Assessing the Market Dynamics of "Values-Added" Agriculture and Food Businesses in Oregon: Challenges and Opportunities







Prepared for the Oregon Environmental Council by
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Executive Summary

This report explores the dynamics of progressive agricultural production and food businesses in Oregon, focusing on the producers and businesses that are seeking to distinguish or "de-commodify" their products through the environmental or social aspects of their management practices or other attributes such as location of origin. The range of agricultural products of interest in this assessment is intentionally inclusive, and is based on what markets – as represented by buyers in direct markets, retail, food service, and export markets – are looking for in terms of the values that have been added to products, i.e. what social or environmental attributes purchasers take into consideration beyond product quality and price. The term "values-added" is used to describe products that are being distinguished on the basis of these attributes.

This assessment is intended to provide an initial snapshot of the dynamics in the "values-added" marketplace in Oregon, highlighting some of the challenges and opportunities for producers seeking to gain market access for their products on the basis of their management practices or the local origin of their product. This assessment is only a starting place – more in-depth exploration is needed to identify what can be done to address these challenges and take advantage of these opportunities to ensure that Oregon producers who want to distinguish their products in the market place in these ways are able to do so.

Background

Despite the fact that Oregon has a high percentage of specialty crops, historically most agriculture production in the state has been sold into commodity markets as undifferentiated product. In recent years, however, the pressures of a global economy have made it increasingly challenging for producers in Oregon to compete in the commodity market due to the relatively high production costs in this region. These pressures, combined with growing demand for products that are differentiated based on quality of product, environmental and/or social practices employed in production and growing interest in products that are "local" in origin, have lead some producers to shift to markets that reward such added values, seeking either price premiums or access to expanded markets.

The viability of such "values-added" products in the marketplace depends in part on the development of more explicit relationships between producers and the businesses that represent their primary or secondary markets. These relationships are critical because the information about the product which differentiates it — its origin, the management practices, or other attributes — must stay with the product from production to end consumer for this value to be fully realized. The primacy of these

relationships across the supply chain and the importance of maintaining the "chain of custody" of information about these products distinguish the structure of the de-commodified agriculture and food business industry from the commodity market structure.

Capturing the dynamics of a sub-sector like this is challenging for a number of reasons — data are rarely collected in ways that capture environmental and social attributes, and the environmental and social values under consideration are somewhat subjective. While certification systems such as the National Organic Program or other certification programs that focus on environmental or social characteristics provide some more objective basis for assessing the credibility of environmental or social claims, capturing the relative weight given these values in purchasing decisions can be difficult.



In order to capture the dynamics of the "values-added" sub-sector in agriculture and food business, this assessment draws on two complementary analytical frameworks —clusters and value chains. Clusters are

geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (for example, universities, standards agreements, and trade associations) in particular fields that compete but also cooperate (Porter, 1996, pp. 197-198).

Analyzing economies within a cluster framework can help capture "important linkages, complementaries, and spillovers of technology, skills, information, marketing and customer needs that cut across firms and industries," can help identify opportunities for coordination and mutual improvement in areas of common concern, and can provide a "constructive and efficient forum for dialogue among related companies and their suppliers, government and other salient institutions" (lbid. p. 205). This study uses cluster analysis to inform a further analysis — one that is beyond the scope of this report - of the strengths, weaknesses, opportunities and threats related to progressive agriculture and food businesses in the state and to identify what can be done to strengthen the economic development opportunities related to this sector.

The concept of "value chains" has also emerged as an important framework for market development for agriculture and community food based businesses that are seeking to de-commodify their products based on their environmental or social attributes. A value chain is "an alliance of enterprises collaborating vertically to achieve a more rewarding position in the market" (Agriculture and Food Council of Alberta, 2004). As summarized by the Agriculture and Food Council of Alberta,

the basic characteristic of a value chain is market-focused collaboration: different business enterprises work together to produce and market products and services in an effective and efficient manner. Value chains allow businesses to respond to the marketplace by linking production, processing and marketing activities to market demands (Agriculture and Food Council of Alberta, 2004, p. 13).

The cluster and value chain frameworks are used together in order to provide a more comprehensive assessment of the dynamics of the sector. Cluster assessments may miss some of the more subtle supply chain dynamics that value chains can capture, while value chain mapping does not necessarily encompass the supporting infrastructure such as training or government programs, nor does it capture the inter-company elements of competition and cooperation. Together, these frameworks provide a more comprehensive picture of the values-added agriculture and food system.

Findings

Many of the attributes of a "values-added" agriculture and food cluster are in place in Oregon, including strong regional demand for products that have added environmental and social attributes, as well as a critical mass of retail and food service businesses that seek these products and are willing to engage in the chain of custody to ensure the full value of certified products is realized by the producer and other intermediary partners. The strong market demand for either certified products or products that are locally grown or produced exists at many scales, from direct marketing to institutional food service, creating opportunities for agricultural enterprises of all sizes.

The regional growth in demand for products that have added environmental and social attributes is consistent with the trends in the national markets, which may also provide local producers with opportunities to take advantage of broader markets. International markets in Asia and Europe are also growing for products that can claim credibly that they have been produced in an environmentally sound manner.

The dynamics of the market for "values-added" products in Oregon differ depending on the scale of production and the nature of the market relationships. In direct markets, the personal relationship between producers — whose operations may range from very small to quite large in terms of acreage - and their end or penultimate customers provides a foundation of trust; the relationships between producers and their markets are often relatively enduring, and prices may be negotiated on the basis of what permits both parties to meet their economic goals. As the relationship between producers and their customers becomes increasingly indirect and as the volume of product increases with the scale of the enterprises, certification systems appear to play an increasingly prominent role in the value equation, although significant numbers of small farms continue to pursue organic and other certification. In the more indirect markets, distribution is a bottleneck to sourcing more local products as well as some types of certified products. While conventional distributors are increasingly engaging in sourcing these products, aggregating adequate volume consistently and maintaining the chain of custody for these products continues to pose challenges.

Producers that are certified with respect to their management practices do not represent the full range of good land management practices in the state. However, the growth trends in certified production and demand for these products serves as an indicator of the interest in the marketplace for products which can claim to have been produced in environmentally and/or socially responsible ways.

In determining whether or not to pursue certification, producers weigh the costs of certification with the added benefits that this certification provides them in the marketplace. These factors vary depending on the type of crop or product, scale of production, and the types of market channels that producers are seeking to access. For larger producers seeking to access the larger volume markets, some kind of environmental certification appears to be increasingly valuable, as purchasers respond to demand for environmentally friendly and socially responsible products and seek ways to "outsource" the verification of such claims. In the end, most producers would not pay the costs of certification unless they saw an economic benefit from doing so — such benefits may include access to new markets, maintaining existing markets that now require certification, and/or receiving a higher price for their certified products.

There are clearly opportunities for Oregon producers to take advantage of the growing markets for products which can make credible claims regarding the environmental and social aspects of production practices. At the same time, there are a number of obstacles facing producers attempting to enter these markets, including distribution issues and, in the case of organic production, growing concern among smaller organic producers about the competition posed by large-scale certified organic producers outside of the region and in other countries. However, the impact of larger organic producers on smaller farms may be limited by the fact that the smaller scale, more local market channels that smaller producers serve are not in direct competition with larger market outlets; this is due in part to the fact that consumers tend to seek out different shopping experiences, with price point being only one of many consumer considerations.

Distribution emerged as a consistent bottleneck for retailers seeking to source larger volumes of local products, although this was not the case as much with organic products. Even the markets which have been most successful at creating local supply chains admit to challenges in sourcing sufficient quality and volume of local and/or some types of certified products, as well as gaps in the supply of processed food products — the availability of processed foods is in part due to the lack of processing capacity for small- to medium-sized producers. The lack of locally produced, minimally processed fresh products, such as pre-cut vegetables or bagged lettuce, also pose an obstacle to entry into some retail markets such as Trader Joes, as well as into institutional food service. The growing volume of organic production

among larger scale producers – which will likely be fueled even further by Wal-Mart's recent commitment to expand the amount of organic product it carries— has in turn led to the development of a relatively efficient system to source and distribute organic products from across the country as well as from Mexico and other countries.

As noted above, this assessment is intended to provide an initial snapshot of the dynamics in the "values-added" marketplace in Oregon, highlighting some of the challenges and opportunities for producers seeking to gain market access for their products on the basis of their management practices or the local origin of their product. This assessment is only a starting place – more in-depth exploration is needed to identify what can be done to address these challenges and take advantage of these opportunities to ensure that Oregon producers who want to distinguish their products in the market place in these ways are able to do so.

Introduction

This report explores the dynamics of progressive agricultural production and food businesses in Oregon, focusing on the producers and businesses that are seeking to distinguish their products through the environmental or social aspects of their management practices or other attributes such as location of origin. The range of agricultural products of interest in this assessment is intentionally inclusive, and is based on what markets – as represented by buyers in direct markets, retail, food service, and export markets – are looking for in terms of the values that have been "added" to products, i.e. what social or environmental attributes purchasers take into consideration beyond product quality and price. The term "values-added" is used to describe products that are being distinguished on the basis of these attributes.

Despite the fact that Oregon has a high percentage of specialty crops, historically most agriculture production in the state has been sold into commodity markets as undifferentiated product. In recent years, however, the pressures of a global economy have made it increasingly challenging for producers in Oregon to compete in the commodity market due to the relatively high production costs in this region. These pressures, combined with growing demand for products that are differentiated based on quality of product, environmental and/or social practices employed in production and growing interest in products that are "local" in origin, have lead some producers to shift to "values-added" markets, seeking either price premiums or access to expanded markets.

The viability of such "values-added" products in the marketplace depends at least in part on the development of more explicit relationships between producers and the businesses that represent their primary or secondary markets. These relationships can be critical because the information about the product which differentiates it – its origin, the management practices, or other attributes – must stay with the product from production to end consumer for this value to be fully realized. The primacy of these relationships across the supply chain and the importance of maintaining the "chain of custody" of information about these products distinguish the structure of the decommodified agriculture and food business industry from the commodity market structure.

In order to capture the dynamics of the "values-added" sub-sector in agriculture and food business, this assessment draws on two complementary analytical frameworks – clusters and value chains. Clusters are

geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (for example, universities, standards agreements, and trade associations) in particular fields that compete but also cooperate. (Porter, 1996, pp. 197-198).

Analyzing economies within a cluster framework can help capture "important linkages, complementarities, and spillovers of technology, skills, information, marketing and customer needs that cut across firms and industries," can help identify opportunities for coordination and mutual improvement in areas of common concern," and can provide a "constructive and efficient forum for dialogue among related companies and their suppliers, government and other salient institutions" (lbid. p. 205).

The concept of "value chains" has emerged as an important framework for market development in the field of "values-added" agriculture and community-food based businesses. A value chain is "an alliance of enterprises collaborating vertically to achieve a more rewarding position in the market" (Agriculture and Food Council of Alberta, 2004). As summarized by the Agriculture and Food Council of Alberta.

the basic characteristic of a value chain is market-focused collaboration: different business enterprises work together to produce and market products and services in an effective and efficient manner. Value chains allow businesses to respond to the marketplace by linking production, processing and marketing activities to market demands (Agriculture and Food Council of Alberta, 2004, p. 13).

The cluster and value chain frameworks are used together in order to provide a more comprehensive assessment of the dynamics of the sector. Cluster assessments may not capture some of the more subtle supply chain dynamics that value chains can capture, while value chain mapping does not necessarily encompass the supporting infrastructure such as training or government programs, nor does it capture the inter-company elements of competition and cooperation. Together, these frameworks provide a more robust picture of the elements of the agriculture and food system focused on the market for de-commodified products.

In both conventional and "values-added" agriculture, the dynamics of production and market demand differ depending upon the type of crop being produced or livestock being raised, as well as on the structure of production and distribution systems and the markets being pursued. A detailed assessment of the dynamics related to different crops and products is beyond the scope of this assessment; however, Attachment I provides several case studies of how producers in different sectors have pursued strategies to gain market share by distinguishing their products around environmental, social, and other attributes.

As noted in the Oregon Business Plan's "Resource Guide for Cluster Breakout Sessions" (2006), there are a number of targeted efforts to support sub-regional or product-specific agricultural clusters, such as the Community Seafood Initiative in Astoria; the Farmer-Chef Connection; the Portland Development Commission's Food Processing Target Industry Plan, and the Mid Columbia Economic Development District's Wine Cluster in the Columbia River Gorge. This report draws on information developed through a number of these initiatives; however, it differs from these other initiatives by seeking to provide both a statewide perspective and to reflect the different dynamics associated with both different crops and products and different scales of production and marketing.

It is also important to note that a number of other mechanisms are emerging that seek to provide compensation or incentives for producers investing in environmentally friendly practices — while it is beyond the scope of this assessment to explore these in detail, they may represent important income streams for progressive producers and so are referenced briefly here. For example, there are a number of efforts to develop markets for ecosystem services, the processes by which the natural environment produces resources useful to people, such as the provision of clean water and air, pollination of crops, mitigation of environmental hazards, and pest and disease control. The Willamette Partnership is developing the Willamette Ecosystem Marketplace to trade conservation credits (seehttp://www.ecosystemmarketplace.com/ for other examples of such market development efforts). There is also increasing interest in developing structures that can support

trading of carbon credits for climate-friendly agricultural practices (see Washington State University's Center for Sustaining Agriculture and Natural Resources' website for more information on research into climate friendly agricultural practices - http://cff.wsu.edu/).

In addition, a number of government programs provide compensation or incentive payments to producers investing in particular types of management practices – these programs include the Conservation Reserve Enhancement Program (CREP), the Conservation Reserve Program (CRP), the Conservation Security Program (CSP – see Section III of this paper for more on this program), as well as state level programs such as those managed by the Oregon Watershed Enhancement Board and the Oregon Department of Fish and Wildlife. While most of these government programs do not represent fully functioning market structures, they do provide valuable opportunities for farmers to access financial resources on the basis of their environmental practices.

This assessment is intended to lay the ground work for an assessment of strengths, weaknesses, opportunities and threats in this "sector," to foster dialogue with the agricultural and food-related community around these issues, and to inform policy recommendations related to expanding opportunities in this sector. This assessment was conducted in consultation with the Oregon Environmental Council (OEC) staff and OEC's Growing Stronger Advisory Committee. (see Attachment 3 for list of advisory committee members). The information was "ground truthed" to a limited extent through discussions with representatives of the agricultural and food business community. This assessment constitutes a "first look" at the overall dynamics in this sector and identifies additional questions that require research and exploration in subsequent assessments.

This report is organized as follows:

Chapter I: Background

Chapter II: Market Assessments

Chapter III: Regulatory and Policy Environment

Chapter IV: Discussion and Next Steps

Attachment 1: Sector Snapshots

Attachment 2: Certification Systems and Production Statistics

Attachment 3: Growing Stronger Advisory Committee Members

Attachment 4: List of Individuals Contacted



Chapter 1: Background

Overview of the agriculture and food industries in Oregon

While this assessment focuses on the aspects of agricultural production and food businesses that are seeking distinction through the environmental or social aspects of their management practices or local origin of their product — referred to as "values-added" strategies - this section provides some background information regarding the broader context of agriculture and food industry dynamics in the U.S. and Oregon. This context may help the reader understand where there is unrealized potential to distinguish products along these lines, as well as where it may be difficult to capture or claim these "added values."

Oregon's 40,000 farmers and ranchers currently manage 17.3 million acres of private farmland. Over 225 commercial crops are grown in Oregon, more than any other state except California and Florida (Works et al, 2005). Oregon leads the nation in the production of a variety of products, including Christmas trees, hazelnuts, grass seeds, blackberries, Dungeness crab and potted florist azaleas, and ranks second in production of peppermint, spearmint, snap beans, red raspberries, onions, hops, and boysenberries and young berries (Oregon Department of Agriculture, 2006). Agriculture is not restricted to particular regions of the state – agricultural activities contribute to the local economies in all 36 Oregon counties.

The food industry as a whole is one of the largest economic sectors in the Pacific Northwest. In Oregon, Washington, and Idaho, the industry employs over 760,000 people in all phases of food growing, processing, marketing and retailing. Food service and food retail comprise the largest segments of food industry employment. Jobs in food retailing are projected to grow at a rate of 11.4 percent while jobs in food management and administration are projected to grow at a rate of 25 percent between 2000 and 2010 (Portland State University, 2003).

Fred Meyer, Safeway Co., Albertson's Food Centers, Costco, and WinCo Foods are the largest employers in the food retail industry in the Pacific Northwest. Trader Joes, a grocery chain that now operates in nineteen states and mainly carries its own brand of product, now has eighteen stores in the region - six in Oregon and twelve in Washington. There are twenty-seven locally owned Thriftway franchises in the state, as well as a number of privately owned regional chains, including C&K (which operates Rays Food place and others outlets), Market of Choice, New Seasons Markets, Roths, and Zupans. Within the "natural foods" sector, Whole Foods has stores in Portland, Seattle, and Bellevue, and Wild Oats has six stores in Oregon and one in Washington. New Seasons Markets will soon have

nine stores in the Portland area. In addition, there are a number of smaller cooperative groceries in the region.

The economic value delivered by all phases of the food production process exceeds \$134 billion, with over 70 percent attributed to manufacturing and wholesaling (Portland State University, 2003).

Summary Statistics on the Food Industry in the Pacific Northwest (Oregon, Washington, and Idaho):

Current employment: 760,618
Total Revenues: \$134 Billion
Export Value: \$5.3 Billion

 $\cdot\,$ 20 of the top 100 private businesses are food companies.

· 5 of the top 25 largest employers are food companies.

Source: Portland State University, 2003

More than 85 percent of Oregon's agricultural production leaves the state and 45 percent moves into the international markets (Oregon Business Plan, 2006). Given the volume of Oregon production that is exported, it is clear that even if local markets for Oregon products were expanded a significant portion of Oregon's agricultural production would continue to seek export to other markets. In order to capture some of the export aspects of the "values-added" market, this assessment provides a brief overview in a later section of international demand trends for products with particular environmental attributes (organic, GMO-free, etc.), drawing on assessments by the Food and Agriculture Organization and others.

Having noted the importance of exports to the agricultural economy, increasing local demand for local products may be having significant impacts on Oregon's agricultural landscape. While nationally the number of operating farms has been decreasing on an annual basis, Oregon has seen a significant increase in the number of small farms and a gain – albeit small – rather than a loss in middle income farms (Works and Harvey, 2005). The Oregon Department of Agriculture (ODA) attributes at least some of the growth in the number of these farms to Portland-area consumers choosing to buy locally grown food, both in stores and at farmers markets (Korn, 2006).

Institutional framework for agriculture

Oregon has 28 commodity commissions and the Oregon Association of Nurseries represents Oregon's greenhouses and nurseries. The Northwest Food Processors Association (NWFPA) supports the more than 179 companies and over 22,000 employees involved with processing food and beverages in Oregon. NWFPA recently conducted a cluster assessment of the food processing industry in the region and developed a set of priority initiatives, including integrating sustainability into agriculture and developing low-cost energy and energy efficiency programs. NWFPA's recognition of the opportunities related to sustainability issues may help focus attention on the gaps in processing capacity supportive of differentiated product, which will be highlighted later in this report.

The Oregon Department of Agriculture (ODA) provides a broad range of services in support of agricultural producers and food businesses, as well as being responsible for enforcing a number of agricultural and land use regulations. Their mandate and mission encompass ensuring food safety and providing consumer protection; protecting Oregon's natural resource base for present and future generations of farmers and ranchers; and promoting economic development and expanding market opportunities for Oregon agricultural products. (Additional information on ODA is available at www.oregon.gov/ODA.)

The Food Industry Leadership Center (FILC) (www.foodleadership.pdx.edu) at Portland State University, OSU's Agricultural Extension programs (www.extension.oregonstate.edu), and the Food Innovation Center (FIC) (www.fic.oregonstate.edu) all provide support to the agriculture and food industry sectors. FILC focuses on issues related to the food industry; OSU extension focuses on producers; and the FIC provides support to entrepreneurs interested in developing and marketing processed food products.

