

# Policy Matters

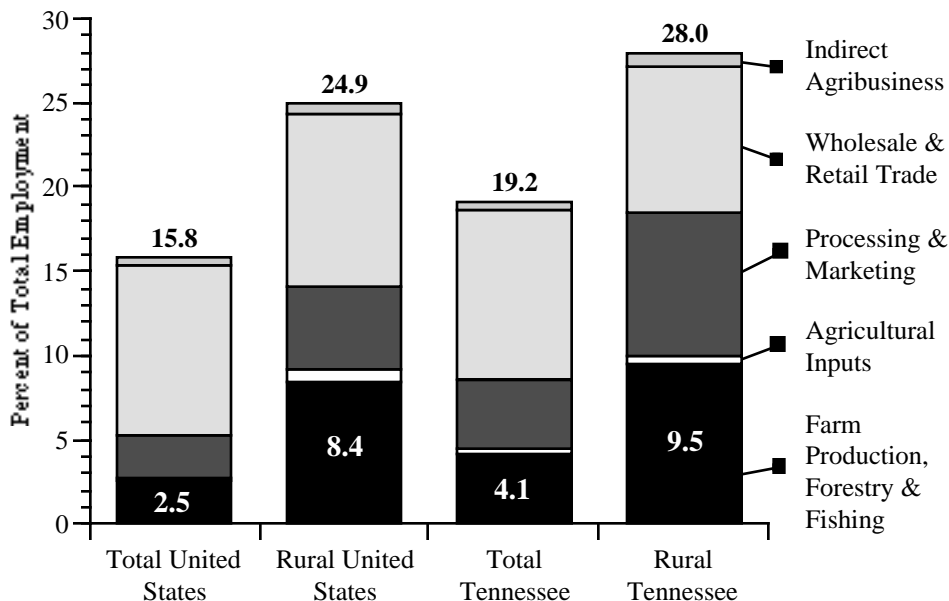
## Reaching Beyond The Farm Gate

Comparing snapshots of agriculture from decades ago and today, it is easy to see the changes which have occurred in the agricultural sector. Like agriculture throughout the United States, Tennessee farm operations have moved from diversified operations to producing a few commodities – if not a single commodity – and from labor-intensive to capital-intensive production practices (see table on next page).

According to the 1930 Census of Agriculture, horses and mules comprised 1.4 percent of total Tennessee

farm value. Nearly half of all Tennesseans farmed on an average 73-acre farm. Nationwide, in fact, during much of the first half of this century most aspects of food production occurred on the farm. An East Tennessee dairy farmer, for example, might separate milk and sell directly to a local creamery as well as fertilize the feed grain portion of their operation with manure from their dairy herd. Fields were plowed using *real* horse power.

Today, a mule on a farm might be considered a tourist attraction.



Source: USDA

**Expanding Agriculture Beyond Farm Production, The *Food & Fiber* Sector Produces 28 Percent of All Tennessee Jobs**

## Agriculture Has Changed Dramatically Since 1930

|                                    | 1930              | 1990s            |
|------------------------------------|-------------------|------------------|
| Typical operation                  | Mixed activity    | Single commodity |
| Land in Farms                      | 18 million acres  | 12 million acres |
| Number of Farms                    | 245,657 farms     | 82,000 farms     |
| Aver. Farm Size                    | 73.3 acres        | 149.0 acres      |
| Farm population                    | 46.4 percent      | 3.5 percent      |
| Leading crops<br>(ranked by value) | 1. Corn for grain | Cattle & calves  |
|                                    | 2. Cotton         | Cotton           |
|                                    | 3. All hay        | Dairy Products   |
|                                    | 4. Tobacco        | Tobacco          |

The average size of a Tennessee farm has doubled as farm operations have consolidated and actual farm numbers have declined.

In 1994, only 3.5 percent of Tennesseans were employed on farms. Nationwide, farm operators buy fertilizers and pesticides manufactured by huge companies. They work their fields using diesel-powered tractors and combines and, after harvest, they sell their products to companies which process crops and meat into microwave dinners and potato chips. Consumers purchase these products more often than not from a grocery store chain or restaurant.

