of \$21,000 on the personally guaranteed KADB loan remained to be repaid by the farmers. Other liabilities at the time of Grasshoppers' closing included a balance of \$21,945.60 on a loan made to Grasshoppers by a principle owner/investor, \$43,856 on a loan from Wholesome Wave, and an outstanding balance of \$119,111 on the 2012 loan from KADB. There was no recovery of owner/investor equity in the firm.

BUSINESS MODELS

Grasshoppers Distribution adopted several different business models over the course of its existence. The initial business plan under which Grasshoppers was launched and which was submitted as part of the first unsuccessful application to the Kentucky Agricultural Development Board in 2007 describes a business focused on addressing issues of food access and food security.

"This business will provide sales and marketing opportunities for Kentucky farmers, local food entrepreneurs and area residents, while offering citizens of West Louisville wholesome and affordable fresh food...The primary effort of this business is to expand service to the low income individuals of West Louisville through the current sales relationships already established with the higher income customer base that farmers now serve."

The focus on food access informed their site selection in West Louisville, identified as a food desert, and the intention to split Grasshoppers' market between high-end restaurants and retailers on one hand and the "families of West Louisville" on the other. There were explicit plans to partner with urban entrepreneurship efforts on the tasks of distribution, marketing, and the development of a mobile market, as well as a partnership with a nonprofit organization who would hire one full-time and one part-time employee to assist with different aspects of business and demand development.

Within a year a revised business plan submitted to the Kentucky Agricultural Development Fund painted a different picture—that of a business focused wholly on small-farm and regional food-system development. According to the 2008 business plan:

"It is the vision of the business not only to become the premier local food distribution business in the state, but to become a model for local food distribution nationwide. It is the further goal of the business to offer a source verified product which we believe is the key to drawing together and maintaining a relationship between Kentucky's producers and its myriad potential customers and to offer our customers an authentic experience as they seek to get to know their farmers and where their food comes from."

The leadership and staff of Grasshoppers encountered unexpected difficulties in their efforts to establish an efficient wholesale distribution enterprise. According to former customers and suppliers, key restaurants and other small wholesale buyers (e.g. specialty food grocers) identified in the marketing plan were already accustomed to sourcing their products directly from multiple producers. Despite their professed interest and intention to work with Grasshoppers, restaurant and wholesale clients found that Grasshoppers was unable to provide an advantage over working with individual growers in terms of convenience, price, quality, or selection. Additionally, former employees identified a particular challenge in finding farmers who could consistently produce wholesale quantities of high-quality products handled and packed appropriately. In its early years, Grasshoppers was simply not in a position to provide for larger wholesale accounts such as schools or institutions. This limitation was due in part to a lack of adequate supply from producers coupled with Grasshoppers' lack of expertise in logistics and inadequate infrastructure (e.g. cold storage) to effectively aggregate multiple producers to large orders.

"In the wholesale department I think we just didn't have enough to offer. Prices were too high and selection was too low. We didn't have standardization. It worked initially because [farmers] transitioned [existing sales] relationships to us and that carried over for a while. But then I think [the restaurants] missed that relationship with the producer." -Former Employee

The difficulty faced in wholesale distribution lead to the overhaul of the business model, transforming Grasshoppers into a subscription program marketed as a Community Supported Agriculture (CSA) Program. This switch was motivated by projected margins of 40 percent on CSA subscriptions compared to 20 percent on wholesale, and a projected break-even point of 500 subscriptions. Two years into the CSA-modeled subscription program and still unable to achieve financial viability, a decision was made to switch the format to an online marketplace that allowed customers to build custom orders on a weekly basis in lieu of the pre-packaged season long share. While this change in services did expand the customer base, it also increased weekly "churn" (i.e. there was a lack of consistent week-to-week purchases by customers). By one estimate only about

one-third of the customers were the loyal core, with the others opting in and out at will. That churn made it difficult for Grasshoppers to serve the market and control its costs. Grasshoppers' managers also learned that CSA customers are not a homogeneous lot. Grasshopper's target demographic of higher-income consumers expected higher quality than the organization was able to consistently deliver.

"The [farmers] markets can be a real gamble, and it's really nice to have an upfront contract relationship with somebody that you feel is dependable." - Former Supplier

The final attempt to reorient the Grasshoppers' business model included an effort to expand into value-added processing and manufacturing (flash frozen produce, fresh soup) in order to meet customer demand for prepared foods and re-engaging wholesale and institutional markets. These efforts met with mixed success and were hampered by inadequate staff capacity after significant downsizing due to financial constraints. In the final two years, though staff and owners recognized the opportunity presented by institutional and large wholesale sales, cash-flow issues resulted in a situation where the online marketplace could not be abandoned as it was the primary revenue generator of the enterprise.

SALES AND INCOME

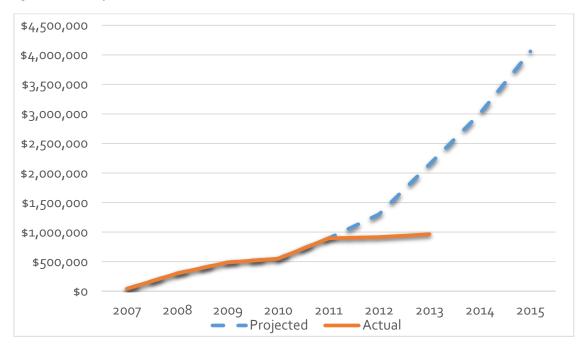
Grasshoppers' sales were modest initially, growing steadily from \$40,000 in 2007 to \$550,000 in 2010. Net losses persisted, however, and changes in management and market focus led to an effort to reach what was perceived to be a minimum efficient scale. Sales hovered in the \$900,000 range in 2011 and 2012 while losses persisted. A major proposal was brought to the Kentucky Agricultural Development Board in February 2012,

suggesting a plan to grow Grasshoppers to a \$4 million enterprise and positive net profits by 2013. This growth was to be achieved mostly through CSA and online grocery income along with another \$500,000 in wholesale sales. Grasshoppers' proposal was for a modest \$537,000 capital expansion funded 45 percent through a KADB grant and the balance from other sources (a USDA Farmers Market Promotion Program [FMPP] grant already awarded and another FMPP application in process, a \$25,000 grant from Seed Capital Kentucky, and other private investors/debt financing).

The ambitious sales growth projections never really materialized. The KADB opted to provide a portion of the funds through a loan of \$200,000 reflected on the third quarter 2012 balance sheet.

Figure 1 shows the projected sales suggested at the time of the KADB grant request in 2012 and the subsequent sales realized over the duration of the business. Sales never approached the growth targets, in spite of the capital infusions.

Figure A1: Projected and Actual Sales



Note: Sales projected in application to KADB, Feb 2012

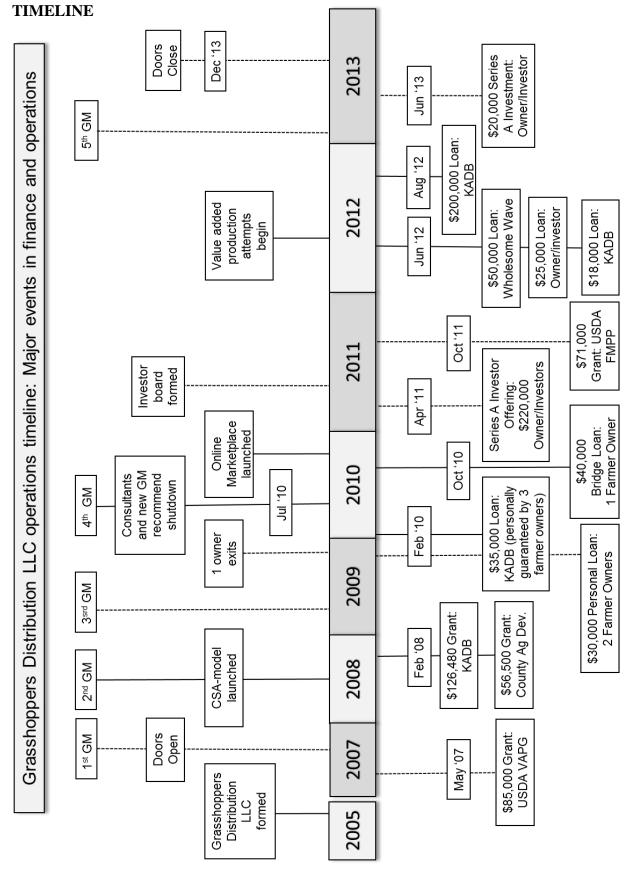
Gross sales for Grasshoppers grew from \$40,000 in 2007 to almost \$1 million in 2013, but the venture never was able to generate a profit beyond grant income. Net ordinary income (earnings before interest, depreciation, taxes, and other income) was substantially negative each year. Adjustments for depreciation and interest were always relatively small since Grasshoppers carried such small balances in equipment and facilities. Most of the adjustments to Net Ordinary Income came through state and federal grants, loan forgiveness, and Kentucky Proud² promotion rebates. Significant grants early in the investment were enough to generate positive overall net income balances, but this figure does not accurately reflect the net from operations.

² Kentucky Proud (KY Proud) is a marketing and promotion program run by the Kentucky Department of Agriculture. For more information visit http://www.kyagr.com/marketing/kentucky-proud.html

Grant funding from various sources continued to be important throughout the life of the firm, but persistent losses made it less and less compelling to attract outside funds sufficient to cover the deficits that were being realized. Grasshoppers finally was compelled to discontinue business at the end of 2013 and realized a modest gain from the sale of assets but not enough to pay off outstanding loans in full, much less return anything to the initial investors.

Year	Gross Sales	Net Ordinary Income		Other Income/Source	Net Income
2007	\$ 40,047	\$ (72,568)	\$ 84,125	VAPG (\$84,125)	\$ 11,556
2008	\$301,150	\$(108,368)	\$156,282	KADB Grant (\$154,000), KY Proud, VAPG)	\$ 48,400
2009	\$486,204	\$(123,594)	\$ 34,485	KADB (\$34,000)	\$ (89,907)
2010	\$551,000	\$ (48,627)	\$ 14,803	Depr, int adj	\$ (63,429)
2011	\$894,219	\$ (57,234)	\$ 4,163	Depr, int adj; KY Proud ad reimburse (\$5,100)	\$ (63,724)
2012	\$914,797	\$(171,290)	\$111,755	Depr, int adj; KY Proud ad reimburse (\$14,738), KY DOH (\$1,473), USDA (\$5,065), Other (\$2,284), GHOP R&D (\$5,236), Brown Family loan forgiveness (\$75,825), LIBA, (\$4,142), Seed Capital (\$25,000)	\$ (59,533)
2013	\$963,058	\$(130,191)	\$ 29,819	Depr, int adj; KY Proud ad reimburse (\$7,484), USDA (14,709), Other (\$21,747), KADB (\$18,000), sale of assets (\$6,912)	\$(100,374)

Table A1: Sources and Measures of Income (Gross, Net Ordinary, Net)



CHALLENGES

Several of the challenges Grasshoppers faced in its operations are common to almost every new regional food venture. The specific way these common obstacles played out for this food hub will hopefully shine a light for others following in Grasshoppers' efforts to build a regional food economy.

RETAINING AND IMPLEMENTING EXPERTISE

The complex business model Grasshoppers was working to develop required a high level of expertise in a number of specialized fields for tasks such as setting up protocols and logistic systems, inventory and warehouse management, as well as in day-to-day operations of a subscription delivery service. As will be discussed, high levels of staff turnover, combined with frequent changes to the business model and underdeveloped supply-side expertise and infrastructure resulted in management and quality control issues that affected customer relations and overall performance of the enterprise.