The Values-Added Segment of Oregon Agriculture and Food Businesses

This assessment explores the dynamics of a subset of agricultural production and food businesses in Oregon, focusing on those producers and businesses seeking to distinguish their products around environmental and social practices and those businesses seeking to source products at least in part on the basis of such characteristics. The boundaries of this assessment were defined by the demand in the

marketplace for environmental and social product attributes. Rather than starting with a strict definition of what does or doesn't constitute "sustainable" agricultural practices, this assessment seeks to identify what environmental and/or social attributes are of interest to buyers in both direct and indirect markets for food products and then evaluates the cluster attributes related to these product lines. The term "values-added" is used to describe the range of strategies that producers and other agricultural and food industry enterprises are using to gain market advantage through the environmental or social attributes of their products.

Capturing the dynamics of a sub-sector like this is challenging for a number of reasons – data are rarely collected in ways that capture these attributes, and the environmental and social values under consideration are somewhat subjective. While certification systems such as the National Organic Program or other certification programs that focus on environmental or social characteristics provide a more objective basis for assessing the credibility of environmental or social claims, capturing the relative weight given these values in purchasing decisions is challenging, in part because even individual consumers vary in the weight they give these attributes depending on the particular context of their purchasing decisions (Hartman Group, http://www.hartman-group.com/products/HB/2006_06_07.html; see also Figure 3, page 24, and accompanying discussion) ¹.

In order to capture the dynamics of the "values-added" sub-sector of Oregon's agricultural and food industry, this assessment draws on two complementary analytical frameworks – clusters and value chains. The following section briefly describes the concepts of economic clusters and value chains, highlighting the relevance of these approaches to understanding the dynamics of sustainable agriculture and food businesses.

Exploring "Progressive" Agriculture in Oregon: Value Chains and Clusters

In recent years, economic development strategies in Oregon have focused on identifying clusters of businesses that can be strengthened and expanded to increase the economic opportunities in the state (see www.oregonclusters.org). Such cluster strategies generally focus on traditional economic sectors, the basic characteristics of which can be captured using data collected under SIC or NAICS code categories.

¹ See attachment 2 for more information on organic, Food Alliance and Salmon Safe certification programs.

In the case of "values-added" agriculture and associated food businesses, the dynamics of the marketplace are not reflected in census data or other economic data as they are generally collected. As a result, the effort to map this cluster relied primarily upon qualitative methods, such as interviews and survey of "grey" literature such as newsletters, as well as on the relatively limited number of assessments that have been done of organic production and small scale direct marketing through farmers markets and Community Supported Agriculture operations (CSAs).

Economic Clusters

Harvard Business School professor Michael Porter has championed the concept that "clusters" play a critical role in competitiveness and successful economic development. As Porter describes them,

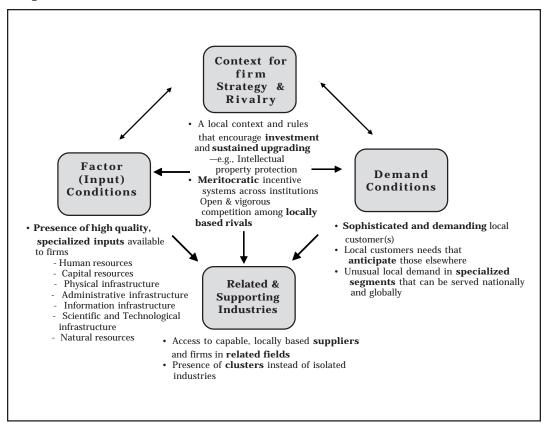
Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (for example, universities, standards agreements, and trade associations) in particular fields that compete but also cooperate. (Porter, 1996, pp. 197-198).

Porter also notes that "a cluster may be defined as a system of interconnected firms and institutions whose value as a whole is greater than the sum of its parts" (Ibid., p. 213). Locating within a cluster can provide superior or lower cost access to specialized inputs such as components, machinery, business services and personnel, and can be a more efficient or effective means of assembling inputs "if competitive local suppliers are available" (Ibid., p. 214)

Porter has developed the now well known "diamond" characterization of clusters. Figure 1 on the following page is adapted from Porter et al., 2004, p. 37.

Productivity and the Regional Business Environment

Figure 1: Porter's Diamond



There are several advantages to analyzing economies within a cluster framework rather than through a traditional assessment of companies, industries or sectors. A cluster framework can help capture "important linkages, complementarities, and spillovers of technology, skills, information, marketing and customer needs that cut across firms and industries" (Porter, 1996, p. 205). In addition, viewing a group of companies as a cluster can help identify "opportunities for coordination and mutual improvement in areas of common concern" and can provide a "constructive and efficient forum for dialogue among related companies and their suppliers, government and other salient institutions" (Ibid. p. 205).

Conceiving of a group of businesses as a cluster can also address some of the disadvantages of vertical integration. Porter notes that,

while extensive vertical integration (for example, in house production of parts, services or training) may have once been the norm, a more dynamic environment can render vertical integration inefficient, ineffective and inflexible (Porter, 1996, p. 209)

Successful clusters can affect competition in several ways – by increasing the productivity of constituent firms or industries; by increasing their capacity for innovation and productivity growth; and by stimulating new business formation that supports innovation and expands the cluster (Porter, 1996, p, 213).

Applying Cluster Assessment to Values-Added Agriculture and Food Businesses in Oregon

Using Porter's diamond framework as a starting point, this report describes the market demand for sustainable products, organized by type of market segment (direct marketing, retail, food service); the overall characteristics of the sector (ranges in the size of enterprises, distribution, and certification strategies); the status of supply chains and supporting infrastructure; and the regulatory and policy environment affecting these producers and businesses.

Porter notes that cluster boundaries should encompass all firms, industries and institutions with strong vertical, horizontal, or institutional linkages, while those with weak linkages can be left out (Ibid, p. 202). In this assessment, the definition of which agriculture and food businesses should be included in the cluster is intentionally inclusive – the initial step was to identify what the market (as represented by buyers in direct markets, retail, food service, and exports) is looking for in terms of the "values added" to products (i.e., what social or environmental attributes they took into consideration beyond product quality and price). The universe of producers, distributors and other suppliers of interest is then defined on the basis of these demand characteristics.

The dynamics of production, distribution and demand vary somewhat among crop types and product lines, adding to the complexity of this undertaking. Providing a detailed analysis of multiple product lines is beyond the scope of this assessment. However, some of the dynamics specific to particular crop or product lines are captured through the use of selected case studies included in Attachment I – these case studies either offer successful models for capturing added value through sustainable practices or illuminate the challenges of doing so.

The approach taken in this study builds on that advanced by Bergman and Feser (1999), starting with a particular objective and using cluster analysis to determine better ways of pursuing that objective. In this case, the objective of the assessment is to inform a further analysis of the strengths, weaknesses, opportunities and threats related to sustainable agriculture and food businesses in the state and to identify what can be done to strengthen the economic development opportunities related to this sector.

In this approach, cluster analysis is supportive of development strategies that strengthen the value-chain connections between firms, strategies that are typically already in place in some form in most regions. The goal of the cluster analysis itself is to permit policy officials to acquire unique and quite detailed insight into the basic features of the regional economy by emphasizing industry linkages and interdependence between f firms (Bergman and Feser, 1999, p. 244).

The cluster analysis presented here is intended as a "platform for action." As Ffowcs-Williams (2004) notes, cluster assessments performed for this purpose should strive to provide sufficient data to capture the actual dynamics of this sector without investing in exhaustive analysis. More extensive research and analysis to identify specific training or other infrastructure needs or other interventions is more appropriately done after this initial assessment has framed the overall dynamics of the sector (Fflowcs-Williams, 2004).

As noted previously, there are a number of targeted efforts to support sub-regional or product specific agricultural clusters, including as the Community Seafood Initiative in Astoria (http://www.heads-up.net/csi/about.cfm); the Farmer-Chef Connection (http://www.farmerchefconnection.org/); the Portland Development Commission's Food Processing Target Industry Plan, and the Mid Columbia Economic Development District's Wine Cluster in the Columbia River Gorge.

Box I on the following page provides additional information on some of these initiatives (the Farmer-Chef Connection is discussed in more detail in the direct marketing section of this report). This report draws on information developed through a number of these initiatives; it differs, however, in that it seeks to capture the overall dynamics of production and marketing of "values-added" products in the state, as well as capturing the dynamics at different scales of production and marketing.

Box 1: Related Cluster Strategies and Approaches

The <u>Community Seafood Initiative</u> (CSI) was launched in 2001 by the Oregon State University Seafood Laboratory in Astoria, OR and ShoreBank Enterprise Pacific, Ilwaco, WA to increase economic opportunities for locally-owned fishing and seafood businesses operating in Oregon and Washington coastal communities. By developing a new service delivery model that combines applied research, and training education and workshops with business, finance and community economic development resources, CSI has helped several local seafood businesses to gain a competitive edge and improve their bottom line in today's fiercely competitive global seafood market. (http://www.heads-up.net/csi/about.cfm)

The following cluster activities were highlighted in the 2006 Oregon Business Plan – key action ideas are noted here (see http://www.oregonbusinessplan.org/pdf/Cluster%20Breakout%20Guide%201.8.pdf for more detail).

Northwest Food Processors Association Action Ideas

- 1. Work force development and stability; replace a soon-to-retire workforce.
- 2. Innovation and technology; connect rural Oregon to high-speed communication with the rest of the world.
- 3. Develop low-cost energy and energy efficiency programs.
- Ensure an adequate water supply through an appropriate Columbia River operation
 management plan to supply low-cost hydropower, water for immigration and salmon
 recovery.
- 5. Integrate sustainability into agriculture.

Portland Development Commission's Food Processing Target Industry Action Ideas

- 1. Establish a technical assistance program with the Food Innovation Center that would focus on business/financial assistance for marketing and testing of food products.
- 2. Support the development of policy initiatives on targeted issues that would make the region more competitive for the industry, such as water and sewer rates.
- 3. Support the implementation of the Northwest Food Processors Association Cluster Strategy.

Mid Columbia Economic Development District's Wine Cluster Action Ideas

- I. Enhance winery and vineyard business atmosphere.
- 2. Decrease inter-state barriers
 - Increase associate membership to Columbia Gorge Winegrowers Association
 - · Increase relationship with media
 - Create a Gorge Chapter of Gorge Wine Ambassadors
- 3. Facilitate wine business start ups.

Value Chains

The concept of "value chains" has emerged as an important framework for market development in the field of sustainable agriculture and community-food based businesses. A value chain is "an alliance of enterprises collaborating vertically to achieve a more rewarding position in the market" (Agriculture and Food Council of Alberta, 2004). As summarized by the Agriculture and Food Council of Alberta,

the basic characteristic of a value chain is market-focused collaboration: different business enterprises work together to produce and market products and services in an effective and efficient manner. Value chains allow businesses to respond to the marketplace by linking production, processing and marketing activities to market demands (Agriculture and Food Council of Alberta, 2004, p. 13)

One of the critical characteristics of a value chain is the vertical alignment between companies, i.e., the connection from the primary production process (e.g., farmer's field), through processing, and possibly into the final marketing stages where consumers purchase a finished product (Agriculture and Food Council of Alberta, 2004). Vertical alignment is important because at each stage the product's value increases.

This is different from other types of alliances, such as a collection of agricultural producers consolidating supply, which would be considered a horizontal alliance, because [in those cases] no value is added to the product. Normally, the term value chain is applied when the vertical alliance includes three or more companies, known as links, in the supply chain. (Agriculture and Food Council of Alberta, 2004, p. 13)

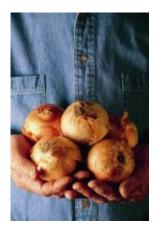


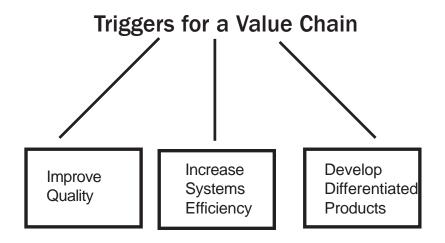
Table I summarizes the differences between a "value" chain and the more traditional concept of a supply chain:

Table 1: Contrasting Supply Chains and Value Chains

	Supply Chain	Value Chain	
Communication & information sharing	Little or none	Extensive	
Value focus	Cost/price	Value/quantity	
Product	Commodity	Differentiated product	
Relationship	Supply push	Demand pull	
Organizational structure	Independent	Interdependent	
Philosophy	Self optimization	Chain optimization	

Adapted from Toma & Bouma Management Consultants, November 1998. Value Chains as a Strategy: Agriculture and Food Council, Edmonton, Alberta, Canada

As noted previously, the viability of "values-added" products in the marketplace depends in part of the development of more explicit relationships between producers and the businesses that represent their primary or secondary markets. These relationships are critical because the information about the product which differentiates it – its origin, the management practices, or other attributes – must stay with the product from production to end consumer for this value to be fully realized. The primacy of these relationships across the supply chain and the importance of maintaining the "chain of custody" of information about these products distinguish the structure of the "values-added" agriculture and food business industry from the commodity market structure and make the characteristics of a value chain directly relevant.



<u>Figure 2: Triggers for a Value Chain</u>. (Toma & Bouma Management Consultants, November 1998. Value Chains as a Strategy: Agriculture and Food Council, Edmonton, Alberta, Canada)

Figure 2 on the previous page suggests some of the triggers for developing the more explicit relationships reflected in a value chain approach, including improving the quality of product, increasing the efficiency of a production and marketing system, and developing differentiated products. Quality improvement flows from the explicit commitment of all partners in the value chain to realizing the highest overall value from the product (handling, production, etc). Increases in the overall efficiency of a supply chain may result from the improved communication between all links of the chain, which can help identify and resolve bottlenecks and support more timely delivery. With respect to developing differentiated products, as noted above, a value chain approach ensures that the information about production methods, product origin, and other attributes stays with the product – if such information is lost at any point in the supply chain, the credibility of product claims around these differentiated attributes is significantly diminished. In this assessment, the value chain framework is used as an evaluative tool to identify areas where value chains could be fostered and glean lessons learned where they are functioning well.

As noted above in the discussion of cluster assessment, the boundaries of this assessment were defined by the demand in the marketplace for environmental and social product attributes. Rather than starting with a strict definition of what does or doesn't constitute "sustainable" agricultural practices, this assessment seeks to identify what environmental and/or social attributes are of interest to buyers in both direct and indirect markets for food products and then evaluate the cluster attributes related to these product lines. The next section provides an overview of the market demand in Oregon for food products with added environmental, social and other "values-added" attributes.



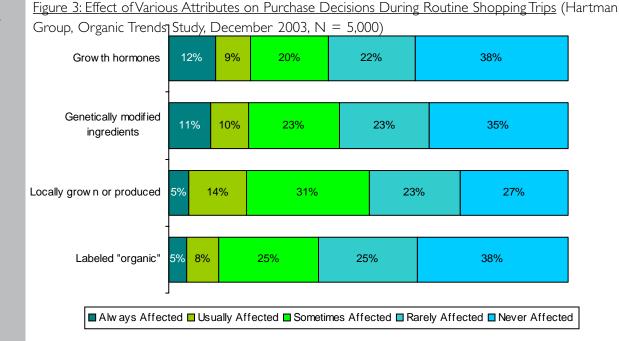
Chapter 2: Market Assessments

Overview of Demand for Environmentally or Socially "Values-Added" Products

This assessment relies primarily on a qualitative assessment of the preferences stated by secondary markets such as retail or food service buyers sourcing from Oregon producers as a proxy for consumer demand and market potential. However, to better understand the context of demand in these markets and to capture the potential for markets that Oregon producers may not yet be fully accessing, it may be useful to review some of the research at the national and international levels related to consumer interest in the environmental or social attributes of products.

National and International Trends in the Marketplace

The Hartman Group (www.hartman-group.com) has conducted a number of surveys seeking to understand the dynamics of this marketplace. Figure 3 indicates some of the Hartman Group's findings regarding the importance of particular attributes in purchasing decisions, based on a 2003 survey. According to Hartman's President and COO Laurie Demeritt, the weight given to locally grown or produced products has been noticeably increasing over the past several years and likely exceeds the percentages noted in this table (Laurie Demeritt, Hartman Group, personal communication).



The statistics in Figure 3 suggest that, while the percentage of purchasers who always make these considerations primary in their purchasing decisions is relatively low, the percentage that take them into consideration "sometimes," "usually" or "always" is significant – 41 percent in the case of growth hormones, 44 percent in the case of GMOs, 50 percent (or higher) in the case of locally grown or purchased products, 50 percent in the case of "all natural" products, and 38 percent in the case of organic products.

Hartman categorizes consumers as "core," "mid-level," and "periphery" depending upon the intensity of their lifestyle and commitment to sustainability attributes. The attributes important to core consumers at any given time tend to "migrate," becoming important to the mid-level and peripheral consumers over time. Figure 4 below indicates the considerations that carry weight for consumers in the various categories.

Dimensions of the World of Products with Sustainable Values

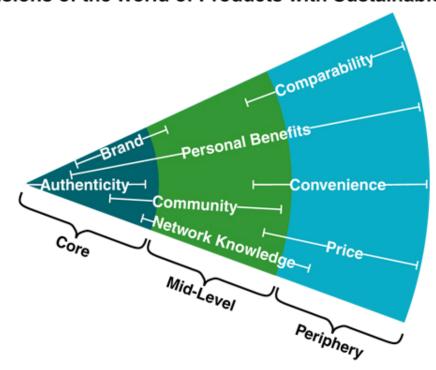


Figure 4, Importance of Product Attributes by Group (Hartman Group)

As Figure 4 suggests, one of the product attributes that is becoming increasingly important to core consumers is "authenticity." In terms of food products this translates in most cases as the "story" behind the product – the connection to the producer and to the place of origin, as well as the integrity of the process through which products have been produced.

The appeal of "authentic" products can extend far beyond the local, encompassing artisanal products from other countries or products whose identity is closely linked with "place," such as the appellation associated with wine production. However, interest in "localness" and the appeal of authenticity are closely connected, in that both are based on the ability to access the story behind the product and to capture the impact of a purchase on the "place-based" actors in that story.

The interest in locally produced products reflected in the Figure 3 is evident in the number of campaigns that have been developed across the country to encourage individuals and businesses to "buy local". Examples of these initiatives in Oregon include the Sustainable Business Network's Buy Local campaign (www.thinklocalportland.org) and the Oregon Environmental Council's efforts to encourage Oregonians to buy local food (www.oeconline.org/farmers). Some of the rationales for encouraging local food purchases include the following:

- Freshness and taste: food grown locally can be bred for taste and freshness rather than for shipping and long shelf life.
- · Strengthening local economy: keeping dollars circulating in the community
- **Protecting endangered farms:** buying local food helps make farming more profitable and selling farmland for development less attractive.
- Buying directly from farmers: knowing how it is grown or raised and whether chemicals, pesticides, hormones, antibiotics, or genetically modified seed are used in food operations.
- Reducing "food miles traveled:" since local food doesn't have to travel far, this reduces carbon dioxide emissions and packing materials.

Adapted from Food Routes, www.foodroutes.org

This list of drivers for consideration of the local origin of products suggests that "localness" can be categorized as either an environmental or a social "value added" in purchasing decisions, as well as offering benefits from the standpoint of product freshness. "Localness" is also not a simple factor of distance; as Karl Kupers of Shepherd's Grain has noted, the Portland community 300 miles distant from his Eastern Washington wheat farm is now local (Agriculture of the Middle, 2004; see also Attachment I). In Kupers' case, his ability to tell an authentic and credible story about the production practices that Shepherd's Grain uses and to engage directly with purchasers in the Portland region

have combined to make this business part of a much larger "local" community. The appeal of local production is also not restricted by the size of the operation – many producers in the Pacific Northwest who are marketing their products around their local origin manage significant amounts of acreage.

