

ANNOTATED BIBLIOGRAPHY OF FOOD HUB RELATED RESEARCH

FOOD HUB RESEARCH IN THE US

Barham, James. “Regional Food Hubs: Understanding the Scope and Scale of Food Hub Operations.” PowerPoint Presentation. USDA Agricultural Marketing Service. April 19, 2011.

URL: <http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5090409>

Abstract: This PowerPoint presentation includes an introduction to the USDA’s “Know Your Farmer, Know Your Food” (KYF2) initiative and the KYF2 regional food hub subcommittee. It then presents the definition of a food hub and its core components, followed by the preliminary findings from a nation-wide food hub survey and potential next steps to scale up food hub operations.

Cantrell, C. and Lewis, R 2010. *Food System Infrastructure: Michigan Good Food Work Group Report*. Report No. 5. East Lansing, MI: C.S. Mott Group for Sustainable Food Systems at Michigan State University, 1-27.

URL:

http://www.michiganfood.org/assets/goodfood/docs/Food_System_Infrastructure_Report.pdf

Abstract: The infrastructure section of the Good Food Charter addresses the particular need of agri-food entrepreneurs for reliable pathways to market. For Michigan to achieve the vision and goals of the charter, its agri-food entrepreneurs need a well-functioning food system infrastructure of processing, distribution, and other facilities and services. If Michigan fails to address this need, it will miss a historic opportunity to grow jobs, build public health and attract business investment. Good food entrepreneurs are emerging in increasing numbers and moving to meet new, broad-based demand for healthy, green, fair and affordable food. But high risks and costs of doing so, due to wide gaps in food system infrastructure, which are a legacy of a different era, hinder this economic development. Local and state leaders from every sector must champion a new good food direction for Michigan and provide key financial and programmatic support to agri-food entrepreneurs, including those equipment makers, distributors, value-added processors and others needed to build appropriate food system infrastructure. The financial investment needed is relatively small compared with other forms of economic development. Yet studies suggest it can generate significant returns for Michigan’s 21st century economic progress.

Food Commons Working Group 2010. *The Food Commons – Building a National Network of Localized Food Systems*, 1-19.

URL: http://www.swantonberryfarm.com/Documents/Food%20Commons%208-4.0%20DOC_Final.pdf

Abstract: This paper poses the hypothesis that the antidote to the unsustainable path we are on is a 21st century re-envisioning and re-creation of the local and regional food systems that pre-dated the current global industrial food system. This new food system will require a new and different kind of local, regional and national infrastructure with a new and different set of governing and operating principles and economic structures. This new system is called the Food Commons. This paper describes the principles on which Food Commons could be developed and discusses

in greater detail the three central elements of the system: Food Commons Trusts; Food Commons Banks; and Food Commons Hubs. It then discusses the question of the Food Commons governance – one of the most critical factors in determining the success of this effort, followed by suggestions of several major areas with cost projections for the planning, design, and launch of the Food Commons system.

Nickerson, Virginia 2008. *Understanding Vermont's Local Food Landscape: An Inventory and Assessment of Recent Local Food Initiatives*. Prepared for the Vermont Sustainable Agriculture Council, 1-60.

URL:

http://nofavt.org/assets/files/pdf/Nickerson%20Final%20SAC%20Report%2012_15_08.pdf

Abstract: In response to this rapid growth of new and existing local foods programs, the Vermont Sustainable Agriculture Council (SAC) identified as a research priority in 2008: "...to review current local food initiatives to coordinate opportunities for expanding production and consumption." This study was conducted to provide an overview of existing and planned recent local foods initiatives in the state. Since other studies have addressed the perceptions of producers, processors and distributors, this study focuses on public, non-profit and grassroots efforts, as opposed to private and for-profit efforts. The study aimed to address the following questions: Who are the actors in the local foods landscape? What is motivating their efforts? What are their relationships with one another? Is there a need for increased collaboration, communication and coordination, and if so, what may be done to facilitate it? What are the gaps in the local food system and the challenges to increasing the production and consumption of local foods? What are the opportunities or leverage points for increasing the production and consumption of local foods?

Slama, J., Nyquist, K., and Bucknum, M. 2010. *Local Food System Assessment for Northern Virginia*. Familyfarmed.org in collaboration with the Wallace Center at Winrock International and the Triskeles Foundation, 1-26.

URL: <http://www.wallacecenter.org/our-work/Resource-Library/wallace-publications/Northern-VA-LFS-Assessment-Final-Report.pdf>

Abstract: There is a business opportunity for the development of a local food system supported by an aggregation center in Northern Virginia. The market and political environment is favorable, wholesale demand is not even close to being met by local suppliers, and the local food sourcing trend is expected to gain even more momentum. Local supply is a current concern and as such further investigation is recommended to better understand growers' perspectives and possible challenges to scaling up. Existing infrastructure is not meeting the high demand, yet some of what exists is working. Investing in both supply and infrastructure can better bridge the enormous gap between Piedmont market demands and the current local supply. This study assesses the feasibility of building a successful fruit and vegetable aggregation and distribution system in the Northern Virginia agricultural crescent around Washington D.C. that contributes local and regional products into the existing wholesale commercial food system. The outcome is intended to inform local food system business development efforts in the region and other analogous markets.

