

# A Practitioner's Guide to Resources and Publications on Food Hubs and Values-Based Supply Chains: A Literature Review

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#### Introduction

Demand for local food "with a farmer's face on it" is on the rise, and many new efforts to increase access to such foods are being explored and attempted. Considerable attention has been focused on building the capacity of wholesale channels moving product differentiated by values-based attributes, such as local, farm or ranch identity, environmentally sustainable production practices, fair trade, and others. These wholesale channels have the potential to provide additional marketing options for small to mid-sized, values-based producers and increase consumer access to their products. Such channels are increasingly referred to as values-based supply chains, or VBSCs. Businesses that provide aggregation and distribution services to VBSCs or that otherwise provide new wholesale channels or non-direct marketing strategies to move values-based products are often called food hubs or, more generally, VBSC enterprises<sup>2</sup>.

Numerous food systems stakeholders around the country are initiating and developing food hubs, VBSCs, and VBSC enterprises. At the same time, researchers at NGOs, government agencies, and universities are providing a wealth of reports, manuals, webinars, and other materials to inform practitioners about these efforts, including when and how they work, their benefits and drawbacks, and necessary steps and best practices for those wanting to develop

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<sup>&</sup>lt;sup>2</sup> The term "VBSC enterprise" may also be used to describe any business as well as distributors and aggregators.

these marketing channels in their own regions. The information these resources offer is of enormous value, but organizations, entrepreneurs, and others involved in VBSC development may find it overwhelming to digest the already large and continually growing body of knowledge available to them. Thus, we believe a review of the publications from experts on the ground can help provide current and future practitioners with an overview of the most valuable insight, suggestions, and advice and direct them to the resources most useful to them.

This paper is a literature review synthesizing some of the recent<sup>3</sup> reports, analyses, how-to manuals and practical case studies geared towards practitioners working to develop VBSCs, food hubs, and similar marketing channels<sup>4</sup>. We included 30 reports<sup>5</sup> produced by various food system stakeholders around the country, including non-profits, government agencies, food systems researchers, and mission-driven private consultants. The majority of these papers have the goal (implicit or explicit) of improving local and regional food systems, increasing economic viability of farmers and ranchers, and/or broadening consumer access to locally grown food from small to midsized producers. As such, the common themes that emerged, which form the structure of this literature review, are the following: (1) the need for food hubs and values-based supply chains; (2) descriptions of VBSCs and food hubs; (3) benefits of VBSCs and food hubs; (4) challenges of VBSCs and food hubs and (5) best practices for stakeholders involved in

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<sup>&</sup>lt;sup>3</sup> Dates of publication are from 2006-2011. This report includes only written materials; webinars were not included. <sup>4</sup> Although reports written by university researchers are included, this review does not included articles published

in peer-reviewed, scholarly journals. A review of the scholarly literature on VBSCs and food hubs, written by Tracy Lerman, is available on the UC Davis Agriculture Sustainability Institute website at <a href="mailto:asi.ucdavis.edu">asi.ucdavis.edu</a> or via email request at <a href="mailto:terman@ucdavis.edu">terman@ucdavis.edu</a>.

<sup>&</sup>lt;sup>5</sup> The authors also compiled an annotated bibliography of both scholarly and non-scholarly reports, studies, and other publications on food hubs and values based supply chains, available on the UC Davis Agriculture Sustainability Institute website: http://asi.ucdavis.edu/resources/publications/pubs

VBSCs and food hubs. In addition, we include a section that describes the research methods used in the reports included in this review.

We hope this paper contributes to the ongoing efforts to develop marketing channels that provide greater economic stability and viability to small and midsized farmers and food producers and fresh, high quality food to consumers.

## **Methodologies Used**

A wide variety of research methods were used in the reports included in this review. Most reports incorporated a combination of primary data collected by the authors, existing secondary data analyzed or synthesized by the authors, and secondary sources in the form of published studies and articles. Some reports used just one or two of these sources of information, and some reports relied solely on the expertise and experience of the authors, with no data collection or information source provided.

Primary data collection methods used in these reports include surveys (online, telephone, and mail), individual interviews (in-person and phone), group interviews (in-person), and participant observation. Secondary data came from databases, websites of profiled companies, financial and other information provided by profiled companies, data from existing studies and reports, and reviews of news articles and other media. Other secondary sources included scholarly journal articles and books and reports and studies from non-academic sources.

