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Assessment of the Dynamics of Value Added Production in Alabama

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Introduction

In recent years there has been an increasing interest in "value-added" agriculture, driven by changes in consumer's tastes and preferences and the desire of farmers to capture a larger share of the consumer dollar. "A broad definition of value added is to economically add value to a product by changing its current place, time and from one set of characteristics to other characteristics that are more preferred in the marketplace" (Boland, 2007). Value-added agricultural products such as organic and locally grown products have received considerable attention at both the national and global levels.

Organic food products are products that were grown without the use of conventional pesticides, artificial fertilizers, human waste, or sewage sludge, and that were processed without ionizing radiation or food additives. Many consumer surveys have shown that Organic products are perceived to be heather than conventionally produced foods and that there practices are better for the environment. This perception adds value to products that are produced in a manner that will maintain the qualities such as taste and nutritional value while preserving the soil's natural resources. Many consumers value the idea of buying locally because it allows them to support local farmers and they believe that locally-grown produce is fresher and can be purchased at its peak because it does not have to travel far.

The United States organic industry grow 17% overall in to 2005, reaching 14.6 billion in consumer sales. In 2005, Organic foods represent the largest

portion of the organic industry accounting for \$13.8 billion in consumer sales. "Organic foods represented 2.5% of total food sales in the United States in 2005, a 'penetration rate' that grow tremendously from 0.8% in 1997 when fairly comprehensive date was first available" (OTA,2005).

Although the organic industry significantly increased in the past 10 years it still accounts for less than 1% of total U.S. production. Although organic products make up such as small percentage of U.S. production the consumer's desire for healthier products may also be visible in the increase use of direct marketing channels such as farmers markets and community supported agriculture. Such marketing channels provide consumers value-added products while aiding the farmer in retaining 100% of the available profit.

The southeast contributes significantly to the production of agricultural products produced in the United States. The production of such products such as oranges, peanuts, tobacco, soybean and cotton are important to the United States and its trade partners. Therefore, the transition from conventionally produced foods to organic and other value-added techniques adopted by the world economy should also be reflected in the future of southern agricultural practices. While the southeast has begin to utilize direct marketing channels to reap the potential rewards of value added products the lack of consumer awareness and underdevelopment of the various marketing channels threatens to limit the growth of value added products, such as organic and locally grown goods. This assessment will focus primarily on the environmental and social "value-added"

products. That is it will look at the organic markets and locally grown markets in Alabama. It will assess consumer awareness of organic and locally grown products in Alabama and evaluates traditional and alternative marketing channels for these products in Alabama as compared to its neighboring states (Georgia, Tennessee, Mississippi and Florida).

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

Recent surveys have shown that the number of U.S. consumers that use organic products at least occasionally is on the rise. The Hartman Group's report, Organic Food & Beverage Trends 2004: Lifestyles, Language and Category Adoption found that the number of U.S. consumers using organic products increased from fifty-five percent in 2000 to sixty-six percent in 2004. Orainc Valley Family of Farms, Food and Farming 2004 reported that seven in ten Americans express some concerns about the health risks of pesticides, hormones, antibiotics and other chemicals used in food production. This increase in consumer's desire for organic foods can be explained by a variety of reasons. Consumers believe that organic foods are better for the environment and better their health. They also believe buying and using organic products are better for supporting small and local farmers. Other reasons consumers have begin to prefer organically grown products is their belief that they taste better and are of better quality. As a result of the growth in sales of organic foods increasing fifteen to twenty-one percent each year, organic products have begin to attract the attention of mainstream supermarkets such as Wal-Mart Stores Inc, The Kroger Co., Safeway Inc. and SuperValu Inc.

Due to the fact that organic food production is still a relatively recent phenomena there is limited information for the demand of these products other than on a country bases. However, the increased demand for locally grown products may be displayed by the growing number of farmers market's and other marketing channels for such products. In Alabama, the number of Farmer's Markets and Community Supported Agriculture programs has increased in recent years. "Since 1999, the number of farmers' markets in Alabama has increased from 17 to 95. Shoppers' desire to "Buy Fresh, Buy Local" has increased demand for produce and left many markets in need of additional growers." (Helms, 2007) FMA Director Don Wambles states that "demand is so high that, in some places, farmers are selling out in one or two hours, and customers who arrive later in the day are being turned away. He also clams that "there has been a big increase in consumption of locally grown produce [in Alabama]" (Treadwell, 2006); reporting that although Alabama experienced terrible weather in the 2006 growing season; some markets reported an increase in retail sales from 2005.