"I think everyone who was ever there had the best intensions throughout the whole thing... Everyone was in it for a reason and it wasn't money. Just really cared about it and was really passionate about it. It was fun." - Former Employee

Finding and retaining qualified staff in key leadership roles was a significant challenge faced by Grasshoppers. This challenge was caused primarily by a lack of adequate working capital to invest in such expertise and the strain placed on a series of managers tasked with developing the enterprise. Though the core of the business model was wholesale produce aggregation and distribution, at no point in its existence did Grasshoppers have a member of the management team with a specific background in that

type of business. This lack theoretically could have been addressed through the careful recruitment of expert board members to provide guidance in key areas such as finance, wholesale produce delivery, or marketing. While the initial farmer-owners had experience in some areas of the value chain, the particular exigencies of wholesale produce were beyond their expertise or that of the subsequent owner/investor board.

This is not to say that Grasshoppers lacked dedicated or talented staff. Former suppliers and customers and other stakeholders spoke highly of the dedication and work ethic of Grasshoppers' staff and management, and there were many highly skilled and passionate individuals who poured their hearts into trying to make Grasshoppers a success. Rather, the unique and intricate management demands of the different business models pursued by Grasshoppers required highly specialized knowledge and knowledge and systems that the enterprise did not have ready access to.

"I don't think the board or staff [was] expert enough collectively in what business model really works as it related to those produce projects." - Former Funder

Produce wholesaling and aggregation is a very demanding and competitive field. Without a foundational knowledge in the unique demands of this sector, coupled with constant cash shortages, Grasshoppers staff were under unrelenting strain, not only for their own jobs but for the success of enterprise as a whole. There was no financial buffer on which the enterprise could rely for the first few years of development as they worked out the kinks of the enterprise, and thus there was a constant pressure to sink or swim. This pressure was further compounded by the significant challenge of having to simultaneously learn the ropes of wholesale produce aggregation and distribution while

developing and implementing innovative solutions to that business model in order to serve the mission of working with regional producers and improving food access. Said another way, owners and managers were trying to revolutionize a business model without first having a thorough understanding of how the conventional model worked.

"At the end things were just pushed through too quickly. Instead of spending time with a certain project making sure it took off it was like 'Ok let's just go on to the next one.'" - Former Employee

Given the high level of demand placed on management staff, it is not wholly surprising that Grasshoppers had a high rate of turnover in key leadership positions; it had five general managers in the almost seven years of its operation. Not only was the learning curve for managers steep, the learning process was repeated as exiting managers burnt out and new managers were introduced. Setbacks to the development of the enterprise caused by the constant resetting of the leadership learning curve were further compounded by the nearly annual retooling of the business model, as discussed in the next section.

LOGISTICS, QUALITY CONTROL, AND INFRASTRUCTURE

The logistic requirements of the various enterprise lines engaged by Grasshoppers required detailed systems of oversight and an extensive system of built infrastructure both within and outside of the boundaries of the enterprise. At times, 70 farmers were involved; at one point more than 1,400 individual customers and 34 drop-off locations created an extremely complex mire of costly logistical functions. Over the years of its operations, management improved as new quality and inventory controls systems were

developed and as the company hired more experienced managers. However, communication and coordination remained a problem.

"We were very much overwhelmed and I feel a lot of us had a lot on our shoulders that last year. I feel like there was a lot that was being dropped because it was such a strenuous work load for everybody." - Former Employee

Former suppliers and customers observed that employees were hard-working and wellintentioned, but not always operating as a "well-oiled machine." Some aspects of the operation, such as weekly communication with farmers regarding orders, were identified as working well and reliably. Other dimensions, such as regular timing of invoice payment, were a point of frustration. In the early attempts to supply restaurants, restaurant buyers planning menus felt they were unable to get information regarding product availability in a timely fashion. Grasshoppers' staff were successful in helping farmers understand the needs of chefs, but the logistic challenges (a combination of product quality, prices, and service) prevented them from being a primary supplier wholesale customers could rely on.

"You never went to Grasshoppers to make a delivery and thought 'Now this is a profitable business. I can tell this thing is clicking... back up to the dock and someone is ready to receive my order...' No, you had to walk through there to find someone to receive your order and you get paid monthly. It just wasn't clicking. It wasn't a well-oiled machine."

- Former Supplier

A significant, and possibly the largest, contributor to issues of quality control for Grasshoppers was the lack of comprehensive cold-chain management from field to client. For producers, those new to specialty or wholesale production often lacked the on-farm protocols and infrastructure to provide an effective cold chain, as walk-in coolers and refrigerated transport are a significant investment. On-farm cold-chain management is critical for managing and maintaining quality, especially for removing field heat from greens, berries, and other tender products.

"Quantities and packaging were a problem. We would ask for packaging to be one way. Once they delivered it was another way." - Former Wholesale Customer

Grasshoppers struggled, as many food hubs do, to find a workable solution to the logistic challenge of getting products from far-flung farms to the hub in a cost effective way. Early on they took on the task of picking up from each farm individually with a rented truck. After three years of struggling to find a workable solution, they switched to requiring farmers to deliver product to their West Louisville location, which often resulted in products taking long trips in the back of (sometimes uncovered) pickup truck beds in summer heat. Quality-control issues proved a significant obstacle to developing a sustainable restaurant and retail business and impacted CSA customer satisfaction. However, conditions improved significantly over time as investments were made in new cold-chain infrastructure, post-harvest handling protocols and product standards and clear criteria for rejection were developed.

"We had quality issues and a lot of it was we didn't have strict enough requirements for our growers. A lot of our growers didn't have refrigerated trucks... There was definitely an education piece there. I think we struggled with restaurant sales because of that." - Former Employee

CLEAR PLANS AND EVALUATION

In the case of Grasshoppers Distribution, frequent, almost annual, changes to the business model posed a serious obstacle to developing efficiency and expertise within the enterprise. This situation was compounded by the logistic complexity of housing several different types of business lines within one enterprise without the infrastructure or expertise to evaluate and achieve efficiency between them. As discussed earlier, Grasshoppers was at various points and often concurrently operating a subscription produce box service, an online specialty grocery delivery service, a trucking service, wholesale aggregation and distribution, value-added food manufacturing, and a production consulting service for farmers. In essence, Grasshoppers never knew exactly what business they were in and thus weren't able strategic decisions based on that plan.

"To ask the question and answer the question, 'What is the role of the food hub?' is a critical piece that was never done... I think [the owner/investors'] instincts told them this was needed but they didn't know what problem they were trying to solve exactly." -Former Employee

One manifestation of this phenomenon was the ongoing debate between owner/investors and management regarding the for profit status of Grasshoppers. One faction felt it was important to develop Grasshoppers as a profitable enterprise as a means to demonstrate the broader viability of regional food systems. However, there were dissenting opinions within management who cited the significant needs for technical assistance and handholding of producers who were new to horticultural production and/or wholesale and high-end markets. The additional challenges presented by the need for technical assistance to producers will be discussed in greater depth in the next section. Continued

disagreement regarding the direction and scope of Grasshoppers' activities resulted in what one former employee described as "analysis paralysis" and hampered their ability to make timely strategic decisions that met with a unified vision for the development of the enterprise.

"I held, and the company held, the notion of business profitability or, more specifically, for profit, too rigidly. The company's most significant product to date, as it turned out, wasn't return on investment, but was instead the building and facilitating of community, including businesses, around food and around the development of the local food system."

- Former Owner/Investor

The logistic forethought and planning required for complex ventures appears at times to have been lacking. Though there were early intentions to open an on-site retail location and a "mobile market," these intentions were never fully realized—virtually all of Grasshoppers' sales were made via delivery (e.g. to CSA pickup sites and to wholesale buyers). At the height of CSA membership Grasshoppers was operating 34 different delivery sites. In the wholesale distribution business, the most important evaluative metric is profit per drop and that metric drives virtually every key decision, including the distance they can travel to make drop, the minimum size of orders, and how frequent deliveries occur (Bailey, 2014). If a drop point is not measuring up as profitable, you have to pull the plug (unless it's part of a strategic and monitored plan for new market growth). Such evaluations were not made until the fifth year of Grasshoppers' operations, and prior to that time there are accounts of maintaining drop points with as few as four customers, or as little as \$50 profit. Additionally, a retail space was created at the warehouse in 2013 but had little sales outside of the holiday season. The delivery

component of the business was perhaps an assumed necessity of the CSA model but was not consistently supported by the requisite business analytics to ensure efficiency.

"We were always [asking] 'What is your business plan like?' 'What are your risks?' 'What's your competition?' They didn't have a lot of those answers." - Former Funder

THE CSA CONUNDRUM

Though the subscription program was intended to solve cash flow and supply management issues, it ultimately ended up exacerbating them. To achieve viability within their subscription-based model, Grasshoppers needed to capture and maintain a relatively large subscriber base with break-even projections that started at 500 rising to 2,000 shares. In a bid to capture large and spatially consolidated subscriber groups, Grasshoppers pursued partnerships with corporate employers but without great success. While other food hubs have found success through similar initiatives, they were implemented in more developed "local food" markets and with direct financial incentives through the employers' wellness programs (Jackson, Raster, & Shattuck, 2011), whereas Grasshoppers was reliant only on the volunteer efforts of on-site employees. While there was some early success in hitting subscription growth targets, after the first year of the CSA program, subscription numbers consistently and significantly failed to meet benchmarks and never achieved financial viability. Efforts to develop a successful subscription service were further complicated as new market entrants with competing local food offerings emerged.

"I would call and would say, 'Well, how many?' before we planted, 'How many families are you expecting?', and it was usually 900, 800 and by the time we delivered it was around 300-500." - Former Supplier

After accounting and procurement record-keeping systems were put in place with assistance from the Kentucky Center for Agricultural Development, produce managers were reliably able to hit margin targets for the subscription boxes. However, Grasshoppers was never able to achieve the volume of sales necessary to achieve revenue targets. It is important to remember that a margin is not equivalent to profit, as breakeven projections are based on total sales, not individual margins.

There are crucial differences between the model of a farm-based Community Supported Agriculture program and a distributor-managed subscription grocery service, which is what Grasshoppers was effectively operating. A successful large-scale aggregated subscription program that targets the main-stream consumer must function much more like a wholesale produce retailer than a small-scale CSA that serves an ideologically driven customer base drawn to the farmers market ethos of produce. In a farm-based CSA model, a farm enterprise sells a set number of "farm shares" at the beginning of the season and receives payment in full from the shareholders. These shareholders are thus invested in the harvest of the farm (or the portion of the enterprise designated for the CSA program) and thus share in the risks and rewards of the season. In the distributormanaged subscription program, the distributor is taking pre-orders for subscriptions to be delivered at a later date rather than truly selling shares to subscription holders. In theory, a crop failure in a farm-based CSA program means the shareholder will simply go without; in the Grasshoppers model there was no such out if the enterprise foundered.

Additionally, the CSA strategy, while intended to avoid competition with producers, put Grasshoppers in closer competition with grocers and other food retailers who might have otherwise been clients of Grasshoppers (had they been able to work out the logistics of wholesale aggregation and distribution).

"So let's just say I liked it when they started calling themselves an online grocery store. Because in a traditional CSA you do not choose your product, you get what they have, so I thought it was more appropriate to call themselves something different. But it didn't offend me that they were calling it a CSA." - Former Supplier

The practical difference between shareholders and subscribers is illustrated in a pivotal moment of Grasshoppers' history that came toward the latter half of a subscription season. According to former staff and owners, it was recognized at the start of the third quarter 2010 that Grasshoppers was yet again facing a significant financial crisis. Funds brought in for CSA subscriptions were running out, while almost half of the subscription period still remained. This problem occurred because planning and implementation of the subscription program was based on financial projections of high levels of subscribership and was compounded by paying premium prices. Funds for existing subscription shares were expended in anticipation of more subscription funds coming in, but those funds never materialized. The decision had to be made of whether to take on further debt (or secure other forms of capital) or shut down the business. The obligation to not default on subscriptions was a primary justification and motivation, along with a broader commitment to the social mission of Grasshoppers, for recapitalizing and continuing to seek a path to viability for Grasshoppers. This scenario of cash-flow crisis caused by the inability to meet subscription goals, over-expenditure of funds early in the season, and

subsequent recapitalization, would unfortunately repeat itself throughout the remainder of Grasshoppers' lifetime, and ultimately lead to the demise of the enterprise.

