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# **The U.S. Sheep Industry**

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### **Abstract**

The U.S. sheep inventory declined from 49 million head in 1942 to 9 million in 1989. Lamb imports have also declined and, in relation to U.S. production, are not seen as a major cause of the sheep industry's problems. Production has declined despite positive returns to producers. Government payments under the wool program provide an important source of income for the sheep industry. In recent years, the industry, including the marketing sector, has stabilized. Imports have followed the downward trend in domestic production and respond counter-cyclically to domestic price fluctuations. A major challenge to the industry is to expand consumption of lamb, a relatively expensive red meat. This study, prepared in accordance with section 4508 of the Omnibus Trade and Competitiveness Act of 1988, focuses on production of lamb and lamb products, returns in the sheep industry, demand and marketing trends for lamb, and lamb imports, both live and product.

**Keywords:** Sheep, lamb, mutton, imports, consumption, wool, sheep, cost of production.

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## Summary

This report assesses the state of the U.S. sheep industry. It responds to section 4508 of the Omnibus Trade and Competitiveness Act of 1988, which requires the Secretary of Agriculture to submit to Congress a report on the market for lamb meat products. As required by the act, this report discusses the condition of:

- o Production of lamb and lamb products.
- o Costs and returns in the sheep industry.
- o Demand and marketing trends for lamb.
- o Imports of both live lambs and lamb meat products.

Lamb prices dropped in April 1988 from the March highs, which was counter to normal seasonal patterns. The major cause of the decline in the slaughter lamb prices was an increase in domestic production in March due to increased slaughter and record heavy slaughter weights. Production in March 1988 was 34 million pounds, compared with slightly under 28 million pounds in April 1987, the comparable Easter/Passover period.

The sheep industry has developed two distinctive enterprises: stock sheep production and lamb feeding. Stock sheep producers manage grazing flocks on pasture and range forage; frequently these producers use arid land with few alternative uses. Lambs are fed grain to finish them for slaughter. Approximately 65 percent of the lambs slaughtered go through feedlots (2). 1/

Inventory data on stock sheep began in 1867 when there were approximately 45 million head of sheep. The inventory peaked in 1942 at 49 million head and declined until 1979. The inventory appears to be stabilizing and re-entering a typical livestock cycle, which previously was masked by the longer term downward trend in the sheep industry. Since 1986, inventories appear to be expanding in response to increased returns. The stock sheep inventory is expected to cycle in the 8- to 10-million-head range over the next few years.

Returns to the U.S. sheep industry have consistently been better than those to the cattle industry. Part of the reason for these relatively higher returns has been a government program supporting the prices received for domestic wool production. In 1987, 17 percent of stock sheep receipts came from government payments.

Because of their high susceptibility to disease and predators, sheep require well-developed management skills. Sheep and lamb death losses are much higher than those for other livestock. Death losses of sheep and lambs in 1987 were 12 percent of beginning inventory. As a result, sheep production requires more labor per animal unit than cattle enterprises.

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1/ Underscored numbers in parentheses are listed in the References.

Sheep producers have historically competed with beef cattle producers for many of the same resources to operate their enterprises: grazing land, labor, water, and marketing and transportation facilities. The higher returns to sheep than cattle, while sheep numbers have declined, indicate that higher returns to management are required to retain resources in sheep production.

Lamb and mutton production has declined since 1945, following the decline in sheep numbers. Lamb production has fallen less than inventories because of a trend toward heavier slaughter weights, reflecting genetic improvements and a larger proportion marketed as fed lambs.

As the number of sheep and lambs slaughtered has declined, the infrastructure of the sheep industry has consolidated. Higher costs result if marketing activities are handled by low-volume, less cost-efficient units, or if the area of procurement and distribution covered by these units increases. Higher procurement and transportation costs are generally borne by producers as the distance between sheep-raising areas and slaughter plants increases.

Like beef and pork consumption, lamb and mutton consumption as a percentage of total meat and poultry consumption has been declining because increases in meat and poultry consumption have come from poultry. Lamb consumption has declined to less than 1 percent of red meat consumption and only 0.6 percent of total meat and poultry consumption.

The industry's challenge is to attract new consumers of a relatively expensive red meat when red meats are losing their market share to poultry due to lower relative prices. Gains for the lamb industry depend on increasing the consumer base. Even though lamb has been sold in the United States for many years, it is unfamiliar to many consumers. In a marketing context, lamb should be approached as a new or specialty product.

The United States imports both sheep meat and live animals. Live animal imports have never been large, and the United States has been a net exporter of live animals. However, the United States has been a net importer of lamb meat and mutton. Lamb and mutton imports have been declining since 1960, along with domestic production and consumption.

Consumption of lamb was 1.2 pounds per capita in 1988, less than 0.6 percent of meat consumption. Small-scale production and distribution tend to increase the costs as the infrastructure shrinks. These higher processing costs are generally borne by both consumers and producers. Imports and production of lamb have declined since 1960, indicating that the biggest problem with the domestic market is the lack of a consumer base. Producers' returns have been consistently positive in recent years, and marketing facilities and plants have been adjusted to gain scale economies for a declining industry. The sheep industry is showing signs of stabilizing or even modest growth.