

# USDA Agricultural Baseline Projections to 2012

## Interagency Agricultural Projections Committee

### Introduction

This report provides long-run baseline projections for the agricultural sector through 2012. Projections cover agricultural commodities, agricultural trade, and aggregate indicators of the sector, such as farm income and food prices.

The projections are a conditional scenario with no shocks and are based on specific assumptions regarding the macroeconomy, agricultural policy, the weather, and international developments. In particular, the baseline incorporates provisions of the Farm Security and Rural Investment Act of 2002 (2002 Farm Act) and assumes that current farm legislation remains in effect through the projections period. The projections are not intended to be a Departmental forecast of what the future will be, but instead a description of what would be expected to happen under a continuation of the 2002 Farm Act, with very specific external circumstances. Thus, the baseline provides a point of departure for discussion of alternative farm sector outcomes that could result under different domestic or international assumptions.

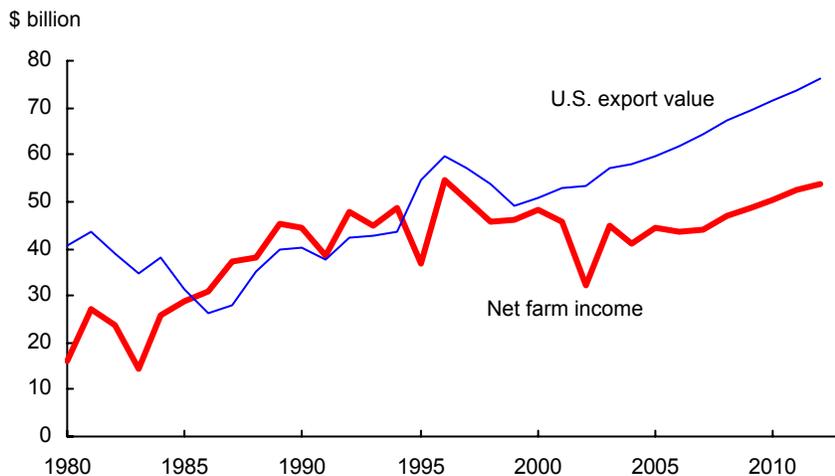
The projections in this report were prepared in October through December 2002 in support of the fiscal year 2004 budget analysis. Projections reflect a composite of model results and judgment-based analysis. Normal weather is assumed. Short-term projections included in the baseline are from the November 2002 *World Agricultural Supply and Demand Estimates* report.

## **Summary of Projections**

In the initial years of the baseline, U.S. farmers respond to reduced supplies and higher prices for many crops in 2002, with planted acreage projections higher in 2003 and 2004 than in recent years. Near-term livestock sector projections reflect adjustments to relatively low net returns in 2002, brought on by increased production levels that reduced meat animal prices coupled with higher grain prices. Total meat production falls in 2003 and net returns improve as meat animal prices increase and grain prices decline.

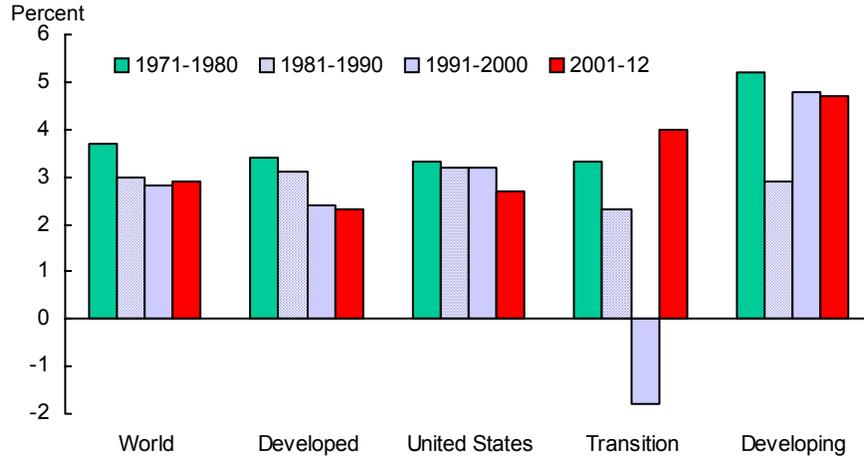
Stronger domestic and international economic growth beginning in 2003 provides a more favorable demand setting for the agricultural sector, supporting longer run increases in consumption, trade, and prices. A continued strong U.S. dollar and trade competition from countries such as Brazil, Argentina, and the Black Sea region are constraining factors on U.S. exports, however. Nonetheless, improving global economic growth, particularly in developing countries, provides a foundation for gains in trade and U.S. agricultural exports, resulting in rising market prices, increases in farm income, and improvement in the financial condition of the U.S. agricultural sector. Consumer food prices are projected to continue a long-term trend of rising less than the general inflation rate. The trend in consumer food expenditures towards a larger share for meals eaten away from home is expected to continue.

