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## **Marketing Local Foods by Food Cooperatives**

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*Selected Poster prepared for presentation at the International Association of Agricultural Economists (IAAE) Triennial Conference, Foz do Iguaçu, Brazil, 18-24 August, 2012.*

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## **Marketing Local Foods by Food Cooperatives**

### **Abstract**

Consumer interest in locally produced foods has been increasing and many grocery retailers and other businesses have been involved in marketing local foods to interested consumers. We study the business strategies that food consumer cooperatives in the U.S. use to promote local foods to their patrons. Data are collected from a national survey of the general managers of food cooperatives. This study's objectives are: 1) to analyze the types of business strategies and frequency of use for these business strategies to promote local foods and 2) to identify the types of food cooperatives that are more versus less intense users of these promotion strategies. Unlike previous studies, the emphasis for this study is on promotion/marketing strategies as opposed to sourcing/working with local farmers business strategies. We use principal component analysis and cluster analysis to group food co-ops based on their involvement with local food promotion activities. We find that food co-ops can be grouped into three main clusters based on the size of the food co-op and its location. These findings can be used by food cooperatives and other local food retailers to attract consumers and increase local food sales.

*Key words:* food consumer cooperatives, local foods, consumers.

JEL: Q13

## **Introduction**

Local/regional food networks are a collaborative effort to build more locally-based, self-reliant food economies. These local food networks emphasize sustainable food production, processing, distribution, and consumption that are integrated to enhance the economic, environmental and social health in a particular location and are considered to be a part of the more global sustainability movement.

Local food networks include organizations that produce, distribute, and promote locally produced products. While grocery retailers, restaurants, and other organizations may include locally produced products, it is food consumer co-ops, Community Supported Agriculture (CSA), and farmers markets that are uniquely positioned in the local food networks and capable of placing greater emphasis on locally produced products. One of the key aspects is the emphasis on “local sourcing” which is defined as the consumers’ preference to buy locally produced goods and services.

Local food networks are an alternative business model to the global corporate models where producers and consumers are separated through a chain of processors, manufacturers, shippers and retailers. As the food industry grows, the consumers are not always able to assess the quality of food. Conversely, local food networks have re-established the direct relationship between producers and consumers to increase the quality characteristics of the products which include freshness and durability but also include characteristics such as the method and location of producing. Traditional grocery retailers are also responding to high demand for local products, but there is a potential for consumer cooperatives to have advantage in scale, customer focus, and credible community orientation for locally produced products.

Consumer cooperatives and in particular food consumer cooperatives have increased in importance. Over the past decade, it is estimated that about 300 to 350 food co-op stores have been operating in the U.S.; these food co-ops have been serving nearly 150,000 households throughout the U.S. (Deller et al. 2009). Cooperatives that operate retail stores are predominantly single-store operations and several of them have expanded into non-grocery businesses such as restaurants and delis. The store-based food cooperatives are usually characterized by their strong support for natural and organic foods, community activities, environmental sustainability, and local food systems.

According to Deller et al. (2009), food consumer cooperatives have a distinctly different business organization than the more traditional grocery stores. Most food cooperatives require a relatively small investment in an initial membership share, and an additional financial contribution, such as an annual membership fee. Investment in membership shares is considered a contribution to equity, while membership fees are usually treated as income. Consumer cooperatives do not have to pay income taxes on member-based income if they distribute that income back to members either as cash or as allocated patronage. However, they will need to pay income taxes on non-member income and unallocated member income. Food cooperative members vote on a one member has one vote basis and elect a board of directors from its members. Many of the current store-based food consumer cooperatives originally encouraged members to work voluntarily in the store in return for a member discount, but more recently, most food co-op stores hire professional management and paid staff.

Consumer interest in locally produced foods has been increasing in the U.S. The popular press has frequently published articles on local foods. In addition, two recent best-selling books (Kingsolver, Hopp, and Kingsolver 2007; Pollan 2008) show the growing interest in sourcing

local food products by making the case for going “local.” According to a nation-wide survey by the Hartman Group (2008), many consumers define local in terms of distance from their home with 50% define local as made or produced within 100 miles, while 37% of consumers understood local to mean made or produced in their state. The survey also indicates that consumer interest in locally produced foods was driven primarily by their belief that these products are healthier.