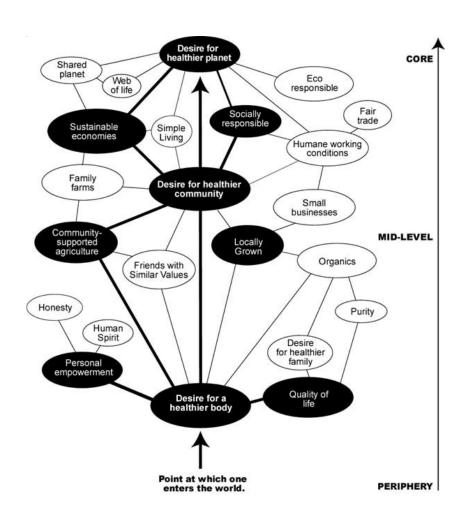


Figure 5, Neurolinguistic Map, Hartman Group, 2006

Figure 5 provides another representation of the types of considerations that consumers might focus on in each category and the different "drivers" that draw consumers into considering these attributes.

The consumer trends that the Hartman Group has mapped at the national level are reflected in the growth trends in markets for organic products, products marketed as "natural," Food Alliance-certified products, and products that are grown or produced "locally". Growth in all of these areas has outpaced the growth in agricultural markets in general (Van Winkle, 2004). Karla Chambers of Stahlbush Island Farms attests that "the market is clearly differentiating between 'conventional' and 'organic and sustainable foods'" (Wells, 2005). Chambers, whose farming operation is certified under both Oregon Tilth and Food Alliance standards², notes that publicly traded companies in the "natural foods" category are trading 41 percent higher than last year while traditional food companies are trading at only 4 percent higher (Wells, 2005). Table 2 shows the predicted growth in natural and organic food markets between 2002 and 2007 (Van Winkle, 2004).

Table 2: Estimated Growth of Natural and Organic Foods Market

	2002 Sales (\$B)	2007- Estimated 3) Sales (\$B)	
United States	11.6	30.7	
Spain	0.3	0.6	
Sweden	0.3	0.7	
Other Europe	1.6	2.8	
Germany	3.5	5.7	
United Kingdom	1.7	2.7	
Netherlands	0.4	0.7	
France	1.3	1.9	
Italy	0.7	0.9	
Total U.S. & Europe	21.4	46.7	

Source: Datamonitor; from Van Winkle, 2004

² See Attachment 2 for information on Oregon Tilth, the Food Alliance, and Salmon Safe certification programs.

The most robust estimates of sales of environmentally or socially distinctive products apply to the organic industry, in large part because data on production and sales can be relatively easily captured for certified products compared to non-certified products. While other products that are not organically certified can make credible claims to the rigor of environmental and social management practices, data about the volume of production and sales for these products at the national and international level are not as readily available. An overview of the trends in the organic marketplace is provided below, based on the premise that these trends serve as an indicator of the growing interest in a broader range of products with "values-added" environmental or social attributes³.

Organic Market Overview

Organics have increasingly been embraced by mainstream consumers, with annual sales in the U.S. growing from \$1 billion in 1990 to an estimated \$12.2 billion in 2004; sales are estimated to have reached \$14.5 billion in 2005 (see Figure 6 on following page). Organic sales represent approximately 2 percent of overall food and beverage sales, and retail sales have historically grown between 20 and 24 percent each year since 1990 (Organic Trade Association, 2004). Surveys conducted by the Organic Trade Association suggest that about two-thirds of American consumers have bought organic products at least once while about 15 percent to 20 percent purchase them on a regular basis (OTA, 2003; Goll, 2006).



³ Attachment 2 provides more information on organic certification.

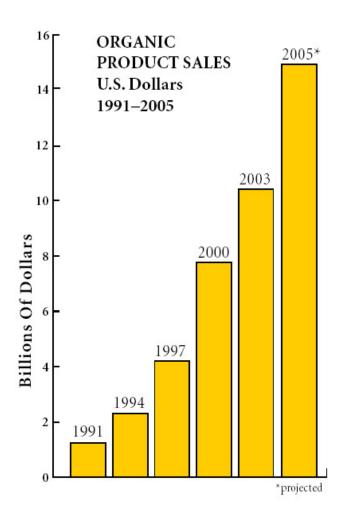


Figure 6, Growth in Organic Sales, 1991-2005 (Organic Trade Association, 2004)

Table 3: Total Foods and Organic Foods Consumer Sales and Penetration, 1997-2003, Organic Trade Association, 2003

	Organic Food (\$MIL)	Organic Food Growth	Total Food Sales	Organic Penetration
1991	\$3,566	na	\$443,724	0.8%
1998	\$4,272	19.8%	\$454,071	0.9%
1999	\$5,043	18.1%	\$474,678	1.1%
2000	\$6,105	21.0%	\$498,379	1.2%
2001	\$7,359	20.6%	\$521,831	1.4%
2002	\$8,624	17.2%	\$538,033	1.6%
2003	\$10,381	20.4%	\$554,830	1.9%

Source: Nutrition Business Journal estimates based on OTA's 2004 Manufacturer Survey, annual Nutrition Business Journal surveys of manufacturers, SPINS, and other sources.

As organic foods have moved into the mainstream in recent years, they are increasingly found in conventional retail establishments, to the point that independent natural food stores represented less than 30 percent of organic food sales in 2003 (OTA, 2003). Adding in the sales at the largest natural food chains (Whole Foods Market and Wild Oats), the natural foods/specialty retail channel represented 47 percent of organic food sales in 2003, while the mass market channel, including supermarkets, grocery stores, mass merchandisers and club stores, accounted for 44% of sales; direct sales through farmer's markets and co-ops, food service and exports made up the remaining 9 percent in sales. Fruit and vegetables account for the largest portion of organic sales at 42 percent. However, some of the fastest growth has been in the smaller, less established categories such as snack foods, meat and poultry (OTA, 2003).

Sales of organic fruits, vegetables, dairy products and meats are estimated to represent about \$18.5 million per year in Oregon; while this is still only a fraction of Oregon's \$4.1 billion agricultural economy, the growth rate for certified organic products has grown at 20 percent per year or faster every year since 1990 (Wells, 2005).

The movement of organic products into the mainstream is perhaps best illustrated by the fact that Wal-Mart has been the largest purveyor of organic foods for several years; their recent commitment to expand their organic offerings while maintaining low prices will significantly increase the demand for organic products that can be produced efficiently and in large volumes (Oregonian, March 27, 2006). The impact of such high volume demand and the responding supply from larger producers may further diminish the value of organic certification for smaller producers who cannot provide these volumes and whose price point is of necessity higher, due to their lack of economies of scale. Since the National Organic standards came into effect in 2002 and as large scale producers are moving into the organic market, the value of organic certification for smaller scale producers has come into question. In addition, the fact that "organic" no longer means "small scale" or "local" has shifted some segments of the marketplace away from organic toward these smaller local producers who may or may not be certified as organic.

However, as the Hartman Group report cited previously notes, Wal-Mart's organic expansion may have relatively little impact on the prices that smaller producers can command for organic produce, given that shoppers are motivated by more than price in their shopping decisions. According to this report, "consumers do not arrive at a channel in search of a set of products available at the lowest prices, they arrive to accomplish tasks on specific shopping occasions by engaging in a compelling set of experiences. To be certain, price matters, but it isn't as important as accomplishing tasks and compelling experiences" (see http://www.hartman-group.com/products/HB/2006_06_07.html).

The growth in demand for organic products evident in the U.S. is paralleled by growth in Europe and Asia⁴. In Austria, for example, growth in the organic market is estimated at 10-15 percent annually; the range of premiums for organic fruit and vegetables at the supermarket level averages from 20 to 30 percent. Demand for organic products in Austria exceeds production, but retailers give priority to imports from producers in neighboring countries, reducing prospects for U.S. producers to export organic products to the Austrian market (Food and Agriculture Organization, 2001). It is important to note that the interest in sourcing product that is grown or produced locally is not restricted to the U.S. market, but plays an increasing role in markets across the globe.

⁴ In Europe, the "<u>European Union regulation</u> (EEC) N° 2092/91" defines how agricultural products and foods that are designated as "ecological products" have to be grown. The regulation is derived from the guidelines of the <u>International Federation of Organic Agriculture Movements</u> (IFOAM), an association of about 750 member organizations in 108 countries. In 1999 EEC No. 2092/91 was supplemented by regulation (EC) N° 1804/1999, which regulates the raising, labelling and inspection of the most relevant animal species (i.e. cattle, sheep, goats, horses and poultry). This agreement covers such issues as foodstuffs, disease prevention and veterinary treatments, animal welfare, husbandry practices and the management of manure. Genetically modified organisms (GMOs) and products derived from GMOs are explicitly excluded from organic production methods.

In Germany, the organic market has also been growing rapidly, and this growth is expected to continue. Demand for organic products is much higher than organic production in Germany, with the highest import ratio for fruits (estimated at 56 percent) followed by oilseeds (50 percent), vegetables and wine (36 percent), poultry (20 percent) and cereals (10 percent). Cereals, eggs, poultry and most vegetables are generally imported from neighboring countries, which may be an indicator of interest in sourcing regionally or locally when possible (Food and Agriculture Organization, 2001)

Japan⁵ often appears to be an attractive market for imported organic products, given its high average income and the fact that on average Japanese consumers spend 20 percent of their income on food. Health concerns in Japan's aging population have triggered wide demand for "safe" and "clean" food products. Domestic organic production in Japan is low due to the warm wet production season and the challenge of growing foods without chemicals in this climate (Food and Agriculture Organization, 2001).

However, there are a number of challenges to importing organic product into Japan, including the random fumigation by port officials of all fresh food products entering Japan. Under the Japanese organic regulations instituted in 2000, an organic product that has been fumigated cannot carry the organic label. Some market sources suggest that over 70 percent of any given shipment may be fumigated, regardless of whether the shipment carries pests that are subject to quarantine. The major advantage for frozen and processed products is that they are not fumigated upon arrival in Japan and can be sold as certified organic (Food and Agriculture Organization, 2001).

The interest in products grown or produced locally is also growing in Japan. A 1997 consumer survey indicated that a large percentage of Japanese consumers prefer to purchase locally-produced organic produce over imported organic produce (Betteridge et al, 1997). Reasons for this preference included:

- Certification was perceived to be more trustworthy than for imported produce;
- Local produce is perceived to be fresher than imported produce;
- •The preservation of Japanese agriculture was an issue; and
- Eating food from ones own country was perceived to be a good thing.

⁵ Japanese regulations governing imports of organic and conventional products have been undergoing revision over the past several years; the latest information on the status of standards and other requirements is available at Ministry of Agriculture, Forestry and Fisheries website, http://www.maff.go.jp/soshiki/syokuhin/hinshitu/e_label/index.htm.

The survey also indicated that, if imported organic food were to be purchased, Australia and New Zealand would be the preferred source, followed by a number of other countries, all ranked according to the consumers' perception of which countries are the most clean and green (Food and Agriculture Organization, 2001).

Some companies are exporting fresh organically certified product to Japan but are selling it under a "green" rather than an organic label. The production procedures for green labeled products do not meet the Japanese organic requirements; the advantage of green labeled products is that the products are not required to be relabeled if they are fumigated at the port. Many of these "green" products are imported from the United States, the Republic of Korea and China.

Other Export Considerations

Another important consideration for U.S. producers interested in gaining access to the European markets is the ban on products that include genetically modified organisms. This can be a challenge in a number of sectors such as livestock, where the availability and/or affordability of feed that is certified as GMO-free is limited (Chris Feise, Washington State University Center for Sustaining Agriculture & Natural Resources (CSANR), personal communication). In addition, drift between fields that may be cultivated with GMO crops and fields where producers are committed to GMO-free production is a concern in a number of areas (Feise, personal communication)⁶.

The ongoing BSE (bovine spongiform encephalopathy) crisis and other food scares have also had a significant impact on the sales of meat products from conventional sources in many European countries. The restriction that the U.S. government has placed on testing all meat products for BSE has proved an obstacle for meat producers in the U.S. trying to access these markets; Creekstone Farms Premium Beef, located in Kansas, is currently suing the U.S. Department of Agriculture government, claiming that this restriction prevents it from accessing key markets in Japan and elsewhere (Business Briefs, The Oregonian, March 23, 2006).

This section has provided a very brief glimpse of national and international market trends with respect to products that can claim particular environmental and social attributes. The trends in demand for organic products has been used as a proxy for interest in products that can claim to have been produced

⁶For enterprises seeking to access export markets, the Oregon Department of Agriculture offers assistance through its Export Service Center (ESC). The ESC assists companies with pre-export analysis and certification of food products. Twenty countries accept ESC analytical results in lieu of testing at the destination port. Specialists at the ESC offer consultative and analytical services under four primary program areas: GMO (genetically modified organism) detection, pesticide residue detection, food chemistry and microbiology.

in environmentally sensitive ways; at present, organic certifications are the most widely applied environmental agricultural certification programs at the international level, making it possible to trace these trends on a global scale. While demand for organic products is not a perfect proxy for other products that may have other credible environmental or social attributes, the trends in organics have significant implications for producers interested in gaining market advantage or market access based on environmental or social claims. The next section explores in more detail the local and regional demand for such food products.

Regional and Local Markets

This section describes the specific demand characteristics of different market channels in Oregon, including direct marketing (farmers markets, farm stands, CSAs, independent restaurants and co-ops), conventional and natural retail markets, and food service. The dynamics of the market for environmentally or socially "values-added" products in Oregon differ somewhat depending on the scale of production and outlet. The role of certification and the challenges of distribution also vary at different scales, while market outlets of all sizes are attempting to respond to interest in locally grown or produced products.

In direct markets, the personal relationship between producers and their end or penultimate customers tends to provide a foundation of trust; in direct marketing to retail markets, relationships between producers and their markets are often relatively enduring, and in some cases prices may be negotiated on the basis of what permits both parties to meet their economic goals. While smaller producers continue to pursue organic certification in significant numbers in Oregon (Chris Schreiner, Oregon Tilth, personal communication), as the relationship between producers and their customers becomes increasingly indirect and as the volume of product increases with the scale of the enterprises involved, certification systems appear to play a more prominent role in the value equation. For example, as will be described below, the Food Alliance has seen the most growth in demand for its products in the institutional food service sector, where larger distributors are responding to demand from food service clients, who are themselves responding to increasing demand from their clients for food that is produced in ways that are environmentally and socially responsible. The third party certification offered by Food Alliance provides a means for these businesses to more easily identify products that will credibly meet these demands. The growth in interest in certified organic products from large retailers such as Safeway and Wal-Mart suggests that organic certification is playing a similar role in supporting credible environmental claims in these larger volume markets (see Attachment 2 for more information on organic, Food Alliance, and Salmon Safe certification programs).

The dynamics at play at different scales and in different types of market channels are explored below.

Direct Market Channels and the Dynamics of Small Scale Production

Producers in Oregon market their products directly to consumers through a variety of channels, including farmers markets, community supported agriculture programs, and farm stands. In addition, some producers market directly to restaurants, cooperative groceries, and other retail or food service operations. A broad range of products is sold through these direct market outlets, including produce, meat (lamb, beef, pork, poultry), flour and baked goods, fish, fruit, and horticultural products. While most farms, ranches, and food businesses involved in direct marketing are relatively small, some larger producers are getting involved in some of these markets as part of their overall marketing strategy (Larry Lev, Oregon State University Extension Marketing Economist, personal communication).

The information provided here draws on assessments conducted by Oregon State University (OSU), interviews with key informants, review of directories and other grey literature. While there are still significant information gaps regarding the value, volume, and other dynamics of direct market sales in Oregon, the research that has been conducted by OSU and others provides a more comprehensive view of the dynamics in direct markets than is available for "values-added" markets at larger scales.

Farmers Markets in Oregon

Larry Lev, Extension Marketing Economist in OSU's Agriculture and Resource Economics Department, estimates the volume of sales from Oregon's Farmers Markets at \$22 million for 2004 (Larry Lev, personal communication). An estimated 90,000 customers frequent farmers markets in Oregon every week during the peak growing season (Oregon Farmers Market Association, www.oregonfarmersmarkets.org). The gradual extension of many market seasons has also expanded the overall economic activity in these markets. In Portland, several markets are held year round, and several markets extend from May through November.

The number of growers represented in farmers markets also continues to grow. The Portland Farmers Market, for example, has grown from 13 vendors at one market in 1992 to 140 vendors at

three markets in 2005 (Portland State University, 2005). Recent estimates indicate that more than 1000 Oregon farmers participate in farmers markets each year (Oregon Farmers Market Association, www.oregonfarmersmarkets.org).

Between 1998 and 2005, the total number of farmers markets in Oregon increased from 38 to 68; Table 4 shows the growth in different regions of the state.

Table 4: Numbers of Farmers Markets by Region

	1998	1999	2000	2001	2002	2003	2004	2005
Portland Metro	13	18	17	19	18	21	22	25
Willamette Valley	10	12	13	15	20	19	18	18
Southern Oregon	8	6	7	7	9	8	7	6
Eastern Oregon	1	1	1	2	5	5	5	5
Orgon Coast	4	4	6	9	7	7	7	9
Central Oregon	1	1	1	1	1	1	1	3
Columbia Gorge	1	1	1	1	1	1	1	2
<u>Annual Total</u>	38	43	46	54	61	62	61	68

Lev, et al., 2005

While Table 4 indicates a solid increase in the number of farmers markets in Oregon between 1998 and 2005, the volatility of these markets is often overlooked. As Lev et al. (2005) note, over this period 61 new markets opened and 31 markets closed. In addition, there was significant turnover in market managers between years. These numbers are important to consider, as they indicate that even more markets opened than the net numbers suggest; they also draw attention to the challenges of making farmers markets succeed (Lev et al. 2005).

The range of products sold at farmers markets continues to diversify, encompassing produce, meat (lamb, beef, pork, poultry), flour and baked goods, fish, flowers, fruit, horticultural products, as well as crafts and other non-agricultural products. The expansion of seafood offerings is one area that has potential for growth; however, in order to supply the volume needed to make an ongoing presence in markets viable, it may be necessary for three or more families to combine their supply. Whether these suppliers would then qualify to sell at farmers markets is not clear (Larry Lev, OSU, personal communication).

One incentive for producers to sell at farmers markets and through other direct channels is the opportunity for them to capture a greater percentage of the value of their products. Interestingly, this dynamic may in fact make their products more affordable. Although there seems to be a perception that farmers markets are more expensive than grocery stores, a Portland State University study compared the cost of purchases at a number of grocery store outlets with the costs of purchasing the same products at farmers markets, and found that farmers markets were more competitive (Portland State University, 2005). Some of the findings of this assessment are presented in Figure 7.

Cost per Sample Food Basket

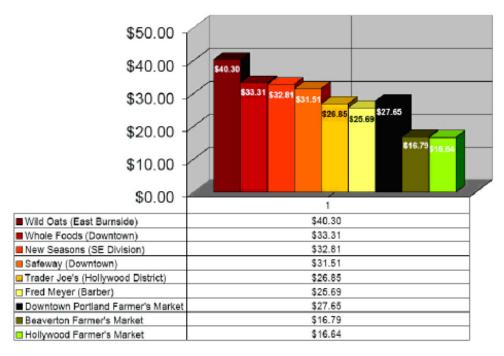


Figure 7: Cost Comparison of Grocery Outlets and Farmers Markets, Portland State University, 2005

An observed dynamic in these markets is that interest in local purchasing and the experience of shopping in the markets drives most of the consumer interest, as opposed to consumers seeking certified organic or other certified products. Larry Lev from OSU has conducted surveys at Portlandarea farmers markets and found that residents here consistently say they are willing to pay more for their groceries if they are convinced the money stays within the community. This observation is supported by the research conducted by Works and Harvey (2005) as well as other more anecdotal research (Korn, 2006).

The opportunity to have direct contact with the producers also may serve in a sense as a proxy for certification; the trust that is developed through this direct relationship appears in some cases to mitigate the need for a third party to validate the authenticity of the product. As a result, a number of farmers market producers that had in the past sought organic or Food Alliance certification have dropped their certification due to the cost and time commitment needed to maintain the certification (Larry Lev, OSU, personal communication). Although there has been no concerted effort to collect information regarding the percentage of organic, other certified product, or conventional agriculture in the markets, the percentage of producers that are following organic practices may be relatively low overall (Larry Lev, personal communication).

However, according to Oregon Tilth the number of small producers (i.e. those with acreage less than 200 acres) seeking organic certification in Oregon continues to grow. Of the 35 new organic farm operations certified by Oregon Tilth in 2005, 15 farms were between 0-10 acres in size, 14 farms were between 11-200 acres in size and only 5 were larger than 200 acres. In addition, over 65% of these producers rely primarily on direct marketing to sell their products (Chris Schreiner, Oregon Tilth, personal communication). These statistics suggest that there continues to be a value proposition for these farms to seek certification.