MISSION VS BOTTOM LINE

HELPING SMALL FARMERS

A consistent challenge across the life of Grasshoppers was how to translate the abstract overarching goal of helping small farmers into the concrete, day-to-day reality of running a food-distribution company. The ideal of integrating social values into a mission-driven food enterprise is easy to grasp, but the practicalities are challenging, or at least nebulous. What does it look like, in practice, for a food hub to help small family farmers? Does this mean offering them the highest price possible? Does it mean having a large impact on a few producers, or a small impact on a large number of farms? This issue was never fully resolved by Grasshoppers, and the lack of clarity and strategy along these lines fueled the general lack of clarity within the enterprise discussed in the previous section.

"Our intention was to try to help as many people as we could. We were... working with a whole lot of farmers. I think that added to complication of it all. If we would have just been working with three or four farmers it would have been easier to make it work than working with 70." -Former Owner/Investor

PRICING

For the leadership of Grasshoppers, price paid to farmers was a key mechanism for realizing producer development. Throughout the life of the enterprise, prices were set once a year and remained the same for the main growing season with a different set of prices offered for the winter season. While pricing benchmarks and calculations varied over time, two former employees (employed at different times) tasked with procurement reported using the previous season's average reported farmers market prices for the state as a general benchmark for a sales price, and then subtracting a pre-determined margin to reach the price paid to farmers. Some additional adjustment was made based on relative availability and demand for specific products. In the later years of the enterprise new pricing calculations included benchmarking sales prices against specialty producer wholesalers in the region. The decision to use farmers market prices as a sales price benchmark is, from a business perspective, rather inexplicable for an enterprise required to work on tight margins and low cash flow. Producers themselves recognized this conundrum and in interviews cited that the prices Grasshoppers paid, while generous, were too high. Seen from one perspective, the price premiums effectively served as form of cash subsidy from Grasshoppers to producers.

"I never wanted to go to the farmers and say let's bargain down the price. That was never our intention." —Former Employee

While keeping the same price for products all season long was believed to simplify the procurement and planning process for everyone along the value chain, it limited the ability of Grasshoppers to adapt to market conditions and to take advantage of the seasonal nature of agricultural production. During the high season farmers and the food hub need to move large volumes of products, and producers can achieve an advantage in quality as well as compete on price with conventional sources. Several informants for this study also expressed frustration with the high wholesale prices (coupled with Grasshoppers' focus on direct marketing), which were seen to work against the goals of

scaling-up regional food production and distribution by distorting the market for regional products and shutting out opportunities to work with conventional grocers and other retailers. One former producer summed up this frustration by stating that Grasshoppers' practices and policies limited the enterprise to sourcing "hobby" amount of products (meaning not of a consistent volume for those looking to operate at a wholesale scale of production).

"I was trying to convince them, 'Y'all are paying too much for tomatoes. Buy them for 60 cents instead of \$1. We will still bring them all day long." -Former Producer

An additional price-focused practice put in place in the latter half of Grasshoppers' existence was the implementation of what were effectively annual procurement targets for suppliers. For several reasons, Grasshoppers was never able to develop a stable system of orders and procurement that allowed for conventional contracts with producers. Based on a desire to provide a level of certainty and predictability for producers, around the time that the online marketplace was started Grasshoppers began making informal annual procurement targets with select producers. With this practice the procurement manager would set a target dollar amount for total purchases from the producer for the season. While there was a general plan for what products would be purchased, and rough time frames, the broader aim was for Grasshoppers to make and keep a dollar-based target for total procurement over the season from a producer. It is unclear how this practice served the best interest of Grasshoppers, in terms of either finance or logistics.

AVOIDING COMPETITION WITH FARMERS

Grasshoppers' leadership decided to avoid competition with existing farm-based CSAs and to target customers outside of the typical dedicated customer base. This decision was based on the commitment to helping small and mid-sized farmers, and a former employee of Grasshoppers Distribution discussed actively avoiding direct competition with their producers: "We didn't want the hard core CSA people." Dedicated or "hard core" local food customers were encouraged to join a farm-based CSA program for the standard season and then to join up with Grasshoppers for the winter months when value-added products, shelf-stable products, and some extended-season production were available. By offering a separate winter CSA program in addition to standard season shares (and later the online marketplace), Grasshoppers helped expand the market for all farmers. However, choosing to primarily target a consumer base outside of the traditional local food and CSA customer base created additional challenges for an already difficult business model struggling to achieve enough subscriptions for viability. That said, the outreach, education, and recruitment of consumers new to regional and seasonal foods was a major achievement for Grasshoppers and a substantial contribution to growing the regional food economy.

DOUBLE DUTY

Because of the state of the post-tobacco agricultural sector in Kentucky at the time of its inception, Grasshoppers took on many additional activities related to food-system development that overburdened staff and other resources. In a very real sense, the staff and owners of Grasshoppers had to build the food-system foundations on which their business was expected to stand—the necessary preconditions to support such an

enterprise were simply not there. Grasshoppers took on the burden of developing both consumer demand for source-identified regionally produced food and the capacity of producers to fulfill that demand. While the enterprise was able to secure public and private funds to pay for infrastructure and operations, technical assistance was late in coming from key partners for the suppliers and customers they served.

"[We] learned a lot of the human resources ... [were] being spent on helping farmers from a technical assistance perspective. We have to help them with their business plan, how to get the GAP certification. It's just a bunch of hand holding with farmers. There was no income coming from that..." - Former Owner/Investor

Production Transition and Capacity Building

As highlighted in the opening discussion of the historic context in which Grasshoppers was founded, the availability of high-quality produce and specialty meats at wholesale volumes was limited at best throughout Grasshoppers' span of operation. Developing a high-quality, diversified wholesale horticulture or custom meat enterprise does not happen overnight and demands a highly specialized set of skills, knowledge, and infrastructure (both on the farm and off). However, supply did increase as producers expanded their operations in response to Grasshoppers' efforts and a broader expanding market demand and outlets for regional/source-identified and specialty products.

"[Institutional sales] motivated us to find larger growers. It was difficult. It could have just been the circle that I was working within but we had a hard time finding producers that were experienced at growing at the volumes that we needed to for certain crops." - Former Employee

Grasshoppers faced significant challenges with product quality control both because of lack of producer knowledge or infrastructure (e.g. walk-in coolers) and initial lack of standards and policies in place by the business. This issue was resolved over time but was the primary complaint made by customers. Former employees also suggested that the producers they dealt with often had "over-diversified crop systems" ill-suited for participation in the wholesale supply chain. From their perspective the ideal (and virtually nonexistent) producer for Grasshoppers would operate "somewhere between a mono-crop and over-diversified," focusing on a few key products of high quality and wholesale volume.

"These guys come every week, they need help, and they need someone to talk to, be there and help them. They used to come into my office all the time. I could never get any work done. They wanted advice and they needed that help. I was like 'I am not extension, I don't have time to do this.'" - Former Employee

The requirements of a wholesale specialty crop farm enterprise differ greatly from a diversified direct marketing enterprise focused on farmers markets or CSA production. For instance, while a farmers market customer may be drawn to a bunch of carrots with the fronds still on and a bit of dirt still clinging to the roots as an indication that they're freshly picked and "home grown," a wholesale operation wants a specific weight of identical bunches washed, trimmed, and packed according to food industry standards and delivered in a new box. The nature of production and harvest planning, post-harvest handling, grading and packing of product, and cold-chain infrastructure (e.g. a walk-in cooler, refrigerated transportation) are all different for wholesale production than a direct marketing–oriented farm enterprise. Making the switch from one mode to the other, or

simultaneously engaging in both modes of production (as many producers who are scaling up must do), is a challenging process for producers and an important area for technical assistance.

Trainings organized and facilitated by Grasshoppers' staff, in partnership with agricultural organizations such as the city of Louisville's Farm to Table Coordinator and Kentucky State University, on topics such as post-harvest handling and business management for wholesale operations were highly praised and identified by former producers as key pieces of education in their development as a farm enterprise.

LASTING LEGACY

Grasshoppers was a truly innovative enterprise that forged a new path for regional foodsystem development in Kentucky. The owner/investors and employees accomplished important foundational work for the Kentucky food system around developing producers, building consumer demand, and elevating regional foods within the local and statewide political sphere. Building a robust regional food system built on small and mid-sized producers requires learning and adaptation all along the supply chain as well as investment in infrastructure.

"Well [Grasshoppers] got me back into cooking. There were a lot of things that I was not so excited about when I saw it but it kind of forced me into trying new things"

-Former Customer

In building regional food systems, there are two important shifts for consumers to make: adapting to the seasonality of production (e.g. fresh strawberries are not available in February, and kale is hard to come by in hot months), and an openness to new varieties

and entirely new types of product. Upon reflection Grasshoppers customers reported that they are more aware of the range of products available regionally and have a greater commitment to seasonally based eating or procurement as a result of their relationship with Grasshoppers, which indicates that important gains were made among consumers. Consumers also reported an appreciation for the exposure to new foods and a continued interest in sourcing regional foods through a locally owned enterprise. Grasshoppers' efforts to expand year-round availability of regional products was a major contribution to developing consumer demand.

"In the beginning I used to be upset because they couldn't deliver what I wanted them to. Later on I realized I had to adapt. That is exactly what we did. So my business became more sustainable. My food costs go lower because I don't have to buy produce that is out of season." —Former Wholesale Customer

A significant lasting impact from Grasshoppers' operation is the changes in procurement practices by the Jefferson County Public School System. Through a good-faith effort on the part of the school system and the coordination efforts of Grasshoppers, it was recognized that the existing two-week bidding system was shutting out regional producers because they needed more lead time to plan production and coordinate aggregation. As a result of efforts to coordinate regional procurement, the school system changed to a six-month lead time on bids which, according to one informant, "was the real game changer for access to [that] institution's buying power. Farmers could plan and plant with this sort of lead time."

"I think they lacked experience in what we have to do. We would try to teach them for us to get them into [our institution] they would have to do this, this and

this. It was a learning experience [for us] as well. It's like two people trying to learn and teach each other at the same time while trying to make a profit." —Former wholesale customer

Public-sector stakeholders acknowledged the central role of Grasshoppers Distribution in highlighting the importance of investment in and support of regional food-system development for the Louisville Metro Area and for the state of Kentucky. Because of the overwhelming need on the part of producers for technical assistance related to specialty crop production, post-harvest packing and handling, and wholesale enterprise management, Grasshoppers coordinated the development of several highly praised trainings. The success of these efforts then directly inspired the formation of Seed Capital, a nonprofit organization engaged in targeted development efforts toward small producers and regional food-system demand and infrastructure. Despite, or perhaps because of, the closing of Grasshoppers, new public-private collaborative efforts continue to work to foster the growth of regional food production and distribution in the region. However, any new venture seeking investment of public funding will likely be held up to greater scrutiny and oversight. While government and foundation funders may be more cautious with their investments moving forward and may expect more detailed plans and reporting, there is recognition of the importance of investing in regional food-system development.