Alabama's neighboring states have also noticed an increase in demand for locally grown products. According to the Market Development Division of the Tennessee Department of Agriculture, Tennessee has experienced increasing consumer demand for local products. In addition to the increasing number of

farmers markets, Tennessee's numbers of grower cooperatives are steadily growing.

Value-Added Segment of Agriculture

The United States has over 2,128,574 farms and a national farm size of 444 acres. Alabama is represents less than 2.1% of U.S. farms with 43,000 farms and an average farm size of 200 acres. Alabama was ranked twenty-third among all states in market value of its agricultural products sold in 2002. In total, the market value of agricultural products sold was about 3.3 billion of that 8 million was sold directly to consumers. The market value for certified organic commodities in Alabama was \$186,000. Therefore, organic and locally grown products have a significant impact on Alabama's agricultural products sold. In order to get a clear picture of the increasing role that value added techniques such as locally grown and organic plays in Alabama, Table 1 include demographical information that can be used to evaluate the similarities of between Alabama and its neighbors.

Table 1: State Statistics, 2006

| | | Number of | % of U.S. | Average Farm |
|-------------|------------|-----------|-------------|--------------|
| State | Population | Farms | Total Farms | Size(acres) |
| Alabama | 4,599,030 | 43,000 | 2.1 | 200 |
| Florida | 18,089,888 | 41,000 | 2.0 | 244 |
| Georgia | 9,363,941 | 49,000 | 2.3 | 220 |
| Mississippi | 2,910,540 | 42,000 | 2.0 | 262 |
| Tennessee | 6,038,803 | 82,000 | 3.9 | 139 |

Source: U.S. Census Bureau

In order to understand the information presented in Table 2, we must cultivate an understanding of what the date represents. As a start, the market value of agricultural products is the value before taxes and production expenses of all products sold or removed from a farm no matter who received the payment. Market Value is equivalent to total sales. This figure includes sales by the operators as well as the value of any shares received by partners, landlords, contractors, or others associated with the operation. It also includes the value of commodities placed in the Commodity Credit Corporation loan program. However, market value of agricultural products sold does include payments received for participation in other federal farm programs.

Table 2. Market Value of Products Sold Direct and Organic: 1991 and 2002,

| State | Directly to individuals for Human Consumption (\$1,000) | | Certified Organically Produced Commodities (\$1,000) | |
|-------------|--|--------|--|-------|
| | 1997 | 2002 | 1997 | 2002 |
| Alabama | 6,487 | 8,039 | (NA) | 637 |
| Florida | 13,988 | 12,370 | (NA) | 5,913 |
| Georgia | 7,998 | 8,958 | (NA) | 621 |
| Mississippi | 3,012 | 7,506 | (NA) | 629 |
| Tennessee | 1,864 | 3,789 | (NA) | 2,239 |

Source: USDA, National Agricultural Statistics Service

The value of agricultural products sold directly to individuals for human consumption deals primarily with the foods purchased from roadside stands, farmers' markets, pick-your-own sites, etc. It excludes all non-food products such as nursery crops, cut flowers, and wool but includes livestock sales.

This data is practically useful for this assessment because it gives us some idea as to the amount of local grown products sold. As previously stated, buying locally through such avenues as farmers' markets and community support agricultural programs provide great advantages to communities. The fact, that this data provides dollar amounts for products sold directly to consumers tells us with little uncertainty that these products were locally produced.

The value of certified organically produced agricultural commodities was a new item to the 2002 census. This explains why there is no data available in this section for 1997. It represents the value of certified organically produced agricultural commodities sold from operation during 2002. According to the Census Bureau, this is the first time organic sales data was collected and published. These sales come from both crop and livestock production. These figures only include those products that were certified as organic by a by a government organization, grower organization, or similar entity.

Traditional Commodity Marketing Channels

Traditionally, commodity producers set goals for high yields and low costs of production in order to be "low cost" producers. Producers focus solely on quantity, paying little attention to the quality of their commodities. In the normal marketing channels the commodities often travel throw many channels and processing procedures before it reaches the end consumer. At each channel additional value is added to the product by different players. These marketing

channels include commodity assembly, processing, manufacturing, wholesale, and retail.

