Consumers’ Willingness to Pay for Value-Added Agricultural Products and response to How the Covid-19 Pandemic affects Agricultural Purchases

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Abstract

Researchers agree that value-added agriculture is an important strategy to both agricultural entrepreneurship and rural development. Value-added commodities expand the customer base however, farmers have to identify how they respond to consumer preferences.

This research examines consumer attitudes and practices through focus groups. The focus group consumer participants represented five counties across North Carolina who purchase their agricultural products from local farms and farmers’ markets. During the early months of the Covid-19 pandemic, North Carolina was under a “stay at home” order which limited access to farmers’ markets and farms. This research also asked consumers how the Covid-19 pandemic affected the way they purchase agricultural products and their willingness to adopt to a food deliver service due to the Covid-19 Pandemic.

The majority of the focus group consumers were willing to pay 20%-25% more for locally valued-added products provided they were fresh, convenient, supported good health and also supported the local economies. In response to the Covid-19 pandemic, consumers significantly reduced trips to the farmer’s markets and grocery stores, adopted gardening, purchased in bulk, and raised concerns for healthier and safer products.

Background

Farmers are looking beyond commodity production to find new ways of generating income and diversifying their operations to increase profitability by providing additional income from agritourism and recreational services, direct-to-consumer sales, and sales of value-added and specialty products, including certified organic products (USDA, 2007). The Bureau of Economic Analysis reports that in 2012 value added contributed more than $201 Billion to the agricultural sector including $167 Billion from farming (2014). Researchers agree that value-added agriculture is an important strategy to both agricultural entrepreneurship and rural development (Lu & Dudensing, 2015; Coltrain, Barton and Boland, 2000; Kilkenny and Schluter, 2001).

The 2018 State Agriculture Overview lists 50,218 farms in North Carolina (USDA, 2018). Of these farms only 10,227 farms list farm income over $50,000 and 35,916 farms list income under $20,000. Net income per farm in the state has decreased from more than $63,000 (NCDA&CS Agricultural Statistics Division, 2015) to $57,042 (USDA, 2018). The North Carolina agricultural sector continues to contribute significantly to the state’s economy with more than $70 billion. The agricultural sector also accounts for 18% of the State’s income and employs over 17% of the work force (NCDA&CS Agricultural Statistics Division, 2015). However, during the early months of the Covid-19 pandemic, North Carolina was under a “stay at home” order which limited access to farmers’ markets and farms.

Value-added agriculture, as outlined in the USDA definition, is concerned with producers capturing a greater share of revenue. In fact, the economic impact of adding value beyond the farm gate is usually several times the value of agricultural production at the farm gate alone.

A simplified USDA (2015) definition of a value-added agricultural product is an agricultural commodity that has undergone a change in physical state or was produced in a manner that enhances the value of the agricultural commodity. Value-added commodities expand the customer base for the agricultural commodity and a greater portion of the revenue derived from the marketing, processing, or physical segregation of the agricultural commodity is available to the farmer (Lu & Dudensing, 2015). This USDA definition helps to characterize value-added strategies. It does not help farmers to identify how they respond to consumer preferences to expand the customer base or how they evaluate their economic feasibility. Ironically, responsiveness to shifting consumer preferences and economic competitiveness are the critical components of the business stability.

