

CRS Report for Congress

Previewing a 2007 Farm Bill

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Jasper Womach, Coordinator,
Geoffrey S. Becker, Ralph M. Chite, Tadlock Cowan,
Ross W. Gorte, Charles E. Hanrahan, Remy Jurenas,
Jim Monke, Jean M. Rawson, Randy Schnepf, and Jeffrey A. Zinn
Resources, Science, and Industry Division

Joe Richardson
Domestic Social Policy Division



**Prepared for Members and
Committees of Congress**

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Summary

Federal farm support, food assistance, agricultural trade, marketing, and rural development policies are governed by a variety of separate laws. However, many of these laws periodically are evaluated, revised, and renewed through an omnibus, multi-year “farm bill.” The Farm Security and Rural Investment Act of 2002 (P.L. 107-171) was the most recent omnibus farm bill, and many of its provisions expire in 2007, so reauthorization is expected to be addressed in the first session of the 110th Congress.

The heart of every omnibus farm bill is farm income and commodity price support policy — namely, the methods and levels of support that the federal government provides to agricultural producers. However, farm bills typically include titles on agricultural trade and foreign food aid, conservation and environment, forestry, domestic food assistance (primarily food stamps), agricultural credit, rural development, agricultural research and education, and marketing-related programs. Often, such “miscellaneous” provisions as food safety, marketing orders, animal health and welfare, and energy are added. This omnibus nature of the farm bill creates a broad coalition of support among sometimes conflicting interests for policies that, individually, might not survive the legislative process.

The scope and direction of a new farm bill may be shaped by such factors as financial conditions in the agricultural economy, competition among various interests, international trade obligations, and — possibly most important — a tight limit on federal funds. Among the thorniest issues may be future farm income and commodity price support. Questions of equity (who should get aid and how much), program cost, conformance with WTO trade obligations, effects on U.S. competitiveness in the global marketplace, and the unintended impacts of agricultural activities on the environment are among the considerations.

The economic prosperity of the U.S. farm sector is heavily dependent upon exports, so the provisions of a new bill reauthorizing farm export and foreign food aid programs also will be of keen interest. Moreover, the agricultural credit, research, conservation, domestic nutrition assistance, and rural development titles bring an array of interests into the debate, and their issues and concerns could prove equally contentious.

Several farm groups have strongly endorsed a continuation of current policies and programs. However, agriculture and rural interests not receiving much benefit from current programs oppose a simple extension and would like some of the spending to be aimed at solving their problems. Furthermore, the Secretary of Agriculture has repeatedly stated that farm programs need to be made “equitable, predictable and beyond challenge” in the WTO.

This report will be updated as related developments transpire.

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Previewing a 2007 Farm Bill

Introduction

What Is the “Farm Bill”?

The first session of the 110th Congress is expected to consider major agriculture and food legislation in an omnibus multi-year authorizing bill, commonly called the “farm bill.”

Federal commodity support, conservation, food assistance, agricultural trade, marketing, and rural development policies are governed by a variety of separate laws. However, many of these laws periodically are evaluated, revised, and renewed through an omnibus, multi-year farm bill. These policies can be, and sometimes are, modified or overhauled as freestanding authorizing legislation, or as part of other laws. However, periodic farm bills have provided Congress, the Administration, and interest groups with an opportunity to reexamine agriculture and food issues more carefully, and address them more comprehensively.

The most recent omnibus farm bill, the Farm Security and Rural Investment Act of 2002 (P.L. 107-171), and many of its provisions expire in 2007.¹ Without new legislation, notably in the area of farm commodity and income support programs, permanent statutes will take effect. Most of these statutes were enacted decades ago and are no longer compatible with current national economic objectives, global trading rules, and federal budgetary or regulatory policies. These largely outdated permanent laws have been kept on the books by Congress in part to compel increasingly urban and suburban future Congresses to pay attention to national agricultural policy. For most other topics addressed in the farm bill, the authority to appropriate funds would end, and in some cases all program authority could terminate.

The heart of every omnibus farm bill is farm income and commodity price support policy — namely, the methods and levels of support that the federal government provides to agricultural producers. However, farm bills typically include titles on agricultural trade and foreign food aid, conservation and environment, forestry, domestic food assistance (primarily food stamps), agricultural credit, rural development, agricultural research and education, and marketing-related programs. Often, such “miscellaneous” provisions as food safety, marketing orders, animal health and welfare, and energy are added.

