

# Zwick Center for Food and Resource Policy

## Outreach Report No. 24

### Research Reveals 'Evolution' of Local and Organic Terms

**Ben Campbell**

**November 25, 2013**



Charles J. Zwick Center for Food and Resource Policy  
Department of Agricultural and Resource Economics  
College of Agriculture and Natural Resources  
1376 Storrs Road, Unit 4021  
Storrs, CT 06269-4021  
Phone: (860) 486-2836  
Fax: (860) 486-1932  
Contact: [ZwickCenter@uconn.edu](mailto:ZwickCenter@uconn.edu)  
[www.zwickcenter.uconn.edu](http://www.zwickcenter.uconn.edu)

During the last couple decades the terms organic and local have gone mainstream. The power of these words on the marketplace is undeniable. A walk-through most grocery stores and supermarkets shows the appeal of products sold under these labels. Whole sections of stores are set aside for organic and local products, with stores competing to be seen as the most organic and local.

However, these terms elicit a plethora of both positive and negative reactions from consumers. Thinking back 20 years ago, the means to define a word was the use of a dictionary. As such, our starting point to understanding these terms is the Merriam-Webster dictionary. Organic is defined as “grown or made without the use of artificial chemicals.” This definition is specific in nature. The true nature of organic is often more complex than this simple dictionary definition, given the requirements to be certified organic. But as has been noted in prior studies, consumers generally recognize the broad issues about organic but routinely do not put forth the energy to understand the complexities of producing organically.

On the other hand, local is defined as “relating to or occurring in a particular area, city, or town.” The specific geographic boundaries are laid out by particular states and the federal government. As defined by the U.S. government (H.R. 2419) local is “(I) the locality or region in which the final product is marketed, so that the total distance that the product is transported is less than 400 miles from the origin of the product” or “(II) the state in which the product is produced.” In similar fashion, the Canadian Food Inspection Agency recently implemented interim rules that changed the definition of local to a “food produced in the province or territory which it is sold” or “food sold across provincial borders within 50 km of the originating province or territory.” However, there is confusion over what defines local as noted by Martinez et al. [Economic Research Report #97 (2010)], “there is no consensus on a definition of “local” or “local food systems” in terms of the geographic distance between production and consumption.” This point is reiterated by Johnson et al. [Congressional Research Service #R42155] in 2013. Adding to the confusion is the myriad of state definitions , with some states having requirements for local labeling around a state based “buy local” campaign, while other states regulating the usage of the term local as well as all similar meaning terms. For instance, Connecticut General Statutes Section 22-38 defines that a product advertised as locally grown must be produced within CT or within a 10-mile radius of the point of sale.”

### **Local perception**

As most producers and retailers know, perception is reality, and perception often does not align with what occurs on the farm or is regulated by state and federal

governments. Case in point is the geographic boundaries consumers place on locally produced. A variety of boundaries permeate through the marketplace with consumers generally equating local to within a community or city, within a state, or within 100 miles (i.e. 100 mile diet). These definitions, by and large, fit with state and federal definitions. However, there is a small group of consumers that equate local to product of the U.S.; some consumers denoting local as worldwide. So when a business advertises produce as locally grown, the question must be asked does the retailer definition align with the consumer definition. There is importance to aligning marketing strategies with consumer perception. If a set of consumers equate local as from my community and the retailer has local as from the state, there is no added benefit of labeling the product as local while the retailer might have paid a higher price for the “local” product. Assuming one or two consumers that frequent the retailer have this view then there may be little harm, but if a larger percentage of consumers share this view then the retailer might be better off investing in produce that more accurately fits with the perception of consumers that shop at the retailer.

With respect to perceptions of production, consumers have both accurate and inaccurate perceptions of these terms. For instance, a forthcoming article in the Canadian Journal of Agricultural Economics (by Ben Campbell, University of Connecticut; Saneliso Mhlanga, Vineland Research and Innovation Centre; and Isabelle Lesschaeve, Vineland Research and Innovation Centre;) found that Canadian consumers have both accurate and inaccurate views of local and organic terminology. For instance, approximately three-quarters consumers correctly indicated that local and organic directly imply “decreased miles to transport product” and “no synthetic pesticide,” respectively. However, 12 percent of consumers perceived organic as local, while 17 percent perceived local as organic. There were also other misperceptions such as 16 percent of consumers indicating local implies no pesticides used, while 15 percent indicated organic was produced closer to home. In a similar study coming out of collaboration from the University of Connecticut (Ben Campbell), Texas A&M University (Charlie Hall), Michigan State University (Bridget Behe), University of Florida (Hayk Khachatryan) and Purdue University (Jennifer Dennis) using a different sample of consumers from the U.S. and Canada, researchers found very similar results. The underlying theme of these studies is that consumers understand the “dictionary” definition of local and organic, but often assign incorrect production practices to characterize the terms. Importantly, there seems to be a blurring of the line between local and organic with around 20 percent of consumers linking the terms as the same. This point has not been lost on industry. As noted by the Canadian Organic Growers website, “Sadly, ‘local’ and ‘organic’ have had the misfortune of entering our vocabulary as separate concepts and then getting jumbled into one, unclear concept.”

There are other attributes, often termed credence attributes, which are perceived to characterize local and organic, but are not easily verified before or after purchase. Such attributes include better tasting, more nutritious, better for the environment, etc. When a consumer is making their purchase decision, it does not matter whether these credence attributes are true, what matters is the consumer's perception of their validity. Within some of the most highly publicized credence attributes – better for the environment, better tasting, more nutritious, and less pesticide residue – both the terms local and organic are frequently cited as having these characteristics. For instance, approximately 50 percent of consumers perceive local and organic as being better for the environment, while 40 percent associate the terms with better tasting and more nutritious.