In addition to the information sources above, this review also includes a few visioning documents and reports that incorporated visioning processes. Visioning processes may be

informed by data or expertise of the participants, but their focus is to develop possible models for food system aggregation and distribution that are both feasible and in line with participants' values and goals.

## The Need for Food Hubs and Values-Based Supply Chains in the Current Food System

Many reports pointed out a pressing need for food hubs, values-based supply chains, and a restructuring of the current food aggregation and distribution infrastructure that better serves local and small to mid-sized producers. Rising consumer demand for local food and food from smaller scale agriculture operations coupled with a lack of viable marketing outlets for consumers to access this kind of food was one primary reason cited for this need (Hardy & Holz-Clause, 2008). In addition, many producers, particularly mid-sized producers, have underutilized production capacity (Masi, Schaller, & Shuman, 2010) and lack sufficient markets to move enough product to be profitable (Hoshide, 2007). According to Slama, Nyquist, and Bucknum (2010), "in most of the U.S., no integrated system exists with the ability to bridge the gap between a fragmented supply and the volume and scale of demand" (p. 5). Moving local food from smaller scale producers through the current distribution system serving grocery outlets and foodservice institutions is costly and inefficient (Hand, 2010; Perrett, 2007). This system is dominated by a shrinking number of increasingly large firms (Perrett, 2007) that want to purchase large volumes of product from a small number of growers to keep transaction costs low and ensure consistent product (Hardy & Holz-Clause, 2008; Perrett, 2007). Sourcing from a large number of small-scale producers can be a time-consuming administrative burden for buyers (Cheng & Seely, 2011).

The farm to restaurant supply chain is also fragmented and inefficient, primarily comprised of a small number of chef-restaurateurs who enjoy sourcing food directly from farms and go out of their way to do so (Chef's Collaborative, 2008). Additionally, there is a lack of processing and aggregation facilities that could effectively pool product from smaller producers for sale to local and regional markets (Cheng & Seely, 2011; Hardy & Holz-Clause, 2008; Masi et al., 2010). The lack of appropriately scaled aggregation and distribution infrastructure is a significant hurdle for scaling up local food systems (Day-Farnsworth, McCown, Miller, & Pfeiffer, 2009), and for improving marketing options and economic viability for rural agriculture producers (Cheng & Seely, 2011; Masi et al., 2010).

## **Defining Values-Based Supply Chains and Food Hubs**

These reports used the terms "values-based supply chains," "food hubs," and a few other similar terms to refer to all or part of alternative regional and local food distribution systems envisioned in order to address the concerns highlighted in the previous section. Values-based supply chains (VBSCs), also called values-based value chains, or simply value chains, were generally described as supply chains that efficiently linked agricultural products with markets, while promoting and maintaining certain core values, such as equitable incomes for farmers and food systems workers, ecological sustainability, community capacity, and healthy food access (Flaccavento, 2009). VBSCs have higher levels of transparency and communication (Flaccavento, 2009) and, according to Stevenson and Pirog, "operate as series of win-win strategic partnerships rather than win-lose, interchangeable business deals " (cited in Cantrell, 2009, p.2). Stevenson (2009) adds that VBSCs "share some central characteristics, including

environmentally regenerative farming and ranching systems; differentiated, higher-quality, higher-value food products; values-based, market-oriented, strategic supply chain business partnerships; economic sustainability through supply control coupled with fair, stable, and transparent pricing mechanisms; and a commitment to diversified farm and ranch structures, rural communities and future farmers and ranchers" (p. 1).

Hoshide (2007) differentiates between value chains that move product differentiated by environmental or social values (value-added values chains) and values chains that have trustful, transparent, equitable and durable relationships with participants committed to the economic viability of all other participants (values-based values chains.) He adds that supply chains can become values based by working with farmer cooperatives, cultivating relationships along the chain, promoting and buying from local suppliers, incorporating environmental and social objectives, hosting events to connect consumers to producers, and labeling products (presumably with information related to values) for consumers.

VBSCs are very diverse, including short, local chains and long, multi-state or national chains, moving one, a few or a wide range of products and emphasizing different values (Clancy & Ruhf, 2010). VBSCs are constantly evolving as producers and entrepreneurs experiment with different models to profitably move values-based products to market (Hand, 2010).

Food hubs are a slightly different and overlapping concept, usually referring to the specific enterprises within a VBSC "facilitating the aggregation, storage, processing, distribution, and/or marketing of locally or regionally produced food products" (Barham, 2011, p. 6). Food hubs also usually have the goals of supporting small to midsized producers, catalyzing regional food system growth, improving food security, and providing food system educational

opportunities (Melone et al., 2010). Food hubs can differ in their organizational type, management, operation practices, and governance (Melone et al., 2010), as well as their target customers, infrastructure, logistics, services offered, and structure (Cheng & Seely, 2011).