This omnibus nature of the farm bill creates a broad coalition of support among sometimes conflicting interests for policies that, individually, might not survive the

¹ See the Appendix for a table of contents of the 2002 farm law (P.L. 107-171).

legislative process. Among the groups lobbying Congress will be farm and commodity organizations; input suppliers; commodity handlers, processors, exporters, retailers, foreign customers, and competitors; universities and scientific organizations; domestic consumers and food assistance advocates; environmentalists; and rural communities. So, for example, farm state lawmakers may seek urban legislators' backing for commodity price supports in exchange for votes on domestic food aid — and vice versa.

Farm bills and the programs they encompass are complex and intensely interactive. Changes to one program often have intended and more often unintended consequences for others. For example, a legislative change that raises corn prices is typically examined for how it might change the planting decisions of those who grow other crops such as soybeans, and, in turn, the cost of the support program for soybeans. Likewise, a change in the corn program can have major implications for producers who feed corn to dairy cows, beef cattle, and other animals; for sugar producers and food manufacturers who can use corn syrup in place of sugar for many products; for consumers, including those on limited food budgets; and for exporters and foreign competitors. The level and type of support provided also can affect farm equipment companies, agricultural investors and rural financial institutions, fertilizer and pesticide suppliers, and farm-dependent rural communities.

Farm bill titles also are growing increasingly integrated. The conservation title, for example, includes provisions that affect commodity programs, and some of the commodity provisions likewise affect conservation. This integration means that one cannot simply look in a single title for all provisions that affect the topic of the title. Major external pressures on this farm bill, including efforts to encourage domestic energy independence and to respond to treaty obligations concerning agricultural trade, are likely to foster further integration of policies and topics.

Congressional and Administration Action

Although farm bills are considered only periodically, federal farm policy is an ongoing issue for many lawmakers. The 1996 farm bill was intended to guide agricultural support through 2002. But an unanticipated drop in commodity prices prompted Congress to begin the “next” farm bill debate in 1998, when it considered and passed the first of a series of *ad hoc* emergency assistance measures that pumped \$20 billion in supplemental payments (called market loss payments) to farmers over three years (FY1999-FY2001), and ultimately led to the adoption of “counter-cyclical payments” in the 2002 farm bill.

In July 2005, Secretary of Agriculture Mike Johanns began a series of “Farm Bill Forums” held throughout the country. The public was invited to provide comments on six specific questions:²

1. How should farm policy be designed to maximize U.S. competitiveness and our country's ability to effectively compete in global markets?

² Information about the Farm Bill Forums is available at [<http://www.usda.gov/farmbill>].

2. How should farm policy address any unintended consequences and ensure that such consequences do not discourage new farmers and the next generation of farmers from entering production agriculture?
3. How should farm policy be designed to effectively and fairly distribute assistance to producers?
4. How can farm policy best achieve conservation and environmental goals?
5. How can federal rural and farm programs provide effective assistance in rural areas?
6. How should agricultural product development, marketing, and research-related issues be addressed in the next farm bill?

Following the forum series, Secretary Johanns has repeatedly stated the USDA's goal for a new farm bill is that it be "equitable, predictable and beyond challenge" in the WTO. Equitable relates to the distribution of benefits among farmers and commodities. Predictable relates to dependably providing assistance, particularly disaster assistance, which has been *ad hoc* over the past 20 years. Beyond challenge relates to full compliance with the World Trade Organization (WTO) rules agreed to by the United States and the entire 149-country membership of the organization.

On January 23, 2006, then House Agriculture Chairman Bob Goodlatte and Ranking Minority Member Collin Peterson announced the beginning of a series of field hearings to review the 2002 farm bill with an eye to designing the next farm bill.

With the 110th Congress, the House and Senate Agriculture Committees face the challenge of enacting a 2007 farm bill before the year's end. The change in partisan control of the House and Senate has put Representative Collin Peterson of Minnesota and Senator Tom Harkin of Iowa in charge of the House and Senate Agriculture Committees. The Democratic party leadership has talked about adopting a pay-go budget policy, which would require any areas of increased spending to be offset by reduced spending in other areas. Adding to the budget challenges of the Agriculture Committees is the likelihood of a somewhat lower spending baseline as the Congressional Budget Office (CBO) estimates the future cost of current commodity programs under the scenario of current and projected high commodity prices.