Commodity assembly occurs after production and is divided into two groups: local assemblers and terminal assemblers. Local assemblers are firms that collect agricultural products from producers and then redistribute tem to other firms in the marketing channel. Local assemblers do not usually change the physical form of the agricultural product although they often add value to products by performing sorting and grading functions. Terminal assemblers are firms that may purchase products directly from producers or from local assemblers. Terminal assemblers also add value to the product by sorting and grading functions. Terminal assemblers are larger and tend to handle larger volumes of products than local assemblers. They are often located at terminal markets that export agricultural commodities.

The next stage in the U.S. marketing channel system is initial processing. The processing stage the physical form of the product is changed. Sometimes skipping the processing channel products the raw farm commodities are changed again and additional value added at the further manufacturing stage. The end result of the manufacturing stage usually results in the product form purchased by consumers.

The Wholesaling Channel's primary functions include assembly of products produced by producers, initial processors, and food manufactures and the distribution of these products to retailers. A difference between local assemblers and wholesalers is the nature of the products. Although wholesalers perform and assembly function, the products they distribute tend to be transformed or have had value added to them in some way or another. In the retailing state firms come into direct contact with the final consumer. Firms at this state add value by assembling and offering an assortment of product form producers, initial processors, food manufactures, and wholesalers.

Although, the traditional marketing channels are an effective way to market non-differentiated products from larger producers these methods have been proven ineffective small farmers and organic producers. Small farmers find great difficulty in competing with larger farmers because of the smaller yield they have to market. Organic producers are facing a relatively new method of farming and although demand for organics is growing at a national and state level the organic industry are not yet large enough to compete in the traditional marketing channels.

Direct Marketing Channels for Value Added Products

Direct marketing refers to selling that is based on a personal, one-to-one relationship that ties farmers and consumers together. Many times this relationship is face-to-face, like at farmers' market. As previously stated, competing solely on price is rarely feasible for small scale farmers. Farmers who accept the lowest price for their products must have the lowest costs. Larger farms can almost always produce high volume, uniform products more cheaply than small farms.

While small farmers cannot effectively compete with large scale operations on price, their businesses are uniquely positioned to compete on other, non-price factors. Competing on non-price factors means that farmers must offer their customers something they want but cannot buy at eh grocery store, or anywhere else. These differences can include: convenience, flavor, variety and novelty.

There are a variety of ways that small scale farmers reach their customers with direct marketing. Direct marketing currently proves to be a good fit for small producers differentiating their products through organic production and targeting local markets. There are a variety of direct marketing channels that producers of these value-added products can use such as farmers' markets and community supported agriculture programs. While most producers that use direct marketing have relatively small operations, some larger producers are beginning to use direct marketing as at least a part of their overall market strategy. The two primary direct marketing channels used by Alabama producers of organic and locally grown products are farmers' markets and community supported agriculture programs.

Farmers' Markets in Alabama

A farmers' market is a market in which producers from a local area gather to sell their own produce directly to the public. By selling direct, the farmer is able to sell produce at retail. A farmers' market is a low-cost way for a beginning farmer to learn about retailing and to develop marketing skills. The cost to

participate is usually low, and at a good market there are plenty of customers. Farmers' markets have been increasing in popularity in the last two decades and many areas have one or more markets.

American farmers markets have increased dramatically form 1994 to 2002; the number of farmers markets has grown by 79%. This increase in farmers markets may result from a desire for an alternative to the conventional food supply which is indifferent toward wholesome, delicious food. For customers, the chief virtue of a farmers market is the superior flavor of the food (Planck, 2004). It is also important to note that the food at farmers' markets is often fresher than at the supermarket. This is because farmers bring the food directly from their farm to the market, typically less than 100 miles away.

The food at farmers' markets is often healthier. Despite the rapid growth of farmers' markets and their evident popularity in the U.S., the food market has moved on in the past thirty years, and farmers' markets as a whole have failed to keep pace. Many individual farmers' markets are stagnant and need reform. Farmers' markets are also facing increased competition Whole Foods, which opened its first health-food store in 1980 and to increased interest in organic foods section in large grocery chains such as Wal-Mart. However, this still remains a viable option for local small farmers due to the desire to buy local.

