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Farmers Markets and Direct Marketing in the Western US: Market Trends and Linkages with Food System Issues

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Farmers markets have a rich history in the market development of agriculture in the United States, and they are re-emerging as a key community-based option for local food marketing. They represented an important community food distribution system long before the rise of the retail agribusiness system and began to re-emerge (following years of decline) after the passage of the Farmer-to-Consumer Direct Marketing Act of 1976. Some argue that they are now integral part of the food community linking consumers and producers through business and social relationships. Others view markets as an appropriate distribution channel for entrepreneurial and small farmers who strive to establish a loyal customer base through personal selling and quality differentiated (vs. low margin commodity) marketing strategies.

The increasing number of direct market channels, including farmers markets, are growing at a persistently high rate since the mid-1990s. These suggest several other bigger food system discussions: the role of farmers markets and producer-focused value chains as “engines of grassroots economic development”, direct markets as a mechanism to address access to healthier foods, and as a market access point for small, beginning or socially disadvantaged producers who might otherwise face barriers to conventional supply chains. The growth and contribution of farmers markets and other direct marketing channels has led to more studies in the literature and encouraged us to update an earlier study on farmers markets and direct marketing in the Western US.

To organize our discussion on markets, we will first attempt to understand the supply side (number of producers and marketing channels) and demand side factors (growth in sales, as well as number and types of potential consumers), as well as how direct marketing activities influence the communities where such activities are established and growing. The major objective of this article is to summarize the findings of recent analyses pertaining to farmers markets and direct marketing by agricultural producers, including the US Ag Census, the USDA’s Agricultural Marketing Service study of farmers markets and community-based studies.

The second purpose of this article is to present a brief review of the literature on the role of farmers markets on key public issues such as community development and dietary and health outcomes. By synthesizing what has been reported on farmers markets and direct marketing, we can assess the potential role of such channels in the region, and whether the role is expanding into new realms of rural and economic development.

Direct Marketing by Producers

Data on direct marketing from the 2007 Ag Census shows some interesting trends in the US and Western region. First, it may be important to note what the USDA currently includes in its measures. The USDA National Agricultural Statistics Service asks producers to estimate, the value of agricultural products sold directly to consumers for human consumption, thereby

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excluding some popular, directed marketed products such as cut flowers and nursery products. It should also be noted that these estimates exclude farms that report less than \$1000 in gross commercial sales. Given Low and Vogel's (2011) conclusions that direct markets are more important for small farmers, this censoring may be important. Moreover, if farmers and ranchers sell their products through vertically integrated cooperatives, value chains, or regional hubs, those sales are also absent from the numbers presented here. Still, we can learn from what data is available on the sample collected for direct marketing, including roadside stands, farmers markets, pick-your-own sites, and other consumer-focused markets.

For the US, the value of agricultural products directly sold by producers under the above definition increased from \$812,204,000 to \$1,211,270,000 between 2002 and 2007, an increase of 49%. The number of farms direct marketing also increased from 116,733 to 136,817 (a 6.2% growth in farms), and in comparison, total farm numbers grew more slowly from 2.12 million to 2.2 million (3.4% increase). The revenue from direct sales on the average farm is very small in absolute terms, though it did increase significantly in relative terms from \$6,958 to \$8,853 (27% higher than five years earlier).

As previously noted by Diamond and Soto (2009), the increase in direct marketing among most Western states is even more dramatic than US trends (Table 1). Between 2002 and 2007, 3,572 farms began direct marketing in this region (29,721 farms up from 26,149) so that, on average, 8.5% of all farms now do some direct marketing (compared to 6.2% for the US as a whole). In this region, the greatest share of farms direct marketing are in Oregon (16.3%) and Washington (13.8%), which could at least partially be explained by their longer growing seasons for fresh produce. But, this growth may also be fueled by the number of marketing support programs and infrastructure investments made (according to information available in the USDA Food compass, <http://www.usda.gov/maps/maps/kyfcompassmap.htm>). The greatest growth in number of farms direct marketing was in New Mexico and Utah (both with over 40% growth in numbers of farms participating since 2002).