Several interest groups have already taken public positions on farm bill topics, especially related to commodity provisions and conservation. Both the American Farm Bureau Federation and National Farmers Union have strongly endorsed a continuation into the future of current commodity support programs. In contrast, the National Corn Growers Association wants to replace some commodity support provisions and crop insurance with crop revenue insurance plans. The American Farmland Trust put itself in a high-profile position with a proposal, addressing risk protection and conservation, endorsed by three former Secretaries of Agriculture from both political parties. Additional proposals can be expected, and Congress faces the need to adjudicate among interest groups competing for parts of an increasingly tight spending package that could be less than under current law and will certainly be less than what the stakeholders in combination would like to receive.³

³ The organizations cited here and their proposals are found at their respective websites:
(continued...)

General Policy Considerations⁴

Economic Situation

For the last four years, including the forecast for 2006, crop and livestock marketing receipts generally have been strong, and in cases where prices have declined, government payments have largely made up the difference. Examples include large milk and cotton payments in FY2004, and large corn and cotton payments in FY2005. The result has been record high levels of net farm income and record low levels of farm debt compared to assets.⁵ Contributing substantially to the strong domestic farm sector was a rapid rise in the value of agricultural exports, from \$53 billion in FY2002 to a forecast \$77 billion in FY2007, a record high.⁶

The trade outlook is important to farmers because exports account for about 25% of the value of agricultural production, and about one-third of harvested acreage is exported. Farm income also is affected by other factors, not least government subsidies. USDA forecast data show 2006 net cash farm income of \$66.6 billion. Though cash receipts in 2006 from the sale of crops increase, livestock receipts decline, and all production expenses increase. This leaves total net cash farm income 18% lower in 2006 than in 2005. Included in 2006 net cash income is \$16.5 billion in direct government payments. These payments help to undergird the value of agricultural land and other assets, keep farm debt at favorably low levels, and stabilize farm operator incomes. While USDA has not published a farm income forecast for 2007, it will be influenced by expected high prices for several of the major commodities.

Changes in farm revenues have impacts on rural communities and businesses that depend on the agricultural sector. Similarly, rural non-farm employment is important to the household income of many farms, particularly smaller farms. Food stamp program spending is largely related to general employment, and competes with agriculture programs in the allocation of funds available to the Agriculture Committees for the farm bill. Hence, food stamps could be prominent in the next farm bill, especially if there is a threat to commodity program spending under a tight budget rule.

³ (...continued)

American Farm Bureau Federation, [<http://www.fb.org/>]; National Farmers Union, [<http://www.nfu.org/>]; National Corn Growers Association, [<http://www.ncga.com/>]; American Farmland Trust, [<http://www.farmland.org/default.asp>].

⁴ This section is by Jasper Womach, Jim Monke, Charles Hanrahan, and Randy Schnepf.

⁵ Economic Research Service, USDA, *Farm Income and Costs: Farm Sector Income*, [<http://www.ers.usda.gov/Briefing/FarmIncome/>].

⁶ Economic Research Service, USDA, *Outlook for U.S. Agricultural Trade*, Nov. 22, 2006, [<http://www.fas.usda.gov/cmp/outlook/2006/Nov-06/AES-11-22-2006.pdf>].

Agriculture Budget

As with all areas of the federal budget, agriculture faces spending constraints. In FY2006, budget reconciliation trimmed \$2.7 billion over five years (FY2006-FY2010) from USDA mandatory programs. For the 2007 farm bill, these constraints will begin to take shape with the start of the annual congressional budget process, when the House and Senate Budget Committees recommend spending levels for broad “functional” categories. Recent federal deficits have raised concern over the ability or willingness of Congress to fund farm programs at levels being requested by stakeholders or even at levels approved in the last farm bill. Once the limits are approved by Congress via the annual budget resolution, program spending cannot be increased to levels that will breach these limits, unless either (1) they are offset by increased revenue or cuts in other programs, a tradeoff process known as “pay-go” (short for pay-as-you-go), or (2) Congress and the President declare the extra spending to be an “emergency,” thus precluding the need for offsets.⁷