According to the Farmers Market Authority (FMA), statewide, about 950 farmers have been authorized by the FMA to participate in farmers' market nutrition programs. Alabama farmers' markets are open year round selling more

that twenty varieties of fruits, vegetables and nuts. "Since 1999, the number of farmers' markets in Alabama has increased from 17 to 95. Shoppers' desire to "Buy Fresh, Buy Local" has increased demand for produce and left many markets in need of additional growers" (Helms, 2007). FMA Director Don Wambles states that "demand is so high that, in some places, farmers are selling out in one or two hours, and customers who arrive later in the day are being turned away." The popularity of programs such as "buy local" and the consumer's desire for fresh produce has created a shortage of produce at some markets increasing the demand for producers. According to the Farmers' Market Coalition, the increase in farmers markets has benefited more than 1,544 small family farmers in Alabama.

The number of farmer's markets in Georgia has also increased in recent years. In 2004 there were 9 farmers market in Georgia in 2007 the number has increased to 12. 58% of the markets participate in the government nutrition programs such as WIC (The Special Supplemental Nutrition Program for Women, Infants, and Children). Over 19,000 United States farmers sell their produce only at farmers' market.

Farmers' Market Benefits and Challenges

Farmers' markets established a reliable customer base and have a low marketing start-up cost. At farmers' markets small lots of produce are acceptable creating an opportunity for small farmers. The one on one contact with customers gives the producer immediate feedback allows testing of product line. Producers have the opportunity to yield a better profit and also have the opportunity to network and form social contacts. Farms are able to promote their farm and products directly to consumers.

Some challenges associated with the use of farmers markets as a marketing channel such as a limited sales value since each contact is one to one. The farmer must take into account the time to prepare and be present at the market. People skills are necessary for producers selling at the farmers market. The producer must have retailing skills are also necessary and must establish a loyal customer base which may take a few years for a new market.

Community Supported Agriculture

Community Supported Agriculture is a rapidly emerging alternative to conventional food marketing that creates a direct marketing relationship between the consumer and the farm. Community Supported Agriculture or CSA consists of a community of individuals who pledge support to a farm operation so that the farmland becomes, the community's farm, with the growers and consumers providing mutual support and sharing the risks and benefits of food production. In most cases, members of the farm pledge in advance to cover the anticipated costs of the farm operation and farmer's salary. Members receive shares in the farm's rewards throughout the growing season, as well as the gained satisfaction from having the opportunity to participate directly in the food production process. "Shareholders" also share in the risks of farming, including poor harvests due to unfavorable weather or pests. By direct sales to

community members, who have provided the farmer with working capital in advance, growers receive better prices for their crops, gain some financial security, and are relieved of much of the burden of marketing.

The growth of Community Supported Agriculture operations in Alabama has been significant. The Alabama Sustainable Agriculture Networks has listed seven CSA and further research identified four possible subscription farmers. A number of CSA are offering products year round, diversifying their offerings to include "winter" vegetables. Statistics on the overall value and volume of CSA production in Alabama are not currently available. The conditions that support farmers markets provide similar support to CSA's and subscription farmers including other support provided by regional programs and increasing demand for locally grown products. As the number of CSA's continues to grow, the competition may help to ensure strong performance and distribution services.

Community Support Agriculture Programs Benefits and Challenges

Some benefits to CSA's are that farmers receive money before the season starts for seed, inputs, supplies, etc. Farmers markets in the off-season to recruit new members and is able to concentrate on production during the season. The relationships with shareholders are at least one season long, and may extend for years afterwards. A final benefit is that the community shares the risk of farming with support and possibly labor.

In order to provide shareholders with diversity, farmers often produce 40-50 crops throughout the season Farmers must have enough labor because crops are continually being planted, harvested, cleaned, sorted, and packed. If the location of the farm is near enough to the customers, on-farm pickup is the least burdensome for the farmer; otherwise, delivery sites must be established. Producers must also be aware that too much produce or too much unfamiliar produce will cause shareholders to drop out of a CSA.

Challenges and Opportunities for Traditional and Direct Marketing Channel

Traditional marketing channels provide little advantage to current organic producers because it is still a growing phenomenon. The traditional marketing channels are difficult for small producers to penetrate because of the lack of large quantities available. If organic products were to enter the traditional marketing system they would be community with non-differentiated products which are typically less expensive. However, as the demand for organic products continues to increase traditional marketing channels may be of interest to larger scale producers of organic products. The country has already begun to see interest from larger cooperation's in organic products.

In contrast to traditional markets, direct marketing channels offer a great deal of benefits to the small organic and local producer. In Community Support Agriculture Programs the producers share the risk with consumers. By directly marketing their products to consumers producers have the opportunity to charge premium price because they have avoid intermediaries that demand a portion of the potential profit. The use of farmers' markets by producers creates a product mix by the other vendors. This mix provides a large variety of crops and cultivates a healthy competitive market.