This increase in activity resulted in a 50% increase in direct sales revenues for the region as sales jumped from \$219.8 to \$330.2 million in 2007. Similarly, the average sales per farm increased from \$6,612 to \$7,884 (which translates to 19.2% growth). These revenues include channels outside of farmers markets as well, including roadside stands, Community Supported Agriculture programs (where members buy shares early in the season in exchange for weekly box deliveries) and pick-your-own farms, illustrating the significant shift to more diverse, customer-driven marketing strategies by Western producers. Among states, California accounts for 49% of the direct marketing revenues. As of 2007, Oregon, Washington, Colorado, New Mexico and Utah all exceeded \$10 million dollars in direct sales as well. The greatest growth in direct marketing revenues originated with farms in Oregon (163%), New Mexico (70%), Utah (44%) and California (42%). Still, the average sales per farm grew by over 160% in Oregon, 30% in California, 19% in New Mexico and 2% in Utah, while the average sales per farm increased by an average of 20% when one considers the whole region. Still, Diamond and Soto (2009) show that in terms of relative importance, the Western region trails other parts of the U.S. (the Northeast and Mid-Atlantic) significantly, perhaps because of the extreme rurality of some areas of the West, or the climatic challenges of running markets in areas where the growing seasons are cut short by late Spring and early fall frosts.

Table 1- Direct Marketing Trends in Western US States, 2002-07

State	Direct Mktg (Farms, 2007)	Direct Mktg (Farms, 2002)	Direct Mktg (% of Farms, 2007)	Direct Market Value 2002 (\$,000)	Direct Market Value, 2007 (\$,000)	Share of Value through Direct Mkt (2007)	Direct Market Sales Growth (2002-2007)	Direct Market Value/ Farm (2002)	Direct Market Value/ Farm (2007)
Arizona	863	711	5.5%	\$3,911	\$5,247	0.16%	34.16%	\$5,501	\$6,080
California	7,068	6,436	8.7%	\$114,356	\$162,896	0.48%	42.45%	\$17,768	\$23,047
Colorado	2,777	2,343	7.5%	\$17,406	\$22,584	0.37%	29.75%	\$7,429	\$8,133
Idaho	2,076	1,632	8.2%	\$5,889	\$7,840	0.14%	33.13%	\$3,609	\$3,776
Montana	1,287	1,164	4.4%	\$4,523	\$6,321	0.23%	39.75%	\$3,886	\$4,911
Nevada	200	246	6.4%	\$1,606	\$1,074	0.21%	-33.13%	\$6,528	\$5,372
New Mexico	1,529	1,071	7.3%	\$6,582	\$11,193	0.51%	70.05%	\$6,146	\$7,320
Oregon	6,274	6,383	16.3%	\$21,411	\$56,362	1.29%	163.24%	\$3,354	\$8,983
Utah	1,584	1,115	9.5%	\$6,983	\$10,098	0.71%	44.61%	\$6,262	\$6,375
Washington	5,418	4,527	13.8%	\$34,753	\$43,537	0.64%	25.28%	\$7,677	\$8,036
Wyoming	645	521	5.8%	\$2,381	\$3,025	0.26%	27.05%	\$4,570	\$4,690
Western Region	29,721	26,149	8.5%	\$219,800	\$330,200	0.61%	50.2%	\$6,612	\$7,884
USA	136,817	116,733	6.2%	\$812,204	\$1,211,270	0.41%	49.13%	\$6,958	\$8,853

Table 2: County in each State with Greatest Revenues from Direct Marketing and Greatest Growth in Direct Marketing between 2002 and 2007

State/County	Direct Marketing Revenues (2007, \$,000s)	State/County	Growth in Direct Marketing Revenues (2002-2007, %)
Wyoming/Park	520	Wyoming/Sweetwater	316
Montana/Ravalli	576	California/Colusa	344
Nevada/Churchill	652	Nevada/Churchill	359
New Mexico/Bernalillo	1393	Idaho/Bonneville	497
Arizona/Maricopa	1549	Arizona/Graham	723
Idaho/Canyon	1829	Colorado/Archuleta	890
Utah/Utah	2824	Montana/Judith Basin	1113
Washington/Franklin	4086	Oregon/Jackson	1291
Colorado/Mesa	4729	Utah/Garfield	1675
Oregon/Jackson	13920	Washington/Franklin	1684
California/Fresno	17170	New Mexico/Union	3500