The literature on consumer preferences for locally produced food is limited. Darby et al. (2008) analyzed stated preference data for locally produced foods among consumers in Ohio; they concluded that demand for local products exists and that the value consumers place on local production is separate from other factors such as farm size and product freshness. In particular, the authors found that that consumers prefer locally grown over U.S. grown, even when freshness is held constant, and are willing to pay almost double for a product from a closer location. Their study concentrated on shoppers at farmers markets as opposed to consumers at traditional retail groceries. In another study, Hu, Woods, and Bastin (2009) examined consumer acceptance and willingness to pay for three nonconventional attributes including whether the product was produced locally. The results show that local products generally receive positive willingness to pay across all products, clearly showing consumers’ preference toward locally produced products. A subsequent study identified a local premium for a prototypical processed product (blackberry jam) and also identified differences in consumer preferences for local products associated with various types of products (Batte et al. 2009). Other studies by Hardesty (2008) and Brown and Miller (2008) have considered the growing role of local food networks. They explored the economic impacts that farmers markets and Community Supported Agriculture (CSA) have on the communities, consumers, and producers. Using case studies of a

number of farmers markets in both rural and urban areas, and in three states from the east to west coasts, Gillespie et al. (2007) found that farmers markets play an important role in building local food networks. These studies concentrated on two elements of the local food networks: farmers markets and CSAs.

The role of food consumer cooperatives, a third major component of local food networks, to supply locally produced products has not been examined in the literature even though the popularity of food co-ops with consumers has been increasing over time. Our goal is fill the gap in the literature by examining the role of food consumer co-ops in strengthening the local food networks and the distribution of locally produced products. Food co-ops serve as important business organizations that contribute to the increase in the density of local food networks and relations. Food co-ops also expand the reach of local food markets to a variety of consumers: from “core” to “periphery” consumers. The economic interactions that take place at food co-ops are combined with social interactions that make them valued community institutions.

Our goal is to identify the emerging business practices in promoting local foods to food co-op patrons. The specific objectives are 1) to determine which supply chain management strategies are most used and effective for food cooperatives and 2) to group food cooperatives into “clusters” based on the extent of supply chain engagement that they demonstrate and promote local foods. To our knowledge, this is the first in-depth national study of the role that food cooperatives play in the local food networks. The contribution of this study is to examine the promotion/marketing strategies for food cooperatives and how effective they are in being used to reach food co-op consumers.

## **Data**

Data are obtained from a national survey of general managers for food consumer cooperatives. This is a unique national survey conducted by the authors and funded by a USDA-Rural Development grant. The first part of the survey questionnaire includes questions about the procurement of local foods and relations with farmers. Specific questions include supply chain strategies to manage and assist farmers with production and planning activities and the relative advantages/disadvantages of working with local farmers when food cooperatives are compared to other grocers. The second part includes questions about the promotion of local foods. Specific questions ask about the approaches that food cooperatives use to promote local products to their patrons such as advertising via labels, farmer photos and stories as well as organizing farmer-led sampling, on-site festivals, deli features, etc. The survey was conducted in 2010-2011 with to a population of about 350 food cooperatives across the US. There are 61 responses received from food cooperatives, which represents a response rate of 17.4%.

Cooperatives range in founding dates from 1936 to 2003 with the majority being formed between 1970 and 1979. The co-ops have on average 4,407 members. The approximate percent of sales to non-members represents a range from 13% to 85% with an average of 41% from 33 responses. The average number of full time employees is 66.

The percent of annual gross sales that comes from local products varies depending on the department. For example, the meat department has the highest percent of local products (45.21%) whereas health/nutrition/cosmetics have the lowest (5.78%). Dairy products, fresh produce, and deli have about 30% of their products sources from local providers. On average, 21.84% of the gross annual sales for the cooperative are locally produced. On average, food cooperatives work with 9.12 dairy farmers, 21.45 producers of fresh products, and 6.19 meat producers. The percent of local products has stayed the same or increased over the last two years



for almost all cooperatives. Many cooperatives also believe that there is somewhat to significant competition among farmers to introduce new products. About 67% to 80% of cooperatives also view grocery stores as competing to introduce local products.