The Regional Food Hub Advisory Council 2010. *A California Network of Regional Food Hubs: A Vision Statement and Strategic Implementation*, 1-32.

URL: <http://www.cccd.coop/files/RFHN%20VISION%20PAPER%20.pdf>

Abstract: This paper outlines a vision and implementation plan for an improved regional wholesale marketing system that addresses the major barriers and risks that limit small family farmers' ability to bring good food to market and in turn provide consumers and communities with access to good food. The vision presented in this paper is of a new statewide organization that networks regional aggregators and distributors into a system that expands marketing opportunities, reduces risk and increases access to just food: a network of Regional Food Hubs.

Vermont Council on Rural Development 2009. *Vermont Regional Food Centers Collaborative*, 1-18.

URL: <http://www.walloomsactransition.org/shires/FINALCopyFoodCentersPlatform3-1.pdf>

Abstract: This report outlines a Regional Food Centers Collaborative work plan for the state of Vermont. Regional Food Centers serve as an important network of organizations that work with communities from various regions of the state to increase physical and organizational infrastructure to support Vermont farms, local agricultural economies, and the health and vitality of Vermont communities. This work plan is a multi-pronged approach towards advancing and building infrastructure to meet regional needs; growing new farms throughout the state; creating consumer education campaigns; building farmer networks and collaborative marketing campaigns; expanding energy efficiency and renewable generation; improving school foods; and expanding tourism opportunities. Some of the stakeholder partners include: Food Works at Two Rivers Center; The Center for an Agricultural Economy; ACORN Local Food Collaborative; The Intervale Center; LACE; RAFEL; Post Oil Solutions; and Vital Communities.

FOOD HUB RESEARCH IN EUROPE

Ford, J., Horrell, C., and Dalmeny, K. 2009. *Joining the Dots...Collaborative food buying and sustainable distribution for London restaurants: A Case Study*. Sustain: The Alliance for Better Food and Farming, UK: 1-10.

URL: http://www.sustainweb.org/pdf/Joining_The_Dots.pdf

Abstract: This report is one of a series that analyses opportunities for improving the sustainability and economic viability of food supply chains serving smaller and community-based food enterprises. It has been commissioned by the Food Distribution and Supply strand of the Big Lottery funded Making Local Food Work program, which aims to reconnect people and land through local food; increasing access to fresh, healthy and local food with clear, traceable origins. The strand of work focusing on distribution – coordinated by Sustain – takes a particular interest in food hubs and other ways of consolidating supply to achieve efficiencies of scale and profitability, and hence create a more resilient market for local and sustainable food.

Forsman, S., and Paananen, J. 2002. Customer value creation in the short food supply chain: theoretical aspects and explorative findings. *Paradoxes in food chains and networks. Proceedings of the Fifth International Conference on Chain and Network Management in Agribusiness and the Food Industry, Noordwijk, Netherlands, 6-8 June 2002*: 153-164.

Abstract: This paper explores short food supply chains as alternatives for conventional food supply chains within a small-scale food processing context. Supporting short food supply chains at local level is a way to promote the viability of rural areas and sustain the national food strategy. A special focus is on customer value creation, relationships between actors involved in a food chain, and rural development. The theoretical foundation for the study lies in value-based theories as well as supply chain management. Based on theoretical discussion, we present a conceptual framework for interdependent value creation in a short food supply chain. The paper also presents a case as part of our study to highlight some practical experiences from the short food supply chains. The case study is focused on the local food systems between small rural food suppliers and catering businesses in Finland. The theoretical discussion and case study results suggest some implications for actors involved in the short food chain as well as policy makers.

Horrell, C., Jones, S., Natelson, S., and Williams, K. *An Investigation into the Workings of Small Scale Food Hubs*. Making Local Food Work, UK: 1-8.

URL: http://www.sustainweb.org/pdf/mlfw_hubs_research_summary.pdf

Abstract: This report investigates a range of different small scale food hubs across the UK to determine whether there were common factors in their features, development and services. Interest in these hubs is to see whether they form part of the answer to rebuilding consumer-producer relationships and if so, what principles of success, synergies and areas of uniqueness can be found in these food hubs. This research contributes to the Making Local Food Work (MLFW) program, a £10 million project (funded by the Big Lottery and coordinated by the Plunkett Foundation) looking at ways of reconnecting consumers and producers. In particular, the research contributes to the subsidiary Food Supply and Distribution strand of Making Local Food Work – a strand that is co-coordinated by Sustain: The alliance for better food and farming, involving several local delivery partners that run community-based food hubs located around the UK. This research will inform the development of the program and be useful for current and developing food hubs.

Maye, D., and Ilbery, B. 2006. Regional economies of local food production – tracing food chain links between ‘specialist’ producers and intermediaries in the Scottish-English borders. *European Urban and Regional Studies*. 13 (4): 337-354.