All of the top five counties with respect to total direct marketing revenues are in California, which is not surprising given its longer seasons and climates that can produce a wide variety of higher value, consumer-ready products (fruits, vegetables, nuts). Still, the highest growth in direct marketing activities is in states that have seen significant population growth (U.S. Census) and show a large number of marketing innovations in the USDA Food compass cited above (such as regional food hubs, value-added enterprises). These include New Mexico, Washington, Utah and Oregon, (all reporting upwards of 1000% growth).

Table 2 shows the largest direct marketing counties in each state (ranked by total direct marketing revenues) and the county with the highest growth in direct marketing revenues in each state from 2002 to 2007. Since these are the counties where direct marketing farms are located, rather than where those products are sold, it may be interesting to look at common characteristics of these counties. Two of the counties with the largest amount of direct sales, Jackson County, Oregon, and Fresno County, California, are heavily urban-influenced as defined by the USDA-ERS urban influence codes. It is likely that some of this supply may “spillover” to other adjacent or nearby counties, especially since many consumer-dense areas have little production remaining in their counties. More specifically, in the case of Mesa County in Colorado, there is direct evidence from market reports that a number of fruit farms in that county ship as far as 350 miles to reach the Front Range markets of Colorado and Southern Wyoming where most of the consumer buying power is located but colder winters inhibit fruit tree production. When one turns to the counties with high growth in direct marketing, some counties near urban areas also stand out (Franklin and Jackson). Others are in areas where there have been projects to support the development of cooperatives and farmers markets over the past decade (as mapped in the USDA Know your Farmer, Know your Food website: accessed March 2013).

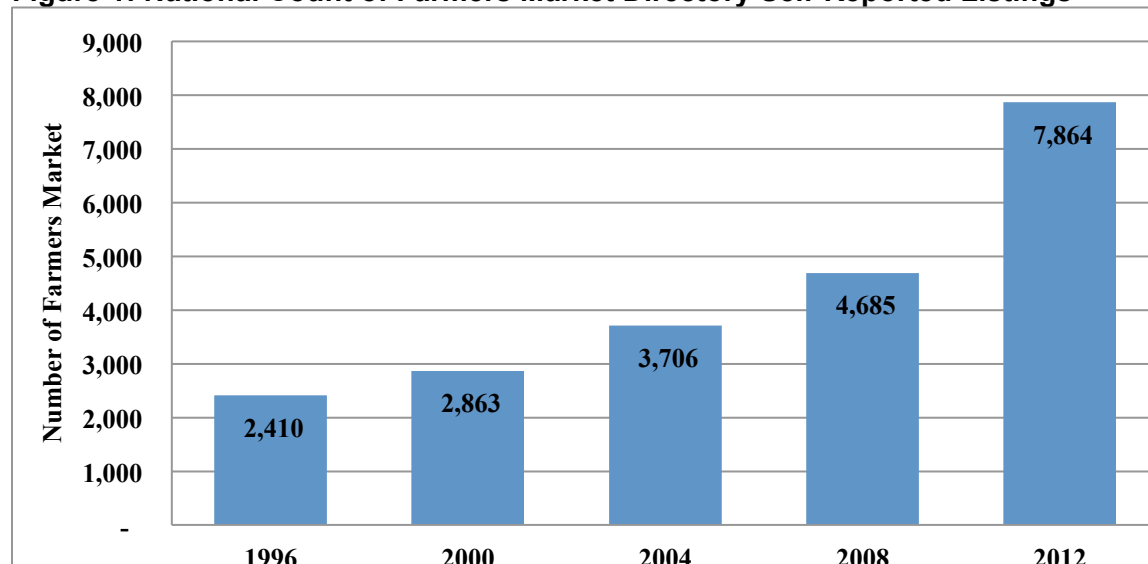
Similar to the states themselves, there is a great degree of difference in the direct marketing revenues among the counties, with the Pacific Coast showing the greatest direct marketing activity. States that reported high population growth during the mid-2000’s, such as Utah, Washington and Colorado, also appear to have significant direct marketing activity and growth.