"When Grasshoppers was closing down, it seemed like there were a lot of farmers kind of where we were... developing their business, and who really wanted to get into moving a larger volume of product. Grasshoppers was a stepping stone for that." —Former Supplier

The greatest impact can be seen amongst former suppliers, especially those who came to Grasshoppers as new enterprises or those eager to expand operations. Trainings and services developed by Grasshoppers were of high value to participants, and set the stage for the next level of food-system development in the state. Producers cited greater knowledge and capacity in a number of areas, including: production planning, postharvest handling, packing and grading standards, invoicing, and both production and financial record-keeping. Grasshoppers' efforts to establish and expand year-round regional food sales outside of the traditional farmers market season encouraged producers to experiment and expand off season and value-added (shelf-stable product) production. This approach was further encouraged by promotion and sign-up assistance provided by Grasshoppers' staff to producers for a Natural Resource and Conservations Services costshare program for hoop house construction.

"I would say Grasshoppers got us into the wholesale [market], taking and selling a lot in one spot instead of just relying on friends and family." – Former Supplier

For many producers, Grasshoppers provided their first sales outside of direct marketing and served as a key stepping stone for scaling up their operations. While conventional food distributors may have an interest in natural, sustainable or local products, the interest is fickle and the volume requirements are well out of the reach of small farmers. An enterprise (or enterprises) dedicated to working with small and mid-sized regional producers provides much-needed market security for the farmer. The availability of dedicated market outlet coupled with a demand for larger volumes provided key support and incentives for small and mid-sized producers to scale up production. While Grasshoppers was unable to provide explicit guarantees, they provided more certainty than the gamble of a weekly farmers market and more flexibility compared to annual CSA share sales.

"I think they were a kind of ladder for us to develop our skills. They could allow us to move a lot of product at a better price while we still needed that better price." —Former Supplier

RECOMMENDATIONS

By way of summary of this report, we would like to offer a limited set of recommendations for future efforts in Louisville and other communities based on the analysis of Grasshoppers. It is important to note that, while we believe the recommendations below are, in a sense, necessary for a successful for-profit food hub, they are by no means sufficient. The work of building a regional agro-food system that meets the needs of farms and the community while simultaneously conforming to the structure and demands of the conventional food sector is no small project and is troubled all along the way by a myriad of obstacles and complications.

SOUND PLANS ARE KEY TO SUCCESS

Successful enterprises are built on sound, research-based plans that guide strategic development and are driven by the passion and vision of their leaders. However, it is too often the case that passion comes first, and the details are presumed to take care of themselves. Grasshoppers started operations without an accurate assessment of the existing capacity of regional producers (including infrastructure and technical knowledge of wholesale production) or an adequate set of logistic and quality-control systems to manage the aggregation of products from multiple small producers. Employing an expert

in wholesale produce distribution (if not as a manager then as a consultant) to establish the necessary protocols provides needed foundation of the enterprise to ensure a baseline of efficiency. However, it is important to acknowledge that acquiring expert staff or services comes with significant cost and may present an early and significant fundraising hurdle for new enterprises.

The service that former suppliers valued most highly was Grasshoppers' function as a reliable, relatively high-volume client. Producers working to expand their operations were able to build their expertise in wholesale production and stabilize their income against the gamble of farmers market sales. Whether that product went into subscription boxes or restaurant produce sections made no practical difference to them. Some producers who were already in, or looking to expand into, exclusively wholesale production stated that the volume Grasshoppers was purchasing simply wasn't worth their time, but institutional sales, when brokered, were a valuable opportunity.

"There were a lot of farmers kind of where we were... that were developing their business who really wanted to get into moving a larger volume of product and Grasshoppers was a stepping stone for that." —Former Supplier

While an ideal situation would include ample startup capital to weather the growing pains that come with any new enterprise, many food hubs will likely face similar challenges to Grasshoppers of scraping by with the help of volunteer labor and tight cash flow for the first several years of operations. That said, this study has also shown that investing in expert management staff is paramount and should be considered a key investment for the long-term success of the business. Those looking to start a new enterprise should think carefully and critically about what financial, human, and material resources are needed at a minimum to set the enterprise up for success and have the patience to wait until they are in place before opening the doors. Additionally, recruitment of a robust and balanced board of directors with appropriate expertise that compliment and/or address an absence of in-house skill sets while also providing representation (voting or non-voting) from stakeholder groups is a key task for any food hub. A balanced set of perspectives from along the value chain coupled with attention to communication and consensus-building helps keep management on track.

A carefully developed and closely monitored plan with clear evaluative metrics will help manage human and financial resources to their highest efficiency. On a shoestring budget, there simply isn't much room for error, and so having clear direction as to the highest and best use of scarce resources is key. To this end we strongly recommend that all enterprises establish clear metrics coupled with defined targets and timelines for conservative growth. By regularly revisiting the question 'What is the value proposition we offer, and how are we ensuring we achieve it?' leadership can both adjust to the constantly changing demands of the market and keep a keen eye on the particular metrics that manage the enterprise. This approach allows managers and ownership to focus on the business that they're in and avoid distractions of other services or opportunities that could be offered. Existing research on food hub best practices, a key resource for developing a new food hub business plan, is available through several public resources including the National Good Food Network and is an invaluable resource for those looking to establish a new enterprise.

A SUCCESSFUL FOOD HUB IS HELP ENOUGH

The siren song of mission creep is difficult for passionate and committed people to ignore, but maintaining a focus on the core activities and competencies of the enterprise is critical if a food hub is to find efficiency and viability. Grasshoppers saw its core mission as helping farmers, and this perception drove leadership to make decisions that, while seen as key for helping farmers, were illogical from a business perspective and ultimately undermined the viability of the business. Providing additional services or offering prices or other terms that effectively result in the food hub subsidizing farm enterprises may provide assistance to developing farm enterprises but does nothing to ensure that the food hub will be there in the long term to help build new markets and expand demand. As we heard from farmers working to find new markets after Grasshoppers' closure, the greatest opportunity Grasshoppers provided was serving as a reliable and high-volume buyer (relative to direct marketing channels). Though the additional services were appreciated, Grasshoppers' activities as a food aggregator and distributor were, in the end, the greatest help to farmers.

Food hub leadership should identify a strategic and parsimonious set of core services that address the highest needs within the particular regional context of that food hub, such as aggregation for and access to institutional markets; value-added and/or shelf-stable processing (e.g. IQF); a reliable market for wholesale volumes of premium regional products; or a retail enterprise that provides consistent access to a broad range of regional products by consumers. Recognizing the core competencies and value proposition of the food hub allows management to focus efforts on innovation and efficacies while having confidence that finding success is, in and of itself, the realization of the food hub's

mission. As other needs or opportunities arise, food hub leadership should feel empowered to say "no" or "not yet" and reach out to other public or private partners in the region to step in as key partners in building the food system.

A FOOD HUB, NOT AN ISLAND

Grasshoppers Distribution was a true innovator in developing the regional food system for the Louisville metro area and in Kentucky. They started operations at a key time in Kentucky agriculture's transition away from tobacco, when there was a large learning curve for many producers entering into or scaling up specialty crop production. The extra educational and other development activities taken on by Grasshoppers' staff, while of huge benefit to the producers, resulted in a dilution of efforts and resources and a confusion of mission. However, Grasshoppers was truly between a rock and a hard place, because there was simply no one else out there picking up the work of producer and consumer development that was an urgent need for Grasshoppers or any other efforts to develop a regional food market to succeed.

"I had to go to Tennessee and find out how to raise green beans. Who really in the state is worried about horticulture? The tobacco industry is still going on. So if we call [University of Kentucky] with something that has to do with tobacco and guess what... it's all answered. It's the easiest thing on Earth. This produce is like... nobody in their right mind would raise it!" —Former Owner/Investor

While there were attempts to partner with public and non-profit organizations, those partnerships fell well short of the existing needs. As previous studies have shown, successful food hubs thrive within an integrated system of support that includes extension, public health agencies, nonprofits, state services, and national programs (Pirog & Bregendahl, 2012). Strategic and committed support, beyond financing, from partner agencies and organizations allows food hubs to focus on the business at hand and supports the broader development of a vibrant regional food system. Support for technical assistance to producers and consumers from the state and national agriculture and public health related agencies, cooperative extension or other public university resources, and community-based organizations focused on regional food-system issues is an indispensable component of food hub development and success. Unfortunately for Grasshoppers the available assistance was inadequate, though the observed shortcomings have pointed the way for the development of new and much needed technical assistance programs in areas of cold-chain management, wholesale production and management for producers, post-harvest handling and packing, and consumer education around planning and preparing fresh seasonally based meals from unprocessed products.

"For me, the company was about testing models around scalability and viability in local food system development... If the goal was about profitability, it was about profitability for the sake of the movement." —Former Owner/Investor

Working as part of an integrated network of food-system development also requires an openness and objectivity on the part of food hub leadership to hear criticism and respond to recommendations. Informants in our study suggested that defending Grasshoppers may have become conflated with the defense of investment in regional food-system development, and thus clouded judgment when receiving recommendations for reforming the business model, or when making a decision as to whether or not to close the enterprise down and start over. Acknowledging that not all regions have equal access to the same level of agricultural support services and technical assistance, there will inevitably be instances where a food hub must take on additional food-system development activities in order to fulfil their goals and mission. In this case, it is recommended that these activities be conceived of as a separate business line and managed accordingly. Time spent on those activities should be financially accounted for either through grants or other outside investment in such activities or by direct financial subsidization by the other business lines.

CONCLUSION

The work of redeveloping regional food systems that place the livelihood of farmers and well-being of community members on par with accruing profits is challenging, and contends with significant obstacles both within the community and at a national and global level. With this in mind, the leaders, staff, suppliers, customers and supporters of Grasshoppers Distribution should be credited and sincerely thanked for their important contributions. It is our hope that through this report the lessons provided by the story of Grasshoppers will add to the many positive changes its operations realized for the farmers and consumers it served.

FINANCIAL DATA AND RATIO PERFORMANCE ANALYSIS

The following section presents the findings from a financial and ratio performance analyses conducted using data provided from Grasshoppers quarterly reports and other documents. In this section we will briefly explain the rationale and components of each of the analyses and measures used and then present the findings that emerged from the Grasshoppers historical financial data.

WHY RATIO ANALYSIS

Ratio analysis allows firms to recognize important relationships within their financial statements that can help with benchmarking and management decisions. Such ratios are commonly used both within an organization and by external creditors and/or investors to assess the financial health of the enterprise as well as to implement managerial changes with a view toward improving organizational financial health. Many ratios are common to this analysis and are typically grouped in those that consider issues of liquidity, solvency, efficiency, and profitability. Annual (2007-2009) and quarterly (2009-2013) income and balance sheet data were provided by Grasshoppers ownership and the Governor's Office of Agricultural Policy.

LIQUIDITY

Liquidity explores the ability of a firm to generate short-term revenue sources to meet short-term financial obligations. Liquidity is commonly measured using the current ratio (current assets/current liabilities) and, where inventory management may play a significant role, the quick ratio (current assets less inventory/current liabilities). The higher the ratio, the more liquid the firm. Quarterly balance sheets can't fully capture some of the inherent cash-flow challenges faced by an entity like Grasshoppers. Factors

that contributed to particularly significant liquidity challenges included seasonal production and markets, staff payroll obligations, a significant dependence on a CSA prepay and delivery revenue model, and periodic infusion of grant funds for a variety of needs over the life of the business.

SEASONALITY

Fresh produce from regional producers accounted for a significant amount of the sales from May to September. Unlike comparable produce wholesalers that source year round from wherever produce is in season, Grasshoppers depended almost exclusively on local sources of products. In order to offer product year round, Grasshoppers was self-limited through its mission and thus procurement strategy to what little extended season product they could source locally— a few local year round hydroponics growers, local meat and eggs, and shelf-stable products.