Abstract: There is currently strong political desire at both European and national scales to 'relocalize' food production and supply. While advocacy remains high, few studies have interrogated the form of these 'new' food chains. This article provides an analysis of such chains in the Scottish-English borders. It traces supply links between small-scale 'specialist' food producers and associated intermediaries for three product sectors. Linking the two stages of the food chain together, the analysis shows differences within and between, as well as similarities across, sectors in terms of spatial and economic organization. It also reveals the 'hybrid' nature of specialist food chains in the region; local producers have created their own 'niche spaces' within the food system. The article thus contributes to debates on new agro-food geographies and regional economic geography and argues that local (specialist) small-scale enterprises do not usually establish food chains, which are 'independent' of the wider food supply system.

Moley, A., Morgan, S., and Morgan, K. 2008. *Food Hubs: The ‘Missing Middle’ of the Local Food Infrastructure*. BRASS Centre, Cardiff University, 1-25.

URL: http://www.brass.cf.ac.uk/uploads/Food_HubKM0908.pdf

Abstract: This Food Hubs report reflects the three questions we were asked to address in the research brief, namely: This Food Hubs report reflects the three questions we were asked to address in the research brief, namely:

- (i) what is the meaning of the Food Hubs concept?
- (ii) what are the main commercial examples?
- (iii) what is the relevance of Food Hubs to the Welsh agri-food strategy?

At the national level in Wales, the local food issue is closely bound up with two particular policy agendas - a new public health paradigm, (which promotes healthy eating as part of a strategy that extols prevention over treatment) and a new *agri-food strategy* (the key aim of which is to move from commodity production to higher value-added activities). This report focuses on the second policy agenda because it considers the potential of Food Hubs as an organizational innovation in the food chain. More specifically, it asks whether there is a 'missing middle' in the local food infrastructure in Wales, a mechanism by which small producers can collectively access a middleman facility that enables them to trade with large customers – be they supermarkets, food service vendors or public procurement consortia – that none of them would be able to trade with by acting alone. Far from being an arcane academic issue, this question is of immense commercial significance because new opportunities are opening up in the food market in Wales – like St Athan and Bluestone for example – which will need more innovative responses from the agri-food supply-side sector if they are to be fully tapped. This is the context in which the relevance of Food Hubs must be judged.

Pimbert, M.P., Thompson, J., and Vorley, W.T. 2001. Global restructuring, agri-food systems and livelihoods. *Gatekeeper Series Sustainable Agriculture and Rural Livelihoods Programme, International Institute for Environment and Development*. (100): 1-24.

Abstract: In this paper, the authors: analyze the dynamics of the present global agrifood system at different scales; use a number of analytical lenses to assess the forces and factors leading to diverging rural livelihoods and landscapes, both in the north and south; and develop research

themes which can serve as leverage points for practical policy change for more democratic and environmentally sustainable food and agricultural systems. A number of erroneous policy recommendations and policy failures stem from too narrow a focus on localized contexts that ignore the wider political economy of the emergent food regime. This paper combines an analysis of global restructuring of agrifood chains with an analysis of livelihoods. This analysis reveals that the main impacts of increasingly globalized and industrialized food systems are diverging rural worlds and the increasing concentration of power over the entire food chain in the hands of a few transnational actors. A minority of the rural population is connected to the global agrifood economy through contracts with agribusiness and even directly with supermarkets. At the other extreme is a world marked by the struggle for food security and survival, by livelihoods fractured into diverse mixtures of off-farm work, temporary migration and subsistence agriculture, against a backdrop of depleting human and natural resources. In between is a 'shrinking middle' of family farmers and landed peasants producing undifferentiated commodities with low and declining returns. To achieve a more democratic and environmentally sustainable agrifood system, several deficits in our understanding must be overcome. The paper concludes with a research framework for filling these knowledge gaps, which include: how to improve knowledge of the dynamics of local food systems under rapidly changing economic conditions, particularly in developing countries; how to bring about democratic change in those systems; how to increase market power for marginal farmers and farm workers; and how to enhance and sustain the (ecological and cultural) diversity of agrifood systems.

Walters, Richard 2009. *GSE Food Hub Feasibility Study*. Bidwells Agribusiness & the South East Food Group Partnership, 1-32.

URL:

<http://www.southeastenglandfoodanddrink.co.uk/upload/London%20Food%20Hub%20Feasibility%20Study%20November%202009.pdf>

Abstract: Following extensive primary and secondary research the report proposes: The development of a food hub to support the food sector in the Greater South East (GSE). The hub should incorporate a virtual business-to-business (B2B) e-marketplace. In tandem should be a project to support and develop 15-20 street markets, to enable them to play a greater role in providing fresh regional food at local levels. The methodology for the study consisted of four stages: A comprehensive review of secondary data to establish the demand for local food, its value, and the ability for it to be supplied by the regions. Identification of the potential size and location of the consumer base that would buy local and regional food. An online survey of food buyers and a series of in depth interviews, to ascertain the priority opportunities and challenges for local food producers. In depth interviews with food suppliers, to ascertain the extent of the opportunities, and the challenges within supply chains that affect the supply of local and regional food. The results highlight the considerable demand for local and regional food at both a consumer and buyer level. The development of a hub is of critical importance to link up this disjointed market place. The recommendations (if delivered) provide a two-pronged attack. It puts in place the necessary infrastructure to foster greater market access through the supply chain. In addition it incorporates a strong offer to consumers, helping to stimulate the long term demand for local and regional food where it counts – providing long term support for the British food sector. In undertaking this work time has been spent liaising with the organizations that are currently working on food sector initiatives, many of which stem from the London Food Strategy.

