



## 1999 Cotton Management Economic Notes

June 16, 1999

Volume 7, Number 2, Statewide

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### Where is the Value Added in Agriculture?

In 1997, U.S. consumers purchased \$561 billion dollars of food products produced by what is known as the agribusiness sector of our economy. Agribusiness is often described as including firms that: a) provide inputs for production agriculture, b) produce raw commodities on the farm or ranch, and c) transform raw agricultural commodities to consumer ready goods. The accompanying figure (see reverse) illustrates how these three agribusiness areas contributed to the value of total food expenditures from 1950 to 1997.

In 1950, 40.9 percent of the \$308 billion in retail food expenditures could be attributed to the total farm value. By 1997, however, this figure slipped to only 21.4 percent. During this period, the value added beyond the farm gate or the transformation of raw agricultural commodities to consumer ready food products received essentially all of the \$253 billion real or inflation adjusted dollar growth in total food expenditures.

Because the value of off-farm inputs like seeds, fuel, fertilizer, chemicals, and equipment has increased,

*the value added contribution of a dollar spent on food for the farm has slipped from 22.8¢ in 1950 to only 8.6¢ in 1997.* This decline at the farm gate has occurred in spite of large production increases for many raw agricultural commodities. For example, between 1950 and 1997 U.S. corn, cotton, and wheat production increased 206, 90, and 148 percent, respectively (USDA, Agricultural Statistics). But over this same period the real value of production for corn, cotton, and wheat declined by 26, 56, and 40 percent, respectively. Advances in production technology have increased on-farm productivity and total output, but the total value of farm goods has remained flat or even declined. Clearly, producing more raw product of a commodity does not ensure that the total farm value received in the aggregate will increase, or that local communities will have economic growth.

Total food expenditures have increased at an average annual inflation adjusted rate of 1.3 percent from 1950 to 1997, while the average annual change in gross farm sales has been -0.1 percent. At the same time, the value of off-farm inputs has increased at an average annual rate of 0.3 percent, while the actual value contributed by the farm has dropped -0.8 percent annually.

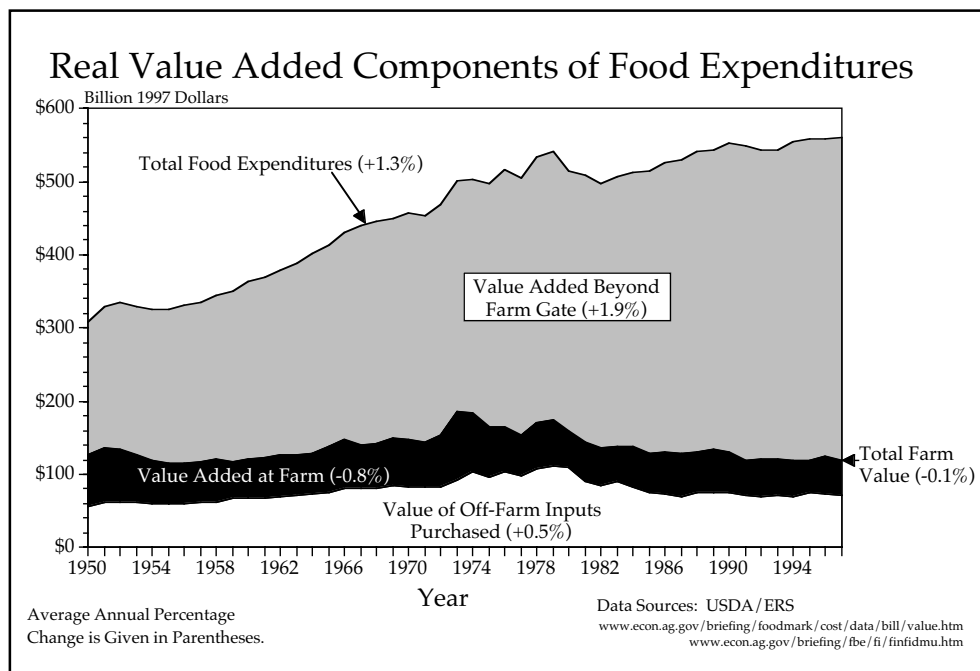
Much of the growth in value added beyond the farm gate can be attributed to an increase in demand for convenience oriented and away-from-home food products. Away-from-home food includes food items purchased at restaurants, drive-through windows, hospitals, schools, and other institutions. Between 1963 and 1997, these away-from-home food purchases increased from 24.3 to 40.4 percent of total food expenditures.

The farm share of each consumer dollar spent on food and clothing varies greatly by product. In

Recent Prices (June 16, 1999)	Upland (¢/lb)	Pima (ELS) (¢/lb)
<b>Spot - uncompressed</b>	50.26	80.25
<b>Oct '99 Futures</b>	56.37	
<b>Dec '99 Futures</b>	55.74	
<b>Dec '00 Futures</b>	58.80	
<b>Adj. World Price</b>	44.07	

Note: Upland Spot for Desert SW grade 31-3, staple 35, add 300 points for compressed bales, Pima Spot for DSW grade 03, staple 46,

1997, the total farm value share was 46 percent for fresh eggs, 37 percent for fluid milk, 36 percent for meat products, 21 percent for fresh vegetables, 18 percent for fresh fruit, and 7 percent for bakery and cereal products. Expenditure figures from the *Statistical Abstract of the United States* and cotton use estimates from *Cotton Counts Its Customers* indicate that the **total farm value share is only 2.3 percent of each retail dollar spent on apparel and household textile products.**



### Considerations for Moving Beyond the Farm Gate

Economic considerations to analyze before integrating forward into the production of consumer ready products include: labor availability, price premium/discount, diversification and risk issues, and technology/processing cost issues.

**Labor:** Transforming raw agricultural products into consumer ready goods requires managerial expertise, industrial skilled labor, packaging, transportation, rent, business taxes, and many other costs. Labor is by far the largest resource component in taking products from the farm gate to the consumer. In 1997, labor contributed to almost 50 percent of the value added beyond the farm gate. In 1950, production agriculture alone accounted for over 16 percent of U.S. workers. Today production agriculture accounts for only 1.7 percent of the civilian workforce, while other areas of agribusiness account for over 15 percent of our workforce. Clearly, a labor pool with needed skills and affordable supply is a paramount consideration for any value-added activities beyond the farm gate.

**Price Premium/Discount:** The price premium or discount that a consumer ready retail product will command is directly related to product uniqueness, quality and consistency, consumer demand and demographics, and spatial factors. Obtaining a price

premium usually requires a track record of established quality and reputation that will set your brand apart from other brands. Also, even if your quality is “top brand” not every market segment is likely interested in paying a premium. Consumer demand needs to be correctly estimated for the target market identified. New entrants should also anticipate that many established food processors will price and promote at a loss in competing markets for several months in order to maintain their market share.

**Diversification and Risk Issues:** In addition to economic growth potential, value-added activities can help diversify the economic base of producers and rural communities. Retail prices tend to be more “sticky” than wholesale prices, resulting in a more stable economic base. Financial benchmarks like Treasury Bonds or the S&P 500 offer useful comparisons for the degree of diversification and return that a value-added enterprise can offer for agricultural producers.

**Technology/Processing Costs:** Cost issues related to processing technology and economies of size largely determine the overall competitive position of your product versus competing firms. Because a large portion of processing costs are sunk into plant and equipment costs, competitors of established plants will not hesitate to undercut the bids of new market entrants if they have lower per unit operating costs.