HUMAN RESOURCES

Meeting monthly payroll obligations is one of the more demanding financial obligations for a start-up venture, particularly when revenue has seasonal swings. Some volunteer staff was used to mitigate peak-season labor demands, but management and core staff remained employed full time all year. One of the managers chose to defer compensation for a period while the company struggled to meet other fiscal obligations, but it's evident that meeting payroll throughout the year was a frequent difficulty.

CSA CASH FLOW MODEL

Grasshoppers made a significant push to expand its CSA markets after the initial wholesale focus seemed to limit growth prospects. Louisville certainly provides a strong retail market for regional foods, and an opportunity to be a CSA aggregator seemed promising. The challenge with a CSA business model is that shareholders contribute payment in full during the winter for season-long subscriptions. While this has historically been one of the primary agricultural benefits of the CSA model, it requires considerable accounting discipline. CSA accounting is complicated, both in identifying real costs and also for cash flow. Many single farm-based CSAs have struggled with the fiscal discipline of (1) knowing their costs of production and marketing and (2) charging a share price that would allow full cost recovery (Woods et all, 2009). In defense of Grasshopper management, a firm margin-based pricing for CSA shares was employed that allowed them to reasonably manage the input costs. The challenge, it seems, fell more to the segregation and utilization of CSA funds to manage cash flow. One key lesson is that a business that blends CSA sales with other wholesale and retailing activities requires a very high level of managerial discipline.

GRANT FUNDS AND OTHER OUTSIDE INFUSIONS OF CAPITAL

Separating sales revenue and grant revenue in the existing financial statements is difficult. Multiple grant contributions from the Agricultural Development Board provided help with meeting short-term liabilities. Tracking how grant funds are used in some cases is difficult based on the financial data provided. The outside funding helps the appearance of liquidity ratios, but the funds to meet short-term liabilities were not consistently being met by the short-term sales and assets. This conclusion is supported by the observations around continued deficits in net income. These tendencies are common in startups but can also present immediate difficulties to an otherwise sound long-term business plan.

Current ratios for Grasshoppers are summarized graphically in Figure 3 using available data and compared to similar ratios reported for small wholesale produce firms in the southeast U.S. (five-year average) and also food hubs included in the recent NGFN study. Quick ratios that calculate the current ratio less inventory holdings were calculated for Grasshoppers–slightly higher than the current ratio. Neither Grasshoppers nor the benchmark food hub firms typically carried extensive inventories, as they are selling primarily seasonal and fresh products. The most recent current ratio data for food hubs provided by the NGFN in 2014 for calendar year 2013 reports an average current ratio of 2.39 for 48 food hubs nationally, up from the 1.6 level observed in 18 hubs in 2012.

Sorting out the short-term cash effects from grants impacting the liquidity situation is difficult. Further, it was difficult from the financial data provided to measure monthly or quarterly cash flows. It is evident from the quarterly current ratios, however, that even with outside grant infusions, the liquidity situation was often tight for Grasshoppers.

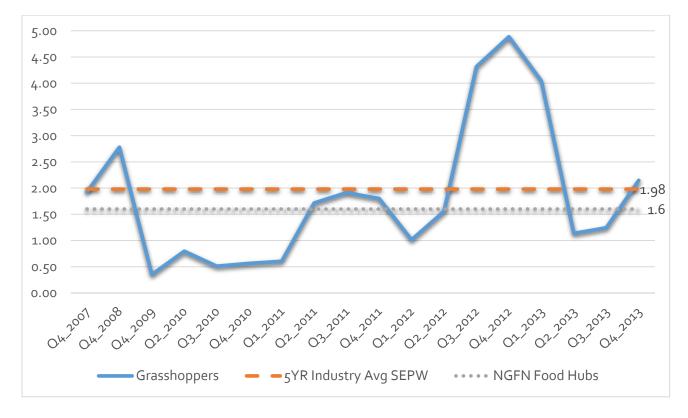


Figure A2: GH Current Ratio vs 5 yr. Produce Wholesaler Industry Average & NGFN 2012 Food Hubs

Note: NGFN reported in 2014 an average current ratio of 2.39 for 48 hubs in 2013. SOLVENCY

Solvency explores the firm's ability to carry debt through building equity and asset reserves. This aspect relates closely to the firm's ability to ride out unexpected short-term changes in the market or other business challenges and to move quickly to pursue unexpected opportunities. A stronger solvency position allows the firm to attract more favorable funding terms from lenders and business support agencies as they view the firm being at lower risk of failure.

Solvency is typically measured from the balance sheet relationships of debt/assets. Lower debt/asset ratios suggest a stronger solvency position. A comparison of debt/asset ratios for Grasshoppers with other produce wholesalers is presented in Figure 4.

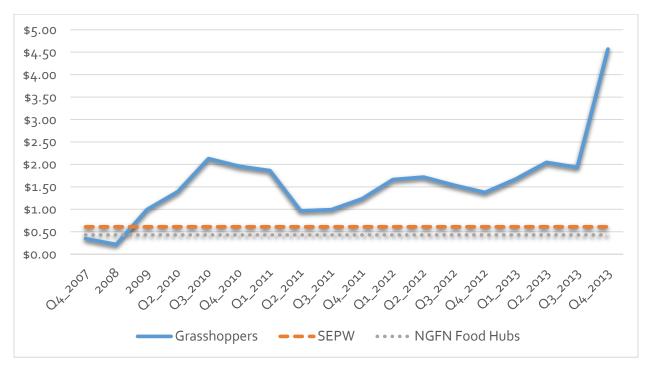


Figure A3: Debt to Asset Ratio (GH vs SE Produce Wholesalers) \$ debt for each \$1 of assets

Debt management was clearly a substantial challenge for Grasshoppers. The food hub business differs somewhat in product scope from produce wholesalers, and food hubs are almost all in a startup phase, but given the similar emphasis on fresh products, the average D/A ratio for these wholesalers was 0.61; essentially \$0.61 in liabilities for each \$1 of assets. The D/A ratio for food hubs within the NGFN benchmarking report was even lower, 0.43. Net worth, or owner's equity, is implicit in these solvency measures as either equity or debt has a claim on the organization's assets. Higher net worth means higher solvency—the organization is in a better financial position to weather short downturns in the market or to seize new opportunities that may require some quick investment. Food hubs in the 2012 NGFN data averaged a net worth of 57 percent. The 48 hubs reporting to NGFN in 2013 averaged a net worth of 68 percent—levels approximating those observed in the small scale commercial wholesale operations. Grasshoppers carried a negative or near zero net worth (equity balance) for the final four years of operation—the value of the assets was not enough to cover the extent of the liabilities, to say nothing of having value to return to the initial equity of the starting producers and, later, the non-farm investors.

A big source of debt for Grasshoppers was the prepaid obligations for the CSAs. It appears that CSA revenues and obligations were extremely difficult for the firm to manage. In September 2010, prepaid CSA obligations were \$125,344 of the \$218, 490 in total liabilities (57%). There were not significant long-term loans being carried early on—small loans to the KADB and an Eclipse loan were carried initially, with a larger Brown Family Foundation loan added in 2011. Grasshopper routinely carried a negative equity balance and, with steady income losses, a negative balance in retained earnings. The initial capitalization by the growers was relatively small, less than \$30,000, and not really adequate to capitalize the assets required for the growth being pursued. Efforts to generate additional equity were pursued in 2011 through the sale of \$142,000 in Series A equity bonds. These contributions certainly helped the solvency position of Grasshoppers, but the positive equity balance was short-lived.

Additional long-term loans were added to the books that included a new \$200,000 note from the KADB, a \$25,000 loan from a private investor, and a \$50,000 loan from the Wholesome Wave Foundation. The loan terms were generally favorable; the additional long-term interest obligations were not presenting significant challenges. This access to low-interest funding seems somewhat common for many food hubs based on the NGFN benchmarking study. Still, the debt has to be repaid and the shift in ownership of the assets initially from the growers that started the venture to the lenders and new outside

equity interests certainly gave rise to changes in management control. Continued negative net income following these loans only made the solvency situation more tenuous. Figure 5 shows the progression of loan debt to total assets carried by Grasshoppers—growing to a point where the firm carried \$1.30-\$1.40 in loan obligations for each \$1 in assets. This situation makes the firm an extremely risky venture for consideration of additional loans to pursue new markets or weather difficult short-term events.

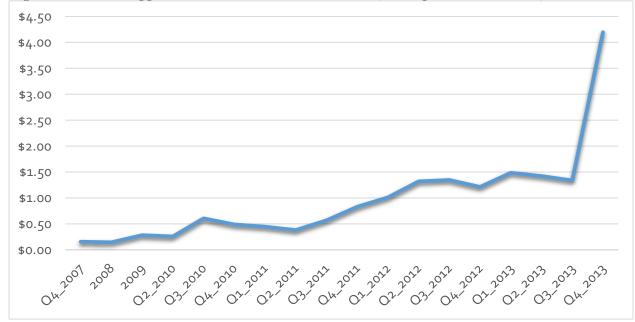


Figure A4: Grasshoppers Loan Balance to Total Assets (\$loan per \$1 total assets)

Liquidation of the assets at the end was not nearly enough to pay back the loans or return anything on the investments from the growers or Series A equity bonds.

EFFICIENCY

Efficiency ratios explore the performance of assets generating sales and profits for the firm. Implicit in efficiency measures are the idea that associated resources of management, learning, and technology can favorably influence efficiency ratios over time. Experience leads to less waste, eliminates redundancy, and builds on transaction

economies gained over time from market relationships. There are many efficiency ratios common to financial statement analysis. We explore sales/total assets, sales/fixed assets, and sales/labor expenses, all common measures of asset and labor efficiency.

ASSET EFFICIENCY

Asset efficiency explores trends in sales or profits per unit input, ideally hoping to see some general increases in these ratios due to management, learning efficiencies, and marketing spillover effects over time. Sales per dollar of assets and fixed assets, as well as sales per dollar of labor input, were examined over the life of the business and are presented in Figures 6 and 7.

There appears to be some evidence of improvement in efficiency very earlyin 2010 but decreased efficiency in the following years. Five managers, regular employee turnover, and unfocused sales targets may have contributed to this situation. Grasshoppers never carried a very large asset base for its size, choosing instead to lease space and equipment. Even the effort to move into small scale processing on-site was outsourced toward the end of the venture.

LABOR EFFICIENCY

The NGFN benchmark study reported an average of 5.2 FTE employees per food hub and sales per employee of \$286,788. This average is very close to the staff employed by Grasshoppers—generally carrying a general manager, two warehouse/delivery staff, a sales/marketing person, and part-time book-keeping. Volunteers were used widely, especially initially, but somewhat less as management and ownership changed hands,

which may explain part of the decline in sales/labor. It's a little difficult to extract the actual sales per FTE from the financial data. Table 1 provides a range based on 3.5-5.0 equivalent FTEs and shows the steady growth realized by Grasshoppers over time, including on a per-employee basis. While some seasonal inefficiencies may have been present throughout the life of the venture, Grasshoppers did not take on a lot of excess labor, nor did they pay outlandishly. Unfortunately, the more telling ratio, profit/employee, was never positive. Simple growth in sales means little toward becoming a viable going concern if it's not eventually being translated into profit.