Welsh Assembly Government 2009. *Local Sourcing Action Plan ‘Food and Drink for Wales’*. Version 2 0509: 1-30.

URL: <http://wales.gov.uk/docs/drah/publications/090601localsourcingactionplanen.pdf>

Abstract: This Local Sourcing of Food and Drink Action Plan is to be delivered as a partnership between key relevant Divisions of the Welsh Assembly Government, the food and drink production and manufacturing sectors, local government in Wales, and the retail and food service sectors. Its overall aims are to support Welsh food and drink companies in accessing local markets and to make it easier for consumers to buy and eat food and drink from Wales, which has been produced within a reasonable distance. The plan is about coherent, sustainable actions. It is about supporting the development of food and drink companies to increase business and, safeguard and create additional jobs, whilst encouraging healthy eating, maintaining high standards in food safety, the development of local food cultures and reducing “food miles” in order to minimize the effect of food distribution on the environment. One of the key elements of the plan is to lead by example and to encourage the whole public sector to procure more locally sourced products. What is the meaning of the Food Hubs concept? What are the main commercial examples? What is the relevance of Food Hubs to the Welsh agri-food strategy? At the national level in Wales, the local food issue is closely bound up with two particular policy agendas - a new *public health paradigm*, (which promotes healthy eating as part of a strategy that extols prevention over treatment) and a new *agri-food strategy* (the key aim of which is to move from commodity production to higher value-added activities). This report focuses on the second policy agenda because it considers the potential of Food Hubs as an organizational innovation in the food chain. More specifically, it asks whether there is a ‘missing middle’ in the local food infrastructure in Wales, a mechanism by which small producers can collectively access a middleman facility that enables them to trade with large customers – be they supermarkets, food service vendors or public procurement consortia – that none of them would be able to trade with by acting alone. Far from being an arcane academic issue, this question is of immense commercial significance because new opportunities are opening up in the food market in Wales – like St Athan and Bluestone for example – which will need more innovative responses from the agri-food supply-side sector if they are to be fully tapped. This is the context in which the relevance of Food Hubs must be judged.

SELECTED RESEARCH ON FOOD VALUE CHAINS

Bloom, J., and Hinrichs, C. 2011. Moving local food through conventional food system infrastructure: Value chain framework comparisons and insights. *Renewable Agriculture and Food Systems*, 26, 13-23.

URL:

http://journals.cambridge.org/download.php?file=%2FRAF%2FRAF26_01%2FS1742170510000384a.pdf&code=4e7d7bf5c41b6cd515bc15f69c7fae16

Abstract: There is growing recognition that the direct marketing initiatives favored by many local food activists and proponents often lack the capacity to meet rapidly expanding consumer demand for local food. To address these needs, some food systems researchers have identified a role for ‘transitional’ food systems that piggyback on the pre-existing, conventional local food system infrastructure, while moving toward the social and economic benefits of direct marketing. This paper uses a value chain model (based on business management studies and adapted to the context of agrifood enterprises) as a framework for investigating how actors who are accustomed to working within the logic of the traditional produce industry incorporate local food into their overall operations. Using a qualitative comparative case study approach, the paper examines how features of the value chain structure and governance mechanisms operate in two food distribution networks that are transitioning toward localization in a rural and an urban region of Pennsylvania, respectively. Case study analysis focuses on conventional wholesale produce distributors as the link between local producers and local buyers. Interviews with the distributors, producers and buyers reveal the sources and outcomes of challenges affecting how the distributors organize their purchasing and selling of local produce. Network practices, in turn, have equity implications as distributors struggle to pay producers enough to maintain their economic viability, while still making local produce accessible to a wide range of consumers. Policy-makers and practitioners seeking to support the ‘scaling up’ of local and regional food systems should consider targeted development of technical infrastructure in processing and distribution, as well as outreach on appropriate shared ownership models. Future research should be longitudinal to determine the longer-term role and contribution of the conventional food system infrastructure in transitioning to more sustainable local and regional food systems.

Connor, D.S., Campbell-Arvai, V., and Hamm, M.W. 2008. Value in the Values: Pasture-Raised Livestock Products Offer Opportunities for Reconnecting Producers and Consumers, *Renewable Agriculture and Food Systems*, 23 (1), 62-69.

URL:

http://journals.cambridge.org/download.php?file=%2FRAF%2FRAF23_01%2FS174217050702086a.pdf&code=9c1760cc8fe5c113b1a15cd526574854

Abstract: Pasture-based livestock production holds promise in helping to reinvigorate small and mid-scale farming, as well as farm communities, across the United States. In this study, in-depth interviews of pasture-based livestock producers, meat processors and buyers were conducted to determine behaviors, attitudes and expectations with regard to pasture-based livestock production. In addition, consumers were polled to determine their attitudes with respect to how food animals are raised and treated. Results revealed many shared values between those involved in raising, processing and distributing animal products, as well as consumers, indicating an opportunity for a ‘re-embedding’ of livestock production based on these shared values. The concurrent development of both direct and extended markets, e.g. values-based value chains, is

suggested as one way of addressing the difficulties faced by individual farmers in processing and distributing animal products with their provenance and underlying values intact.