Overall, food cooperatives state that they have an advantage working with local farmers when compared to other non-coop grocery stores in the area. They also use all business functions and strategies at least to some extent when working with local growers/suppliers. Food cooperatives also use several approaches to promote local products, including farmer photos and stories, food sampling, newsletters and social media, etc.

### **Marketing Strategies**

Marketing is the process which connects producers and consumers. Food marketing has four components, called the “four Ps” of marketing mix: product, price, promotion and place. When retailers decide what type of new foods to introduce to consumers, they develop either new food products or extend an existing food product. For products, brand loyalty and product attributes play an important role in consumer demand. Price is also an important component of marketing as retailers have some flexibility in charging variable price margins for different products. Promotion can be done in store, out of store, and on the package. Place refers to where products are located in the store, including end caps, top or bottom shelf, etc. Place is especially important in promoting products in the store.

Marketing strategies allow businesses to concentrate their limited resources on the greatest opportunities to increase their sales and achieve a sustainable competitive advantage over their competitors. Food co-ops use several marketing strategies to promote local products, including farmer photos and stories, food sampling, newsletters and social media, etc. The most

frequently used promotion strategies include newsletters, social media/Facebook, and websites to disseminate information about local products, with over half of the food co-ops reporting frequent or extensive use of these strategies (table 1). Co-ops also provide staff training on local products, samplings, annual merchandising features, sponsorship of off-site local food events, on-site festivals, and deli features to increase consumer awareness of local foods. Other less frequently used strategies include point-of-purchase (POP) farmer photos, POP farmer stories, POP farm brands, and end caps or special displays. Overall, most food co-ops use these strategies to increase consumer awareness of local products and effectively promote them to consumers.

### **Statistical Methodology**

We seek to determine the key clusters of food cooperatives based on the frequency of use for business strategies to promote local foods. We use principal components analysis and a segmentation technique to estimate specific clusters that each food cooperative belongs to depending on the type of activities they engage in. After the clusters are determined, we examine common characteristics of the food cooperatives that influence the intensity of use of particular activities aimed at facilitating and increasing local food consumption. Our goal is to group food cooperatives into homogenous clusters based on their intensity of use when using strategies in promoting local foods.

### **Results and Discussion**

Principal components analysis is a data reduction technique used to reduce the dimensions of the 16 business strategies into a few components. The first four components which have eigenvalues

above 1 explain 65.7% of the variation in the data and were retained. Then the factor loadings are calculated which reflect the correlation of the original business functions with each of the components (table 2). Based on the original variables with factor loadings of greater than 0.3, we name the four components: sampling and merchandizing (with highest loadings on samplings, annual merchandizing features, cross merchandizing, and newsletters), festivals and training (with highest loadings on on-site festivals, staff training on local products, and blogs), promoting farmers (with highest loadings on POP farmer photos, POP farmer stories, and on-site festivals), and social media (with highest loadings on end caps or special display, social media/Facebook, and website).

The four components are then used in the Ward's cluster analysis to determine the number of clusters based on the similarity in the frequency of use for these promotion strategies. Examining the dendrogram (not shown here), three clusters are selected to segment the food cooperatives. Using a k-means cluster analysis with the initial groupings from Ward's cluster analysis, the food cooperatives are grouped into three clusters.

Various food cooperatives' characteristics by cluster are reported in table 3. We notice that food co-ops are groups based on their size and geographic location. We name the clusters large food co-ops in the East and Midwest, large food co-ops in the West and Midwest, and small food co-ops. The large food co-ops have on average \$11 million to \$13.3 million in 2010 annual gross sales depending on where they are located. The large cooperatives have more employees and members, but similar percent of sales to non-members as the small cooperatives. Table 4 shows that food cooperatives have had similar experiences with respect to increases in the proportion of local foods sold, the competition among farmers to introduce new products, and the competition among other grocers to introduce new local categories.