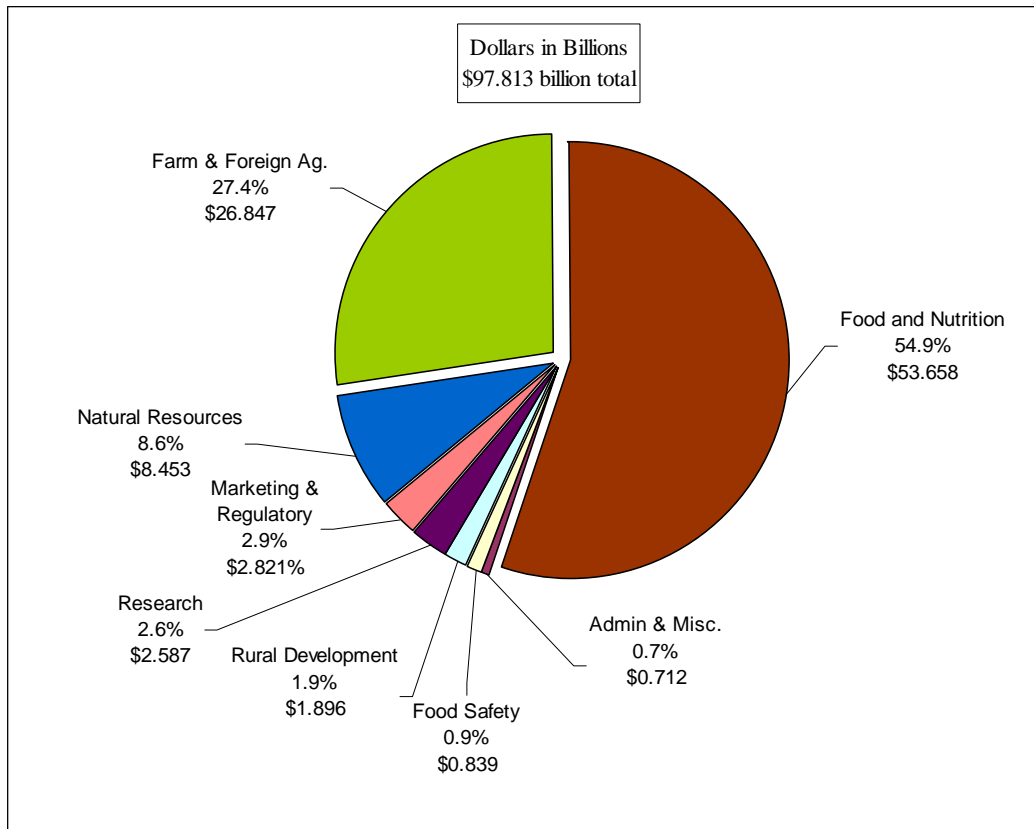
Budget Categories. The USDA carries out a wide array of responsibilities through about 30 separate internal agencies and offices staffed by some 100,000 employees. For FY2006, USDA spent about \$97.8 billion for its varied mandatory and discretionary programs. **Figure 1** shows how this is divided among the major budget categories.⁸

USDA is responsible for many activities outside of the agriculture budget function. Therefore, spending by USDA is not synonymous with spending for farmers, with the farm bill, or with agriculture appropriations bills. Most of the major programs that assist production agriculture, including commodity price and income supports, crop insurance, farm credit, marketing, and agricultural research, fall within function 350, the agriculture function of the federal budget. Some other functional areas of spending administered by USDA include food stamps (in function 600, income security); conservation programs (function 300, the natural resources and environment category); foreign food aid (function 150, the international affairs category); meat inspection (function 550, health); rural electric and communication loans (function 270, energy); rural community and business grants and loans (function 450, community and regional development); and rural housing loans (function 370, commerce and housing credit). So, although most of these programs are addressed by the Agriculture Committees in an omnibus farm bill, they are scattered throughout the federal budget for scorekeeping purposes.

⁷ The budget resolution is a congressional blueprint for all federal spending; it does not require a presidential signature.

⁸ The food stamp program accounts for about \$34.8 billion of the \$53.658 billion food and nutrition category. Farm and foreign agriculture outlays amount to about \$26.847 billion, with Commodity Credit Corporation (CCC) spending totaling to \$21.26 billion.

Figure 1. USDA Gross Outlays, by Budget Category, FY2006 Estimated



Mandatory vs. Discretionary Spending. Mandatory and discretionary spending are treated differently in the budget process. Congress generally controls spending on mandatory programs by setting rules for eligibility, benefit formulas, and other parameters rather than approving specific dollar amounts for these programs each year. Funding for mandatory programs is determined indirectly in the Agriculture Committees when they write, directly into the authorizing laws, the eligibility standards and benefits for these programs. Any individual or entity that meets the eligibility requirements is entitled to the benefits authorized by the law.