DREAMSTIME.COM

Even with consumer perceptions of credence attributes, there tends to be an evolution occurring with respect to how people view local and organic. Since the inception of organic as a mainstream item, organic has been marketed to a large extent as helping the world through less pesticide use and more environmentally friendly production practices, while local has been viewed as helping the community and providing fresher product. New research coming out of the University of Connecticut (Lingqiao Qi and Ben Campbell) is showing that consumers that are altruistic (e.g. care about others) and biospheric (e.g. care about the environment) are more likely to purchase local over organic, while consumers that are more egoistic (e.g. care more about themselves) are more likely to purchase organic over local. This transformation seems to indicate that organic purchasers are focusing in on safety attributes, notably less pesticide residue, which would have a direct impact on the consumer. Local, on the other hand, seems to be expanding to fill the role of environmental stewardship, while also helping the community. The continued evolution of local and organic will be interesting over the next couple of years.

### **Impact on purchasing**

When we look at how the terms local and organic impact the purchasing decision, there is clear evidence that these terms do two things. First, they increase the likelihood of purchasing by the average consumer. Second, the average consumer is willing to pay a price-premium to purchase a local or

organic product. When making pricing and marketing decisions, we (academics, producers, and retailers) tend to focus on the price premium angle to denote a consumer's liking of, or aversion to, local and organic. This point is brought up in an article in HortScience (by Ben Campbell, University of Connecticut; Isabelle Lesschaeve and Amy Bowen, Vineland Research and Innovation Centre; Stephen Onufrey, Onufrey Group, LLC; Howard Moskowitz, Moskowitz Jacobs, Inc.; 2010) which says that price premiums are good, but increasing the chances of someone purchasing is also an important component of these terms, regardless of price premium. Based on the previous studies mentioned above, produce retailers (whether on-farm, farmers market, or larger retailer) need to realize that the terms local and organic are powerful words that can and do influence a consumer's purchase decision.



DREAMSTIME.COM



There seems to be a blurring of the line between local and organic with around 20 percent of consumers linking the terms as the same.

Normally, when talking about who buys local and organic product we talk about the average consumer. In reality, the market is made up of many different consumers but they generally coalesce into a couple of market segments, such as price sensitive, environmentally conscious, locality of production, quality and the "fuzzy group." The price sensitive group represents about 10-25 percent of the market and will be turned off by higher prices, such as price premiums. But that does not mean that purchasing local/organic is out of the question given there is no (or a small) price premium. The environmentally conscious segment makes up 5-20 percent of the market, while the locality segment makes up 0-10

percent of the market. Within these segments is where the highest probability of purchasing local and organic produce occurs. These segments are also where the highest willingness to pay occurs. However, within these segments is where the highest potential for consumers to substitute between local and organic occurs. For instance, there are core purchasers of local and organic that will purchase no matter the price; however, there is a more moderate group within each segment that will switch from local to organic and vice versa depending on price. So exorbitant premiums may not cause consumers to switch out of the local/organic category, but may cause substitution between local and organic.

The quality product segment is another 20-40 percent of consumers who are mostly driven by produce quality and packaging, while the “fuzzy” segment does not have a clear driver of purchase. Consumers within these segments tend to have a higher willingness to pay than the price-sensitive segment, but lower than that of the locality-of-production and environmentally-conscious segments.

When looking at the price premium associated with labeling produce as local and organic, generally research has found price premiums exist. The premium does vary by market segment. For instance, in the HortScience (2010) article mentioned above, the authors found that Canadian consumer’s likelihood of purchasing and willingness to pay a price premium is influenced by local and organic labeling, but it varies by market segment. One segment, for example, did not respond in any way to the Canada Organic, Foodland Ontario, or any other label. However, the largest impact was for one segment of the population termed by the research team as the “in organic we trust” segment. This segment responded favorably to all organic labels, especially the Canada Organic logo. Not only was the impact of the labels on purchasing high, but also this segment had an average willingness to pay across produce items of \$0.43/lb for produce labeled as Canada Organic. Interestingly, this segment also responded to local labeling with the “Foodland Ontario” label having an impact on the purchase decision and garnering a \$0.38/lb premium. With respect to certified Canada organic, there was a \$0.16/lb price premium overall, with one segment paying up to \$0.43/lb. The impact on likelihood of purchase and willingness to pay vary from product to product, but the same pattern emerges across studies.

### **New research**

The impact of local and organic remains a fascinating topic for research and study. This article focuses on work I have been a part of while and provides general overview of the past research on local and organic. Currently, considerable resources are being devoted to trying to understand local and organic consumers and what drives their purchasing. This research is centered at universities, governmental, and the industry level.

However, there are lessons that can be gained from examining what has been done in the past. As producers and retailers, understanding your consumer is essential. A common theme heard throughout the business and academic world is that consumers can and should be educated on the subtle points of local and organic. However, in order to educate we need to know what the consumer knows and does not know, along with what are the motivations behind the purchase decision. Even after gathering this information, successfully educating or changing behavior can be challenging given consumers are bombarded with information from various outlets.

Perhaps a more efficient mechanism is to recognize that consumers are different, but by in large fall into one of several market segments. Then by understanding which market segment shops at a particular retail location, marketing strategies (and even educational strategies) can be implemented to address issues consumers have on a more personal level.

Ben Campbell is Assistant Professor and Extension Economist, Department of Agriculture and Resource Economics, University of Connecticut, [ben.campbell@uconn.edu](mailto:ben.campbell@uconn.edu).