After the cluster analysis was performed, we have checked for the intensity of use by business strategy (table 5). The results show that on average, large food co-ops in the West and Midwest parts of the U.S. are most intensely involved in using promotion/marketing strategies for local foods (3.22, indicating frequent use), followed by large food co-ops in the East and Midwest (2.38, indicating occasional to frequent use), in turn followed by small food co-ops (1.70, indicating minimal use). These seem to be consistent findings across the original variables that were used in the cluster analysis.

The results show that there exists a considerable variation in promotion strategies among food cooperatives across the US. The supply chain management activities critically depend on the food co-op size and geographic location. Larger cooperatives are better able to develop more sophisticated strategies and use them with higher frequency than smaller cooperatives. Also, the geographic location plays a critical role in the availability of local foods and the complexity of their distribution systems.

### **Concluding comments**

We identify several clusters of strategies used for local food marketing. These clusters are predominantly based on the extent and frequency with which the co-op is involved marketing local products. These clusters are further examined to differentiate the types of cooperatives that fall into each category based on their total value of sales, geographic location, year in business, and other cooperative characteristics. The results also show that when compared to other grocers, larger food co-ops and those located in the East, West, and Midwest regions are more involved in marketing of local foods and creating innovative strategies to promote local foods to their patrons. These findings help food cooperatives to identify the strategies that are typically most

successful in their promotion of local foods. As a result, food cooperatives will be able to develop better supply chain management and new cooperatives will be better aware of viable business models corresponding to their local food supplier environment. We show the key role that food cooperatives play in the local food networks and the strategies most successful to connect local producers with consumers using the food co-op business model.

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Table 1. Business strategies food co-ops use to promote local products to consumers

Business strategy	Frequency of use				
	Minimal	Occasional	Frequent	Extensive	Intensive <sup>a</sup>
POP farmer photos	20.0%	38.3%	26.7%	15.0%	41.7%
POP farmer stories	21.7%	41.7%	23.3%	13.3%	36.7%
POP farm brands	29.3%	39.7%	24.1%	6.9%	31.0%
End caps or special displays	18.3%	51.7%	23.3%	6.7%	30.0%
Samplings	5.0%	40.0%	35.0%	20.0%	55.0%
Annual merchandising features	27.6%	32.8%	27.6%	12.1%	39.7%
Cross merchandising	26.7%	40.0%	26.7%	6.7%	33.3%
Farmer-led sampling	31.7%	48.3%	13.3%	6.7%	20.0%
Newsletters	3.3%	16.7%	56.7%	23.3%	80.0%
Social media/Facebook etc.	11.7%	31.7%	43.3%	13.3%	56.7%
Website	8.3%	43.3%	35.0%	13.3%	48.3%
On-site festivals	33.9%	37.3%	22.0%	6.8%	28.8%
Deli features	32.1%	39.3%	21.4%	7.1%	28.6%
Sponsorship of off-site local food events	25.0%	38.3%	28.3%	8.3%	36.7%
Staff training on local products	21.7%	28.3%	38.3%	11.7%	50.0%
Blogs	62.5%	19.6%	12.5%	5.4%	17.9%

<sup>a</sup> The category intensive represents the sum of the frequent and extensive response categories.



Table 2. Factor loadings of promoting local foods to food co-op patrons

Category	Sampling and Merchandizing	Festivals and Training	Promoting farmers	Social media	Unexplained variation
POP farmer photos	0.001	-0.007	0.640	0.070	0.105
POP farmer stories	0.009	0.037	0.586	-0.025	0.191
POP farm brands	0.143	0.286	0.127	-0.458	0.297
End caps or special displays	0.291	0.092	0.121	-0.062	0.395
Samplings	0.378	0.088	0.024	-0.186	0.283
Annual merchandising features	0.334	-0.100	0.078	0.022	0.555
Cross merchandising	0.355	-0.104	0.095	0.274	0.252
Farmer-led sampling	0.271	0.174	0.103	-0.151	0.346
Newsletters	0.463	-0.152	-0.178	-0.034	0.387
Social media/Facebook etc.	0.255	0.047	-0.171	0.363	0.379
Website	-0.001	0.110	0.116	0.651	0.223
On-site festivals	0.174	0.401	-0.311	-0.046	0.387
Deli features	0.077	0.266	0.030	0.184	0.576
Sponsorship of off-site local food events	0.333	-0.057	0.080	0.058	0.488
Staff training on local products	-0.100	0.582	0.087	-0.034	0.225
Blogs	-0.067	0.489	-0.057	0.226	0.397

Notes: The factor loadings are based on principal components analysis with four principal components and the varimax rotation. Loadings above 0.3 in absolute value are highlighted.