MAP & TABLES

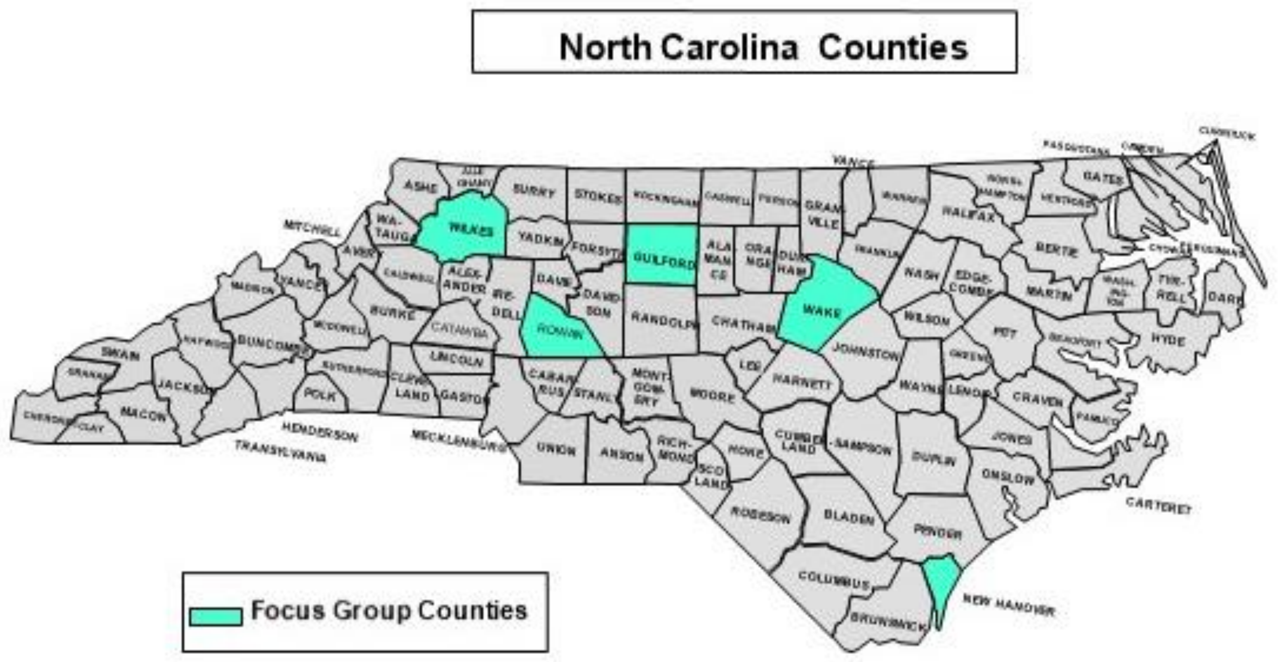

Table 1

If you are willing to pay more for a value-added product, how much extra are you willing to pay for any value added product of your choice?	
County	**Percent Range or Affirmation**
Guilford	20%-25%
New Hanover	Yes
Rowan	10%-50%
Wake	Yes
Wilkes	40%-50%
n=39	

Table 2

What would be the main reason you would support paying a little extra for a value-added product?	
County	**Responses**
Guilford	Convenience; Freshness; Money stays in community
New Hanover	Serves local communities
Rowan	Convenience; made locally
Wake	Freshness & Cleanliness
Wilkes	Convenience
n=39	

Table 3

Would you be willing to pay more for the convenience of these types of products? (i.e. washed/packaged fruit, shucked corn on the cob, ice cream)	
County	**Responses**
Guilford	Yes
New Hanover	No
Rowan	Yes
Wake	Yes
Wilkes	Yes
n=39	

Table 4

How has COVID-19 affected the way that you purchase agricultural and food products?	
County	**Responses**
Guilford	Started growing vegetables; online grocery order
New Hanover	Use Box delivery from farm; make foods from scratch like 20 year ago
Rowan	Farmers’ market open only once a week. Purchase boxes from farm
Wake	Not going to farmers’ market; less frequent trips to farmers market; started growing own vegetables
Wilkes	Negative: Mask Not fun going to farmers’ market; Buy in Box only farmers touch product
n=39	

Table 5

In the wake of COVID-19, are you willing to adopt an agricultural and/or food delivery service sourced by local farmers (within a 50-mile radius)?	
County	**Responses**
Guilford	Prefer on farm; like to touch and smell produce; ensure freshness
New Hanover	Only if farmers’ markets not open
Rowan	Yes
Wake	50% - Already do. 40%- No, to close to another market. 10% - too complicated
Wilkes	Yes
n=39	

Table 6

What type of products available from a farmer’s market, an on-farm store, or a pick-your-own farm operation are you willing to purchase that are not currently available in your area?	
County	**Responses**
Guilford	Peppers: jalapeno and banana
New Hanover	Kale and herbs
Rowan	Flowers, spices,
Wake	Cherries, popcorn and other varieties of apples
Wilkes	Grass fed beef; berries
n=39	

Note: All discussion question responses are recorded. Some responses are shown with ranges when numeric. “Yes” indicates that all of the participants who responded to this discussion question, responded with “Yes.”

Methodology

As part of a larger research project, researchers are trying to evaluate consumers’ attitudes towards value-added products. Focus groups were the first component of the research design and the findings are being used to identify consumers’ concerns and questions which will be incorporated into the main survey instrument. Because of the pandemic, questions were added to the discussion concerning how the pandemic affected the manner in which consumers purchased agricultural products and their willingness to adopt to a food deliver service due to the Covid-19 Pandemic. For this research poster, only certain questions were selected for consideration and analysis.

Cooperative extension offices were contacted across the state to request their participation in informal small focus group interviews with county consumers from the Western, Piedmont and Coastal regions of North Carolina (See Map). Consumers from the following counties responded: Guilford, New Hanover, Rowan, Wake, and Wilkes. Focus group conversations were conducted for each county through Zoom with video and audio recordings. Topics covered included consumers’ perceptions or beliefs regarding value-added agricultural products, consumers’ attitudes towards the quality of the products, consumers’ preference among other alternative products, consumers’ behavioral intensions to choose a product, and market constraints including budget and product availability.

Results and Conclusions

Tables 1-6 represent the focus group responses to select discussion questions. The majority of the focus group consumers were willing to pay 20%-25% more for locally valued-added products provided they were fresh, convenient, supported good health and also supported the local economies. In response to the Covid-19 pandemic, consumers significantly reduced trips to the farmer’s markets and grocery stores, adopted gardening, purchased in bulk, and raised concerns for healthier and safer products. Consumers provided a mix of responses to the question concerning “in the wake of the Covid-19 pandemic would they be will to adopt an agricultural and/or food delivery service sourced by local farmers.” The responses included: “Yes,” “Already enrolled,” “No,: and “Too complicated.” All respondents from one county (New Hanover) would be willing to pay more for the convenience of value-added products.

The consumers also listed a plethora of products that they would like to see available at the farmers’ markets that are not currently available in their area. The responses included berries, spices, herbs, cherries, peppers, (jalapeno & banana), persimmons, plums, popcorn and grass fed beef.

The focus group findings will be used to identify consumers’ concerns and questions which will be incorporated into the main survey instrument to be used to survey a larger consumer sample. These results will help understand factors influencing small farmers’ willingness to adopt and consumers’ willingness to pay for value-added agriculture in North Carolina.

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