Figure A5: Sales to Total Assets, Fixed Assets (\$sales per \$1 total or fixed assets)

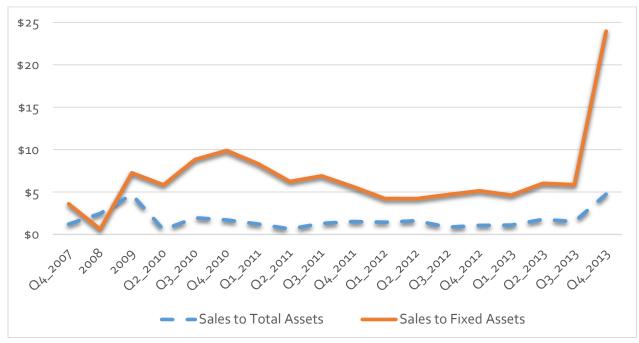


Figure A6: Grasshoppers Sales to Labor Expense (\$ sales per \$1 in labor expense)



Table A2: Sales per FTE Employee for Grasshoppers

Year	Sales per FTE Employee
2007	\$8,009-\$11,442
2008	\$60,230-\$86,042
2009	\$97,240-\$138,915
2010	\$110,206-\$157,437
2011	\$178,843-\$255,491
2012	\$182-959-261,371
2013	\$192,611-\$275,159

Note: The NGFN 2014 benchmarking study reports revenue per worker equivalent for 2012 (18 hubs) at \$286,788 and for 2013 \$432,872 (48 hubs) and product sales per employee in 2013 at \$387,204.

PROFITABILITY

The financial health of any venture ultimately rests on its long-term ability to generate sales above its expenses. Both produce wholesaling and food hub ventures tend to be relatively low-margin propositions. SE produce wholesalers reported an average of 3.37 percent for EBITDA and 2.66 percent Net Income. Food hubs in the NGFN study reported an average 3 percent Net Income loss, although the median reported was 5 percent. The NGFN study does not report EBITDA for the food hubs, but based on the observations for Grasshoppers, a lot happens to adjust these values beyond Net Ordinary Income to Net Income—especially accounting for grant income. The NGFN Food Hub Benchmarking Study reports 9 percent of total revenue coming from grants/contributions. This amount is actually quite a lot when considering the narrow margins generally observed in this business.

INCOME/SALES

Presenting income proportional to sales is the most common measure of profitability. The EBITDA, or Net Ordinary Income, was consistently double-digit negative initially, although improving over 2007-2011; the positive net incomes in 2007 and 2008 came substantially from other grant income.

		meome
2007	-181.2%	28.9%
2008	-36.0%	16.1%
2009	-25.4%	-18.5%
2010	-8.8%	-11.5%
2011	-6.4%	-7.1%
2012	-18.7%	-6.5%
2013	-13.5%	-10.4%

Table A3: Income to Sales Ratios for Grasshoppers, 2007-2013

EBITDA

Net

Income

INCOME/ASSETS

Return on assets (ROA) examines the profits each dollar of assets is able to generate for a firm. The goal of assets is to generate not only sales but profits as assets are secured through both equity contributions and loans. ROA for small-to-medium SE produce companies for the previous five years averaged 12.27 percent. No ROA was provided in the NGFN study. This metric is important, especially given that some food hubs may mirror Grasshoppers by receiving significant grant assistance to create an initial asset base. Table 4 summarizes the ROA for Grasshoppers for Ordinary Net Income and Net Income (including grants and other income). The ROA values suggest relatively high losses given the asset base.

	EBITDA/Assets	Income/Assets
2007	-219.8%	35.0%
2008	-88.9%	39.7%
2009	-119.9%	-87.2%
2010	-39.8%	-52.0%
2011	-38.1%	-42.4%
2012	-67.6%	-23.5%
2013	-82.7%	-63.7%

Table A4: Return on Assets for Grasshoppers Distribution, 2007-2013

Net

GROSS MARGIN

Gross margin represents the sales less cost of goods sold (COGS). Firms with a strong market, differentiated product, or loyal customer base can often capture higher gross margins, sales above the COGS. The gross margin also reflects the type of market a firm engages. A lower gross margin doesn't preclude profitability, but it suggests the firm will have to pursue volume sales and well-managed overhead expenses to generate profits.

Gross margins for SE produce firms averaged 23.34 percent for the previous five years. Gross margins for food hubs in 2012 averaged a comparable 21.33 percent (reported by NGFN as 14.49% for hubs reporting in 2013). Gross margins for Grasshoppers were generally comparable with these other firms, although slightly below 20 percent as sales expanded in 2011, summarized in Figure 8. Later managers pointed to difficulty finding higher margin clients and grew sales through wholesale and farm-to-school accounts,

with potentially adverse effects on the overall gross margin.

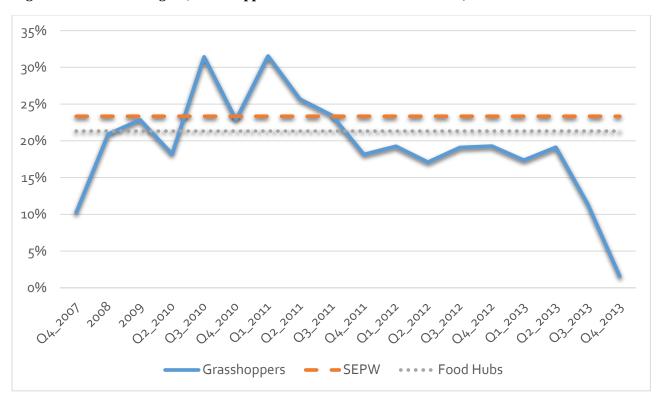


Figure A7: Gross Margin (Grasshoppers vs SEPW and NFGN Hubs)

SUMMARY OBSERVATIONS FROM THE RATIO ANALYSIS

- Growth in debt and even involvement in grant programs changed the financial control of the firm. Producers had less and less opportunity to direct the entity as continued losses required them to have to seek outside funding to cover operating costs.
- The solvency position steadily eroded. This erosion placed Grasshoppers in a difficult position as they sought to pursue new growth and market opportunities.

- Ordinary net income—revenue from the sales of products less cash expenses were always negative. This situation necessarily led to erosion of equity in the firm and the eventual closure of the business.
- Outside grant funding and creative equity financing were not sufficient to cover the ordinary net income deficits. Support for the public good dimensions was either not enough or the management and marketing challenges were too difficult to overcome to allow Grasshoppers to be a viable going concern.

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APPENDIX B: MINI-CONFERENCE CALL FOR PAPERS FOR CHAPTER 2

The New Frontier of Resistance in Global Agri-Food

Mini-Conference to be Held at the 2016 XIV IRSA World Congress of Rural Sociology Toronto, Canada August 10-14

Alessandro Bonanno and Steven Wolf Sam Houston State University Cornell University

The objective of this short white paper is to offer thoughts on the theme of the miniconference and to stress items that could be of relevance in the preparation of the conference presentations, the discussion in Toronto, and possible ensuing publications. As indicated by the original call for papers, the mini-conference consists of the presentations of works that analyze the theme of "resistance in global agri-food" and, in particular, logics, forms, and actors that characterize the current opposition to the corporate neoliberal agrifood regime. It is our hope that through the paper presentations and related discussions we can generate a coherent, informed and updated analysis of resistance in agri-food.

In the sociological tradition, the development of resistance is often associated not only with the opposition to undesirable authority but also with the extent to which dominant actors are able to legitimize their power, control subordinate groups, and secure their support. Resistance movements oppose a developmental trajectory and the capacity of incumbents to shape trajectory through barriers to entry and control of public resources and fora including markets, public subsidies, law, courts, media, and culture. In this sense, hegemony – maintaining dominance by undermining debate and social selection processes - is generally what is contested, even if the contest appears to be focused on material manifestations of social relations such as environmental degradation, vulnerability of farm labor, and public health problems. In this tradition, the concept of critique is employed to assess the limits of dominant ideologies and practices. A core function of critique is to unmask domination and legitimation, highlight internal contradictions, and create space for alternative concepts, discourses, and models to emerge and to gain traction. The classical Kantian notion of the "critique of reason" is utilized to assess the power of ideological formulations that find legitimacy in the claimed validity of their "rational" accounts. For Kant, it is paramount to explore the extent to which reason can explain reality. Simultaneously, Marx's "critique" of political economy is directed at revealing the falsity of the claims of the "neutrality" of the free market and the fairness of its exchange mechanisms. The economy is political (i.e., class constructed and based), Marx contends, and the free exchange that supposedly characterizes the functioning of the market is based on processes of violent expropriation, exploitation and domination.

In critiques of mature capitalism, the ability of individuals to satisfy their needs through affluent consumption is presented as controlled by the power of monopoly capital, state bureaucracy, and ideological constructs that give the illusion of freedom while constraining behavior and reinforcing structural controls. "Artificial negativity" as explained by Critical Theory allows us to see ethical or intentional consumption (e.g., Fair Trade, Organic, eco-certified, local) as a problematic response to the problem we confront and an incomplete stance for resistance. Artificial negativity draws our attention to the illusion of freedom and also a false sense of the significance of behaviors and discourses that oppose dominant forces. This resistance is illusory and manipulated by the powers that be. While 20th Century analyses stressed the controlling power of state bureaucracy in 'the totally administered society," corporate appropriation and reinterpretation of historically progressive concepts such as justice, ethics, responsibility and regulation define contemporary arrangements. Similarly, theoretical formulations based on the Post-structuralist views of Michel Foucault identify individuality, market competition and responsibilization (i.e., regarding consumer choice, rather than politics, as engine for structural reform) as dimensions that, while appearing to be emancipatory, contribute to the strengthening of the power of the neoliberal regime.

According to proponents of neoliberal theory, such as F. A. Hayek and Milton Friedman, freedom is based on the ability of individuals to make unconstrained decisions. They contend that any form of control of the actions of individuals, from state regulation and planning to the power exercised by existing institutions (e.g., community, family, tradition, etc.), is a violation of, and impediment to, freedom. In particular, they contend that collective decision making processes, even those based on the will of the majority and democratically structured states, curtail individual freedom.

The centrality of individuality is supported by other theories that do not necessarily follow the tenets of Neoliberalism. Dwelling on the limiting power of institutions, theories of "reflexivity" stress the emancipatory dimension of the freedom of the individuals that allows emancipation from constraining conditions such as tradition, duty but also corporatism. Equating this push for the affirmation of individuality with the completion of the modern revolution, they contend that it is only now that the "modern" promise of freeing the individual from pre-capitalist limits is finally reaching realization. For these theories, the augmenting of individuality is a liberating force that find its power in the ability of the reflexive and responsible individual to make choices that once were unavailable due to the existence of established social arrangements. But the practical potential to escape from history and the implications of 'total' freedom defined in this manner are, of course, open to question.

Freely acting individuals, neoliberal theorists contend, liberated from the burden of tradition and institutions, create a just, fair, and efficient society. Justice, fairness and efficiency are generated through competition that results in the rewarding of meritorious individuals and the application of discipline to poor performers. This situation stands in sharp contrast to collectively made decisions about what constitutes just, fair and productive. While inspired by the democratic ideal of the rule of the majority and the participation of the minority, they contend that bureaucratic decision processes are flawed by information deficits and they are also frequently shaped by powerful special interest groups that, ultimately, control the economy and the state. Competition, conversely, allows individuals to assume full responsibility for their actions. Individuals are free do decide how to act and to select these actions based on their knowledge of their requirements (costs) and consequences (benefits). As these benefits and consequences are realized, the composition of society and markets will continually reflect the best possible allocation of

human, natural and economic resources and distribution of social rewards. In this context, individuals are empowered to act and, simultaneously, are called to become responsible for their actions. Denying any positive role of the state unless directed at the creation of more markets, stressing the undesirable effects of the redistribution of resources and the decommodification of goods and services, and emphasizing personal responsibility over the concept of social safety net, neoliberals view responsibilization as a tool to achieve emancipation from the overbearing, inept, and captured "nanny state." As individuals take control of their actions and move away from obeying state mandates, not only do they break away from following improbable "all knowing" state leaders and plans, but their responsible behavior becomes one of the primary conditions for the ongoing creation of a better society. Contending that freely acting individuals permit the best possible outcome of socioeconomic and ecological interaction, they argue that alternatives to "free market capitalism" fail on both normative (i.e., justice) and technical grounds (i.e., allocative and dynamic efficiency).