Recommendations

Although, the organic industry has seen increasing growth it still makes up a relatively small portion of the United States economy. This tend is also true in Alabama, while there is evidence of a change the market for socially and environmentally responsible products is still in its early developmental stages. There are a number of direct marketing channels that are not being used to full potential that could provide additional befits to both producers and consumers. Some examples of these are cooperative stores, direct marketing to restaurants and the food service industry. This assessment provides a snapshot into the current condition of organic and locally grown products.

To develop the direct marketing channels Alabama must improve consumer awareness by using promotion strategies. The creation of such programs as the buy fresh buy local campaigns seeks to increase this awareness. Alabama should continue to promote such campaigns through media advertising, utilization of the internet and participating in public interest events.

Conclusion

The increase interest in value added products such as organic and locally produced products have been a result the increasing value consumers place on

socially and environmentally responsible agricultural practices. Even though this is an increasing sector of agriculture that over possible benefits to small farmers it is still relatively underdeveloped. This paper evaluated the traditional and direct marketing channels as to the benefits, challenges and opportunities they provide for organic products and locally grown products. It found that farmers' markets and CSA are the most popular direct marketing channels used in Alabama. Even with the growth, the lack of consumer awareness and underdevelopment products, such as organic and locally grown goods in Alabama. Comparing Alabama to its neighbor found similar findings, the lack of data indicates that some states may be less developed then Alabama and they may utilize different direct marketing channels.

Alabama should better utilize existing marketing channels, specifically alternative markets. In order to improve consumer awareness Alabama must by use promotions strategies such as media advertising, internet utilization and participation in public interest events.

References

- Allen, Jennifer H., <u>Assessing the Market Dynamics of "Value-Added"</u>

 <u>Agriculture and Food Businesses in Oregon: Challenges and Opportunities.</u> Dec. 2006.
- Boland, Mike. What is Value-added Agriculture? 20 Sept. 2007. http://www.agmrc.org/agmrc/business/gettingstarted/whatisvalueaddedag.htm
- Farmers Market Authority, <u>State of Alabama</u>. Farmers Markets By County. 12 Oct. 2007. http://www.fma.state.al.us/MapFarmerMarket.htm
- Food and Agriculture Organization, World Markets for Gorganic Fruit and Vegetables: Opportunities for Developing Countries in the Production and Export of Organic Horticulural Cops. 2007
- Fortune, Laura. <u>Locally Grown Makes Tennessee's Farmers Market Attractive.</u>
 "Media Release", Tennessee Department of Agriculture Market
 Development Division. 1 4 Aug 2006.
 http://picktnproducts.org/news/08142006.html
- Helms, Jeff. <u>Demand For Farmers Markets On Rise in Alabama</u>. "Alabama Farmers Federation". 23 April, 2007.
- Lev, Larry. <u>Segmented Markets Opportunities for Individual Producers: Five Observations.</u> 29 July 2000, http://www.farmfoundation.org/tampa/lev.pdf.
- Muzzi, Doreen. <u>Value-added commodities promising</u>, "South East Farm Press" 7
 Aug.2002. http://southeastfarmpress.com/mag/farming_valueadded_
 commodities_promising
- Organic Trade Association's 2006 Manufacturer Survey, <u>U.S. Organic Industry</u>

 <u>Overview.</u>13 October 2007, http://www.ota.com/pics/documents/short%20overview%20MMS.pdf
- Planck, Nina. <u>Farmers' Markets and Beyond: Expanding the Market for Local Foods.</u> 17 Sept, 2004. http://www.yale.edu/agrarianstudies/papers/FMandBeyond.pdf
- Sauer, Patricia and Sullivan, Preston, <u>Alternative Agronomic Crops.</u> Dec 2000. http://www.attra.org/attra-pub/PDF/altcrops.pdf

- Treadwell, Jaine. <u>Farmers markets benefit consumers</u>. "The Messenger." 12 Aug 2006. http://www.troymessenger.com/articles/2006/08/14/news/newsss04.txt
- USDA, National Agricultural Statistics Service. <u>2002 Census Of Agriculture-State</u>
 <u>Date.</u> "Market Value of Agricultural Products Sold Including Direct and Organic: 2002 and 1997. P United States 261
- Wysocki, Allen F. <u>University of Florida IFAS Extension</u>. "Major Alternative Marketing Channels in the U.S. Food System" 19 Oct 2007.