A number of factors contribute to the health of Oregon's farmers markets. The trends observed by Lev et al. (2005) in terms of the number of markets that fold may in fact reflect the type of "open and vigorous competition" that Porter identifies as an important attribute of healthy cluster formation. Such competition forces markets to target underserved areas and to hone their management strategies and skills, ensuring a core of well-managed markets that are distributed in such a way that they each have a "shopper shed" that can support them.

Farmers markets in Oregon also have a strong base to draw from in terms of both factor or input conditions and demand conditions. Communities across the state have taken steps to ensure that markets have access to public spaces on a regular basis. Data collected by Lev and others regarding the positive ripple effects of markets on other local retail has also helped to strengthen support for the markets from other local businesses. The proximity of fertile farm land to urban centers, particularly in the Willamette Valley, makes it possible for multiple smaller producers to access urban markets with relative ease. That said, farmers markets in the Portland region provide enough value as market outlets to draw vendors from as far as Wallowa County and central Washington. Figure 8 indicates the distance that farmers travel to sell at Portland farmers markets.

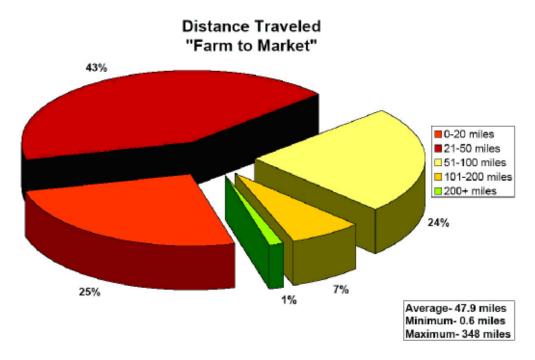


Figure 8: Distance Traveled from Farm to Market, Portland State University, 2005

Programs such as the Oregon Farmers Market Association, the OSU Small Farms program, and the Oregon Department of Agriculture all provide a supporting infrastructure for vendors and market managers. The recent addition of five staff to the OSU Small Farms program significantly strengthens the support for these smaller producers.

Community Supported Agriculture

The growth of Community Supported Agriculture operations (CSAs) in Oregon has been significant as well. The Oregon Sustainable Agriculture Land Trust (OSALT) currently lists 19 CSAs or subscription farms in the Portland area, 20 in Lane County, and 3 elsewhere in the state (www.pacsac.org).)⁷. A number of CSAs are offering products year round, diversifying their offerings to include "winter" vegetables such as root crops as well as meat and eggs.

Statistics on the overall value and volume of CSA production in Oregon are not currently available. However, data collected by the U.S. Census Bureau suggests that CSAs may have tapped into some significant economic advantages by engaging their customers as partial shareholders in the farming operation. According to the Census Bureau, 60 percent of CSA farmers gross more than \$20,000 per year, compared to 39 percent of conventional farmers. In addition, CSA farmers keep 100 percent of every consumer food dollar (i.e. dollar spent by a consumer for food), while on average conventional farmers receive only \$0.21 of every consumer food dollar (Thomas, 2002).

The dynamics affecting organic certification appear to differ in CSAs and subscription farms, supporting the theory that certification at times may play a more limited role in realizing market opportunities when there is a direct relationship between producer and consumers. A number of CSA producers using organic methods have recently chosen not to pursue or maintain certification, in part because the development of national standards has created a more corporate dynamic around the value of certification, and the entry of large scale producers may reduce the distinguishing value of certification for smaller farms as prices drop. Subscription farms, however, are more likely to seek and maintain this certification due to the more indirect relationship they may have with some of their end consumers and the interest that their retail and restaurant buyers have in sourcing certified product (OSALT, 2/6/2005). However, as noted previously, the impacts of larger scale organic production on smaller producers involved in smaller scale market channels may in fact be limited due to the range of factors that affect consumer behavior.

⁷Technically speaking, a CSA is a farm that distributes its entire production to its shareholders, while a "subscription" farm sells only part of its production to these subscribers; the rest of the production from a subscription farm may be sold to restaurants, food coops, or other retail outlets (www.pacsac.org).

The conditions that support farmers markets provide similar support to CSAs and subscription farms, including the proximity of farmland to urban centers in Western Oregon, the informational and other support provided by regional programs, and increasing demand for locally grown products. As the number of CSAs continues to grow, the competition may help to ensure strong performance and distribution of services.

In addition, a recent assessment of the relative cost of purchasing local produce indicates that CSAs offer the most cost-effective means of accessing locally grown, fresh produce. The up-front purchase of shares or subscriptions may pose a hurdle for lower income households to consider membership in a CSA or subscription farm, cost. However, if this obstacle can be overcome, there may be opportunities for CSAs to expand their client base in lower income areas (Portland State University, 2005).

"Direct" Marketing to Restaurants

Restaurants represent another channel for producers to sell their products directly, although in this case the sales are "indirect" in terms of their relationship to the end consumer. In general, there appears to be a stronger emphasis on local purchasing than on organic or Food Alliance certified food in the smaller, independent restaurants. Nonetheless, David Lively at Organically Grown Company indicates that demand for organic product in restaurants has been "booming" in recent years (David Lively, personal communication).

The Portland chapter of the Chefs Collaborative has played a significant role in promoting the use of local, seasonal and sustainable food in restaurants (www.portlandcc.org). Chefs Collaborative members include a number of "white tablecloth" restaurants in the Portland area, such as Higgins, Veritable Quandary, and Wildwood, as well as Hot Lips Pizza. The Farmer-Chef Connection and Fisherman-Chef Connection events, in which the Chefs Collaborative has been heavily involved, have been particularly effective at expanding the opportunities for producers to market directly to restaurants.

Initiated in 2001 as a collaborative project of the Portland Chapter of the Chefs Collaborative and Ecotrust, the Farmer-Chef and Fisherman-Chef Connections bring together producers and potential clients in restaurant and retail to build business relationships, share ideas, address challenges and develop viable and successful partnerships. Ecotrust also produces a "Guide to Local and Seasonal Products" based on the information and relationships developed at the events. The directory provides contact information and other information for both producers and purchasers.

The following tables reflect the levels of participation in the Farmer-Chef and Fisherman-Chef events and the number of prdoucers included in the Guide over the past four years.

Table 5, Farmer-Chef Connection Conference Participant Breakdown. Source: Ecotrust

Year of Conference	2001	2002	2003*	2004	2005	2006
Producers	37	61	69	78	103	123
Buyers	21	39	65	91	101	119
NGOs	16	18	26	19	26	24
Other	19	18		28	42	66
Total	93	136	160	216	272	332

^{*} Lacking complete registration data for 2003.

Table 6, Guide to Local & Seasonal Products at a Glance. Source: Ecotrust, 2006

	2001	2002	2003	2004	2005	2006/OR/WA/Other
Buyers	43	67	77	96	129	100/49/1 (150)
Producers	45	80	68	108	148	88/117/1 (206)
Fisherman	0	0	32	22	37	12/20/5 (37)
Total	88	147	177	226	314	393

Table 7, Fisherman-Chef Connection Conference Participant Breakdown. Source: Ecotrust, 2006

Year of Conference	Portland 2003	Portland 2004	Seattle 2004	Portland 2005	
Fishers	61	44	55	17	
Buyers	34	28	35	29	
Others	9	26	23	22	
Total	104	98	113	68	

As of April 2005, over 600 people had attended a Farmer-Chef Connection in the Portland area, and over 412 people had attended a Fisherman-Chef Connection in the Portland and Seattle areas.

The dynamics around product certification for producers supplying independent restaurants appear to mirror those in farmers markets: those producers relying primarily on direct marketing relationships with restaurants or other direct outlets are less likely to seek or maintain organic or other certifications, while those that also have more indirect sales to retail or food service or that sell to prominent restaurants outside of the region, such as Chez Panisse in San Francisco, are more likely to rely on certification systems to gain or maintain market advantage (Larry Lev, personal communication).

Once again, the general cluster characteristics described above regarding farmers markets and CSAs contribute to the strength of direct marketing to restaurants in Oregon. In addition, the role of the Chefs Collaborative and Ecotrust's Food and Farms program in creating venues where producers and chefs can develop a better understanding of each others business models and address concerns such as reliable delivery of quality products has been critical. The density of independent "white tablecloth" restaurants in Portland also provides a diverse market for these products. However, larger restaurants such as Burgerville, a regional chain of restaurants owned by The Holland, Inc., are also actively seeking local product, though they rely on distributors for these products. Burgerville has a long tradition of sourcing local Northwest products and in recent years has also begun to specify Food Alliance certified products.



Cooperative Grocery Stores

Cooperative groceries represent another outlet where Oregon producers can sell their products relatively directly. As with restaurant markets, these sales are "indirect" in terms of their relationship to the end consumer, but there are opportunities for producers to establish direct market relationships with co-op produce and grocery buyers.

While cooperatives differ in size and in product mix, local sourcing appears to be a consistent commitment. While the environmental practices of their suppliers are of interest, localness may be given as much or more consideration as organic certification or other certification in the sourcing process. This focus reflects a philosophical commitment among co-ops and their members to support smaller scale economic systems and the local or regional community in general. Lee Lancaster, manager of Food Front, notes:

Personally I tend to favor local as the more important variable. And that's because of the economic impact. I'm concerned about the diversity of our regional economy and the ability to create jobs.... When I talk to our people in produce, when they talk to growers, they say that because of our little store they were able to keep their farms (Interview in Portland Tribune, January 20, 2006).

Food co-ops also have a commitment to source from smaller producers rather than larger ones; the produce buyer at Food Front described "our kind of supplier" as "small and responsible in multi-dimensional aspects of their operations" (Dylan Gillis, Food Front Produce Buyer, personal communication).

Co-ops often carry a range of products that includes organic, conventional, and "sustainable" choices. In the case of Food Front, a 3-tiered signage system is used to identify these attributes of different products. Food Front will generally decide to carry conventional products when organic or sustainable products are not available or when the price point differential between organic and convention is extreme, as is often the case with products such as russet potatoes. In such cases, co-ops may carry both conventional and organic types of the same product in order to provide their customers with a range of options (Gillis, personal communication).

In some cases, co-ops source from farmers who are just getting started in production, helping them learn the ropes of selling into the marketplace. However, food co-ops often have long-standing relationships with particular producers, and it can therefore be difficult for them to work in a new

producer for particular products. As one produce buyer indicated, they "take the relationship with particular growers very seriously and feel responsible for their success"; in return, these producers can usually be relied on to deliver when needed (Gillis, personal communication). While many coops source directly from producers for many of products, they also source through distributors, such as Organically Grown Company, Gato and Sons, and others.

Once again, the cluster characteristics that support the producers selling through farmers markets, CSAs, and direct marketing to restaurants are relevant to the co-operative grocery market.

Supporting Programs and Small-Scale Producer Dynamics

In addition to Ecotrust's Food and Farms program and the Chefs Collaborative already referenced, there are a number of organizations and government or university programs in Oregon that provide support to small producers involved in direct marketing. The Oregon Farmers Market Association provides a variety of programs to support market managers and farmers, including market liability insurance, networking opportunities, publicity campaigns, regional and statewide surveys, and farm-direct advocacy (www.oregonfarmersmarkets.org). The Oregon Sustainable Agriculture Land Trust compiles information on CSAs (www.pacsac.org).

The OSU Small Farms Program (http://smallfarms.oregonstate.edu/) provides information for the commercial small farmer as well as the small acreage landowner through its website, publications, and workshops. In the past year five additional positions were allocated to this program, an investment that reflects the growing recognition of the contribution and potential that smaller farms in the state can have to the regional economy.

In addition to maintaining a directory of farmers markets, ODA administers the Oregon Farm Direct Nutrition Program (FDNP - formerly known as the Farmers Market Nutrition Program), a federal nutrition program that distributed \$1.04 million dollars in 2005. FDNP funds are available to low-income nutritionally at-risk pregnant women and young children enrolled in the WIC (Women Infants & Children) program and to eligible low-income seniors. Eligible clients can use these funds between June and October to purchase locally produced fresh fruit and vegetables directly from authorized farmers at farm stands and farmers markets. In 2005, this program is estimated to have served approximately 17,500 WIC clients and 17,350 senior clients. In 2004, there were approximately 600 authorized farmers selling to WIC and senior clients at 200 farm stands and 64 authorized farmers markets throughout Oregon (Oregon Department of Agriculture, http://oregon.gov/ODA/ADMD/farm_direct.shtml).

These supporting programs, combined with the growing demand for locally grown products and the proximity of fertile farm land to urban centers, particularly in the Willamette Valley, make it possible for multiple smaller producers to market directly with relative ease. However, while direct marketing of agricultural products through all of the outlets described above continues to grow in volume, the smaller producers who tend to service these outlets face a number of challenges. One of the major challenges is "burn out" among producers, who may decide to move out of farming even if they are making a profit due to the significant investment of time required to make ends meet. To a certain extent, small farm production depends on people who are making a commitment to the lifestyle of farming regardless of its profitability. This type of commitment is often possible because farming income is supplemented by income from other household employment (Larry Lev, personal communication).

In addition, while in some cases producers transition from farmers markets to larger market outlets such as retail markets or even to national distribution, these transitions can be challenging. One example of a successful local business that has followed this trajectory is Dulcet, a manufacturer of dressings, marinades and sauces that started selling at the Lake Oswego farmers market, and now has national distribution (www.dulcetcuisine.com). According to several buyers interviewed for this project, more enterprises might expand to serve such market outlets if they had better access to technical assistance in processing, packaging, labeling, merchandising, and distribution (Rachel Knapp, Food Front Body Care Buyer, personal communication; Carl Duyn, Zupan's Grocery Buyer, personal communication; Chris Feise, CSANR, personal communication).

Support for small scale entrepreneurs in the food industry is available through the Food Innovation Center (FIC) in Portland, which has core capabilities in sensory testing, process and product innovation and development, and marketing and business analysis. The FIC has recently been undergone a change in leadership, and according to Bill Boggess, Associate Dean of OSU's College of Agricultural Science the Center is aggressively seeking to reach out to all sectors of the food system and to help link the food system to Oregon State University's broad range of research and extension programs.

Changes in the land use planning system, which has to date protected farm land close to urban areas, may pose another challenge to the smaller suppliers of direct markets. Other challenges include the lack of small or medium scale processing facilities. For example, Greener Pastures, a poultry cooperative in the Willamette Valley, recently closed due to the lack of a processing facility that could handle the level of processing it needed to remain viable. Organizations such as the Food Innovation Center may be able to play a role in supporting the development of such processing facilities, in collaboration with small business assistance programs and other public and private partners.



Higher Volume Market Channels: Retail, Food Service & Manufacturers

The characteristics of market demand and the dynamics of production and distribution for producers seeking to access larger volume markets differ from those at play at smaller scales of production and for producers focused on selling directly to consumers, restaurants or retail. This section provides an overview of market demand in retail, food service, and product manufacturing. It then turns to the particular challenges related to distribution of "values-added" products in these market channels.

As noted previously, the research that has been conducted by OSU and others on direct markets in Oregon offered a more comprehensive view of the dynamics in these markets and in smaller scale production than is available for "values-added" markets at larger scales. Additional data collection and analysis regarding these higher volume markets and larger scale production would be beneficial in order to better capture the challenges and opportunities at play for these producers and food businesses.

Retail Markets

Conventional and natural retail outlets seeking to source organic or other environmentally or socially certified products represent a growing market in Oregon. In addition, a number of the retailers interviewed indicated that they had an explicit company commitment to local sourcing, and in some cases they "brand" themselves around their sourcing of local product. This section provides some examples of how retailers are approaching the sourcing of "values-added" products, drawn from interviews with retail staff and review of company literature, websites, and other information sources.

Market of Choice

Market of Choice's company policy is to focus on locally grown and sustainable products wherever possible, including produce, meat, and other product lines. At least half of the produce carried by Market of Choice is organic, and half of their grocery items are either organic or "natural" foods. In the case of meat products, they carry products that are hormone-free and range fed, such as Painted Hills beef. According to Market of Choice staff, their commitment also extends to the used of recycled or compostable paper products – for example, the plates used in the deli area are either corn stock or recycled. As often as possible they source directly from the local supplier; individual stores are authorized to source directly if they find a product they want to bring in. This flexibility

also means that one supplier does not have to be able to supply all stores, making it more possible for smaller producers to get into the supply chain. In addition to sourcing directly from producers, Market of Choice works with distributors, in particular Mountain Peoples Northwest and Organically Grown Company (Market of Choice, staff person).

New Seasons Markets

New Seasons Markets, a regional grocery chain founded in 1999, emphasizes sustainability and quality products and also makes buying from local vendors a priority. New Seasons recently launched a "Home Grown" program, which features products sourced from Oregon, Washington, and Northern California and their Pacific coastlines. Their product mix is about 75 percent "natural foods" and 25 percent conventional products (Brady, 2004). All meat at New Seasons is local and in season, and all produce is sourced locally as well. Shelf-price labels on all goods are either yellow, indicating that the product was processed within "the food shed" (defined as Oregon, Washington and Northern California) or white, which means it came from outside of this region (Korn, 2006).

While New Seasons' purchasing structure is similar to that of "traditional" grocery chains, "significantly more resources are employed to manage purchasing of local and sustainable products" compared to a conventional operation (Brady, 2004). The need for investment of these additional resources to support local purchasing reflects the challenges associated with sourcing products from multiple smaller producers.

New Seasons has established close relationships with a number of regionally based quality food providers, such as Country Natural Beef, Umpqua Valley Lamb, and Rose Fisheries of Alaska. Some unusual aspects of New Seasons business model include the personal relationship New Seasons has with the owners of each of these operations, the fact that deals are cut without a middleman, and that the price paid to the producer does not vary with the Commodity Price Index. Instead, the price is based on what the producer needs and what New Seasons can afford (Brady, 2004).

While it carries an extensive selection of organic product, New Seasons places a stronger emphasis on sourcing locally than on sourcing organic. In a January 2006 Portland Tribune article, New Season's CEO Brian Rohter comments that "... organics has become increasingly industrialized ... (so) the economy of scale has hit the organic movement. Some of the organic manufacturers have been purchased by large conventional players. And that leads to people wondering if organics really represent what their buying choice is all about." Rohter notes that local food generally comes from smaller farms and ranches, and "we believe there's value to all of them staying in business" (Korn, 2006).

WinCo

WinCo offers a different rationale than most other outlets for sourcing local product. An employee-owned chain based in Boise, Winco's major distribution center is located in Woodburn, Oregon. Winco sources a large amount of its produce from Oregon, either directly from producers or through Aurora Farms, which consolidates produce from other regional producers. WinCo's rationale for purchasing local products is primarily convenience and price during the growing season; off season they source primarily from California. While they have tried offering organic produce a number of times in the past, there has been little demand from their clientele (Jason Miller, produce purchasing, WinCo personal communication).

Fred Meyer

Several of the larger, national retailers in the region also indicated a willingness to source local as well as organic produce in order to respond to consumer demand. Paul Enderle, producer merchandiser for Fred Meyer, echoes WinCo's observation, noting that local produce, in season, is less expensive than national equivalents. According to Enderle, Fred Meyer stocks local produce whenever possible, though in more limited quantities than smaller stores because of Fred Meyer's need for large batches of consistent quality. However, Enderle notes, local products are what shoppers want. "If you asked any customer if they prefer the same product grown locally, I think they do," Enderle says (Korn, 2006). Fred Meyer's organic section has also been growing steadily in response to customer demand and increasing product availability.

Wild Oats

While purchasing decisions for national chains usually are made out of a corporate office, Wild Oats emphasizes local produce and meat in its Oregon stores, according to Sonja Tuitele, a Wild Oats spokeswoman (Korn, 2006). For example, she notes, all beef in Portland area Wild Oats stores is local. "We have a policy to buy as much local as possible," she says. In summer, up to 80 percent of the produce in the store comes from local farms (Korn, 2006). Wild Oats also has a strong focus on organic products (www.wildoats.com/u/community.100059).