Examples of mandatory spending are the major farm commodity price support programs and the food stamp program. The Appropriations Committees generally are expected to provide the necessary year-to-year funding in the annual USDA appropriation to maintain these programs. However, for certain mandatory programs in the 2002 farm bill, such as conservation, rural development, and research, appropriators have limited authorized mandatory outlays. The savings achieved by limiting mandatory programs has been used to boost discretionary programs. In FY2006, about \$1.5 billion in mandatory programs was prohibited from being spent.⁹

⁹ Limits on mandatory programs usually have been achieved by using language such as, “None of the funds appropriated or otherwise made available by this or any other Act shall be used to pay the salaries and expenses of personnel to carry out section [...] of Public Law (continued...)”

While discretionary programs also are designed and authorized in the House and Senate Agriculture Committees, their annual funding levels are determined by the agriculture subcommittees of the House and Senate Appropriations Committees as part of the annual agriculture appropriations bill. Examples of discretionary spending are agricultural research and extension, agricultural credit, animal and plant health protection, farm marketing services, and most rural development programs. (Of course, both mandatory and discretionary program authorizations and spending still ultimately must be approved by the full House and Senate after they are reported by the relevant committees.)

Before either the Agriculture Committees or the Appropriations Committees make these decisions by drafting the appropriate measure — whether it is a new farm bill, an annual USDA appropriation, or some other measure — the panels must know how much spending room they have been allocated under the congressional budget resolution.

The Baseline. The opening stages of debate over a new farm bill usually occur in the House and Senate Budget Committees. The debate focuses on whether the multi-year “baseline” projection (which assumes the current farm bill continues under expected economic conditions) is appropriate or whether more (or, possibly, less) spending should be “built into the baseline.”

Each year, the Congressional Budget Office (CBO) issues a baseline budget for all federal spending under current law over a 10-year period.¹⁰ Projected spending in the baseline budget represents CBO’s estimate at a particular point in time of what federal spending and revenues would likely be under current law if no policy changes were made over the projected period.

The CBO baseline serves as a benchmark or starting point for future budget analyses. Whenever any new legislation is introduced that affects federal mandatory spending, such as a farm bill, its impact is measured by CBO as a difference from the baseline.

For farm commodity and income support and related programs, CBO estimated in August 2006 that, under current law, total spending would average about \$12 billion annually over the FY2006 through FY2016 period.¹¹ Due to rapid increases in the futures market price of corn and other commodities since the summer of 2006, the baseline of government spending for the commodity programs is decreasing. The CBO baseline published in early 2007, in conjunction with the FY2008 budget resolution, largely will determine the size of the pie to be divided among

⁹ (...continued)
[...] in excess of \$[...].”

¹⁰ The President’s Office of Management and Budget (OMB) separately presents Congress with a budget request based on current law, adjusted for changes in program rules funding sought by the Administration.

¹¹ These figures refer to farm spending by the Commodity Credit Corporation (CCC), the USDA entity created specifically to finance operations of the department’s farm price, income support, and related programs.

commodities and competing interest groups. Policymakers may craft changes in farm policy and score budgetary savings or costs to fit the new farm bill within its allocated budget.

International Trade Agreements, Disputes, and Negotiations

International trade agreements, and disputes arising under them, could shape the direction of future U.S. agricultural policy. Continuing multilateral trade negotiations on agriculture, if they result in a new trade agreement, also could have an influence on U.S. farm policy as expressed in the next farm bill. Although the United States is party to a number of trade agreements, it is primarily the agricultural agreement in the World Trade Organization (WTO), with rules governing the use of agricultural subsidies, both domestic and export, that constrains domestic policy choices. Membership in the WTO opens the United States to three avenues of influence that could change the direction of future domestic agricultural policy: (1) existing trade commitments, (2) trade disputes, and (3) trade negotiations.

Existing Trade Commitments. Under the most recently completed round of WTO trade negotiations — the 1995 Uruguay Round — the United States agreed to abide by a set of disciplines that govern not only export subsidies and import tariffs and quotas for agricultural products, but also domestic farm program design and spending.