Diamond, A and Barham, J. 2011. Money and Mission: Moving Food with Value and Values. *Journal of Agriculture, Food Systems, and Community Development (in press).*

Abstract: Responding to low margins in traditional commodity markets and consumer demand for decommmodified food, food value chains have emerged in the last decade as strategies for differentiating farm products and opening new, more financially viable market channels for smaller farmers. These business networks incorporate strategic coordination between food producers, distributors, and sellers in pursuit of common financial and social goals. Our analysis of the aggregation, distribution and marketing functions of eight food value chains of diverse character across the United States reveals four summary findings that encapsulate the challenges and opportunities facing these business organizations: (1) private infrastructure investment should match the organizational stage of development and market capacities; (2) identity preservation is a critical market differentiation strategy; (3) informal networks can be highly effective tools for coordinating the marketing efforts of diverse agricultural producers; and (4) nonprofits and cooperatives both can play key roles in value chain development but should recognize their organizational competencies and limitations.

Flaccavento, Anthony 2009. *Healthy Food System: A Toolkit for Building Value Chains. Appalachian Sustainable Development*, 1-39.

URL: <http://www.cannetwork.org/documents/Value%20Chain%20Toolkit%2007.22.09.pdf>

Abstract: This toolkit is designed to help new and emerging healthy food system value chain efforts. While it draws heavily from the experience of Appalachian Sustainable Development, including particularly its *Appalachian Harvest* network, it also includes ideas, challenges and insights from other value chain and food system initiatives, both within Appalachia and other parts of the country. The toolkit is intended to be a hands-on resource which can help spur new thinking, help refine plans, and perhaps help guide implementation of new and emerging food system initiatives.

Hoshide, Aaron K. 2007. *Values-Based & Value-Added Value Chains in the Northeast, Upper Midwest, and Pacific Northwest. The University of Maine*, 1-13.

URL: http://www.agofthemiddle.org/papers/value_chains.pdf

Abstract: Given that value-added and values-based value chains can stabilize the loss of mid-sized family farms, this research component of the Ag of the Middle Project sought to identify more values-based value chains (VBVC's) in the Northeast, Upper Midwest, and Pacific Northwest in addition to the original thirteen VBVC case studies on the Ag of the Middle project website (AOTM, 2004). It also sought to determine value-added value chains that could evolve into VBVC's in each of these geographic regions of the United States.

Kaplinsky, R. 2004. "Spreading the Gains from Globalization. What Can be Learned from the Value-Chain Analysis?" *Problems of Economic Transition*, 47 (2), June, 74-115.

URL: <http://www.inti.gob.ar/cadenasdevalor/wp110.pdf>

Abstract: In recent years, globalization has been associated with increasing inequality within and between countries, and with a stubbornly large share of the world's population living in poverty. If the "losers" had been confined to those who did not participate in the global economy, then the

policy implications would be clear--join the rush. But, when (as is the case) the "losers" include those who have participated in global processes, then the policy challenge is much more daunting. It is not so much a matter of whether to participate in global processes, but how to do so in a way that provides sustainable income growth for poor people and for poor countries. In these circumstances, policy needs to address processes of production and product development, including both intrafirm organization and the relationship between firms. It also needs to address the ways in which poor producers and poor countries connect with producers and consumers in the global economy. Value-chain analysis--which includes the whole cycle of the organization, production, and delivery of products from inception to use and recycling-- provides a tool for mapping these crucial domains of private and public policy. But, more than that, by focusing on the dynamic shifting of producer rents through the chain, on the processes whereby key actors provide governance to production that occurs on a global basis, value-chain analysis provides important insights into the policy challenges confronting both private and public actors. This article reviews the unequal character of recent processes of globalization, summarizes the key theoretical concepts that characterize the concept of value chains, and illustrates the contribution of value-chain analysis through summaries of four chain case studies (fresh fruit and vegetables, canned deciduous fruit, footwear, and automobile components). It concludes with a discussion of practical ways of how value-chain analysis can inform policy.

Pirog, Richard, et al. 2009. *Food Facts: Results from Marketing and Food System Research*. The Leopold Center For Sustainable Agriculture, Iowa State University.

URL: http://www.leopold.iastate.edu/research/marketing_files/food/Food_Facts_0409.pdf

Abstract: This fact sheet reveals key findings from research, demonstrations, studies and surveys that have been supported since 2000 by the Leopold Center's Marketing and Food Systems Initiative and the Regional Food Systems Working Group of the Value Chain Partnerships project.

Stevenson, G.W. and Pirog, R. 2008. "Values-Based Supply Chains: Strategies for Agrifood Enterprises of the Middle" in T.A. Lyson, G.W. Stevenson, & R. Welsh (Eds.), *Food and the Mid-Level Farm: Renewing an Agriculture of the Middle*. Cambridge: The MIT Press, 119-143.