One common food hub function is product or information aggregation for regional distribution to wholesale markets (Cheng & Seely, 2011; Day-Farnsworth et al., 2009). Food hubs aggregating product can operate as producer and/or consumer-led cooperatives, buying clubs, produce auctions, private and non-profit wholesale packers and distributors, and retailers (Day-Farnsworth et al., 2009) and as multi-farm CSA programs. Multi-farm or collaborative CSAs (community supported agriculture) are programs where participating customers each receive one regularly delivered share of produce, meat, and/or values-added items (e.g. cheese, bread, jams) from many farmers collaborating together to aggregate their products (Bregendahl & Flora, 2006). Regardless of the form the food hub or VBSC takes or the values emphasized, a universal characteristic for both is the clear articulation of values.

## **Benefits**

Many reports highlighted a wide array of benefits VBSCs and food hubs provide to producers, consumers, local economies, and food system initiatives such as farm to school programs. Some of these benefits came from primary data collection, secondary data analysis, or literature and studies used by the authors. Other authors made claims of benefits but did not necessarily back them up with data or other sources.

For producers, Clancy and Ruhf (2010) identified, through their survey of value chains in the Northeast, the following benefits: higher prices, additional marketing options, and greater market access. Barham (2011) and Flaccavento (2009) note similar benefits in their reports, although they did not cite sources. Hand (2010), writing about a study comparing local and mainstream supply chains, reported that the mutual interdependence developed between VBSC partnerships can reduce uncertainty producers often feel around future economic viability. From their case studies of community food enterprises around the world, Shuman, Barron, and Wasserman (2009) found that producer cooperatives can improve the competitiveness of producer members by aggregating market power. Community Alliance with Family Farmers (CAFF, 2011) learned from their stakeholder meetings that small-scale and beginning farmers in particular benefit from food hubs and VBSC enterprises which provide support in packing, sizing, grading, and storage, as well as umbrella insurance coverage and food safety assurances. In their profile of "virtual" food hubs operating primarily through webbased platforms, Matson and Cook (2011) found, because these enterprises lack "brick and mortar facilities" and have automated sales processes, their expenses are reduced and producers' costs of access are lower. In their interviews with producer participants in collaborative CSAs Bregendahl and Flora (2006) learned this model can benefit producers by serving as business incubators for new growers and helping existing growers expand and diversify their operations; improving practical farming knowledge and marketing skills; building personal, professional, and community relationships; and helping farmers decide whether to start their own CSA. Additionally, Perry and Franzblau (2010), reporting on their experience in developing multi-farm CSAs in the Northeast, note this model allows farmers to focus on just a few products, rather than having highly diverse, labor and management-intensive farming systems necessary for single-farm CSAs. Moreover, producers can enjoy both the convenience

of wholesale marketing (e.g. one place to drop off product that's already been sold) and the direct connection to consumers.

Matson, Sullins, and Cook (2011) argue that consumers can benefit from greater access to local food providers, often with greater delivery reliability than purchasing individually from producers. These conclusions come from a longer, unreleased report by the same authors, but no empirical data is cited in the article included in this review. Clancy and Ruhf's (2010) study of Northeast value chains reports increased awareness of local foods as a consumer benefit. Barham (2011) contends that, in some cases, food hubs may have potential to provide low-income consumers with greater access to more affordable local foods but does not cite specific data for this point. Finally, Matson and Cook (2011) found that virtual food hubs benefit consumers by lowering the costs of local foods and making access to them more convenient.

CAFF (2011) claims food hubs can provide improved economic development rooted in agriculture, although they do not back this up with quantifiable research. However, in their report on re-localizing the food system in Northeastern Ohio, Masi et al. (2010), cite several empirically-backed sources in their conclusions about the local economic development benefits of re-localized food systems (which require local food aggregation and distribution infrastructure as provided by VBSCs and food hubs). These benefits include a reduction in unemployment, increased local tax revenue, greater regional branding, attraction and retention of local businesses, improved rural economies, improved economic security, increased environmental stewardship, improved public health, and better quality of life. In addition, these authors argue local distribution can reduce the need for and expense of "every component of distribution, including transportation, refrigeration, packaging, advertising, insurance, and

middle-people" (p. 4). Other studies also maintain (without citing specific data) that food hubs and regionalized food distribution may have the potential to generate more jobs (Fisk & Barham, 2011; Flaccavento, 2009). Additionally, in their food assessment for Northern Virginia, Slama et al. (2010) found that \$16.8 billion are spent annually on fruits and vegetables in the Washington, D.C., and surrounding tri-state area, but only seven percent of that amount is spent on locally produced food. These authors argue that local food distribution could help to direct more of that money towards local producers.