Under the WTO, domestic farm support programs are categorized into boxes (amber, blue, or green) according to their relative likelihood to distort trade. Amber box policies (the most trade-distorting) are subject to total annual spending limits. The United States, like virtually all other countries, has been reporting that its amber box spending has been below its allowable annual level of \$19.1 billion. Farm bill programs that generally are included in the amber box include dairy and sugar price supports, crop marketing loans, loan deficiency payments, and other direct payments linked to per-unit levels of production; counter-cyclical payments; storage payments; and crop insurance and loan interest subsidies, among others. In contrast, blue box policies are narrowly defined to include only a specific subset of production-limiting programs that have no spending limit. (The United States has not used the blue box exemption since 1995.) Finally, green box policies — i.e., the least trade-distorting policies — are exempt from spending limits. Green box programs include conservation and environmental activities, such as the Conservation Reserve Program (CRP) or the Conservation Security Program (CSP); farm disaster relief payments; domestic food aid such as food stamps; and income supports not linked to current production or prices, such as the direct payments enacted in the 2002 farm bill. A final WTO agricultural subsidy category that is exempt from spending limits under certain conditions is known as *de minimis* exempted outlays. *De minimis* exemptions encompass domestic support outlays that do not exceed 5% of the value of production, calculated both on a product-specific and non-product-specific basis. Countries report to the WTO on their domestic farm spending by category for each year.

The WTO's system of policy categorization has provided latitude to U.S. policymakers in developing domestic support measures that can provide significant aid to producers but at the same time comply with WTO obligations. For example,

on average during 1999-2001, the United States provided \$50 billion in green box payments and \$16 billion in amber box or restricted spending. During that period, U.S. amber box spending was about 85% of its permitted WTO ceiling. A narrowing gap between the ceiling and spending could limit U.S. flexibility in choosing ways to support farmers as a new farm bill is considered. Furthermore, because U.S. amber box payments are geared to price variations (when prices decline, amber box outlays rise), the United States risks exceeding its \$19.1 billion amber box ceiling. These factors could encourage a policy shift to green box programs, such as conservation, rural development, and/or resource retirement payments, or to payments to producers that are not linked to current production or prices. Conversely, when commodity prices are high, as they are currently, amber box outlays decline. Even in situations like this, some farm groups advocate a shift to green box programs to make up for forgone subsidy payments.

Trade Litigation. In addition to trade negotiations, litigation of disputes in the WTO Dispute Settlement Body (DSB) can be a means of achieving trade policy objectives. The U.S.-Brazil cotton dispute, recently litigated in the WTO, illustrates the impact that litigation could have on U.S. farm programs.

On March 3, 2005, a WTO Dispute Appeals Panel ruled against the United States in a dispute brought by Brazil against certain aspects of the U.S. cotton program. As a result, USDA announced that it would make a number of administrative changes in its export credit guarantee programs to comply with the WTO ruling, including removal of a 1% cap on fees charged under the GSM-102 (short term) export credit guarantee program and termination of the GSM-103 (intermediate term) guarantee program. In addition, Congress repealed the Step 2 cotton program (Deficit Reduction Act of 2005; P.L. 109-171). The Step 2 program subsidized U.S. cotton users and exporters so that U.S. rather than foreign cotton would be utilized, even when U.S. cotton was higher-priced.

Brazil's success in challenging U.S. farm subsidies in WTO litigation could encourage other countries to attempt similar challenges. Uruguay, for example, has indicated that it might challenge the U.S. rice program in WTO dispute settlement. While subsidies for many U.S. crops are vulnerable to challenge, legal, political, and economic factors may constrain the decision of U.S. trading partners to challenge U.S. programs in WTO dispute settlement.

Trade Negotiations. Agricultural trade negotiations in the latest so-called Doha Round of multilateral trade negotiations has focused on the extension and deepening of the reforms in agricultural trade rules begun in the Uruguay Round Agreement. Negotiations have been aimed at further expanding market access for agricultural products, making further reductions in trade-distorting domestic farm subsidies, and ending all forms of export subsidies. If completed, a WTO trade agreement could produce new agricultural trade rules that might further tighten U.S. commitments to alter farm programs or limit spending. The U.S. negotiating position in the Doha Round has been that further limits on domestic support or reduced export subsidies depend on a substantial expansion of market access for U.S. agricultural products around the world, including in developing countries.

