



Agricultural Economic Report Number 714

Feed Grains

Background for 1995 Farm Legislation

William Lin Peter Riley Sam Evans





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Abstract

Feed grains are the leading crop grown in the United States. U.S. feed grain production averaged 239 million tons per year in 1990-94. Total disappearance of feed grains is forecast to reach a record 267 million tons in the 1994/95 marketing year: 211 million tons for domestic use and 56 million tons for exports. Much of the expansion during the last two decades came from domestic use. Returns over cash expenses for corn producers during 1991-93 were only twothirds of those during 1988-90 due to rising cash expenses and declining government payments, but are expected to improve considerably in 1994/95 due to record yields. During 1990-93, world trade in coarse grains was sluggish and the U.S. share of world coarse grain trade was relatively low, averaging 52 percent. Slower growth of competitor exports and increased world import demand projected for the next decade, however, suggest that U.S. exports are likely to increase fairly steadily. During 1991-93, direct government payments as a percentage of annual gross income ranged from 12 to 17 percent for corn production. Policy issues likely to be considered in 1995 farm legislation are discussed, including planting flexibility, acreage idling under the acreage reduction program and conservation reserve program, and the malting barley assessment, as well as policy options to address these issues.

Keywords: Feed grains, production, domestic use, exports, farm programs, farm costs and returns, world markets, policy issues

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Foreword

Congress will soon consider new farm legislation to replace the expiring Food, Agriculture, Conservation, and Trade Act of 1990. In preparation for these deliberations, the U.S. Department of Agriculture and other groups are studying previous legislation to see what lessons can be learned that are applicable to the 1990's. This report updates Corn: Background for 1990 Farm Legislation (Staff Report No. 89-47), by Stephanie Mercier. It is one of a series of updated and new Economic Research Service background reports for farm legislation discussions. These reports summarize the experiences with various farm programs and the key characteristics of the commodities and the industries that produce them. This report integrates all feed grains (corn, sorghum, barley, and oats) into one report, but focuses on corn. For more information, see Additional Readings at the end of the text.

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Summary

Key issues to be addressed in the feed grains portion of this year's farm legislation deliberations include planting flexibility and acreage idling under both the Conservation Reserve Program (CRP) and the Acreage Reduction Program (ARP). Policy options in regard to the planting flexibility issue include (1) expanding the normal flex acreage beyond the current 15 percent, (2) combining all crop acreage base into a farm program base and allowing complete planting flexibility within the base, and (3) implementing a normal crop acreage concept, such as the one under the 1977 Farm Act.

Options for the CRP include extending the current program for another 10-15 years but under more critical criteria to reduce soil and wind erosion and to preserve water quality and other environmental benefits.

Policy decisions that continue to hold land out of production will be critical given expectations for continued growth in both domestic use and exports. However, the program cost is likely to be the dominant criterion for legislation.

Producers benefit from participating in the government feed grains program directly through support prices and direct payments and indirectly through higher market prices. U.S. feed grain farmers have received program payments since 1961. During 1991-93, direct payments as a percentage of annual gross income were in ranges of 12-17 percent for corn, 19-22 percent for sorghum, 24-31 percent for barley, and 18-25 percent for oats. These percentages were well under those during much of the 1980's. In 1986-88, for example, direct payments were 25-37 percent of annual gross income from corn production. Deficiency payments averaged \$5.5 billion for feed grain producers during that late-1980's period, compared with \$2.8 billion during 1991-93.

During 1991-93, returns over cash expenses for corn producers averaged \$0.66 per bushel (in 1987 dollars), compared with \$0.71 in 1985 and \$0.86 in 1990. However, returns over cash expenses for corn producers were still the highest among feed grain producers on a per acre basis. Overall, returns over cash expenses are expected to improve considerably in 1994/95 because of record yields, greater domestic and export demands, and higher deficiency payments.

U.S. feed grain production has trended upward since the 1930's, reaching a record 285 million metric tons in 1994/95. Much of the increase was due to yield improvements, especially for corn. Corn production increased from 5.8 billion bushels in 1975 to 10.1 billion bushels in 1994. However, acres planted to sorghum, barley, and oats have declined.

In the 1980's and the early 1990's, weather and, at times, set-aside programs caused larger fluctuations in feed grain production and stocks than in earlier years. The CRP, a long-term conservation program that is credited with conservation and environmental benefits, is a policy factor that could have significant effects on future feed grain production.

Total disappearance of feed grains has trended upward during the last two decades and is expected to reach a record 267 million metric tons in the 1994/95 marketing year. That total is likely to include 211 million metric tons for domestic use and 56 million for exports.

Much of the expansion is coming from domestic use. Food, seed, and industrial (FSI) use of feed grains, although accounting for only 20-25 percent of domestic use, has been steadily increasing in recent years. FSI use of corn exceeded 1 billion bushels in 1984/85 and reached a record 1.6 billion bushels in 1993/94, exceeding corn exports for the first time.

Livestock and poultry feeding remains the predominant domestic use, accounting for about 75 percent, which averaged about 140 million metric tons over the last decade. The upward trend in domestic feed grain use is expected to continue over the next decade.

World trade in coarse grains was sluggish in 1990-93, averaging about 89 million metric tons per year. Corn is the major component, averaging about 60 million metric tons. Most of the trade in coarse grains is for livestock feed.

The U.S. share of world coarse grains trade was relatively low during the early 1990's, averaging about 52 percent, as competing corn exporters captured a larger share of the world market at the expense of the United States. Recent competitor gains have been led by China. However, competitor exports are not expected to increase substantially in the next decade. This, in combination with expected growth in world import demand, suggests that U.S. exports of coarse grains are likely to increase fairly steadily over the next decade. Also, a greater share of U.S. exports will move to the higher income developing countries, with the most promising U.S. export opportunities among the coarse grains expected for corn.