Table 3. Food cooperatives' characteristics by clusters

	Cluster 1 Large food co-ops East and Midwest	Cluster 2 Large food co-ops West and Midwest	Cluster 3 Small food co-ops
Number of stores	1.25	1.22	1.05
Annual gross sales 2007	8,626,362	9,464,764	1,452,543
Annual gross sales 2008	9,298,555	11,200,000	2,037,428
Annual gross sales 2009	9,893,000	12,100,000	2,193,603
Annual gross sales 2010	11,000,000	13,300,000	2,506,016
Year coop founded	1974	1974	1980
Number of members	5,624	7,344	2,456
Percent of sales to non- members	39.42	46.11	35.16
Number of employees and management FTE	76.50	97.78	19.79
Local food within ____ miles	132.28	104.00	122.22
Local food within state	0.47	0.44	0.44
Local food within geographic region	0.34	0.44	0.44
Percent sales from local products	23.36	23.71	13.73
Number of local grower- vendors	81.94	83.38	37.39
Atlantic region	38%	10%	26%
South region	9%	0%	0%
Midwest region	34%	40%	53%
Plains region	3%	0%	16%
West region	13%	40%	5%

Table 4. Food cooperatives' characteristics by clusters

	Cluster 1 Large food co-ops East and Midwest	Cluster 2 Large food co-ops West and Midwest	Cluster 3 Small food co-ops
<i>Change in percent of local foods for <sup>a</sup></i>			
Dairy products	4.03	4.10	4.12
Fresh produce	4.00	4.10	4.28
Meats	4.13	4.20	4.08
Packaged goods	3.74	3.80	3.33
Health/nutrition/cosmetics	3.74	3.44	3.22
<i>Competition among farmers to introduce new local products <sup>b</sup></i>			
Meat products	2.13	2.40	2.60
Dairy	2.24	2.30	2.06
Fresh produce	3.00	3.20	2.72
Grocery	1.84	2.70	1.50
<i>Competition from other grocers to introduce new local categories <sup>b</sup></i>			
Meat	2.31	2.70	2.00
Dairy	2.32	3.10	2.06
Fresh produce	2.90	3.40	2.06
Grocery	2.07	3.10	1.82

<sup>a</sup> The values for this variable are: 1 = declined substantially, 2 = declined somewhat, 3 = stayed about the same, 4 = increased somewhat, 5 = increased substantially.

<sup>b</sup> The values for these variables are: 1 = none or minor, 2 = some but stable, 3 = increasing but not significant, 4 = significant.

Table 5. Frequency of use for promotion business strategies by cluster

Category <sup>a</sup>	Cluster 1 Large food co-ops East and Midwest	Cluster 2 Large food co-ops West and Midwest	Cluster 3 Small food co-ops
<i>Sampling and merchandising</i>			
Samplings	2.75	3.90	2.05
Annual merchandising features	2.44	2.90	1.37
Cross merchandising	2.22	3.30	1.42
Newsletters	3.06	3.50	2.63
<i>Festivals and training</i>			
On-site festivals	1.94	3.10	1.58
Staff training on local products	2.53	3.50	1.68
Blogs	1.59	2.50	1.00
<i>Promoting farmers</i>			
POP farmer photos	2.72	3.00	1.53
POP farmer stories	2.53	3.10	1.53
On-site festivals	1.94	3.10	1.58
<i>Social media</i>			
POP farm brands	2.09	3.10	1.53
Social media/Facebook etc.	2.53	3.60	2.21
Website	2.66	3.30	2.00
Average	2.38	3.22	1.70

<sup>a</sup> The values for these variables are: 1 = minimal, 2 = occasional, 3 = frequent, 4 = extensive.