URL: <http://www.agofthemiddle.org/papers/valuechain.pdf>

Abstract: The center of the U.S. farming and food system is disappearing. Caught in the middle as the food system divides into global agricultural commodity marketing, on the one side, and direct marketing of food to local consumers, on the other, many traditional family farms/ranches/fisheries are increasingly at risk. Conventional food supply chains also squeeze out many regionally-based food processors, distributors, retailers and other food enterprises-of-the-middle. Restoring balance and integrity to these agri-food economic relationships will require changes in both private sector business models and public policy. The panel will explore one strategy for such new business models: values-based supply chains (value chains)...strategic alliances between mid-size independent (often cooperative) food production, processing, and distribution/retail enterprises that seek to create and retain more value on the front (farmer/rancher/fisher) end of the chain, and effectively operate at regional levels. Comparative data will be shared relative to successful food value chains in four agri-food sectors and three regions of the country.

World Economic Forum. 2009. "The Next Billions: Business Strategies to Enhance Food Value Chains and Empower the Poor."

URL: http://www3.weforum.org/docs/WEF_FB_FoodValueChainsAndPoor_Report_2009.pdf

Abstract: This report focuses on food access and business opportunities for the 3.7 billion poor individuals excluded from formal economic markets. This group, referred to as the “base of the pyramid”, earn US\$ 8 per day (in PPP\$) or less. The purpose of this report is to convey strategies to transform a "vicious cycle" of low agricultural productivity and capital access in developing countries into a "virtuous cycle" through the engagement of business and other stakeholders. The innovations target support to three groups: producers, consumers and entrepreneurs. This report is useful in that it parallels and details much of the same service innovations provided by Food Hubs though not necessarily in the form of centrally located infrastructure.

SELECTED RESEARCH ON SMALL FARM DISTRIBUTION MODELS

Hendrickson M.K., and Heffernan W.D. 2002. "Opening spaces through relocalization: locating potential resistance in the weaknesses of the global food system." *Sociologia Ruralis*. 42 (4): 347-369.

Abstract: This paper focuses on the structure of the global food system through the rise of food chain clusters and their extension into food retailing. It is suggested that there are possibilities for resistance and the development of new alternatives. The potentials for local food system initiatives are examined using the Kansas City Food Circle in the USA.

King, R., Hand, M., DiGiacomo, G., Clancy, K., Gomez, M., Hardesty, S., Lev, L., and McLaughlin, E. 2010. *Comparing the Structure, Size and Performance of Local and Mainstream Food Supply Chains*. ERR-99, U.S. Department of Agriculture: Economic Research Service.

URL: <http://www.ers.usda.gov/Publications/ERR99/ERR99.pdf>

Abstract: Despite increasing interest in locally grown and processed food, little is known about the supply chains that move local foods from farms to consumers. The objective of this report is to improve understanding of how local food products are being introduced or reintroduced into the broader food system and potential barriers to expansion of markets for local foods.

Understanding the operation and performance of local food supply chains is an initial step toward gauging how the food system might incorporate more local foods in the future to meet growing demand. Two general research questions in this report addressed factors that influence the structure and size of local food supply chains, and how local food supply chains compare with mainstream supply chains on performance indicators.

LeRoux, M.N., T.M. Schmit, M. Roth, and D.H. Streeter. 2010. "Evaluating marketing channel options for small-scale fruit and vegetable producers." *Renewable Agriculture and Food Systems* 25:16-23.

Abstract: There are producer trade-offs in selling product wholesale versus through direct marketing. A few are pricing, time commitment, labor commitment, and product waste. This report investigates producer marketing strategy decision-making and the optimal combination of these strategies. Life-style preferences and stress aversion are two main reasons for choosing particular marketing channels. CSA as a first priority and wholesale as a second priority channel appeared to offer the highest net return for the Central NY producers included as case studies.

Michahelles, Marina, S. "The Distribution of Local Food Through Consumer Cooperatives in the Northeast" 2008. *The University of Vermont*.

URL: <http://library.uvm.edu/jspui/bitstream/123456789/136/1/Michahelles%20Final.pdf>

Abstract: This study is designed not only to measure dollar transactions between farmers and consumer co-ops – with and without middle-man distributors – but also to identify the existing strengths of the farmer-co-op market, as well as its weaknesses. By identifying the barriers that hinder farmers from selling to co-ops and that hinder co-ops from sourcing locally, some recommendations can be made to help remove them and to facilitate the distribution of local foods. At the root of this study lies the following question: Does a local food market offer viable marketing opportunities to local farmers? In an attempt to find an answer, it's further ask: Is there a market demand for locally produced food? If so, for which products? In what quantities?

In what setting? And at what cost to the farmer and consumer?

Painter, Kathleen 2007. *An Analysis of Food-Chain Demand for Differentiated Farm Commodities: Implications for the Farm Sector*. Center for Sustaining Agriculture and Natural Resources, Washington State University, 1-48.

URL: <http://agofthemiddle.org/papers/PainterReportSmall.pdf>

Abstract: This report explores the trend toward alternative, higher quality food, including organic, sustainably produced, local and regional origin, eco-labeled food, and Fair Trade products, as well as their potential implications for the farm sector. Literature on the organic marketplace will be examined as it relates to the market for differentiated farm products (DFP). In particular, this report examines how much consumers are willing to pay for DFP. Finally, the potential of marketing DFP for food service, restaurants, and farm-to-school programs will be addressed.