### Net farm income and U.S. export value



With production growing faster than domestic demand, agricultural export markets are important for sustaining prices and revenues and, in turn, farm income. Export revenues account for 25 to 30 percent of U.S. farm cash receipts, and are a key factor in determining gains in net farm income.

### World gross domestic product (GDP) growth rates, decade averages

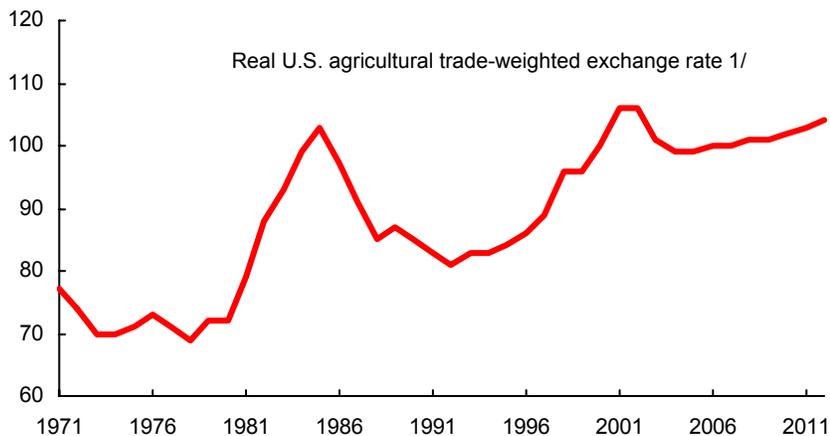


Agricultural trade depends on the economic prosperity of consumers throughout the world.

- Economic growth in developing countries will generate most of the increase in global food demand over the next decade.
- Economic growth in developing countries is important for global agricultural demand because many developing countries have incomes at levels where consumers diversify their diets to include more meats and other higher valued food products, and where consumption and imports of food and feed are particularly responsive to income changes.
- Projected growth in the transition economies (countries of the former Soviet Union and Central and Eastern Europe) of about 4 percent over 2003-2012 is significant in comparison to the economic contraction of the 1990s. This growth will increase consumer income and thereby raise demand for agricultural goods, such as livestock products for which demand is relatively responsive to income changes.

### U.S. dollar stays high

Index values, 2000=100



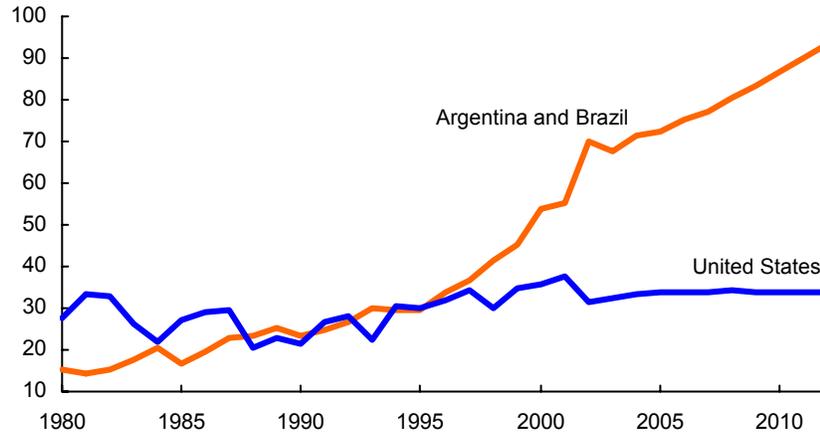
1/ See [www.ers.usda.gov/data/exchangerates/questions.htm](http://www.ers.usda.gov/data/exchangerates/questions.htm) for an explanation of real U.S. agricultural trade-weighted exchange rates.

A strong U.S. dollar in the baseline is a constraining factor for United States agricultural competitiveness and growth in exports.

- Although declining somewhat in the near term, the dollar is assumed to stay at historically strong levels throughout the projections as relatively high financial market returns attract financial flows into the United States.