Finally, Erlbaum, McManus, and Nowak (2011) determined from their data collection that local and regional aggregation and distribution infrastructure (including food hubs) could greatly assist the functionality of farm to school programs in Colorado (and perhaps other places) by providing schools with additional and more convenient sources to procure locally grown foods that align with their purchasing practices.

## **Challenges and Needs**

The reports identified a number of challenges for the successful development of regional and values-based aggregation and distribution. Several studies cite a lack of existing, appropriate infrastructure, including cold storage, processing, distribution and marketing as a major barrier to food hub and VBSC development (CAFF, 2011; Day-Farnsworth et al., 2009; Erlbaum et al., 2011; Hardy & Holz-Clause, 2008; Perrett, 2007). Related to this is the cost of capitalizing new infrastructure, and a number of reports identified a lack of start-up capital and funding to do that (Clancy & Ruhf, 2010; Day-Farnsworth et al., 2009; Fisk & Barham, 2011).

For operators of food hubs and VBSC enterprises, barriers include overwhelming workload, lack of time to reflect on their work, working with producers who lack understanding of wholesale market needs, managing growth, dealing with conventional supply chain participants (such as processors and distributors), and lack of technical assistance (related to web and data management, organizational management issues, product development, and food safety knowledge and compliance) (Clancy & Ruhf, 2010). Dreier and Taheri (2008, 2009) also identify growth management as a hurdle, as well as maintaining product quality and consistency, relying on a small number of suppliers, logistical inefficiencies and obstacles, and overall hub coordination. Additional constraints for food hubs and VBSC enterprises include lack of skilled management, leading to poor recordkeeping and financial management, lack of financial resources and risk management plans, regulatory compliance (Matson & Cook, 2011), and finding and maintaining appropriate markets (Melone et al., 2010).

Matching supply and demand can be a hurdle (Clancy & Ruhf, 2010; Melone et al., 2010). Too much demand will strain producers' capacity and too much supply can diminish price premiums paid to producers for unique product attributes (Hand, 2010). Also, getting enough suppliers and buyers to commit at the beginning can be a challenge (Flaccavento, 2009; O'Sullivan, 2011). In addition, O'Sullivan (2011) noted that establishing trust with buyers and suppliers can be difficult; without trust, information flows between supply chain participants are blocked.

Challenges farmers face include a lack of access to capital, technical knowledge, business acumen, and entrepreneurial capacity (Day-Farnsworth et al., 2009) and access to packing and processing infrastructure (Hardy & Holz-Clause, 2008). In addition, in their study on

collaborative CSAs, Bregendahl and Flora (2006) learned that participating farmers did not enjoy political or financial gain, and that lack of financial gain was one reason producers left these CSAs.

Fisk and Barham (2011) suggest the following to improve food hubs and regional food distribution: pilot programs to further develop economically viable food hub models; development of communities of practice that facilitate networking with other food hub operators; and support for partner organizations that assist food hub development through research and education. Melone et al. (2010) also see a need for an overarching entity or organization to support and coordinate efforts of individual food hub enterprises. Additionally, CAFF (2011) mentioned entrepreneurial experience and financial resources as needs.

## **Best Practices**

Best practices was a major focus in these reports. Some targeted individual participants; others focused on functioning of the VBSC as a whole. Because local contexts and conditions are so variable, most recommendations were necessarily general.

For producers, understanding the guidelines around storage, packing, and shipping is necessary to sell to most VBSC enterprises (Hardy & Holz-Clause, 2008). Also, having very high quality product is critical (Dreier & Taheri, 2008; Greenberg, 2007) because consumers still value quality, taste and freshness more than any other attribute (Painter, 2007). In that vein, understanding proper post-harvest handling and ensuring access to appropriate infrastructure, such as cold storage, is critical (Day-Farnsworth et al., 2009).