Perret, Allison S. 2007. "The Infrastructure of Food Procurement and Distribution: Implications for Farmers in Western North Carolina." Appalachian Sustainable Agriculture Project.

URL:<http://www.asapconnections.org/special/research/Reports/Infrastructure%20of%20Distribution%20Final.pdf>

Abstract: This report assesses existing infrastructure for food distribution and procurement in NC and its capacity to accommodate more local producers. Backhauling and pooling of product are noted as strategies for overcoming market barriers for small, local farmers.

Zajfen, Vanessa 2008. *Fresh Food Distribution Models for the Greater Los Angeles Region: Barriers and Opportunities to Facilitate and Scale Up the Distribution of Fresh Fruits and Vegetables*. Center for Food & Justice and the Urban & Environmental Policy Institute, Occidental College, 1-23.

URL: http://departments.oxy.edu/uepi/publications/TCE_Final_Report.pdf

Abstract: This report assesses the opportunities and barriers to scaling up the distribution of locally grown fruits and vegetables in the greater Los Angeles region. The primary focus of this research is to evaluate how large institutional clients can more readily access locally grown foods through traditional institutional procurement avenues such as large distribution firms. The suggested five models for scaling up the distribution of local foods include local school food programs; WIC Local Food Line; Farmers' Market Hub; Farmer Collaborative; and Farm Direct Distribution Model, CSA in the Classroom.

SELECTED RESEARCH ON COMMUNITY FOOD ENTERPRISES

Day-Farnsworth, L., McCown, B., Miller, M., and Pfeiffer, A. 2009. *Scaling Up: Meeting the Demand for Local Food*. UW-Extension Ag. Innovation Center & UW-Madison Center for Integrated Agricultural Systems, 1-30.

URL: http://www.cias.wisc.edu/wp-content/uploads/2010/01/baldwin_web_final.pdf

Abstract: Robust local food systems offer social, environmental and economic benefits. Purchasing local food can help preserve local farmland and reduce the distance food travels between farmers and consumers. In addition, an ample supply of local food may reduce a region's vulnerability to supply disruptions and global food safety concerns. Local food purchases can support local economies by keeping food dollars in circulation within communities. Local food can also link growers with consumers who are hungry for a connection to farms and farmers. For these and other reasons, consumer interest in local food has grown in recent years. Local food is not only in demand at farmers' markets and natural food retailers, but also in conventional supermarkets and institutions such as schools and hospitals. Increasingly, wholesale buyers are demanding locally grown food and growers are looking for new regional markets. In order to meet the demand for local food and move significant quantities of locally and regionally grown food into markets that we all rely on, such as restaurants, mainstream grocery retailers and institutions, local food systems need to be "scaled up" or expanded from farmer-direct sales of small quantities of product to wholesale transactions. By scaling up, local food systems have the potential to borrow some of the economic and logistical efficiencies of the industrial food system while retaining social and environmental priorities such as sustainable agricultural practices and profitability for small- and mid-scale family farms and food businesses. Scaling up local and regional food systems requires the development of organizational and production capacity across the local food supply chain. In particular, this supply chain lacks mid-scale, regional aggregation and distribution systems that move local food into mainstream markets in an effective and cost efficient manner. Aggregation—or the consolidation of products sourced from multiple growers to generate volumes compatible with the wholesale market—is a key ingredient for scaling up local and regional food systems. Aggregated product is typically marketed, branded and distributed under a single or generic brand name; in some cases, individual farms are also identified. Product aggregation may occur through producer- and consumer-led cooperatives, buying clubs, produce auctions, private and non-profit wholesale packers and distributors, and retailers. An aggregator is an entrepreneur or business that amasses product for distribution and marketing. This report focuses on a number of case studies, including: Alsum Produce; Capital Foods; Co-op Partners Warehouse; Fennimore Produce Auction; Growers Collaborative; GROWN Locally; High Desert Foods; Organic Valley Produce Program; Provisions International; University of Wisconsin-Madison; Wescott Agri Products.

Greenberg, Laurie 2007. *Innovative Strategies for Meeting New Markets*. Cultural Landscapes, 1-42.

URL: <http://ncdf.coop/documents/Meeting%20New%20Markets%20l%20greenberg.pdf>

Abstract: The purpose of this exploratory study is to provide concrete tools and inspiration for producers and others who address the challenges inherent in scaling up agricultural production and expanding into new markets. This report provides a summary and analysis of the experiences of numerous producer cooperatives, individual producers and buyers. Each of these groups has

approached challenges in ways that have resulted in innovative businesses and infrastructure that are effective in meeting new markets.

Shuman, M., Barron, A., and Wasserman, W. 2009. *Community Food Enterprise: Local Success in a Global Marketplace*. Wallace Center at Winrock International and Business Alliance for Local Living Economies, 1-187.