Thus, measured against the overall Tennessee economy, what usually counts as agriculture – the actual production of agricultural commodities – accounts for only a

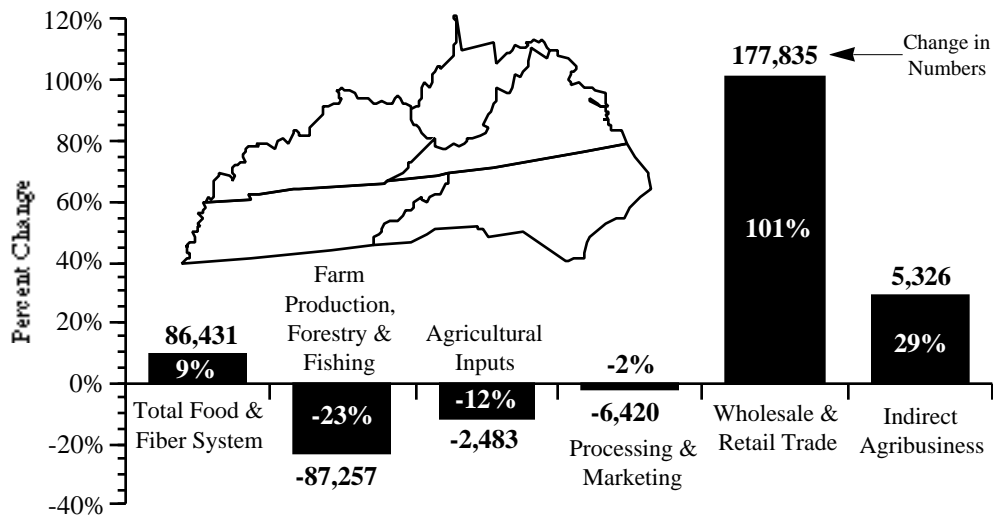
few percentage points of Tennessee's Gross Domestic Product (GDP). If we include those activities which traditionally were considered agriculture, the importance of Tennessee agriculture to the overall state economy rises considerably.

For this discussion, agriculture can be thought of as a *food and fiber system* (FFS) composed not only the farm sector but also other activities: inputs, processing and marketing, wholesale and retail trade, and indirect agribusiness (USDA, 1996). Viewed that way, agriculture in Tennessee comprised almost one-fifth of all Tennessee jobs and 28 percent of all rural Tennessee employment in 1994 (see figure below).

In rural Tennessee, farm production and similar activities are the biggest employer for the entire FFS. For the state as a whole, more than half of Tennessee FFS employment goes to wholesale and retail trade activities.

Considered over a longer period, total FFS employment for Appalachia has grown 9 percent during 1975-92 (see figure on next page). While wholesale and retail trade employment doubled during that time employment in farm production activities fell nearly one-quarter.

A similar trend can be seen in terms of the U.S. food and fiber system's contribution to GDP. In this case, the value added to the



Source: USDA

### Appalachia Saw Dramatic FFS Job Changes During 1975-92

nation's total economic output through nonproduction activities easily outpaces the economic value generated by the farm sector.

When economists develop agricultural forecasts, they typically focus on farm production and ignore the broader food and fiber system because:

- a) some of the linkages between FFS sectors are not well understood, and
- b) even without the entire FFS, forecasting the agricultural economy requires complex analytical processes.

But these linkages should not be ignored by "consumers" of economic forecasts simply because it is difficult to provide timely information which considers all of these linkages.

Instead, we should temper our interpretations of these forecasts with the knowledge that (a) they often are based on an incomplete understanding of agriculture, and (b) as we look to the future, the structure of agriculture is changing under our feet.

Sometimes, it is easy to forget how quickly the world is changing. The spread of agricultural activities beyond the farm gate is but one example of the changes we've seen and will continue to see.

Our understanding of what agriculture is and how it works will continue to evolve as the federal government's long-term role in agriculture is shaped, as new biotechnologies are developed and introduced, and as a myriad of other changes make themselves known.