These arguments against state intervention and planning, expert judgment, democratic decision making processes, the collective satisfaction of social needs, and the idea that markets generate socially undesirable consequences and crises legitimated neoliberalism made it a theory "hard to oppose." Yet, in society in general, and in agrifood in particular, the growth of corporate neoliberal arrangements has been opposed not only through the production of sharp, sustained critiques but, more importantly, through a variety of initiatives. The industrialization of farming after WWII produced a countermovement in the 1970s fueled by both an ecological and a social critique. The resonance of these critiques can be found in contemporary programs, but rural economy and ecology, most specifically the fate of the family farm and concerns about long term productive capacity of farmland, have largely been eclipsed with concerns that grow out of consumption. Some of these initiatives take the form of consumer and/or community-based "alternative agri-food." These initiatives include not only programs that resist the industrialization of food production and consumption such as organic farming, biological farming and slow food, but also proposals that establish different forms of production and distribution such as civic agriculture and farmers markets. Based on the actions of responsible, free, and reflexive individuals and market exchange, these initiatives have received a great deal of attention and are heralded as successful ways to oppose corporate dominated transnational agri-food networks. Simultaneously, the fact that these programs center on consumer behavior and are market oriented has allowed critics to maintain that they are based on the same ideological traits that characterize Neoliberalism. Additionally, critics have questioned their anti-corporate effectiveness. Not only has the expansion of corporate agri-food not been altered, but many of the key features of these initiatives have been appropriated by the corporate entities targeted by opponents. Finally, critics indicate that these programs limit participation of members of the lower classes and, because of their local nature, hamper broader participation. The fact that they do not transcend market relations and the search for profit (commodification) allows, at best, a "benign" form of small scale capitalism that remains vulnerable to corporate co-optation, capital concentration and market contradictions including exploitation of land and labor (wage, family, and self). By failing to address the political economic foundations of the regime they contest, alternatives focused on 'voting with one's wallet' address the symptoms and

not the cause. In terms of resistance projects, we view such approaches as substantially self-limiting.

Other initiatives offer opposition to corporate neoliberal agri-food through proposals that de-commodify agri-food and present it as a "right." The collective project of "Vía Campesina" is exemplary of this form of resistance. Vía Campesina advocates small scale and/or peasant farming as a form of agricultural production that is ecologically and socially sustainable. The establishment of food sovereignty, or the capacity of those involved in food production, distribution and consumption to control these processes, is regarded as a moral imperative and a key strategic objective. Offering a powerful alternative discourse, the identification of food production and consumption as rights stands in sharp contrast to the Neoliberal proposal that sees food as a commodity and production as managed through market competition. Simultaneously, however, the project of championing small holders has been criticized for its limited ability to deliver a sustainable and just food system that is inclusive and global. It is not yet clear that agroecological production techniques and direct reliance on local systems of production can consistently address the food needs of the large and growing world population composed of members of the lower classes, non-farmers, and urban dwellers. Critics argue that failures to advance an intensive model of exploitation of land will result in reductions of biodiversity. Additionally, the pre-capitalist nature of peasant farming casts doubt on its applicability in advanced capitalist contexts. Paraphrasing, we might say, 'Once they have seen Paris, you can't keep them down on the farm.'

Pertinent debates stress the "retreat of the state" as one of the primary features of the neoliberal revolution. The implementation of de-regulation and a significant reduction of state intervention, it is argued, paved the way for the marketization of society and the expansion of corporate power. Defining current conditions in terms of "state versus corporations", opponents of corporate neoliberalization propose a return to greater state intervention and control of the economy and society. They call for the implementation of measures such as enhanced regulation of production and distribution of goods and services, stricter state regulation of the environment and labor relations, and a renegotiation of transnational agreements and organizations such as NAFTA, MERCOSUR and the EU. This neo-Fordist posture proposes opposition to Neoliberalism through the revival of progressive roles played by the state under Fordism. While recognizing the progressive dimension of Fordism, critics not only stress the issues associated with the unresolved contradictions of a Fordist style state action, but also underscore the fact that the state has been instrumental in the implementation of Neoliberalism. They point out that the "state versus corporations" is, ultimately, a false dichotomy as the state has been neoliberalized and it is a primary factor in the implementation and maintenance of neoliberal governance. In this light, the challenge of structural reform is understood as a normative realignment of state resources and state authority. To the extent that agrifood resistance movements do not engage the state, limited progress can be expected.

The development of these alternative forms of agri-food production and consumption has been accompanied by the intensification of labor exploitation worldwide. Agri-Food is increasingly based on the use of cheap and vulnerable labor whose conditions have worsened in recent decades. A very large, global reserve army of labor is made available through transcontinental migration and the growth of transnational production networks. These processes allow corporations to compress wages and control opposition through market mechanisms. However, immigration schemes and existing antiimmigration discourses also permit the control of labor through intimidation and political means. The crisis of unions and political parties that historically supported the working class has further contributed to the political and economic weakness of labor. Importantly, discussions on resistance rarely address the issues of labor and labor/immigration policy and their potential for opposition and change. These conditions create the paradoxical situation in which greater labor exploitation is accompanied by limited analytical focus on labor and organized labor resistance.

The persistence and intensification of the exploitation of agrifood workers is paralleled by stresses placed on ecosystems. As summarized by Goodman, Sorj, and Wilkinson, the industrialization of agriculture was premised on 'appropriation and substitution', and the tendency to replace production inputs provided by nature and communities with commercial goods and services has deepened in the corporate agrifood regime. Genetically modified seeds that are inscribed with weed management regimens and intellectual property controls offer a potent example. The dominant mode of technological development continues to be one that seeks to smooth ecological variability and increasingly approach the comprehensively controlled ideal of the factory. The neoliberal agri-food regime seems to accept degradation of on-farm (e.g., soil quality, pest resistance) and off-farm degradation (e.g., hypoxia of the Gulf of Mexico), as responses to well documented problems are meek. Technological optimism, capacity to source land and food globally, and high discount rates present a situation in which ecological costs and risks can be denied and/or treated as inconsequential. With respect to the role of the state in addressing public goods and public bads linked to environment, it is noteworthy to recognize that one of the largest environmental conservation programs in USA is structured such that roughly half of all spending subsidizes manure management by concentrated animal feeding operations (CAFOs). The state and citizens seem satisfied to allow the corporate agri-food regime to externalize the ecological costs of production.

Reflecting on the capacity of the neoliberal agrifood regime to persist and to grow in the face of unjust treatment of labor, ecological degradation of on- and off-farm ecosystems, negative public health outcomes, and other contradictions invites attention to 'system boundaries.' Attention to the criteria of evaluation of performance and legitimacy is critical for understanding how industrial agrifood is able to maintain professional, popular, and public sector support. The food sovereignty movement and the relocalization/re-embedding movement attempt to integrate non-agricultural and non-/productivist considerations into the calculus regarding what kind of agrifood system we have and what kind we should strive for. Additionally, the planning horizon of alternative models are quite different from that of corporate agri-food, and this explains something about capacity of the neoliberal regime to maintain legitimacy in the face of argumentation and evidence. Inability to re-define the criteria structuring analysis and to re-scope the debate can be understood as a significant weakness of critiques and resistance movements. The locavore movement and its cousins attempt to out-compete the corporate agrifood model on its own terms. We believe more attention should be devoted to alternative accountings and the constraints to institutionalization of new modes of evaluation.

In this context, it is our hope that the mini-conference could foster discussion and the sharing of ideas and proposals about the current characteristics, positive contributions, and future developments but also limits of resistance in agri-food. Also important would be to discuss counter moves carried out by dominant groups as well as salient actions performed at the state and civil society levels. Ideally, papers should provide theoretically and/or empirically based contributions that that include a "critique" of current resistance. As indicated above, critique should be understood in terms of the exploration of "how far" each of these proposals/episodes of resistance can go in term of opposing corporate neoliberal agri-food. All papers presented at the mini-conference will be considered for inclusion in an edited book to be published by a major academic press. Additionally, selected papers will be included in a special issue (or special issues) of the official journal of RC-40: *The International Journal of Sociology of Agriculture and Food*. In both cases, we hope to generate coherent bodies of contributions. Accordingly, it is likely that each of the participants would be asked to revise his/her paper to include/expand parts that contain a critique of current resistance initiatives as well as other pertinent dimensions.

APPENDIX C: SPECIAL ISSUE FOR CHAPTER 4

CAFE SPECIAL ISSUE (Overview and Introduction Abstract)

Confronting The Goldilocks Problem: Encountering "The Middle" in Anthropological Studies Of Food and Agriculture

A. Ashley Stinnett and Jennifer Jo Thompson

Anthropological studies of agriculture and food systems have generally concentrated on opposing ends of a spectrum of scale, with studies of subsistence strategies and household practices on one end (e.g., Malinowski 1944; Counihan 2004) and analyses of industrialized production and globalized markets on the other (e.g., Mintz 1985; Miller 1997; Stone 2010). At the same time, rural sociologists and agricultural economists have identified the "disappearing middle" in the structure of U.S. agriculture, in which midsize producers—or "large family farms"—are being replaced by massive corporate enterprises on one hand, and small, directmarket, farms on the other (Lyson et al., 2008). Globally, the contours of this trend vary by region and national income level, yet indicate an overall trend towards bipolarization. Recent analyses indicate that 94% of the world's farms are smaller than 5 ha, while farms greater than 5 ha account for large shares of the world's farmland -- ranging from 27% of agricultural land in low-income countries to 97% in high income countries (Lowder et al. 2016). Nevertheless, as anthropologists studying agriculture and food systems, we find ourselves increasingly working betwixt and between—with producers concerned with "scaling-up" to reach more reliable and more profitable markets, with intermediaries that aim to bridge the divide between small-scale producers and larger, often wholesale, markets, and with populations living and working in transitioning demographic and geographic spaces—yet

with little anthropological theory to support this work. This special issue aims to retheorize "the middle" in anthropological research of food and agriculture. We ask the following questions: 1) Why is the middle absent in anthropology, in policy, and, increasingly, on the ground? and 2) Given its presence in our ethnographic work, what are some productive frameworks for conceptualizing or rendering the middle?

The articles in this proposed issue draw upon ethnographic and applied fieldwork to shed new light on the actors, organizations, practices, and values that comprise the middle in U.S agro-food systems. Together, they expand theoretical territory toward a conceptualization of "the middle" from an anthropological perspective. In the introductory essay, **Stinnett and Thompson** synthesize current scholarship on an "agriculture of the middle," considering what anthropologists can contribute theoretically and methodologically, and providing brief exemplars from our ethnographic work in this area. We address two areas of import: (1) How are researchers across disciplines conceptualizing and writing about "scale" in food production and consumption? (2) What can anthropologists uniquely contribute, theoretically and methodologically, toward the development of an "anthropology of the middle" – especially as it relates to the study of agro-food systems? We illustrate through brief exemplars from our respective field sites: **Stinnett** presents ethnographically grounded evidence from meat production research conducted in the U.S., supporting findings of a definitive gap between agroindustrial scale and small-scale meat processors. In recent years the push for local, sustainable and ethically produced meat is on the rise, yet scaling-up from niche meat processing to address this demand has been met with policy and organizational barriers, resulting in a lack of mid-sized processing facilities nationwide. **Thompson** draws on ethnographic

work to examine the reemergence of "the middle" in efforts to bring local foods into school lunch as a part of trending "farm to school" programs. Although initial efforts emphasized the social and economic value of direct purchases from small farms, structural and practical barriers have made this difficult in practice and have fueled increasing demand for intermediaries--whether local distributors or food hubs--to absorb the risks and streamline the purchase of local foods.