For example, Utah and Colorado both have seen sustained population growth, concentrated in corridors along the Rocky Mountains, have been identified as best places to live by magazines such as Money, and also have some of the highest growth direct sales counties.

Farmers Market Trends

The presence, growth and new creation of farmers markets is one of the most apparent signals of consumer and producer interest in developing direct markets. Still, since there are some organizational costs in establishing such markets, such markets will only continue or develop in the presence of sufficient consumer demand (and word of mouth about traffic and sales by participating vendors). The USDA's Agricultural Marketing Service recent analysis of a 2009 survey of market managers led them to conclude, "...growth in farmers market numbers, although still increasing, is continuing at a slower pace. The reduction in the growth rate of farmers markets may indicate that farmers markets are approaching a saturation point. . . raising questions about whether current levels of growth are sustainable (p. 78)." (Ragland and Tropp, 2009)

Figure 1: National Count of Farmers Market Directory Self-Reported Listings



Source: USDA-AMS-Marketing Services Division, 2012

Note: These are self-reported, and because responses are voluntary, may not be an accurate census of farmers markets. Still, they are one of the best cited measures of general trends in this sector

They continue to say that market managers should therefore be careful to understand their visitors and meet their expectations for a variety of key criteria that may affect their frequency of trips and purchasing behavior. Onozaka et al (2010) reported that a significant share of consumers value and purchase local food. Those choosing to shop in direct markets report relatively higher concern about the importance of protecting local farmland and supporting the local economy; therefore, this could be seen as a signal to policy makers of the relationship between the interest in local foods and emerging public policy issues.

The number of farmers markets in the United States has grown dramatically, increasing 226 percent from 1996 to 2012, with over 7,800 farmers markets operating in the United States (Figure 1). Farmers markets also serve as a key direct marketing channel for small and mid-

size US producers (Diamond and Soto, 2009), so with recent growth in their numbers, one could perceive that the prevalence of direct sales may boost farm income.

Table 3: Number of Markets listed in USDA's National Farmers Market Directory

State	2004	2006	2008	2010	2012
Arizona	40	52	52	75	82
California	459	496	505	580	827
Colorado	62	77	95	94	166
Idaho	26	25	36	61	67
Montana	28	34	40	46	65
Nevada	16	25	19	32	38
New Mexico	42	43	45	58	69
Oregon	74	86	89	120	164
Utah	20	21	27	32	37
Washington	87	97	97	136	148
Wyoming	13	18	29	31	43

Table 3 depicts the number of markets listed in USDA's National Farmers Market Directory. In 2012, the lion's share of these markets is located in California followed by Colorado and Oregon. The Western States considered here comprise about 22% of the total count of farmers markets in the US in 2012. Since 2004, number of farmers markets has grown dramatically, representing 97% growth from 2004 to 2012. The increasing number of farmers markets may indicate growing importance and significance of direct marketing to producers in Western states.

Farmers Markets' Role in the Health of Communities

There are a number of studies that have attempted to evaluate and quantify the contribution of farmers markets and other direct marketing channels to a myriad of community development issues including public health, economic development and resiliency, as well as compilations that summarize key points of these studies (Martinez et al, 2009; Brown and Miller, 2008). Here we summarize highlights of these studies to suggest community implications that may be result from continued growth of such markets in the Western region.

Story et al (2009) note that the American Public Health Association (APHA) and American Medical Association (AMA) have both passed resolutions concerning the linkage of a sustainable agriculture and food system to the public health of our nation, "... (where) a sustainable food system has been defined as one that . . . encourages local production and distribution infrastructures; makes nutritious food available, accessible, and affordable to all; is humane and just—protecting farmers and other workers, consumers, and communities (p. 223)". Beyond this national group, numerous state and local based wellness organizations perceive benefits of having a viable farmers markets and direct marketing (Kaiser Permanente in California, Livewell Colorado, Oregon Public Health Institute).