Whole Foods Market

Whole Foods Market, the world's leading retailer of natural and organic foods, has for a number of years been the largest purchaser of Country Natural Beef, which it sources through Fulton Meats, a Portland-based subsidiary of Sysco. While Whole Foods defines itself as a purveyor of organic and natural food products, it has a relatively limited commitment to source local products for its stores, tending instead to source from large scale producers that can provide a high volume of product in a timely fashion (Slate, March 17, 2006, www.slate.com).

Safeway

Safeway recently introduced its "O Organics" program, a private-label line that features 150 organic products including beverages, bakery goods, cereals, canned and frozen foods, dairy products and snack items. Introducing this line is part of a strategy to appeal to a broader range of shoppers by making it possible for them to buy conventional and organic products in one place (Goll, 2006). There is also speculation that this initiative is in part in response to the growth of Whole Foods in recent years (Goll, 2006).

Comments on Retail Markets

A majority of the local or regional grocery stores contacted in the course of this assessment indicated a commitment to local, natural, and/or certified product. However, the primacy of product quality over considerations of localness or other social or environmental considerations came up frequently in interviews with retail market representatives. While some stores were willing to put significant effort and resources into sourcing local product, none of them indicated a willingness to sacrifice quality for localness. Other challenges include dealing with multiple producers and the lack of products from local producers that are available through distributors.

Even the markets which have been most successful at creating local supply chains admit to challenges in sourcing sufficient quality and volume of local products, as well as gaps in the supply of processed food products. Several individuals interviewed for this report specifically noted that finding adequate supply of Food Alliance certified product was also a challenge. The lack of locally produced, minimally processed fresh products, such as pre-cut vegetables or bagged lettuce, also pose an obstacle to entry into some retail markets such as Trader Joes, as well as into institutional food service, as will be referenced in a later section of this assessment.

Distribution emerged as a consistent bottleneck for retailers seeking to source local products, although this was not the case with organic products. The growing volume of organic production among larger scale producers — which will likely be fueled even further by Walmart's recent commitment to expand the amount of organic product it carries (Oregonian March 27, 2006) — has in turn led to the development of a relatively efficient system to source and distribute organic products from across the country as well as from Mexico and other countries.

Food Service

Food service encompasses independent restaurants, restaurant chains, and contractors that service institutions such as schools, universities, corporations, health care, retirement, military, and government. Expenditures in the food service sector in the U.S. now equal or exceed household food expenditures at retail stores. The volume and market share of food purchased through food service channels has increased dramatically over the past decade. On average consumers are currently eating 40 percent of their food through food service, and in some cases this percentage approaches 50 percent of total food expenditures (Economic Research Service, 2006; National Restaurant Association, 2006).

The increasing demand from food service companies for products that are locally sourced, organic, or Food Alliance certified represents a significant engine of growth for producers. Driven by demand on the academic and corporate campuses they serve, these companies have in recent years begun to incorporate specifications in their sourcing for local, sustainable, and organic products. Portland State University's recent food service contract, for example, specified that the bidders indicate how they would incorporate local, organic, and Food Alliance products into their food service delivery, and other local institutions, including Reed College, Lewis and Clark, and Nike have requested similar services from their food service contractors.

Some food service companies are moving proactively to institute internal policies around sustainability and environmental management. Sodexho, for example, has developed an Environmental Awareness Policy and states that protecting the environment is central to achieving their mission. According to Sodexho, sensitivity to environmental issues is an integral part of their way of doing business, as is being socially responsible. Sodexho was the first company in the food industry to endorse the Global Sullivan Principles, a corporate code of conduct. (University of Wisconsin, 2006). Sodexho staff have indicated that such corporate commitments create an environment where they feel that their individual efforts to respond to demand for expanded local sourcing or other sustainability demands are supported (Ariel Varney, Director of Catering, Sodexho/Portland State, speaking to PSU class, winter 2006).

The growth in demand for Food Alliance products in the food service sector serves as an indicator of the trends in this market channel. Over the past several years, Food Alliance has seen the highest rate of growth in demand for its products in the institutional food service sector, where larger distributors like SYSCO or Food Services of America are responding to demand from food service

clients such as Bon Appetit, Sodexho, and Aramark. These food service providers are themselves responding to increasing demand from corporate and academic campuses for food that is produced in ways that are environmentally and socially responsible. The third party certification offered by Food Alliance provides a means for these businesses to more easily identify product that will credibly meet these demands.

Larger restaurant chains represent another food service channel where there is growing demand for both local and certified products. Burgerville, a Vancouver-based chain of 39 fast food restaurants, has a long tradition of sourcing product from the Northwest region and has made this part of their business strategy. In the past several years they have also incorporated Food Alliance certified products into their supply chain; they currently source 100 percent of their meat from Food Alliance-certified Country Natural Beef through Portland-based Fulton Meats.

A number of major players in the health care industry have also recently ramped up their efforts to incorporate local, seasonal, and organic or sustainable food products into its supply chains. Organizations active in Oregon, including Kaiser Permanente, Good Shepherd Health Care, Provide Health Systems, and Legacy Health Systems are actively seeking to source these products for their internal food services (Oregon Center for Environmental Health website, http://www.oregon-health.org). The potential demand from these organizations on a year round basis is significant and is contributing to increased interest among both producers and distributors in developing more product volume in the "values-added" products in demand from food service providers. (See Health Care Without Harm's website for more information on these initiatives in the health care industry: http://www.noharm.org/us/food/issue).

The public school system is another food service channel which may offer expanded market opportunities for producers to sell into regional markets. Fostering more direct connections between locally grown products and public school systems is garnering growing interest and support at the regional and national levels. The passage in 2004 of P.L.108-256 requiring schools that participate in federal meal programs to establish a local school wellness policy by July 1, 2006 is likely to fuel even more activity in this area. This legislation, which was part of the Child Nutrition and WIC Reauthorization Act of 2004, places the responsibility of developing the wellness policy at the local level so that individual needs of schools can be addressed. In addition to considerations about physical activity and other health issues, policies must address goals for nutrition education, and provide nutrition guidelines for all foods available at school. The Portland Public Schools established their Wellness Committee in February 2006.

Efforts to increase sales of local products into the school system face a number of challenges, including the fact that the highest demand occurs in the off season for many local crops. The lack of processing capacity accessible to small and medium sized producers that has been referenced previously also makes it difficult to develop processed foods such as tomato sauces or minimally processed fresh product that

could be sold year round into the public school system.

Product Manufacturers

Product manufacturers represent another market for local and certified products. Kettle Foods, Emerald Valley Kitchen, Resers, and Amy's Kitchen (a California-based product manufacturer which recently expanded to Oregon) are examples of product manufacturers that have a commitment to source local, organic, or other certified product.

Emerald Valley Kitchen's products are all certified organic and GMO-free. Kettle Foods has had an organic line of potato chips for a number of years and is exploring Food Alliance certification for its processing facility. Amy's Kitchen focuses on natural and organic foods and has made a commitment to source from local Oregon producers to supply its White City manufacturing plant. Resers is in the process of developing an organic product line for its products.

Cluster Characteristics and Medium to Large Scale Producer Dynamics

The number and diversity of retail outlets, food service businesses, and manufacturers in Oregon that are seeking to source local, organic, or other "values-added" products contribute to healthy competition at all scales, as well as fostering sizeable local demand for these products. The number of outlets that are thriving in this region indicates a large cohort of "discriminating customers," as Porter characterizes them. The volume of products that is being marketed around either the products' certified status or the fact that products are locally grown or produced continues to grow to meet this demand.

However, retail and food service representatives identified a number of gaps in the local supply chain, including a need for more regionally produced packaged goods such as cereals (Brady 2004), as well as for more "minimally processed" fresh products, such as bagged lettuce or other chopped vegetables (Food Alliance Food Service panel, February 17, 2006; Roberta Anderson, Food Alliance, personal communication). The demand for more locally processed foods that are also certified was also identified, and poultry emerged as a product line where more local, organic, or other certified "values-added" products would find strong markets. However, the recent closure of Greener Pastures, a poultry cooperative in the Willamette Valley, due to the lack of a processing facility that could handle the level of processing it needed to remain viable highlights the challenges that small and

medium sized producers face in getting their products into the marketplace.

Distribution was noted as a consistent bottleneck in terms of sourcing both certified and non-certified products from the region. Given the critical role of an efficient distribution system in allowing producers to gain access to larger volume markets, the next section explores the challenges and opportunities related to distribution infrastructure.

Distribution Considerations

While some larger producers are selling directly into larger food service channels, and smaller restaurants often purchase product directly from producers, the majority of retail, food service businesses and manufacturers source their products through distributors or consolidators. Some of the major distributors servicing institutions and restaurant chains include SYSCO, Food Services of America, and U.S. Food Service; in addition, there are a number of produce houses and wholesalers that serve both food service and retail, such as Organically Grown Company, Gato and Sons, and Pacific Coast Fruit Company. In some cases clusters of institutions also join together to form group purchasing organizations in order to streamline their sourcing and to gain market advantage (Roberta Anderson, Food Alliance, personal communication).

Distributors face extremely thin margins and are therefore under pressure to turn over their inventories quickly. Given the slim margins they face, distributors generally prefer to source from a relatively limited number of sources to reduce transaction costs. Working directly with individual farms can be a major challenge for distributors due to the volume of products the distributors need and the pace at which they need to operate. Some distributors have standing contracts to source from particular buyers that can ensure volume, timely delivery, and quality products, which can make it difficult for independent producers to enter the supply chain. Some distributors like Food Services of America work with consolidators to help them access the volume of products they need, as well as sourcing from manufacturers and directly from some farms.

Retaining information about the attributes of specific products through the supply chain is another challenge for large scale distributors and food service providers, one that constrains the opportunity for Food Alliance or other certified product to retain its "values-added" identify and secure market advantage (Roberta Anderson, Food Alliance, personal communication). The presence of a wholesaler like Organically Grown Company that is willing to maintain the chain of custody around organically certified product has helped address the challenges other distributors face in handling this type of values-added product (see Box 2).

The different terminology that is used by farmers and by food industry players poses another challenge to the development of more direct relationships; this difference in vocabulary is in part what catalyzed the creation of the Farmer-Chef Connection referenced in previous sections, in order to provide a venue where farmers and their potential clients could developed a shared language. Food Alliance has often played a role in helping producers and purchasers gain a better understanding of each others business models and terminology, both by bringing producers and purchasers together for panel discussions and by brokering individual relationships between different parts of the value chain. Organically Grown Company has played a similar role for organic producers (see Box 2).



Box 2: Organically Grown Company

Organically Grown Company's (OGC) role in sourcing and distributing organic product has made accessing these products from smaller producers much easier than it would be otherwise. OGC is a major wholesaler of organic products, based in Eugene. They currently have approximately 300 accounts; source from approximately 500 vendors; and maintain distribution centers in Eugene, Central Point and Clackamas. While they initially focused on products produced locally in the Eugene area, OGC now sources about 10% of its product under the Ladybug brand, representing dedicated growers in Oregon, Washington, Idaho and British Columbia, and another 15% from other growers in the Northwest. The remaining 75% of the products they source from outside of the region – California, Florida, Texas, Mexico, South America, Europe, the Middle East, Asia and Australia, among other locations.

OGC primarily buys directly from producers, though they work with some small scale distributors that consolidate from 10-15 farms. Some of the farms they work with are fairly small farms – as long as they are "very efficient", the quality of their products is good, and they are "good communicators", OGC will work with them. The size of a farm is of less consequence than their capacity to deliver quality product in a timely fashion. (David Lively, Organically Grown Company, personal communication).

OGC has also played a key role in "value chain" creation, particularly in its early years. While it now sources product nationally and internationally, in its early years, OGC played a key role in helping organic producers in Oregon and Washington determine what crops to grow and how to deliver quality products in a timely fashion. OGC provided training and other technical assistance to farmers for a number of years, until the producer base reached a level of sophistication that made this service less necessary.

The Potential for the "Agriculture of the Middle"

Despite these structural challenges, distributors and food service contractors recognize that their customers are increasingly demanding product that is locally or regionally sourced and that is either organic or has other "values-added" attributes, such as those provided by Food Alliance or Salmon Safe certified products. At a panel discussion of food service providers prior to the Food Alliance annual meeting in February 2006, the growing demand for certified products was clearly stated, as were the challenges of sourcing adequate and consistent volume of many products. As noted previously, products in particular demand include minimally processed fresh products, such as pre-cut vegetables or bagged lettuce; most food service preparation kitchens are designed to use pre-cut or packaged fresh product, and the time and effort that it takes to chop vegetables for large volumes poses a major obstacle.

There may be opportunities to engage producers in the "agriculture of the middle" category to meet the demand for "values-added" products in the larger volume market channels. The term "agriculture of the middle" refers to the "disappearing sector of mid-scale farms/ranches and related agrifood enterprises that are unable to successfully market bulk commodities or sell food directly to consumers" (www.agofthemiddle.org). Operating between vertically integrated commodity markets, which often have global supply chains, and direct markets, which most often function at relatively smaller scales, these farms are too small to realize the full economies of scale that would allow them to compete effectively in the bulk commodity markets, but are too large to be able to sell all of their products directly to consumers through farmers markets or other direct outlets.

However, farms of this size are often ideally suited to provide the volume of product that is required by institutional food service and distributors, and are of a size that allows them to be directly involved in the stewardship practices on their land which can translate into market advantage through "values-added" certification or other "de-commodification" strategies. Producers with this volume of production are small enough to develop the value chain relationships that can translate into successful sales to distributors, food service providers, and larger retail consumers. While any size farm may fall into this category in terms of finding its market niche, farms with gross sales of between \$100,000 and \$250,000 tend to be most vulnerable to the dynamics of the commodity market. (Kirschenmann, et al., date unknown).

Attachment I provides case studies of Country Natural Beef and Shepherd's Grain, two examples of "ag of the middle" enterprises that have successfully differentiated themselves and developed the distribution and marketing infrastructure to achieve market success. Stahlbush Island Farms is another

example of an "ag of the middle" farming operation that has been successful in gaining market advantage through its investments in "values-added" agriculture. Stahlbush Island Farms grows 15 types of crops, including sweet corn, pumpkins, broccoli, wheat, spinach, and grass seed, on 2000 acres of intensive row crops. Their farm was the first to be endorsed by The Food Alliance and their products also carry the Salmon Safe seal, recognizing their efforts to protect water quality (SARE, 2000).

Stahlbush Island Farms has combined methods from the organic community with advanced science from the conventional agriculture community to move toward a lowest-cost farming system. They have also focused on mechanization, adopting innovative technologies that allow them to substitute lighter, lower impact equipment for their farming operations. In addition to changing their farming system, Stahlbush Island Farms has vertically integrated their business, acting as both the grower and the processor (SARE, 2000). They currently serve both domestic and international markets with their products.

It is not coincidental that Country Natural Beef, Shepherd's Grain, and Stahlbush Island Farms are all certified by the Food Alliance. While each of these enterprises would likely have achieved success through their entrepreneurial leadership, the role of the Food Alliance in helping "ag of the middle" producers link to distributors and larger markets for their products has often been a critical element in successfully developing these value chains (Harrington, 2005; Agriculture of the Middle, 2004). Because many of these producers have customarily sold their products into the commodity markets, they have not been involved in marketing or interacting with end markets. Food Alliance often plays a critical role in helping producers navigate this new terrain, facilitating the development of relationships throughout the supply chain and effectively transforming it into a true value chain, where information about the management practices of the product remains with the product. Food Alliance's role in facilitating these relationships represents the most fully developed example of successful, systemic value chain creation in Oregon. The role that Food Alliance has played in managing these relationships may offer useful lessons for other organizations seeking to enhance the economic contributions of the "values-added" agricultural sector in the region.

Other local processors are exploring the opportunities that Food Alliance certification offers to access food service and retail markets. Truitt Brothers, a producer of "shelf stable foods" that currently sells to food service and retail outlets as well as doing custom contracting, is in the process of getting Food Alliance certification for several of their product lines, and NORPAC, a cooperative of 240 Oregon farm families, is also pursuing Food Alliance certification for its growers. The entry of these and other processors into the Food Alliance value chain will significantly increase the amount of processed Food Alliance product available to food service and other large volume purchasers.

Market Channels Summary

As the overview provided in this section has attempted to illustrate, the dynamics of the market for values-added products in Oregon differ depending on the scale of production and the nature of the market relationships. In direct markets, the personal relationship between producers and their end or penultimate customers provides a foundation of trust; the relationships between producers and their markets are often relatively enduring, and prices may be negotiated on the basis of what permits both parties to meet their economic goals. As the relationship between producers and their customers becomes increasingly indirect and as the volume of product increases with the scale of the enterprises, certification systems begin to play a more prominent role in the value equation. In the indirect markets, distribution is a bottleneck to sourcing more local and certified organic or Food Alliance products. While conventional distributors are increasingly engaging in sourcing these products, aggregating adequate volume consistently and maintaining the chain of custody for these products continues to pose challenges.

Table 8 on the following page provides a summary of the demand characteristics, challenges and opportunities in various market channels.



 Local development of biofuels may helpful with fuel costs Local development of biofuels may helpful with fuel costs Need for technical assistance in merchandising products > Often part-time, reliant on other income manufactured products > Burn out can be an issue for small scale producers > Can be hard for new farmers to gain entry ooth certified and local (cereals, etc) that are Other Comments > Demand for more > Lack of processing for local, Food Alliance > Lack of processing for local, Food Alliance permanent (committed) sites product from multimple sources product from multimple sources > Lack of small scale processing for valuedistributors to obtain distributors to obtain local, Food Alliance local, Food Alliance through distributors > Not enough local products available > Need for more >Fuel costs for distributors >Fuel costs for distributors added products > Challenge for > Challenge for Challenges product product regional product that is certified >Demand for more processed/ minimally processed food prodcuts regional product that is certified > Engaging more restaurants in local sourcing opportunities to expand in lower income communities > processed/minimally processed food products > Co-branding local and > Co-branding local and products suggests **Opportunities** scale "direct" (eg. Shepherd's Grain, Country Natural Beef) Distributors; rare large Direct or distributors Distributors or direct Distribution Direct Range of size Range of size Smaller producers, certified and conventional Smaller producers Sources Organic, Local, Food Alliance Growing Demand Trends Local (range >200 miles) Food Alliance, local Local, organic Institutional food service Farmers Markets, CSAs Market Outlet restaurants, food Independent Retail

Table 8: Market Channel Summary Table

Chapter 3: Regulatory & Policy Issues

The regulatory and policy environment in Oregon poses both challenges and opportunities for producers seeking to enter a values-added market. For example, regulatory requirements related to slaughterhouses and composting are oriented mainly toward larger operations and impose requirements that may be unreasonable for smaller operations. Given the gaps in processing for smaller to medium sized producers and the unmet demand for processed or minimally processed products, these regulations may be a constraint on growth in the sector.

On the other hand, some of Oregon's soil and water management regulations establish a fairly high standard of operations which may facilitate transition to certified status under either Oregon Tilth or Food Alliance (Heather Saam, Food Alliance, personal communication). The recent agreement between the Natural Resources Conservation Service (NRCS) Conservation Security Program and the Food Alliance establishing that Food Alliance certification is broadly equivalent to Tier 3 of the Conservation Security Program offers an added incentive for both Food Alliance certification and application under the CSP. Qualifying for Tier 3 under the CSP makes producers eligible for payments which offset much of the cost of Food Alliance certification. According to Food Alliance staff, a number of producers have expressed interest in Food Alliance certification as a result of this partnership (Heather Saam, personal communication).

Some policies at the state and national level encourage organic production, while other policies serve as disincentives to shifting to organic. For example, because farm support programs and crop insurance programs in the U.S. base their support on historical production and yields of affected fields and crops, they can in some cases constitute a disincentive to switching to organic production. However, the cost share program for organic producers administered by the Oregon Department of Agriculture provides some support for these producers; the program was established to offset the certification costs for farms that had historically labeled their products as organic but had never before acquired organic certification. In order to ensure that the distribution of funds was equitable, all farm producers acquiring certification — not just those seeking certification for the first time — are eligible for cost share dollars (Chris Schreiner, Oregon Tilth, personal communication).