The next set of articles examines the complexities of scale: **Wilson** examines how intersecting constructions of scale (e.g., geographic distance, production volume) exclude midsized producers from participation in the largest farmers' market in the largely agroindustrial Palouse region of the Northwest U.S. **Janssen** conceptualizes "the middle" in terms of practice, rather than scale, and examines the process by which "small" and "alternative" producers in Iowa adopt conventional practices of mechanization and specialization. In a collaboration between Extension faculty and anthropologist, **Gaskin and Thompson** examine whether small farmers can maintain their commitment to small-scale and "alternative" production values (e.g., building soil health and maintaining crop diversity) even as they shift production practices to gain access to more profitably wholesale markets.

The remaining papers consider the role and position of intermediaries in midscale agrofood systems. **Brislen** examines the process of "scaling-up" of alternative food networks and the role of food hubs and other values-based supply chains as intermediaries and support structures in this process. She argues that "scaling-up" requires far more than technical support, and that values-based networks, like food hubs, are positioned to broker trust, along with the social and cultural knowledge necessary for

"scaling-up." **Kemelson et al.** examine the reinvention of intermediaries, specifically forprofit partners emerging from the non-profit sector to connect mid-scale and sustainable producers with mainstream markets. Through analysis of three case studies with intermediaries, they identify key trends, grounded in their non-profit origins that underpin these relationships: trust based in shared values and institutional resilience.

As with any ideological project "scaling implies positioning and, hence, point of view" (Gal 2016: 91). The articles in this special issue seek to broaden the possibilities of how scale is conceptualized and rendered in agriculture and food systems, through the examination of the structures, practices, and values that ultimately constitute the "middle." These papers point to an important role for anthropologists in uncovering, through applied and ethnographic fieldwork, the local, embedded, creative, and contingent ways that individuals, families, and communities navigate the forces of agricultural policies and the market economy. We find that there is no onesize-fits-all model for scaling-up or down; rather, actors navigate the middle using a variety of approaches that reflect local geographies and material conditions, as well as policies, values, and attitudes. We see these factors drive the emergence of new production networks and practices that support resilience within an ever-shifting system.

APPENDIX D: FOOD HUB STAKEHOLDER SEMI-STRUCTURED

INTERVIEW PROTOCOL

The following include potential questions for the food hub stakeholder interviews. This list reflects key areas of inquiry but does not contain an exhaustive list of potential questions. Questions will follow the flow of conversation and appreciative inquiry, and will reflect the particular areas of expertise or experience of the interview participant.

OVERVIEW

- Tell me about the story of your involvement with this food hub.
- What are some of the key highlights in the history of this food hub?
 Who played a role in its inception and organization?
- Who are the current leaders and decision makers for this food hub?
 - How does decision making about operational issues take place?
 - What are the processes, and who is involved with what relative authority?
- What groups, agencies, or individuals would you say are key stakeholders for this food hub?
 - How are their needs, views, or opinions accounted for within the food hubs operations?
- What groups, agencies, or individuals provide support to the food hub?
 - Financially
 - Technical Assistance
 - Marketing/Outreach
 - Material (e.g. warehouse space, trucks)

VALUES AND MISSION

- What are the short and long term goals for the food hub?
- How would you define the values of this food hub?
 - How were those values chosen, and who had a role in shaping them?
 - In what ways do you feel those values are reflected in the operations of the food hub?
- How are values implemented in relationship to each other? Are some values more highly prioritized than others?
 - How does that prioritization happen?
 - Who is involved?
 - What role do financial considerations or profitability play in those decisions?
 - When does profit trump values, and when is it secondary to them?

- What stakeholder or population do you feel is best served by the food hub?
 - Are there any stakeholder groups that you feel are underserved?
- What did you see as some of the key points of struggle or challenges for the food hub?
 - What aspects of the operations and management of the food hub contribute to both key successes and challenges?
- What aspects of marketing, sales, and financial management lead to key successes and challenges?
- What role do you think public policy (national, state, local) play in the successes and challenges of the food hub?
- What role did publically funded capital or grants play in the successes and challenges of the food hub?

FARMER PARTICIPATION

- What type of producers do you work with?
 - Size of operations
 - Tenure in agriculture (new, established)
 - Relative diversity of enterprises
- How are farmers recruited for participation in the food hub?
 - What formal and informal processes exist?
 - Who is involved in selection?
- What information is collected about participating farmers?
 - Is any of that information communicated to consumers, and if so how?
- What would you say are the goals of the food hub relative to participating farmers?
 - What impacts does the food hub seek to have on participating farm enterprises?
 - How are those impacts pursued? Through what policies or practices?
 - What practices are in place to measure those impacts?
- What changes have you observed in your participating farmers over the course of your relationship with them?

WRAP UP

- If you could share lessons learned from your experience with a person or group in charge of running an enterprise like Grasshoppers, what would it be?
 - What would you share with someone in your same position with that enterprise? Say, another farmer thinking of supplying the food hub?

APPENDIX E: ON FARM SEMI-STRUCTURED INTERVIEW PROTOCOL

The interview will take place at the participant's farm at the kitchen table or another quiet location of the participant's choosing. Each interview will take approximately 2 hours, and will be audio recorded with the participant's permission.

General farm history

- What do you know about the history of this farm?
 - Has any past usage or management practices affected what is grown here now?
- Where was the farm, generally (markets, production practices) when you started as the principle operator, and how has it changed over the years?
 - What drove those changes?
 - Were there any 'watershed' moments that resulted in major changes, were there small changes over time, or have things pretty much stayed the same?
- How has the farm production or management changed over time? What drove these changes?
- Who's in charge here?
 - Who are the key decision makers?
 - Who are other people that have a say in what happens on this farm?

Current farming systems and management

- What do you raise now?
 - What crops do you currently have planted?
 - How do you decide what to grow/raise, and how much of it to grow/raise?
 - Do you have any lands on our farm that you would consider not suited for cultivated agriculture?
 - What do you do there?
 - What livestock do you have on the farm?
 - If you have livestock, please describe how you balance the crop and livestock production on the farm.
- Can you walk me through your farming system(s) from beginning to end of the production cycle?
 - What particular challenges do you face in regards to:
 - Weeds, Insects, Diseases, any other pests?
 - How do you manage them?
 - Describe your soils on the farm.
 - What is your soil quality, and how do you manage for that (any particular management techniques or systems)?
 - Do you have any issues with productivity related to soil quality?
 - How do you prepare your soil for planting?
 - What are your water resources?
 - Is there enough?
 - What kind of equipment do you use?
- Please tell me about a time you changed the way you did something or implemented a new management practice on your farm?

• Walk me through from the beginning, how you learned about the new practice, what influenced your decision to management, and how you went about implementing and evaluating it.

Management and philosophy

- What motivated you to go into farming?
 - Who or what were your major influences?
- Is there anyone you look up to as a 'good farmer'?
 - What about them or their farm do you admire?
- Are there people or experiences that have influenced the way you manage your farm or what you produce?
- There's a lot of talk about 'sustainability' in the world of food and agriculture right now, would you describe what a "sustainable" farm means to you?
 - What are you doing on your farm that you feel contributes to this idea?
 - Are there ways you feel your farm could be more sustainable?
- Where would you like to see your farm enterprise in five years, and what is it going to take to get there?
 - Production
 - o Markets
 - Personal? (Work/life balance?)
 - What financial barriers do you foresee for achieving these goals?
 - What technical barriers do you foresee for achieving these goals?
 - What sort of skills or knowledge will you have to obtain to achieve these goals?
 - What people, organizations, or other resources will you rely on to address these barriers and achieve these goals?

Marketing

- Where do you sell your products to?
 - Can you give us a rough idea of your annual sales in each market?
- How did you decide to sell your products to those markets?
- How did you find or gain access to the different market outlets?
- About how much time goes into tending to each market outlet?
 - Transportation
 - Administration/logistics
- Are you looking to grow sales of any of your products?
- Are you looking to grow the share of your sales in any specific market outlet?
- How do you decide the price for your products?

Best Management Practices

- What current practices are you using that might be considered "best management practices"?
- How did you learn about the best management practices you're using?
- How long have you been using each practice?
 - What motivated you to start using those practices?
- Are there any best management practices that you have heard about that you are considering implementing?

- How did you hear about them?
- What interests you in these practices?
- Do you foresee any challenges in implementing them?

Peer networks

- What is your relationship with the other farmers in the area like?
 - Are there any farmers you talk with regularly?
 - Do you share any resources or labor?
- Do you have a relationship with any other producers who sell to the food hub?
- Have you gained access to any new groups, or become acquainted with other producers as a result of your participation in the food hub?
 - Have there been any observable benefits to your enterprise as a result of those relationships?

• Do you belong to any farming related organizations?

Finance

- Does the farm financially support itself?
- Does the farm support your household?
 - How many hours off farm do you work?
 - Would you like to be full time on the farm?
 - Does working off farm affect how you manage your farm, or your choices of what to produce?
 - Does anyone else in your household work off farm?
 - Supplemental income?
 - Health insurance?
- Do you feel like you have access to enough capital to develop your farm enterprise as you'd like?
 - What would you like to do on the farm that you cannot because of lack of access to capital?

APPENDIX F: FOCUS GROUP PROTOCOL

FACILITATION GOAL: Focus on sector specific experiences, insights, and impacts regarding the food hubs social, economic, and environmental goals and mission.

- Ice Breaker (with flip chart) Let's work together to generate a general model of what this food hub is:
 - What does it do?
 - Who does it serve?
- How did you learn about the food hub, and what motivated you to participate? What other motivations or interest do you have related to this food hubs mission or operations? (Write responses on flip chart)
- How would you describe the values or goals of the food hub?
- What are some of the particular ways that you see the food hub seeking to achieve its goals or mission?
 - How successful or unsuccessful are those efforts?
- What concerns do you have about the current food system in your community?
 - What venues/channels do you feel are available to you for addressing those concerns?
- Which of those concerns do you feel the food hub addresses, and how?
 - (If not mentioned) What concerns, if any, do you have about the ecological aspects of food and agriculture?
 - How do you feel the food hub does and does not address those concerns?
- What services or needs does the food hub provide for your community?
- What changes have you observed in the business model of the food hub over time, and what were the outcomes (positive or negative) of those changes?
- What changes have you seen occur in the food/farming sector as a result of the food hubs operations?
 - What partners or stakeholders are served best by the food hub?
 - Were any key partners or stakeholders underserved or over looked?
- What advice would you give to the leadership of this food hub in order for it to be more successful in achieving its goals?

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CURRICULUM VITAE

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EDUCATION

University of Kentucky (2010-2012)

Masters of Science in Agriculture (Rural Sociology)

Professional Paper: Cultivating Beginning Farmers: A Policy Analysis of the Beginning Farmer and Rancher Development Program

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PROFESSIONAL EXPERIENCE

2015-Present, Executive Director, The Food Connection, University of Kentucky

2010-2015, Graduate Research Associate, Department of Sociology, University of Kentucky

2008-2010, Program Manager: Micro Enterprise Development and Learning (MEDAL) Program, Umpqua Community Development Corporation

2007-2008, Project Associate, Resource Assistance for Rural Environments (RARE), Umpqua Community Development Corporation

2006, Development Intern, Kallari Association and Cooperative

2004-2005, Program Assistant, Sustainable Agriculture Program, Rural Action

AWARDS AND FELLOWSHIPS

(2014) Dissertation Enhancement Award (\$3,000), University of Kentucky Graduate School

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PUBLICATIONS

JOURNAL ARTICLES

Brislen, Lilian, Keiko Tanaka, Krista Jacobsen. 2016. "Preferred Knowledge Sources for Beginning Farmers: The Case of Kentucky." Journal of Extension. Vol. 54 (4). https://www.joe.org/joe/2016august/a5.php

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