### Trade competition remains strong: Soybean and soybean meal exports

Million metric tons 1/

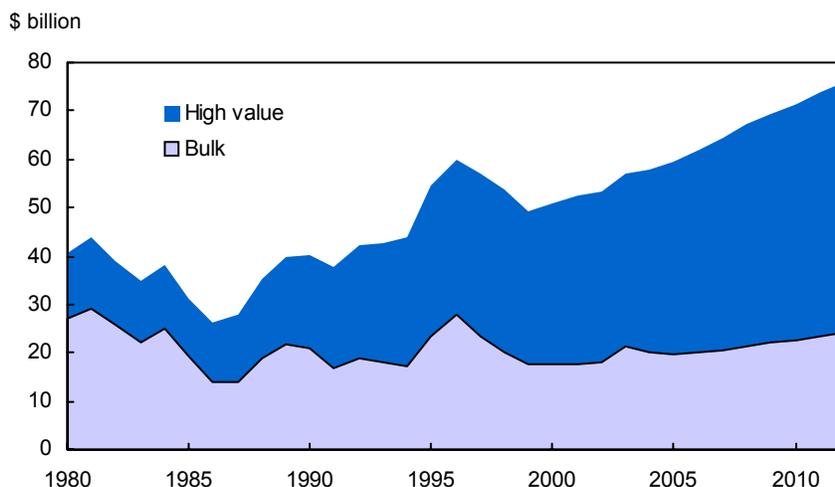


1/ Soybeans plus soybean meal converted to soybean-equivalent weight.

Competition in global agricultural markets will continue to be strong, with expanding production in a number of foreign countries.

- For example, increasing exports of soybeans and soybean meal from South America reflect a continuing conversion of land to crop production uses, particularly in Brazil.

### U.S. agricultural export value: bulk and high value



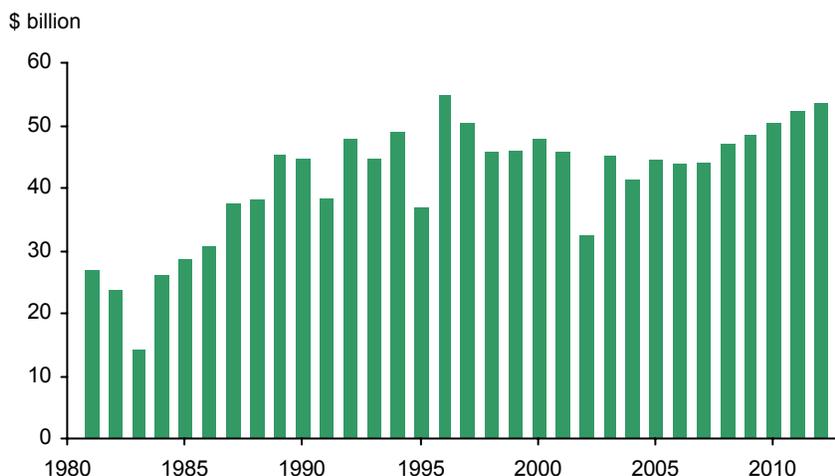
The value of U.S. agricultural exports, which fell from a record of almost \$60 billion in fiscal year 1996 to \$49.1 billion in 1999, has risen since then.

- Gains in U.S. exports are constrained by a strong U.S. dollar and by continued strong trade competition throughout the baseline period.
- Nonetheless, strengthening world economic growth in the longer run, particularly in developing countries, provides a foundation for gains in U.S. agricultural exports, which increase to about \$76 billion by the end of the projections.
- The share of U.S. agricultural exports accounted for by high-value products continues to rise, reaching about 68 percent in the last several years of the baseline.<sup>1</sup>

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<sup>1</sup>Bulk commodities include wheat, rice, feed grains, soybeans, cotton, and tobacco. High-value products (HVP's) is calculated as total exports less the bulk commodities. HVP's includes semi-processed and processed grains and oilseeds, animals and products, horticultural products, and sugar and tropical products.

### Net farm income



Strengthening market conditions lead to rising market prices, increases in farm income, and improvement in the financial condition of the U.S. agricultural sector.

- U.S. net farm income rises gradually throughout the baseline. Income projections for the next decade average near \$47 billion, compared to about \$46 billion in the 1990s.
- Gross cash income gradually increases as crop and livestock receipts increase due to growing domestic and export demands.
- Production expenses increase modestly in the baseline at slightly less than the general inflation rate. Cash operating margins are stable in the projections with cash expenses at 77-79 percent of gross cash income.
- Government payments become relatively less important over time as a greater share of gross cash income comes from the marketplace.
- Increasing farm incomes and relatively low interest rates through the baseline assist in asset accumulation and debt management. Debt-to-asset ratios decline to about 15 percent in the last several years of the projections, compared with over 20 percent in the mid-1980s.