Some individual states are providing assistance in conversion to organic production. For example, lowa has accepted organic production as an approved state conservation practice, and Minnesota has implemented a cost share program that pays for two-thirds of the cost for organic inspection and certification (Food and Agriculture Organization, 2001). However, some have observed that these and other programs primarily assist farmers already interested in organic production rather than encouraging conventional producers to consider conversion (Food and Agriculture Organization, 2001).

Regulatory & Policy Issues

The recent establishment of the Oregon Sustainable Agriculture Research Center (OSARC), which is intended to provide a "one-stop" access to information on a range of sustainable agricultural practices, could further strengthen the sector by mitigating the cost to producers of finding this information. In addition, public investments such as the expansion of the staffing in the OSU Small Farms Program as well as efforts to incorporate both local and certified specifications into food service contracts at Portland State University and the public school system represent powerful indications of how public resources can be used to expand and strengthen these markets.

In addition, there may be opportunities to bring policy and/or regulatory tools to bear to enhance some of the other efforts that are underway to reward producers for their environmental practices. As noted previously, these efforts encompass the development of markets for ecosystem services, the development of structures to support trading of carbon credits for climate-friendly agricultural practices, and existing government programs that provide compensation or incentive payments to producers investing in particular types of management practices. Assessing the specific opportunities to strengthen both market-based programs and regulatory programs is beyond the scope of this report, but the magnitude of the potential contribution of such programs to sustainable economic development in rural communities should not be overlooked.



Chapter 4: Discussion & Next Steps

This assessment has attempted to provide an initial snapshot of the dynamics in the "values-added" marketplace for food products in Oregon, highlighting some of the challenges and opportunities for producers seeking to gain market access for their products on the basis of their management practices or the local origin of their products. This section summarizes some of the key economic cluster characteristics at play in this arena, as well as highlighting the chief issues and opportunities for value chain development.

Cluster Strengths

Demand

Many of the attributes of a sustainable agriculture and food cluster are in place in Oregon, including strong regional demand for products that are local, organic, and/or sustainable, as well as a critical mass of retail and food service businesses that seek these products and that are willing to engage in the chain of custody to ensure the full value of certified products is realized by the producer and other intermediary partners. The strong market demand for locally grown or produced products exists at many scales, from direct marketing to institutional food service, creating opportunities for agricultural enterprises of all sizes.

The regional growth in demand for products that have added environmental and social attributes is consistent with the trends in the national markets, which may also provide local producers with opportunities to take advantage of broader markets. Increased concern over food safety may provide an advantage to producers who already have a strong chain of custody and a system in place to track processes and products, as is the case with organic, Food Alliance, and other certified products. International markets in Asia and Europe are also growing for products that can claim credibly that they have been produced in an environmentally sound manner. In addition, Oregon has a reputation for investing in environmental quality, which can translate into a marketing benefit for companies seeking to capture market advantage based on their environmental practices (David Lively, Organically Grown Company, personal communication).

Supporting Organizations

A significant number of governmental and non-governmental programs provide support for both small local producers and producers with certified products. The role which these supporting institutions play is in many cases critical to the development of value chains that link producers through the supply chain to the end consumers, allowing them to realize an added value for their product. A number of Food Alliance certified producers have explicitly credited the organization with helping them to both

Discussion & Next Steps

add credibility to their claims of strong environmental management and with helping to forge relationships with key customers (Harrington, 2005; Agriculture of the Middle. 2004; Country Natural Beef, personal communication). Building these relationships and catalyzing broader networks of businesses is an important contribution to the development of healthy economic clusters (Porter, 1996).

Other supporting organizations include the Oregon Department of Agriculture, Oregon Tilth, OSU Small Farms program, PSU's Food Industry Leadership Center, the Chefs Collaborative, Ecotrust's Food and Farms Program, the Oregon Farmers Market Association and the Food Innovation Center. These organizations provide technical assistance and information, as well as creating the venues like the Farmer-Chef Connection where producers and their potential clients can develop better understanding of each other's business models and cement the relationships that lead to long term business partnerships. The recent establishment of the Oregon Sustainable Agriculture Research Center (OSARC) has the potential to further strengthen the sector by mitigating the cost to producers of accessing information about a broad range of production practices and market opportunities.

In addition, several of these supporting organizations, such as Food Alliance and Oregon Tilth, have national reach in their programs. Being based in Oregon makes them more accessible to local producers than to producers in other regions, which may provide an edge of sorts for producers in the region seeking broader markets.

Geography

The physical characteristics of the region also provide a strong foundation for the development of regional markets for a broad range of agricultural products, as well as providing opportunities for customers to gain direct contact with producers. The long growing season and fertile soils in the Willamette Valley contribute to the productivity of producers selling into the urban farmers markets in the Portland and Eugene areas. At the same time, the strength of demand in these urban areas and the opportunity to get a premium price for their products draws producers to urban areas from much of Washington and Oregon.

Leadership

The leadership among key regional producers such as Country Natural Beef, Shepherd's Grain, and Stahlbush Island Farms in both proactively seeking "values-added" markets and in forging true "value-chain" relationships with their customers is another critical contribution to the overall health of the "values-added" food industry in the region. These producers have developed an understanding of their customers and of the marketing and merchandising needed to be successful in de-commodifying their products. As such they are modeling for other producers how to gain market advantage, identify

markets that can source the volume they can deliver, and offer the added environmental and social values that are increasingly in demand in these markets. While distribution remains a challenge for many producers seeking to provide "values-added" products into the marketplace, some of the larger producers such as Country Natural Beef have been able to engage conventional feed lots, slaughterhouses and distributors in providing a chain of custody for their products. Leadership in the retail and food service sectors from businesses such as New Seasons Markets, Bon Appetit, and Sodoexho has also helped show both the feasibility and the economic value of making local, sustainable products part of a business strategy.

Cluster Challenges

While the factors noted above contribute to the viability of "values-added" producers and food businesses and the overall health of this community as an economic cluster, there are also a number of challenges facing the producers and other enterprises in this arena.

Distribution

The distribution network for many products is a significant bottleneck; a number of business representatives interviewed for this assessment indicated that they do not source as much local or other "values-added" product as they might if it were available through distributors. As noted, the role that Organically Grown Company plays in distributing organic products addresses this issue for organic producers and their potential markets to some extent. However, OGC now sources much of its product from outside the region, particularly off season, due to availability and the more competitive prices for products from regions with larger production capacity. That noted, OGC is getting more demand from its Northwest markets for products which are sourced from within the region (Josh Hinerfeld, personal communication).

Volume and Quality

There are challenges to providing products in sufficient volume and of consistent quality to meet the needs of larger food service and retail markets. This challenge relates in part to the lack of a distribution system that can efficiently consolidate product from smaller producers to meet these needs. In addition, distributors are challenged to maintain the chain of custody for certified product that allow these products to retain this value added throughout the supply chain.

It is also important to recognize that the value that may be added through environmental and social claims cannot substitute for the basic quality of products. Across the board, purchasers interviewed for this assessment declared that the quality of a product, together with price point, are their primary considerations. The continued provision of technical assistance focused on ensuring the production of high quality crops and other products, through OSU extension and other channels, will be an important element of any strategy to grow opportunities in this area.

Certification

The cost of certification appears to be a challenge, particularly for smaller producers. As Food Alliance has shifted its emphasis to the medium sized producers and the larger volume markets, the advantage of seeking this certification for smaller producers is also in question, in part because Food Alliance has shifted its relationship management focus to larger volume market players. For smaller producers seeking multiple certifications, costs can quickly become prohibitive. The efforts of Oregon Tilth and Salmon Safe to coordinate their certifications so that producers can seek both at once is a good model to consider if there is interest in expanding the number of smaller producers that are able to afford certification (see Attachment 2). Streamlining certification processes — while not watering down the standards - may also help bring more producers into the certified supply chain, which may help in addressing the challenges of sourcing adequate local and certified product for larger volume markets.

In addition, some inputs to certified production are not easily available or affordable in the region, such as non-GMO or organic feed for livestock. There may be significant potential to expand the production of organic meat, which at this point is constrained in part by the cost of organic high-protein feed; OSU is conducting studies in eastern Oregon on these feed products to help expand their availability (Wells, 2005).

There are also many producers who are very likely good stewards of their resources but who are still not aware of the opportunities to gain market share through "values-added" approaches, leaving them vulnerable to commodity price fluctuations. Engaging these producers in exploring "values-added" production may help address the challenges of providing an adequate volume of products being demanded by larger purchasers.

Geography

While Oregon offers a longer growing season than many other areas in the country, the fact that the demand from potential institutional buyers (i.e., schools and universities) falls mainly outside of the growing season for many products poses a challenge to tapping into these markets. The lack of processing facilities that would allow small or medium sized producers to develop products that could be sold into these off-season markets is an additional obstacle to capturing value from these markets.

Development Pressures

The pressures of urbanization and land conversion, particularly with the passage of Measure 37, may make alternative uses of agricultural land in and around metropolitan areas more attractive. Conversion of agricultural land can result in a loss of critical mass and infrastructure in localized areas, making agriculture less viable in these areas.

"Customer Confusion"

For products seeking value through reference to the "values-added" attributes of the product or through a certification system, the lack of awareness among the public and the potential confusion about the multiplicity of labels may limit market potential. In addition, the potential for "green wash" for non-certified product or products that use unregulated labels such as "natural" may undermine consumer confidence.

Policy and Regulations

Some regulations may pose barriers, particularly for smaller producers and processors; for example, the rules that regulate slaughterhouses, processors and composting operations were crafted for larger operations and many of the requirements do not reflect the relative footprint and constraints facing smaller businesses (Chris Schreiner, Oregon Tilth, personal communication). In addition, national agricultural policies pose some challenges; commodity products continue to receive subsidies, making the cost of these products lower than they would be if the full costs of production were reflected in the price.

Information

Even developing an understanding of the challenges and opportunities in the sector is a challenge, as data are not collected on the volume or value of products that are marketed based on their environmental and social attributes or the extent to which businesses seek to source products with these attributes. The lack of consistent data about these producers and businesses makes it difficult to assess their growth and to identify areas facing particular challenges or opportunities.

Summary and Concluding Remarks

Based on the research presented in this report, there are clearly opportunities for Oregon producers to take advantage of the growing markets for products which can make credible claims regarding the environmental and social aspects of production practices. At the same time, there are a number of obstacles to producers attempting to enter these markets, including processing and distribution bottlenecks, costs of certification, regulatory and policy barriers, and customer confusion in the face of multiple labels and competing claims.

Organic and other types of certification may play a particularly significant role for producers seeking to enter larger volume markets, such as larger retail and institutional food service, as these purchasers are increasingly interested in being able to claim that the products they source have these "values-added" attributes. Given the difficulty of establishing personal relationships throughout the value chain in these larger volume channels, certification helps provide credibility for these claims, removing the onus from the purchaser to verify them individually. However, certification appears to continue to provide value to smaller producers in direct market channels as well, based on the numbers of small producers relying on direct market channels who are seeking certification from Oregon Tilth.

The role of the Food Alliance in helping mid-sized "agriculture of the middle" producers link to distributors and larger markets for their products offers a useful example of how value chains can be nurtured in this sector by facilitating the development of relationships throughout the supply chain and effectively transforming it into a true value chain. While enterprises such as Country Natural Beef and New Seasons have successfully created these types of relationships for their respective customers and suppliers, organizations like the Food Alliance play a critical role in creating networks that encompass multiple suppliers and multiple purchasers, helping to create a sufficient volume of product to meet growing demand and to mobilize distributors and processing businesses.

As noted previously, there are a number of other mechanisms emerging that seek to provide compensation or incentives for producers investing in environmentally friendly practices, including markets for ecosystem services, structures to support trading of carbon credits for climate-friendly agricultural practices, and diverse regulatory and government programs that provide compensation or incentive payments to producers investing in particular types of management practices. While in most cases the market mechanisms are not yet fully developed, these and others programs provide important opportunities for farmers to access resources on the basis of their environmental practices.

Given the nature of crop and livestock production and the diversity of markets in Oregon, there is no optimal scale for agricultural production and food business operations, nor is there one optimal approach to production. Decisions regarding the most appropriate production methods and the value of pursuing certification must always be informed by the economic and environmental context specific to each individual farm and ranch. Agricultural activities at every scale contribute uniquely to the overall goals of achieving economic viability, environmental sustainability, and resilience at the local and regional level. These diverse threads of commerce weave a robust and resilient fabric that supports Oregon's rural and urban communities.

This assessment is intended to provide an initial snapshot of the dynamics in the values-added marketplace in Oregon, highlighting some of the challenges and opportunities for producers seeking to gain market access for their products on the basis of their management practices. This assessment is only a starting place – there is a clear need for more in-depth exploration of what can be done to address these challenges and take advantage of these opportunities to ensure that Oregon producers who want to distinguish their products in the market place in these ways are able to do so.



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Attachment I

Sector Snapshots: Case Studies of Oregon Country Beef (also known as Country Natural Beef), Shepherd's Grain (Western SARE), and Tillamook County Creamery Assocation (TCCA) (Agriculture of the Middle)

Attachment 2

Overview of Certification Systems and Related Statistics

Attachment 3

Growing Stronger Advisory Committee Members

Attachment 4

List of individuals contacted



Attachment I: Sector Snapshots

The dynamics described in this report regarding market demand, distribution, certification issues, and cluster characteristics apply generally to most types of agricultural food products, but they are probably most accurately descriptive of the produce sector. Other types of products, including livestock, dairy, and grain production, face similar but slightly different market drivers, challenges and opportunities. Providing in-depth analysis of each of these product areas is beyond the scope of this project; this attachment therefore seeks to highlight some of the specific market and production dynamics related to these products, provided in case studies conducted by the "Agriculture of the Middle" project and by Western SARE.

- Oregon Country Beef(also known as Country Natural Beef) Case Study (Agriculture of the Middle)
- Shepherd's Grain Case Study (Western SARE)
- Tillamook County Creamery Association (TCCA) Case Study (Agriculture of the Middle)

Oregon Country Beef (also known as Country Natural Beef) Case Study (Agriculture of the Middle)⁸

Oregon Country Beef

Better humans, better ranches, sustainability, better families

Background

OCB is a member cooperative of 40 cow/calf beef ranchers in Oregon, with 16 prospective [trial] members from Oregon, Washington, Idaho, Nevada and California. An additional 15 ranch families are considering joining the cooperative. The organizational goal was drafted by the original 14 ranchers in 1986 stating in part that .Our goal is to provide a sustainable means through a group to profitably market quality beef products desired by the consumer while retaining every possible bit of independence.. After one year of selling beef through retail outlets, OCB was officially incorporated by 14 ranch families in 1987 in the State of Oregon. The mission statement (1991) reaffirms the cooperatives value placed on making the rancher the key decision-maker, and the sustainability of the land and health of the animals a key factor. OCB maxed out the 10,000 mother cows of the original 14 members after 13 years. The ranches vary in size from the smallest with 60 mother cows to the larges with 4,000 mother cows. Most of the ranches have between 600 and 1400 mother cows. Ranching is the primary income generating activity for all the members.

Organizational form/scale/leadership

OCB is a member cooperative in which *each* member family (husband *and* wife) sits on the Board of Directors. Rancher members perform all of the day to day business functions. They have distinct offices for different aspects of the business: *Marketing* - led by founders Doc and Connie Hatfield; *Financial / headquarters* - Mary Foreman is the Chief Financial Officer; *Feedlot* administrated by John Wilson, owner of Beef Northwest; *Production* led by Dan and Susie Proeberton. Recently, Norm and Jennifer Birch joined the marketing team to take over day to day marketing needs in the wake of rapid growth in demand for OCB product, specifically dealing with inventory management, forecasting demand 18 months in advance and coordinating with production to ensure an adequate supply. Participating in the day to day management of the cooperative makes them all more responsible as producers. They believe there has always been someone in the coop with the talent to do everything they have needed. Another responsibility of membership is that each ranch family spends one weekend a year in one of their partner stores in Seattle, Portland or San Francisco. OCB considers contact between ranchers and consumers as a key element in how they conduct their business. This relational marketing approach even impacts the wholesale impacts of the business, as the marketing team makes weekly contact with each of their retailers. While this approach to management is difficult, it is critical to the success of the business.

OCB believes that having every ranch family on the Board is essentially since they all share in the risk of the business. They hold two 3-day board meetings each year attended by all member families. All OCB Board decisions are made by consensus, which slows the process but dramatically improves the buy in by each member for decisions that are made. One member is fond of saying we just keep muddling along.

Each member feels as though his or her opinion is valued. In fact, there was a case in which one member decided to block a decision that everyone else had agreed to. She was allowed to voice her

⁸ Source: Agriculture of the Middle, http://www.agofthemiddle.org/pubs/ocb_case.pdf

concern, which resulted in everyone changing to her decision. In addition to the meetings, OCB holds a weekly conference call of the board. Oregon Country Beef is a people thing; it's a great big people thing. Three keys to the success of OCB are the involvement of the ranch women, the age differential of members, and the emphasis on people as the center of the business.

Nature of products and the value chain

The "purchased" product is high quality, natural beef. The 40 full members OCB ranchers have approximately 65,000 cow/calf pairs (all marketed cattle raised from birth) and 2.5 million acres of rangeland. OCB producers are certified by the Food Alliance and are required to manage by Grazewell principles. OCB partners with Beef Northwest in Boardman, Oregon (custom feedlot owned by OCB member rancher John Wilson) for finishing generally averaging 89 days on the feedlot after 12-18 months of grazing. The finishing is done with a 30% grain ration as opposed to the standard 80% ration as it is ecologically indefensible to feed excessive amounts of grain to fatten up an animal past the point of health both for the animal and the consumer. They are currently moving 400 animals through the feedlot each week, and have plans to increase to 500 in May of 2004 and 600 by the end of 2004. They target high-select or low-choice grades to get the best mix between taste and tenderness. They have had outside verification of the quality and nutritive content of their beef conducted by Texas A & M University. They strive to produce their beef using feed that is GMO free, antibiotics hormones and/or other growth implants. Products are sold through partnerships with natural foods grocers (such as Seattle-based PCC and Whole Foods) and restaurants. OCB conducted \$18 million in retail business in 2003 without a single legal contract reaffirming that OCB is a relationship based business with mutual benefit for all partners.

The non-market product is the ranch families themselves. OCB is a people based business that markets it's products based on trust and relationship. There emphasis on having each of the member ranch families visit stores once a year is key to their organizational values and marketing strategy.

Economics of the Enterprise

"De-commodify or die!" The economic goal of Oregon Country Beef is to keep ranchers stewarding the land. OCB prefers not to look at economics as how much more money they make than conventional beef producers. They learned early on that the economics of beef is about .cost of production, return on investment, and a reasonable profit. They have done exhaustive accounting of their costs of production and costs of marketing and set their prices based on this accounting regardless of .market prices. If the price they put on their meat is too high for consumers, they believe they would have to get out of the business because if they can't meet their costs and a reasonable profit, they would have to stop producing. They have estimated, however, that they have averaged nearly \$120 per animal profit over the market price for the last 10 years. When market prices rose above OCB profits in 2003, they did not change their pricing because they felt it had no bearing on whether they kept ranchers on the land.

In addition to the pricing strategy and marketing efforts, OCB has worked diligently to streamline their production, feeding and slaughter operations. They partner with the feedlot and slaughterhouse and have developed relationships with these businesses that are mutually beneficial to the ranchers and the processors. Washington Beef, the meat packer, has benefited from it's business relationship with OCB and considers OCB a valued partner. OCB believes that Washington Beef deserves every penny they earn on the OCB relationship, because of the "costs of production, return on investment, and a reasonable profit" objective.

Oregon Country Beef Case Study (Cont.)

OCB planned for a whopping 31% growth in demand for it's product in 2003. Actual growth in demand was closer to 45%. The difficulty of planning for growth is exacerbated by the fact that it can take over 2 years from the time growth rates are projected to the time a product is ready (conception to birth, rearing the animal, finishing the animal, slaughter . packing and marketing). They have had to turn away potential customers because they are unable to meet this demand, and have even invited in Coleman Natural Beef (a Colorado-based competitor) to help them meet their commitments. In addition, OCB recently became the keystone product of Burgerville USA, a upscale hamburger restaurant chain near Portland, Oregon that values Food Alliance certified products.