Still, others see these conclusions as conjecture, so we are beginning to see more in-depth research on the role of farmers markets on dietary and health outcomes. Thilmany McFadden, and Low (2012) used secondary data to begin exploring whether there may be some interdependence between direct markets and the extent to which households in the US incorporate USDA's dietary guidelines in their daily diets. Specifically, the study used 2007

Census of Agriculture data and calculated the correlation between measures of local food marketing and health outcomes. They found out that direct sales, number of farmers markets and fruit and vegetable sales are negatively correlated with obesity and cardiovascular disease mortality rate; implying that the public health community's conjectures about the role of more fresh produce-laden direct markets on helping to lower adult obesity rate and the cardiovascular death rate are not without merit. However to understand the broader relationships between local food marketing and health outcomes, the authors of the study have pointed out that more research should be done by incorporating more variables like income, education and population.

Other studies have attempted to assess the positive health outcomes of increased local food consumption. By moving toward a more community tied food systems, high rates of unemployment rate and obesity can be reduced significantly (Conner and Levine, 2006). Low income children benefited more according to Chomitz, et al. (2010) when there is increased availability to healthy food and physical activity leading to reduced obesity. Lea (2005) argued that food that is locally obtained may be healthier because "they retain more nutrients than less fresh food."

Brown and Miller (2008) provided a fairly in-depth summary of the role those farmers markets may play in impacting farmers economic viability, the economies of the communities where markets exist, and in anchoring other local food system development activities taking place throughout the U.S. Hilchey, Lyson and Gillespie (2004) suggest that farmers markets enhance producers' business opportunities, foster business skills and have positive effects on producer-vendor families. For the broader community, they concluded that markets may have spillover and multiplier effects to other adjacent businesses on market day, support entrepreneurial start-ups in agriculture and food industries while supporting food nutrition, security and educational goals.

To examine the potential economic benefits of farmers markets and other producer-focused regional food project on communities, several studies report using regional input-output models (Gunter, Thilmany, and Sullins 2012). Examples include Hughes et al (2008) study that found farmers markets have a positive impact on the economy of West Virginia by creating more than 40 full time jobs and \$1.07 million in net economic impact to the state. Otto and Varner (2005) estimated Iowa benefited up to \$31.5 million from farmers markets. Cummings, et al. (1999) study on Ontario determined that farmers markets generated \$1 billion in secondary effects. However, many caution that the conclusions drawn from these studies must be used carefully, since assumptions about region impacted, net benefits of new marketing channels (which may draw activity from competing sectors) and potential to strengthen community economies are all very place-based questions.

There are also potential environmental benefits that are gained through local food systems, due to the shorter distance that food travels and the energy saved and reduced greenhouse emission. But, many researchers (including Martinez et al, 2010) argue that these results are inconclusive and transportation based full supply chain studies should be perused more in the future.

Conclusions

Martinez et al (2009) concluded that, "... findings are mixed on the impact of local food systems on local economic development and better nutrition levels among consumers, and sparse literature is so far inconclusive about whether localization reduces energy use or greenhouse gas emissions (page 3)." Generally, current trends suggest that farmers markets continue to grow in popularity as producers seek to personally connect with consumers. But, what seems

to be a more recent promotional tool for farmers markets are efforts made by partners in the economic development and public health communities. These partners' interest in using farmers market to address broader community issues, and evaluate outcomes that address a community's quality of life (jobs, health indicators), have encouraged them to bring new ideas and resources to farmers markets. But, if the sustainability of farmers markets is based on resources from these partners, it motivates the need to further explore the relationship between direct marketing, local economic development, and public health in data analysis, case study and evaluation activities related to direct markets.

This paper updates the 2004 study that documented the notable expansion of the farmers market sector in the Western U.S. (Thilmany and Watson, 2004). In addition to more reported direct marketing activity, there appears to be an expanding policy agenda that implicates farmers markets and other food system relocalization efforts as a key ingredient of community health. However, it bears repeating that one should be careful in interpreting these numbers for two reasons: 1) some of these increases are from very small starting base numbers for revenues; and, 2) some believe these numbers are still lower than what actually occurs because the types of farms that direct market are less likely to be reporting to the Ag Census.

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