URL: http://www.communityfoodenterprise.org/book-pdfs/CFE%20Book_view.pdf

Abstract: This report provides a detailed field report on the performance of 24 community food enterprises (CFEs), half inside the United States and half international. CFEs represent a huge diversity of legal forms, scales, activities, and designs and from these case studies, this report addresses four questions: What strategies are community food enterprises deploying to heighten their competitiveness? What are the major challenges facing these enterprises and the ways they are overcoming those challenges? How well are these enterprises meeting the triple bottom lines of profit, people, and planet? To what extent are successful CFE models capable of being replicated worldwide?

SELECTED RESEARCH ON "PUBLIC" MARKETS

Bosona, T. G. and G. Gebresenbet. 2011. "Cluster building and logistics network integration of local food supply chain." *Biosystems Engineering* 108:293-302.

Abstract: This study on transportation logistics includes methods to tracing food origin and determining "optimal product collection centers" as a means to improving clustering and network integration of local food producers and distribution facilities. A study of this sort could be conducted in the U.S. to determine the clusters of producers, their distance from existing resources and infrastructure while identifying optimal sites for new infrastructure that improves the network.

Bower, Jim and Ron Doetch, Steve Stevenson. 2010. "Tiers of the food system: A new way of thinking about local and regional food."

URL: <http://www.cias.wisc.edu/farm-to-fork/tiers-of-the-food-system-a-new-way-of-thinking-about-local-and-regional-food/>

Abstract: Tiers of the Food System framework, developed by University of Wisconsin researchers, identifies five levels of relationships between food producers and consumers: personal production of food, direct producer to consumer, strategic partners in supply chain relationship, large volume aggregation and distribution, and global/anonymous aggregation and distribution. Food business often belongs to more than one tier in balancing values and consumer needs.

Brown, Allison. 2001. "Counting Farmers Markets." *Geographical Review* 91:655-674.

Abstract: The article discusses four surges of wholesale market expansion and decline experienced in recent history: circa 1900, 1930, 1970, and 1980. Predicting the disappearance of markets, sources recount that surviving markets were supported by funds from public agencies to preserve "the social usefulness of farmers and faithfulness of their consumers" while others challenge the idea of farmers' markets as anachronisms. In attempting to count farmers markets, the author first investigates the definitions and components of farmers markets. While we may discover how many markets exist in an area, previous assessments have failed to record where they are located for future tracking and verification. In addition, over time, data has been lost and speculation has been adopted as fact. This article also provides an interesting account of the evolution of food marketing that led to the disappearance of farms. It may be helpful to track back the history to recover opportunities for a viable regional food system. The author offers suggestions on how to standardize definitions and tabulation so that analysis of markets may be useful as consistently framed sources of data for future research.

Folz, William E. 1967. "The Food Marketing Commission and Market Structure and Performance." *Journal of Farm Economics* 49:413-424.

Abstract: This report provides statistics on the U.S. food industry during a tumultuous transition to market control by large firms. Chain stores vertically integrated producers into their food chain by bypassing terminal markets as the "middle man" with sourcing from terminal decreasing 23% between 1963 and 1948. "The Commission studies state that those firms closest to the consumer possess the greatest market power, enabling them to exact increasingly greater concessions back to the grower." though bargaining buyer between buyers and sellers are imbalanced. (pg. 418) Yet, larger retail chains make terminal markets and auctions obsolete and

direct purchasing from favor larger producers, which is changing the market place with larger implications in hindsight than is acknowledged by the authors.

Jumper, Sidney R. 1974. "Wholesale Marketing of Fresh Vegetables." *Annals of the Association of American Geographers* 64:387-396.

Abstract: Considers competition, economies of scale, processing and distribution trends of that time to project into the future of the state of terminal markets. Producer and consumer oriented markets are in decline in favor of consolidation and aesthetic/convenience respectively by consumers. Chain market and institution bypassed terminal markets to contract directly with farmers. Jumper suggests that terminals may only survive because producers do not want to cede full pricing power to the chain organizations. However, to survive the market trends, most terminal markets need upgrades and mergers to cater to populations greater than one million that are not located in highly accessible producing areas. Mentions NAPMM, USDA, and Columbia, SC market.

Richards, Timothy J., Ram N. Acharya, and Ignacio Molina. 2011. "Retail and wholesale market power in organic apples." *Agribusiness* 27:62-81.

Abstract: This report investigates the bargaining power of organic versus non-organic growers. The finding is organic growers earn a larger share of the total margin than nonorganic growers do, but this vertical market power is eroding over time as market supply adjusts. This report offers an interesting account of how organic product is consolidated into the operations of conventional product. This process of protecting the integrity and identity of organic product bears similar constraints to how local product branding may require duplicate mechanics and command price premiums. An important point coming out of this report is forecasting future profit growth depends on how the margin between retail prices and production costs is allocated between the grower or supplier, and the retailer.

Ruhf, Kathryn and Kate Clancy. 2010. "It Takes a Region: Exploring a Regional Food Systems Approach." Northeast Sustainable Agriculture Working Group.

URL:

http://www.ittakesaregion.org/uploads/2/7/7/0/2770360/regional_food_system_working_paper_final.pdf

Abstract: This report offers suggestions and clarity on food system terminology and presents proposals for regionalizing the food system as well as opportunities for future research.