In order to meet growing demand, OCB is bringing new ranch families into the cooperative. The capital buyin for the cooperative is cattle. They attempt to have each new ranch provide one .truckload. of calves in the first year (roughly 60, 800 pound feeder calves) and slowly bring them up to their full capacity. This also enables the new ranch families to get the carcasses in condition suitable for the OCB quality program. Each rancher finances their animal from birth to the retail cooler and commits to retail needs 12 . 18 months in advance of delivery. They do not purchase in feeder steers to meet their commitments. The individual ranchers are responsible for consumer product satisfaction. Administrative costs for the cooperative are kept to a bare minimum, and are assessed per animal sold (i.e. Marketing gets \$25 / head). Whole Foods has been slightly more than half of the business and the new partnership with Burgerville USA has made it possible for OCB to market all cuts of meat.

Key opportunities & challenges engaged

When the USDA released reports of a single case of BSE in a cow slaughtered in Washington State on December 23rd, Oregon Country Beef was one of the first direct market beef companies to respond to consumers with a press release late on December 23rd. The release reassured customers that OCB's quality control standards provided sufficient insurance that the case of BSE was not connected to OCB. Rationale included assurances that OCB cattle are not fed any contaminated feeds and that all OCB cattle are raised from birth to slaughter by the member ranchers.

A second challenge is the need to provide consistent product year round. Finishing the calves at one feedlot with a defined feeding program has helped develop product consistency. However, having calves available year round has forced OCB to background feed on triticale and/or hold some of their calves to deliver them to the feedlot at 800 pounds. The hardest time to meet these needs is winter, when many of the ranches have snow. Also, most of the ranches are based in the high desert and deal with seasonal and annual variability of precipitation.

OCB has not made an effort to gain organic certification because much of the land they manage is BLM or USFS land. The BLM and USFS spray for noxious weeds near roads and even though the vast majority of the land is free of chemicals, if the animals cross the roads they would lose their certification.

Replicability in other settings

Dramatic growth in demand for sustainable, natural beef creates a tremendous opportunity for growth of Oregon Country Beef. The current 56 member ranches are now maxed out in their cattle and OCB is adding another 15 ranches, including some in Washington, Idaho and Montana. One issue that faces OCB is balancing expansion with their dedication to consensus decision-making and having all members represented on the Board of Directors. 18 years of functioning this way and slowly expanding the membership has made it a very successful strategy, but it is a strategy that requires incredible patience and persistence.

The production, processing and marketing strategies are replicable in other settings. A key to the success of the cooperative has been the minimized administrative costs and ultimately the low capital approach to establishing the cooperative. The costs and benefits of the strategy are born by and accrue to the individual ranchers.

Connie Hatfield has suggested that there is no reason that every farmer and rancher cannot de-commodify, that successfully changing market strategy is as much a mindset as a business model. For instance, she prodded a fellow OCB member to find an alternative way to market his wheat until he became convinced that it was possible. He has now made connections with other grain farmers, such as Karl Kupers, to cooperatively market Food Alliance certified wheat to specialty markets. OCB is also currently helping to broker a relationship between Whole Foods and sustainable pork producers. Connie suggested that OCB is not concerned about competition, because if they were to start losing market share or profitability then we must be doing something wrong.

Research, education/demonstration, or policy changes

OCB has been very pro-active in forging new business and marketing strategies. They have capitalized on past research, education and policy work, such as the establishment of Food Alliance by WSDA, WSU and OSU. They have also capitalized on the growing awareness consumers have over the production, safety and quality of their foods. Further research, education and policy changes promoting sustainable agriculture and food systems would be beneficial to OCB and similar strategies. Another example of how they have overcome policy barriers for their market strategy was to form a cooperative that would give them sufficient scale to operate in wholesale markets and meat processing. OCB's feeding, slaughter and processing standards are quite stringent and the cooperative strategy enables them to deal with state and federal meat inspection standards that many smaller beef producers attempting alternative markets struggle to overcome.

Sector Snapshot: Shepherd's Grain Western SARE Study⁹

Karl Kupers Harrington, Washington Profile written by Helen Husher Updated in 2005

Summary of Operation

Wheat, barley, sunflowers, safflower, buckwheat, mustard, canola, legumes and reclamation grasses on 4,400 acres

Flexible, no-till rotation of grain crops, cool- and warm-season grasses and broadleaf crops

Problems Addressed

<u>Moisture management.</u> Karl Kupers' farm falls within the "rain shadow" of the Cascade Mountains and, thus, receives just 12 inches of rain a year. In this dryland agricultural region, Washington farmers like Kupers strive all year long to both retain moisture and fight erosion — twin goals that are sometimes at cross purposes.

<u>Erosion and pest problems</u>. Most farmers in the area grow wheat, alternating with summer fallow. The fallow period relieves them of moisture concerns, as they aren't growing cash crops, but leaving exposed soil and making six to eight tillage trips within eight months exacerbates erosion. Moreover, growing wheat in a monocultural system creates an ideal situation for weeds and disease to gain a foothold.

Background

In 1996, Kupers examined his options, looked at his soil, then weighed the risks and benefits of taking a new approach to crop rotation and tillage that would increase profits but also provide a more diverse environment that would save soil and discourage pests.

With help from a SARE farmer/rancher grant, Kupers began planting alternative crops like canola, millet, corn and buckwheat on 40-acre plots in a no-till system to see if the model would conserve the soil and still prove profitable. After several years of gradual expansion, Kupers now uses no-till and continuous cropping on the entire farm.

"This approach breaks the weed and disease cycles that can be such a factor in a single-crop system," says Kupers. "It also conserves and improves the soil, maximizes water retention, and offers a much broader spectrum of marketing opportunities."

⁹ Source: http://www.sare.org/publications/naf2/kupers.htm

Kupers owns all of his equipment, but leases the farmland in keeping with a tradition his family has kept for 53 years. When one of his landlords died, he decided to buy a parcel to keep it in agriculture. The other trustees who own his farm have accepted his transition to a no-till, diversified operation in part because he started small and managed his risk.

Kupers describes diversification as both a choice for farmers and as a shift in the farming environment, and it is a shift that can open up new markets and access to new consumers.

Focal Point of Operation — Diversification and marketing

Under Kupers' approach, diversification, no-till, and direct marketing are integrally linked. Under traditional grain crop systems, others set the prices; with diversification, Kupers can match his crops to opportunities and fluctuations in the marketplace. Using a system he calls "direct seeding," he leaves his soil untouched, placing seeds into the soil with a retrofitted drill. The system preserves the scant soil moisture and minimizes erosion. And, just as importantly, he can match his crops to his variable conditions.

"I can respond to changes in the moisture content in the soil and go with the crop that I think will work best," he says.

For example, if the area receives adequate precipitation, Kupers plants sunflowers as his broadleaf crop. If it's dry, he grows buckwheat. He also considers rainfall the main decision-maker on whether to plan winter wheat or spring wheat.

He grows reclamation grasses for seed, which is used in the USDA Conservation Reserve Program. Warm-season crops might include sunflower, buckwheat and millet. Kupers seeds the warm-season crops in late spring or early summer after any danger of frost.

"There is no recipe," he says. "I know my work would be much simpler if there were, but there are simply too many variables. I take into account the weed and pest cycles, market conditions, and moisture, and make decisions based on all these things."

This flexible approach enables Kupers to do what he does best: market his products. With a partner, he formed a limited liability corporation from which they and 10 other growers market commodities under their "Shepherd's Grain" label. They market mostly in their region, sending their Pacific Northwest-grown products to bakeries, food service businesses and high-end fast food outlets in the Pacific Northwest.

"This is the truest form of identity preservation," he says. "We can walk into a bakery and look at the bag of flour and introduce the farmer that grew that crop and he can tell you what field it came from."

Kupers is working to establish relationships with his buyers and the consumers who purchase from them. He wants them to better understand his environmentally sound "direct seeding system" and not only enjoy their product, but also like to guarantee him and the other Shepherd's Grain farmers a reasonable return.

Teasing the marketing and production components apart is impossible, and is one of the benefits and burdens of a holistic approach. "You do have to know more," he concedes, "but it's all part of making the shift to sustainability."

Economics and Profitability

Kupers' profit can run 10 to 12 percent ahead of farmers in a wheat-and-fallow system, although those impressive numbers are dependent upon adequate rainfall. He's satisfied with the farm's current status, feeling that the extra effort of the no-till transition has paid off, but points out that he's in it for the long term.

"Most of the real profits are in the future," he says, because the cumulative impact of good soil management will bring increasing yields. That said, he is seeing improved profits now, along with operational savings, particularly in weed and disease management expenses.

"What I'm doing is a complete reversal of conventional farming," he says, "and the profitability is only one part of the system. I'm not taking the profit out. I have the profit because I have a whole system that makes profitability sustainable."

By diversifying, he tries different responses to pests and weeds, and these new modes also bring with them savings in capital equipment costs. He can seed his 5,000-plus acres with one 30-foot drill because he spreads it out among different crops from March to early June. He can use one combine to harvest because he starts on grass in early July and finishes with sunflowers in late October. By contrast, a typical wheat rotation requires some 120 feet of drills and at least three

combines, an additional sprayer — and more labor.

Kupers' farm was certified by The Food Alliance, which verifies and endorses environmentally sound agriculture and makes consumers aware of the choices they can make to support sustainability. The effort aims to turn consumer support into more profits for farmers. Kupers was the first large-scale wheat farmer to earn The Food Alliance certification, and he hopes to lead by example.

"It's not for me to tell my neighbors how to farm," he says, "but I can farm in a new way and show that it's profitable, and I can show that I can meet and exceed the returns on neighboring operations."

Environmental Benefits

Still, Kupers plays down his enhanced profitability and talks more about the enhanced environmental benefit — he feels strongly that environmental and economic goals should be understood as being, in the end, exactly the same thing.

Kupers' varying crop rotations tend to break the weed and disease cycles that can plague single-crop operations, so he applies fewer inputs. Using no-till lessens erosion and also builds carbon in the soil. By improving the soil, Kupers hopes to reduce his reliance on commercial fertilizers. In 2000, soil tests revealed that the no-till system had improved soil porosity, making nitrogen more available to crops.

"This is what we want, as we can now apply our nitrogen in a more timely manner and reduce total needs," he says. "Our goal is to create a healthy soil that feeds the plant."

The driving force behind Kupers' conversion to no-till is an ongoing commitment to the health of the land. For Kupers, profitability and soil conservation are linked. "I've learned that if I feed the soil, the soil will take care of the plant," he says.

Community and Quality of Life Benefits

Kupers farmed his land conventionally for 23 years, but over the past several years — since his first SARE grant and his first test plots of no-till alternative cropping — his satisfaction with farming has increased.

"For me, personally, it's a way of defining my moral position with the land," he says.

Conserving and building the soil brings rewards that can't always be counted in direct dollars but are central to the farming enterprise. The added work of marketing a range of farm products adds variety and interest to the job, a bonus for this unusually energetic farmer. He seems temperamentally suited to making quick but informed decisions.

"Sometimes I don't know for sure what I'm going to plant until I've been in the field and seen the conditions," he says. The soil itself, along with an understanding of market conditions off the farm, combine to support a flexible approach that Kupers clearly values.

While it's true that as a tenant Kupers may not have the option to pass the farm along to the next generation, he understands that the improved land has its own kind of legacy, quite apart from who is actually farming it. He describes his relationship with the land as a "moral passion;" this moral momentum has informed his choices as he has made a true paradigm shift toward diversity. One result is that he has become an advocate for sustainable alternatives to conventional farming. He helped to bring the canola industry to Washington state, and has become a sought-after speaker on agricultural issues.

Transition Advice

Kupers thinks that farmers starting with no-till, diversified cropping should start small, much the way he did. "There's a learning curve," he says, "and you will make some mistakes."

The most common mistake, he says, is impatience.

"It takes five to seven years to get the land through the transition to decide which crops will suit your individual conditions," he says. Making a gradual change in selected fields means the stakes are lower and the temptation to fall back into conventional is easier to resist.

"It's important not to get discouraged and start plowing again," says Kupers, "because you will lose everything you were on the road to gaining. Commitment is important."

The Future

Now that Kupers has made the transition from test plots to placing the whole farm in diversified no-till, it seems that in some way the future is already here. But the conservation and improvement of the soil on Kupers' farm is an ongoing process, as is the seasonal selection of crops, an important element in the farm's long-term sustainability. Because the rotation is open, Kupers has a continuing option of trying something new.

On the marketing side, he knows "eco-friendly" food can capture 40 percent or more of market share, a lofty yet attainable goal.

"Our long range goal is to develop a value chain with the consumer that adds a diverse market for products raised under a direct seed system through an assurance that the producer receives a true cost of production and a reasonable rate of return."



Tillamook County Creamery Assocation (TCCA)¹⁰

I. Background of the enterprise (initial strategy, evolution of strategy and enterprise structure, dynamics and resources involved in getting started; amount of start-up capital required?)

Tillamook County Creamery Association (TCCA) is a farmer-owned cooperative of approximately 142 members. Tillamook County, Oregon has historically been known for quality cheeses. In 1909, the ten independent cheese factories formed the Tillamook County Creamery Association for quality control, and by 1968 they had consolidated into a central cheese making facility. To facilitate outreach to customers, a visitor center with self-guided tours, video presentation and museum was constructed in 1979. It now accommodates over 1 million visitors annually. In 2000 they constructed an additional facility for the storage, aging and retrieval of an additional 35 million pounds of cheese.

II. Organizational form / scale / leadership (nature & legal form of the enterprise, number of members, capitalization and other major financial indicators, amount of product, leadership & decision-making structures, changes over time and reasons for changes)

TCCA is incorporated as a cooperative of 142 area dairy families. The member dairies elect a board member and an alternate for each of the 9 districts. The board functions as a policy setting entity and hires an executive to manage the day to day operation of the company. The farmer members are all active farmers who share in both the risk and the profits of the cooperative. They place a value on their history as a "quality-oriented marketing cooperative" and recognize the importance of their nearly 100 year history for keeping them viable in the dairy industry. TCCA accounts for nearly 1/3 of the dairy production in Oregon.

TCCA provides a member handbook to each of its farmers outlining their responsibilities and opportunities as members. The key element of member responsibility is the production of high-quality milk. The milk produced averages a somatic cell count of 166,000 and they have a quality milk incentive program in which they pay a premium for high quality milk.

III. Nature of products and the "value chain"

TCCA produces a variety of dairy products, nearly 85% of which is cheddar cheese. They are the #1 brand of natural chunk cheese in almost all western markets, and market through many of the largest consolidated retailers on the west coast. They have received numerous awards for their cheeses, and consider the brand recognition of their cheese a critical element of their product. Specific products include:

Cheeses: Cheddar varieties: Medium, Medium Smoked, Kosher Medium, Reduced-Fat (all aged 60 days), Sharp (aged 9 months), Special Reserve Extra Sharp (aged 15 months), Vintage White Extra Sharp, and Vintage White Extra Sharp Smoked (both aged 2 years). Also: Monterey Jack, Pepper Jack, Colby, Colby Jack, Reduced Fat Monterey.

Other Products: Butter, Ice Cream, Sour Cream, Yogurt and Dried Whey.

¹⁰ Source: Agriculture of the Middle, http://wwagofthemiddle.org/pubs/tillamook_case.pdf

Another key aspect of the "value chain" is their emphasis on connecting with the consumer. They recognize that consumers are becoming more aware and concerned about the methods of production as they are with the final product. Member producers have responded to environmental concerns by working with state and federal regulators and agencies to improve their environmental practices. Examples of these efforts include:

- Fencing over 480,000 feet (91 miles) of streamside to keep dairy cows from damaging riparian areas.
- Installing over 120 alternate cattle watering facilities.
- Planting over 400,000 native trees and shrubs to enhance existing riparian areas and cool local streams and rivers.
- Managing cattle manure as a valuable natural fertilizer and an alternative to commercial fertilizers.
- Building on-site manure storage facilities to provide the operational flexibility necessary to allow farmers to apply manure when, and where, it is most needed.
- Working with the scientific community to implement unique, and experimental, environmental enhancement projects.
- Participating in state and local environmental planning, including representation on the Tillamook Bay National Estuary Project, participation in the Tillamook County Performance Partnership, and representing dairy interests in the Senate Bill 1010 planning process.
- Developing and implementing a culvert survey on dairy pastureland that will expand salmon habitat."

In addition, members are currently discussing other issues related to consumer interest in production practices, such as animal welfare. They believe that within five years the dairy industry as a whole will need to be able to respond to consumer concerns – and they want TCCA to be in position to respond to increasing consumer concern. They are exploring options for responding to consumer needs, such as Food Alliance certification, but have not yet made any decisions about how they will proceed.

TCCA also maintains an interactive website with history, recipes, product information, tour information and a "kid's zone" – all of which are consistent with their emphasis on connecting with the end customer – in spite of the wholesale orientation of their business.

IV. Economics of the Enterprise

TCCA has a significant market share in the dairy product industry on the west coast. They do not provide specific data regarding the volume of their sales other than to suggest they are the #1 brand of natural chunk cheese on the west coast. They have 460 employees. They market a diverse array of products through the consolidated retail grocery chains and are still able to command premium prices for their products. Thus far, the consolidated retailers have respected TCCA's values of a high-quality product at a premium price. They do acknowledge that they are responsive to the need to be a cost-effective business. With that in mind, they have consistently made investments in high-tech equipment to improve the efficiency of their operation. They will not allow improvements in efficiency to compromise the quality, consistency or taste of their products. Efforts to expand markets for TCCA products are dictated by the expansion of their retail market partners and controlled by the quality and time-sensitive nature of their aged cheese products. They have had recent success in market expansion into Texas.

Tillamook County Creamery Assocation (TCCA) (Cont.)

V. Key opportunities & challenges engaged

One of the key challenges faced by the members of TCCA is complying with local, state and federal regulations for dairy farming, in particular for nutrient management. Specific characteristics of Tillamook County, including limited pastureland, nearly 100 inches of annual precipitation, proximity to the Pacific Ocean exacerbate the impacts of these regulations for Tillamook dairies. The Port of Tillamook Bay (POTB) has created the MEAD (Methane Energy and Agricultural Development) project to assist Tillamook dairies with the manure management problem. The POTB has constructed an anaerobic digester in the middle of a cluster of dairy farms to manage manure, generate electricity and other value-added by-products. This digester is operational, but income generated by the digester is lagging behind expectations due to the cost of transporting manure. They are seeking a \$1 million appropriation for the construction of a second digester. Expectations are that the revenue generated from the first two digesters will help finance additional digesters until each dairy in the county has a digester within reasonable distance. Members of the TCCA are involved with the MEAD project, but the TCCA cooperative is not an official partner.

Another key challenge facing the TCCA is the nature of consolidation in the retail food industry. TCCA's significant market share enables them to operate in an industry that many farmer-owned cooperatives are too small for. However, TCCA has concerns about "placing all their eggs in one basket" – and the risks associated with the consolidated retail industry. To this point, they have been successful with these marketing relationships – even capturing premium prices, but are conscious of the importance of customer valuation and brand recognition to maintaining market share in the larger retail stores.

Another challenge facing TCCA is the down cycle in the dairy industry over the past few years. Like every other dairy farmer cooperative or association they have needed to balance their milk supply with demand. They have entered into a cooperative supply management plan with other dairy farmers in the country in an attempt to balance supply and demand and raise the price of milk back to a more profitable level for the farmers. As far as pricing of our milk supply we have one the best payout to our members in the past two years averaging \$3.00 over the federal order price. TCCA has been remarkably successful in reducing milk supply, having balanced their supply with demand in 12 months. Individual members have had to change long-term expansion plans to achieve this balance, but they recognized the importance of this step and are cooperating.

VI. Replicability in other settings

TCCA has nearly 100 years of history as a cooperative. It's relative scale, and the "brand" recognition of its products give it a tremendous market advantage over smaller, newer dairy cooperatives. However, TCCA values, such as providing a differentiated, higher-quality product to customers and responding to changing customer concerns and interests are critical to the replicability of farmer-owned, wholesale food enterprises. For example, other dairy cooperatives of similar or larger scales, such as Darigold in neighboring Washington State (762 dairies), are currently struggling to maintain market share in the consolidated retail sector. There is much to be learned from TCCA about the value of reaching out to and appealing to consumers, by dairy cooperatives and other agricultural cooperatives alike. In addition, TCCA has demonstrated the need to accommodate changing conditions to be successful.