Marketing is critical to the success of VBSCs, food hub enterprises, and producers working with them. In particular, telling the farm or ranch "story" resonates strongly with consumers, and many reports recommend this (Chef's Collaborative, 2008; Greenberg, 2007; Hardy & Holz-Clause, 2008; Shuman et al., 2009). Events that connect farmers to consumers is a recommended strategy (Day-Farnsworth et al., 2009). Also, having third-party certifications that highlight specific production practices or core values is helpful (Greenberg, 2007) though not as important as story (Day-Farnsworth et al., 2009). Similarly, consumer education, about production practices as well as the marketing model is important (Cantrell, 2009; Dreier & Taheri, 2009).

Many authors recommended finding a structure most appropriate to the particular needs, conditions, growing capacity, market, existing infrastructure, financial resources, and capacity of the stakeholders (Boule et al., 2011; Cantrell, 2009; Dreier & Taheri, 2009; Flaccavento, 2009; Greenberg, 2007). For example, in some cases, a specific legal structure will be necessary; in others, flexibility will be key. The supply chain as a whole works best when participants form partnerships with different and complementary skills sets and shared values (Day-Farnsworth et al., 2009; Stevenson, 2009). These kinds of partnerships help individual participants focus on their greatest strengths (Greenberg, 2007). Many reports recommend utilizing existing infrastructure when possible (Boule et al., 2011; Cheng & Seely, 2011; Day-Farnsworth et al., 2009; Erlbaum et al., 2011; Flaccavento, 2009) although Day-Farnsworth et al. (2009) caution this may lead to power imbalances between VBSC participants. Building strong, trusting relationships across the chain is critical (Cantrell, 2009; Chef's Collaborative, 2008; Hand, 2010) and may help to mitigate power imbalances. Along those lines, several reports

recommend frequent communication, information-sharing and coordination between producers and other participants in the supply chain, including advanced crop planning, information about product availability, and knowing the buyers' requirements, so that all parties understand each other's needs and the supply chain can flow more smoothly (Day-Farnsworth et al., 2009; Hand, 2010; Hardy & Holz-Clause, 2008). Additionally, buyers need to be educated about seasonality and regionally available produce (Day-Farnsworth et al., 2009). Distributors and other downstream supply chain participants can assist producers new to this form of marketing by providing technical assistance, particularly around food safety and packing protocol (Cantrell, 2009). Downstream supply chain participants can also provide infrastructure investments and access to capital for producers, and producers and entrepreneurs can pool their resources to develop needed infrastructure (Day-Farnsworth et al., 2009). Finally, economic viability for all participants in the supply chain is necessary to success (O'Sullivan, 2011; Stevenson, 2009). The USDA has a number of programs authorized in the 2008 Farm Bill that can assist VBSC development, and producers and enterprises participating in them (Fitzgerald, Evans, & Daniel, 2010).

## Conclusion

This literature review attempted to synthesize the various publications, reports and resources produced by food system stakeholders interested in contributing to the successful development of food hubs and values-based supply chains. As this model of marketing continues to evolve, more reports such as these will be helpful in assisting farmers, ranchers, food entrepreneurs, and VBSC enterprises incorporate the best steps to facilitate food and

agriculture distribution strategies that are economically viable, values-driven, and support small to midsized farmers and ranchers.

#### **Works Cited**

- Barham, J. (2011). Regional Food Hubs: Understanding the scope and scale of food hub operations. Washington, DC: USDA AMS.
- Boule, D., Hubert, G., Jensen, A., Kull, A., Van Soelen Kim, J., Marshall, C., Meagher, K., & Rittenhouse, T. (2011). Context Matters: Visioning a Food Hub in Yolo and Solano Counties. Davis: UC Davis.
- Bregendahl, C., & Flora, C. B. (2006). The Role of Collaborative Community Supported Agriculture: Lessons from Iowa (pp. 1-84). Ames: North Central Regional Center for Rural Development, Iowa State University.
- Cantrell, P. (2009). Sysco's Journey from Supply Chain to Value Chain: Results and Lessons Learned from the 2008 National Good Food Network/Sysco Corporation Pilot Project to Source and Sell Good Food (pp. 1-12). Arlington: Wallace Center at Winrock International.
- Chef's Collaborative. (2008). Chef's Collaborative Regional Food Infrastructure Project (pp. 1-11). Boston: Chef's Collaborative.
- Cheng, M., & Seely, K. (2011). Building Regional Produce Supply Chains: Helping Farms Access and Sell to Multiple Channels, Helping Large-Volume Buyers Access Regional Foods (pp. 1-32). San Francisco: FarmsReach.
- Clancy, K., & Ruhf, K. (2010). Report on Some Regional Values Chains in the Northeast (pp. 1-20).
- Community Alliance with Family Farmers. (2011). Establishing an Aggregation & Marketing Center for California's North Coast (pp. 1-51): Community Alliance with Family Farmers.
- Day-Farnsworth, L., McCown, B., Miller, M., & Pfeiffer, A. (2009). Scaling Up: Meeting the Demand for Local Food (pp. 1-40). Madison: University of Wisconsin.
- Dreier, S., & Taheri, M. (2008). Innovative Models: Small Grower and Retailer Collaborations. Arlington: Wallace Center at Winrock International.
- Dreier, S., & Taheri, M. (2009). Innovative Models: Small Grower and Retailer Collaborations, Part B Balls Food Stores Perspective (pp. 1-10). Arlington: Wallace Center at Winrock International.
- Erlbaum, J., McManus, K., & Nowak, A. (2011). Colorado Local Food Hubs for Farm to School Products:

  An Initial Feasibility Analysis of Local Food Hubs for Colorado Producers and Schools (pp. 1-53).

  Colorado: Real Food Colorado.
- Fisk, J., & Barham, J. (2011). *Initial Findings from Food Hub National Survey*.
- Fitzgerald, K., Evans, L., & Daniel, J. (2010). The National Sustainable Agriculture Coalition's Guide to USDA Funding for Local and Regional Food Systems (First ed., pp. 1-41). Washington, DC: The National Sustainable Agriculture Coalition.
- Flaccavento, A. (2009). Healthy Food Systems: A Toolkit for Building Value Chains (pp. 1-40): Appalachian Sustainable Development.
- Greenberg, L. (2007). Innovative Strategies for Meeting New Markets (pp. 1-42): Northcountry Cooperative Development Fund.
- Hand, M. S. (2010, December 2010). Local Food Supply Chains Use Diverse Business Models to Satisfy Demand. *Amber Waves*.
- Hardy, C., & Holz-Clause, M. (2008). Bridging the Gap: What does it take to bring small and medium-sized producers and retail and foodservice distributors together? (pp. 1-24). Ames: Leopold Center for Sustainable Agriculture, Iowa State University.
- Hoshide, A. K. (2007). Values-Based & Value-Added Value Chains in the Northeast, Upper Midwest, and Pacific Northwest (pp. 1-13). Orono, ME: University of Maine.
- Masi, B., Schaller, L., & Shuman, M. H. (2010). The 25% Shift: The Benefits of Food Localization for Northeast Ohio & How to Realize Them (pp. 1-135).
- Matson, J., & Cook, C. (2011, May/June 2011). Virtual Food Hubs Help Producers Tap Into Local Food Markets. *Rural Cooperatives*, *78*, 4-8, 43.

- Matson, J., Sullins, M., & Cook, C. (2011, May/June 2011). Keys to Success for Food Hubs. *Rural Cooperatives, 78,* 9-11.
- Melone, B., Cardenas, E., Cochran, J., Gross, J., Reinbold, J., Brenneis, L., Sierra, L., Cech, S., & Zajfen, V. (2010). California Network of Regional Food Hubs: A Vision Statement and Strategic Implementation Plan (pp. 1-60). California: Regional Food Hub Advisory Council.
- O'Sullivan, E. M. (2011). The Sacramento Region's Three Local Alternative Food Distributors: A Case Study of Factors Affecting Success. Masters of Science, University of California Davis, Davis.
- Painter, K. (2007). An Analysis of Food-Chain Demand for Differentiated Farm Commodities: Implications for the Farm Sector (Center for Sustaining Ag & Natural Resources, Trans.) (pp. 1-48). Pullman: Washington State University.
- Perrett, A. S. (2007). The Infrastructure of Food Procurement and Distribution: Implications for Farmers in Western North Carolina (pp. 1-19): Appalachian Sustainable Agriculture Project.
- Perry, J., & Franzblau, S. (2010). Local Harvest: A Multifarm CSA. USA: Author.
- Shuman, M., Barron, A., & Wasserman, W. (2009). Community Food Enterprise: Local Success in a Global Marketplace. Arlington: Wallace Center at Winrock International.
- Slama, J., Nyquist, K., & Bucknum, M. (2010). Local Food System Assessment for Northern Virginia (pp. 1-26): Wallace Center at Winrock International, FamilyFarmed.org, and Triskeles Foundation.
- Stevenson, S. (2009). Values-based food supply chains: Executive Summary (pp. 1-12): Center for Integrated Agricultural Systems.