VII. Research, education/demonstration, or policy changes that would strengthen the enterprise or similar enterprises

The TCCA cooperative and its members would benefit from a variety of research, education and policy efforts directed at their needs. The cooperative's interest in understanding changing consumer interests and needs would benefit from further research on the changing nature of the food system identified in the White Paper written by the Agriculture of the Middle Task Force. Another potential benefit would come from research on marketing the "valuation of non-market benefits" of agriculture – such as efforts to improve soil and water quality, reducing greenhouse gas emissions from dairies, community economic development, etc. Individual

farmers would continue to benefit from research on nutrient management, especially economic assessment of nutrient management technologies.

TCCA has been contacted a number of times over the years with inquiries by researchers about their business, but has received very little feedback or communication after the fact. They place a value on the knowledge that others have gained by investigating their cooperative and would invite more feedback and collaboration by researchers, educators and policy-makers who have learned from them.



Attachment 2:

Overview of Certification Systems and Related Statistics

In order to accurately assess the potential for values-added agriculture to contribute to economic development in Oregon, this assessment would ideally provide information not only about production of certified products, but about all products that are produced in such a manner that they could seek a premium or market access based on their environmentally and/or socially responsible ways. It is quite likely that there are a large number of producers who are excellent land stewards in Oregon and whose environmental and/or social practices are deserving of recognition, but who have not pursued certification.

However, information about production and sales of certified products is easier to obtain than information about other products which may have credible claims regarding their environmental or social production practices but that are not certified. Given the lack of information about such noncertified producers, an overview of the current status of sales and production of Food Alliance products and organic products, as well as the amount of acreage certified under the Salmon Safe eco-label, is provided here to offer an indication of both the trends in the marketplace, the responses of producers to these trends, and the distribution of these products across product categories.

Food Alliance

Food Alliance, a non-profit based in Portland, was established in 1997 through a joint effort of Oregon State University, Washington State University and the Washington Department of Agriculture. Food Alliance operates a voluntary certification and eco-labeling program based on standards that define socially and environmentally responsible agricultural practices. Farms, ranches and food processors that meet Food Alliance's standards, as determined by a third-party site inspection, are granted the right to use the Food Alliance eco-label to distinguish their products in the marketplace (Food Alliance, 2006).

The basic requirements of certification include:

- Reduction or elimination of pesticide use through Integrated Pest Management (IPM)
- Conservation of soil and water resources
- Protection and enhancement of wildlife habitat
- Provision of safe and fair working conditions
- Provision of healthy and humane care for livestock

Food Alliance certification also prohibits the use of hormones or sub-therapeutic antibiotics, genetically modified organisms, and certain pesticide ingredients that have been identified as an acute risk to human and environmental health. Certified farms and ranches are also required to show improvement in land stewardship over time (Food Alliance, 2006). Food Alliance also recently introduced its own processor certification.

Between 2001 and 2005, the number of farms that are Food Alliance certified has grown an average of 25 percent per year, average acreage has grown 32 percent per year, and sales of Food Alliance product have grown at a rate of 71 percent per year (Matthew Buck, Food Alliance, personal communication). Annual sales of Food Alliance product in 2005 were estimated at \$100 million. Food Alliance currently has 215 certified producers in 16 states, managing over 2 million acres of farm and range land, and raising livestock, dairy products, wheat and other grains, and a wide variety of fruits and vegetables. There are 85 certified farms and ranches in Oregon. In addition, farmers and ranchers in the Food Alliance program report positive customer feedback, increased customer loyalty, new markets, sales increases, and in some cases price premiums (premiums averaged 8 percent in a 2004 survey of Food Alliance producers).

Food Alliance has developed a large number of formal "market partnerships" to increase demand for and facilitate sales of certified products, including agreements with retail grocery stores and food co-ops, restaurants, distributors and food service providers. Market-side partners report strong sales of Food Alliance products, with over half reporting increases in sales because of their participation in the program (Food Alliance, 2006).

In recent years, Food Alliance products have seen the most significant growth in demand from institutional food service providers. The current statistics related to certified acreage and sales for different product lines are summarized below.

Table 9: Food Alliance, Certifications in Oregon, 2006 (Food Alliance, 2006)

Product	Number of Farms	Acreage	Estimated Annual Sales	
Fruits & Vegetables	25 farms	10,192 acres	\$100,000 (average per farm)	
Beef	68 ranches	2,372,201 acres	\$35 million (total sales)	
Sheep	2 farms	II2 acres	\$300,000 (combined annual sales)	
Pending: I wheat, 2 ranches, I dairy				

Table 10: Food Alliance, Certifications in Pacific NW 2006 (Food Alliance, 2006)

Product	Number of Farms/Ranches		
Fruit & Veg	45 farms		
Beef	95 ranches		
Wheat	II farms		
Sheep	3 farms		
Dairy	l farms		
Pending: 23 ranches, I dairy, I wheat			

Organic Certification

The term "organic" is defined by the National Organic Standards Board as follows:

Organic agriculture is an ecological production management system that promotes and enhances biodiversity, biological cycles and soil biological activity. It is based on minimal use of off-farm inputs and on management practices that restore, maintain and enhance ecological harmony. The primary goal of organic agriculture is to optimize the health and productivity of interdependent communities of soil life, plants, animals and people (National Organic Program, 2006).

The implementation of the national organic standards in 2002 required that certifying organizations seek their own certification from the USDA to qualify to administer the national standards¹¹. Oregon Tilth is the major certifier in Oregon; active in organic production and certification since the 1970s, Oregon Tilth now certifies locally, nationally, and internationally. Oregon Tilth works closely with Washington State University's Center for Sustaining Agriculture and Natural Resources to track organic production in the region.

Sales of organic fruits, vegetables, dairy products and meats are estimated to represent about \$18.5 million per year in Oregon. While this is still only a fraction of Oregon's \$4.1 billion agricultural economy, the growth rate for certified organic products has grown at 20 percent per year or faster every year since 1990 (Wells, 2005). The tables on the following page provide summary data of the estimated amount of certified organic acreage and livestock in Oregon, as well as the farmgate sales of organic products from different regions of the state.

¹¹ In order to offset the added costs that organic certifiers were expected to pass along to producers as they sought their own certification under the National Organic Program, a cost share program was established by USDA and is administered by Oregon Department of Agriculture.

Table 11:Vital Statistics, Oregon Tilth, 2006

2005 Vital Statistics Oregon Tilth Certified Organic*

OTCO Farm Operations	2001	2003	2005
Total US Farms	359	388	412
Total US organic acres ¹ Total US acres in transition ²	53,790 3155	64,794	83,923 2126
Average Certified acres per US farm	159	174	211
Total Intermational Farms	40	35	29
Total International hecters (ha)	7042	19,212	9057
Total International ha in transition	131	275	143
Average Certified ha per Int. Grower ²	24.5	39.4	24.5

OTCO Farms Operations in Oregon	2001	2003	2005
Total OR Farms	220	242	271
Total OR organic acres ¹	17,344	25,918	36,352
Total OR acres in transition	427	854	1345
Average Certified acres per OR farm	81	112	141

Size of US OTCO Farm Operations	2001	2003	2005
Over 1,000 acres ¹	6	8	14
500 to 1,000 acres	17	23	32
100 to 500 acres	110	119	Ш
50 to 100 acres	40	46	37
10 to 50 acres	109	109	121
Under 10 acres	73	79	93

^{*}These numbers are accurate as of January 2, 2006. They are dynamic, changing constantly due to new additions, operators surrendering certification, and certification

or These families are accurate as or jamain 2, 2000. They are dynamic, changing constantly due to the accurate process.

OTCO certifies three wild harvest operations that harvest from a 5,000-acre area on Klamath Lake in Oregon. OTCO also certifies a 1.46 million-acre in Alaska upon which organic livestock are grazed. These operations were left out of calculations for statistical reasons.

Some international firms are cooperatives of growers or production partnerships, all certifying under one company name. As of 1/2/06, OTCO certifies 376 in the accuracy of the company of the company

individual growers internationally.

Table 12: Oregon Tilth Certified Handling Operations, 2005

OTCO Certified Handlings Operations				
Year	2001	2003	2005	
US Organic Handlers	19	25	29	
US Organic Processors	241	282	326	
US Organic Marketers	22	25	21	
US Organic Restaurants	1	1	1	
Total US Operations	283	333	377	
International Handlers	3	3	3	
International Organic Processors	25	18	16	
International Organic Marketers	2	0	1	
Total International Operations	30	21	20	

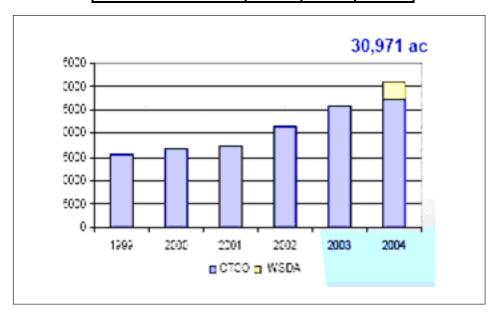


Figure 9: Estimated certified organic crop acreage in Oregon, 2005

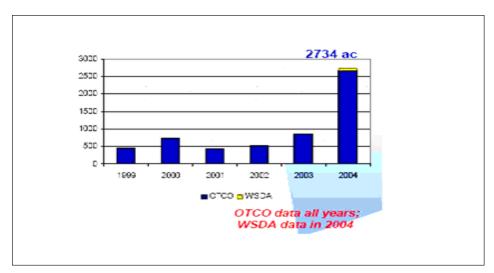


Figure 10: Estimated transitional organic crop acreage in Oregon, 2005

David Granatstein from the Washington State University Center for Sustaining Agriculture and Natural Resources (CSANR) notes that the preliminary statistics on 2005 acreage indicate a substantial jump in certified acres from 2004 to 2005 in Oregon (David Granatstein, personal communication).

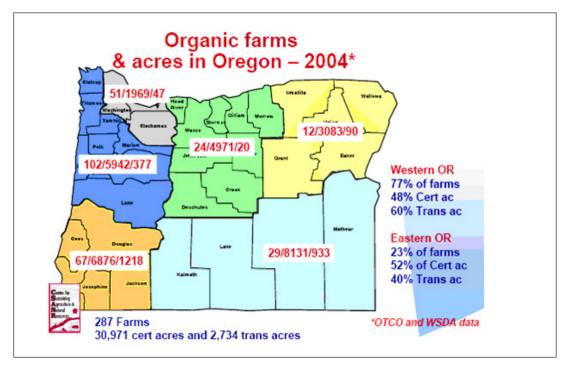


Figure 11: Number and acreage of organic farms in Oregon, 2004, Washington State University, (CSANR, 2005)

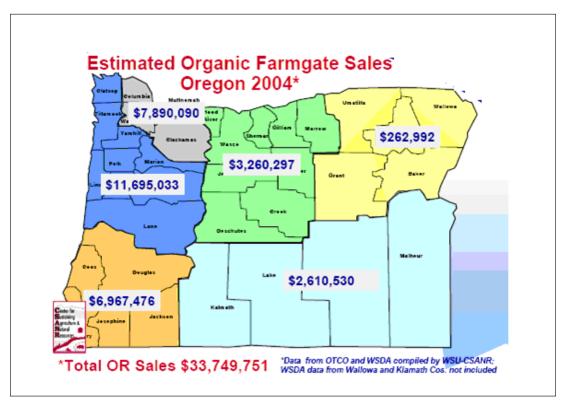


Figure 12: Estimated Organic Farmgate Sales in Oregon, 2004, Washington State University, (CSANR, 2005)

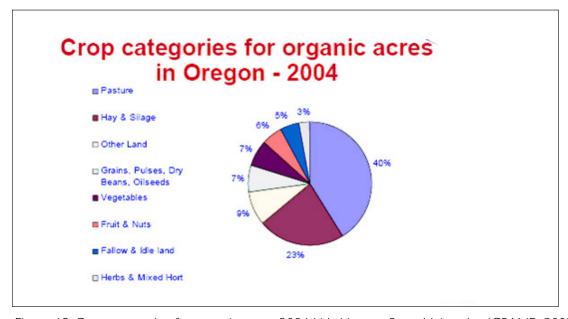


Figure 13 Crop categories for organic acres, 2004, Washington State University, (CSANR, 2005).

The dynamics of organic production and marketing has been changing over the past several years since the National Organic standards came into effect in 2002 and as large scale producers are moving into the organic market. These dynamics have affected the value of organic certification for smaller scale producers, who previously had often been able to distinguish their products through this certification. David Lively of Organically Grown Company has noted that some organic growers are beginning to talk about labor and other social aspects of production. As the national organic program has standardized organic certification and as the scale of production has grown, there is pressure to further differentiate organic product along lines other than production (David Lively, personal communication).

Salmon Safe

Salmon-Safe is a regional eco-label with more than 50,000 acres of farm and urban lands certified to date. Salmon-Safe also supports a retail campaign which has been featured in 200 supermarkets and natural food stores. Salmon-Safe and its certification partners, Low Input Viticulture and Enology (LIVE) and Oregon Tilth, have certified more than a third of Oregon's vineyard acreage, mostly in the Willamette Valley. More than 30,000 acres in farmland have been certified Salmon-Safe in the Willamette and Rogue basins of Oregon. These farms include both conventional and organic farms.

On a product, the Salmon-Safe logo refers to how the crop is produced – if a product is Salmon-Safe Certified, it means that the land was managed according to standards that are verified independently. Based on Salmon-Safe's certification process, an operation is considered Salmon-Safe when both its impact upon the aquatic ecosystem is assessed and any negative impacts on water quality and fish habitat are minimized. Salmon-Safe certification includes extensive on-site inspection by a qualified inspector to ensure that growers are meeting the standards which have been set.

Salmon-Safe foods may or may not be certified organic. While organic certification is primarily concerned with chemical inputs used in production, Salmon-Safe certification examines the overall affect of the farming system in its watershed. Salmon-Safe farms may use synthetic or naturally occurring pesticides and fertilizers that are chosen with consideration for having the least impact on aquatic ecosystems.

For all Salmon-Safe operations, program participation requires that Salmon-Safe be allowed to monitor practices on at least an annual basis. Participating operators also have agreed to disclose to Salmon-Safe any change in practices or crops being cultivated that materially affect the continued validity of the certification.

The development of the Salmon-Safe program was supported by several national foundations that fund efforts to use market incentives to promote ecologically sustainable agricultural practices. To sustain the program, Salmon-Safe typically asks operators to pay the cost of providing the certification, which can range from \$150 for a small vineyard in the Willamette Valley to more than \$20,000 for a large municipal park system with several hundred sites.

Discussion

As noted above, certified production does not represent the full range of good land management practices in the state. However, the growth trends in certified production and in demand for these products in the marketplace serve as an indicator of the interest in the marketplace for products which can claim to have been produced in environmentally and/or socially responsible ways.

The value of seeking certification is greater for producers seeking to enter larger volume markets, such as larger retail and institutional food service, as these purchasers are increasingly interested in being able to claim that the products they source have these values-added attributes. Given the difficulty of establishing personal relationships throughout the value chain in these larger volume channels, certification helps provide credibility for these claims, removing the onus from the purchaser to verify them individually.

In determining whether or not to pursue certification, producers weigh the costs of certification with the added benefit that this certification provides them in the marketplace. These factors will vary depending on the type of crop or product, scale of production, and the types of market channels that producers are seeking to access. As noted above, as organic certification has become nationally standardized and as large volume producers have entered the organic marketplace, the value of this certification for smaller producers has become more uncertain, particularly for producers that are primarily operating in direct markets. For larger producers seeking to access the larger volume markets, however, some kind of certification is increasingly useful, as purchasers respond to demand for "sustainable" products and seek ways to "outsource" the verification of claims.

These purchasers are also responding to market demand for products that are locally grown or produced, and several purchasers have noted that adding information about product origin to the information provided through certification and labeling systems would be helpful (Food Alliance Food Service panel discussion, February 17, 2006).

Attachment 3:

Growing Stronger Advisory Committee Members

Katy Coba

Director

Oregon Department of Agriculture

Bill Boggess

Professor and Head of the Department of Agricultural and Resource Economics President of the OSU Faculty Senate Extension & Experiment Station Communications Oregon State University

Mike Hibbard

Director
Institute for Policy Research
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Peter Bloome

Oregon Environmental Council Board Member Oregon Environmental Council Agricultural Advisory Committee Member Associate Director Emeritus, Oregon State University Extension Service

Iim McMullen

President and CEO
Tillamook County Creamery Association
Member, Association of Agricultural Cooperatives of Oregon

Chris Schreiner

Quality Control Director OregonTilth

Karen Lewotsky

Certification Director Food Alliance

Martin Goebel

President
Sustainable Northwest

Tom Gilpatrick

Director
Food Industry Leadership Center
Portland State University

Martha Works

Professor and Chair Department of Geography Portland State University



Attachment 4:

Individuals and Organizations Contacted

Rick Ahn, Emerald Valley Kitchen

Krista Anderson, New Seasons Markets

Roberta Anderson, Food Alliance

Paul Arbuthnot, retired CEO, Sunshine Dairy

Laura Barton, Oregon Department of Agriculture

Matthew Buck, Assistant Director, Food Alliance

Laurie Demeritt, COO, Hartmann Group

Carl Duyn, Grocery Purchasing, Zupans Markets

Paul Enderle, Grocery Purchasing, Fred Meyer

Scott Exo, Executive Director, Food Alliance

Chris Feise, Washington State University Center for Sustaining Agriculture & Natural Resources

Steve Fox, Fred Meyer, VP of Grocery Merchandising

David Granatstein, Washington State University Center for Sustaining Agriculture and Natural Resources

Tom Gillpatrick, Food Industry Leadership Center, Portland State University

Martin Goebel, President, Sustainable Northwest

Doc and Connie Hatfield, Country Natural Beef

James Honey, Program Officer, Sustainable Northwest

Dylan Gillis, Produce Purchasing, Food Front

Will Homer, Painted Hills Beef

Dan Kent, Salmon Safe

Rachel Knapp, Body Care, Food Front

David Lakey, Cardinal Nutrition

Greene Lawson, Hot Lips Pizza

Larry Lev, Agriculture and Resource Economics, OSU

David Lively, Organically Grown Company

Meg Merrick, Institute for Metropolitan Studies, Portland State University

Jason Millek, Produce Purchasing, WINCO

Nancy Moon Eiler, Fred Meyer

Organic Valley Coop (by email only; no name included in correspondence)

Michelle Peterman, Marketing Director, Kettle Foods

Jerry Reser, Resers Fine Foods

Heather Saam, NW Certification Coordinator, Food Alliance

Chris Schreiner, Oregon Tilth

Marci Schuman, Portland Energy Conservation Inc (PECI) (formerly PSU Food Contract committee member)

Dresden Skees-Gregory, Portland State Sustainable Facilities Coordinator

Debra Sohm, Ecotrust Food and Farms Program

Pam Wiley, VP for Programs and Operations, Sustainable Northwest

David Williams, CEO, Shorebank Pacific

Ariel Varney, Sodexho

Additional information gathered at Oregon Tilth 2006 Annual Meeting, and from Food Alliance food service panel discussion, Feb 17, 2006 (participants included Aramark, Bon Appetit, Sodexho, Charlie's Produce)

In addition, the report drew on information presented in student projects in PSU graduate level class on Sustainable Practices, Winter 2006. Students interviewed representatives from WinCo, New Seasons Markets, Burgerville, Oregon Tilth, Food Alliance, Higgins Restaurant, Ecotrust and other organizations.

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Many individuals and organizations gave generously of their time and wisdom in the process of developing this report. In addition to those cited in the report, the author would like to extend special thanks to the Oregon Environmental Council's "Growing Stronger" Advisory Committee members for their advice and guidance. Working with OEC's Agriculture Program Director Allison Hensey and former Program Director Karen Lewotsky was also a delight, and the author would like to thank them for the opportunity to contribute to OEC's "Growing Stronger" project.



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