Doha Round negotiations, launched in 2001 and plagued by delays and missed deadlines, were suspended indefinitely in July 2006. The principal cause of the suspension was that a core group of WTO member countries — the United States, the European Union (EU), Brazil, India, Australia, and Japan — known as the G-6 had reached an impasse over specific methods to achieve the broad aims of the round for agricultural trade: substantial reductions in trade-distorting domestic subsidies, elimination of export subsidies, and substantially increased market access for agricultural products. The United States maintained that it had made an ambitious offer of reductions in trade distorting domestic support that had not been matched by agricultural tariff reductions by the EU, or by market opening for agricultural and industrial products by Brazil and India (both large developing countries). The EU and Brazil argued that the U.S. offer on domestic support did not go far enough in reducing trade-distorting support and would in fact leave the United States in a position to spend more on such subsidies than under the current WTO (Uruguay Round) Agreement on Agriculture.

Doha Round negotiators have been operating under a deadline effectively imposed by the expiration of U.S. Trade Promotion Authority (TPA), which permits the President to negotiate trade deals and present them to Congress for an up or down vote without amendment. TPA legislation expires on June 30, 2007, and most trade experts think that Congress will not renew the authority. Some, however, think that Congress might extend TPA temporarily if a Doha Round agreement seems imminent, as was the case in 1994 for the Uruguay Round Multilateral Trade Agreements.¹²

A number of agreements, which would have entailed substantial change in some U.S. farm bill programs, had already been reached in the Doha Round agricultural negotiations, but they are contingent on reaching a comprehensive agreement and now will be put on hold. Those include an agreement to eliminate all agricultural export subsidies by the end of 2013; an agreement to eliminate food aid that displaces commercial sales and to operate export credit guarantee programs in a manner that covers their costs; and an agreement to classify the United States' counter-cyclical payments as blue box (and thus not subject to reduction commitments). An agreement to provide early and ambitious subsidy reductions for cotton also is dependent on a comprehensive Doha Round agreement.

Proponents of changes in U.S. domestic farm policy were looking to a Doha Round agreement to make the most trade-distorting provisions of the subsidies more compatible with a new set of world trade rules. As a result of the suspension of the negotiations, however, a major source of pressure for U.S. farm policy change has dissipated. The option of extending the current farm law, proposed by some, appears strengthened by the indefinite suspension of the Doha talks. Legislation (H.R. 4332, H.R. 4775, and S. 2696) was introduced in the 109th Congress to extend the 2002

¹² TPA issues, options, and prospects for renewal are discussed in CRS Report RL33743, *Trade Promotion Authority (TPA): Issues, Options, and Prospects for Renewal*, by J. F. Hornbeck, William H. Cooper.

farm bill by one year, but committee leadership seems intent on a new long-term authorization.

Related CRS Reports:

CRS Report RS22086, *Agriculture and FY2006 Budget Reconciliation*, by Ralph Chite.

CRS Report RL33412, *Agriculture and Related Agencies: FY2007 Appropriations*, coordinated by Jim Monke.

CRS Report RS20840, *Agriculture in the WTO: Limits on Domestic Support*, by Randy Schnepf.

CRS Report RL30612, *Agriculture in the WTO: Member Spending on Domestic Support*, by Randy Schnepf.

CRS Report RS22187, *U.S. Agricultural Policy Response to WTO Cotton Decision*, by Randy Schnepf.

CRS Report RS22522, *Potential Challenges to U.S. Farm Subsidies in the WTO: A Brief Overview*, by Randy Schnepf and Jasper Womach.

Farm Income and Commodity Price Support¹³

The economic argument for federal support of farms, in contrast to nonfarm businesses, is that markets do not efficiently balance commodity supply with demand. Imbalances in agricultural markets develop because consumers do not respond to price changes by buying proportionally smaller or larger quantities (demand is price-inelastic) and, similarly, farmers do not respond to price changes by proportionally reducing or increasing production (supply is price inelastic). The imbalances then often result in inadequate or exaggerated resource adjustments by farmers. The imbalances are further exacerbated by the long time lag between crop planting (or livestock breeding) and harvest, during which economic and yield conditions may dramatically change.

The objectives of federal commodity programs are to stabilize and support farm incomes by shifting some of the risks of short term market price instability and longer-term capacity adjustments to the federal government. The goals are to maintain the economic health of the farm sector so that it can utilize the nation's comparative advantages in natural, infrastructure, and technology resources to be globally competitive.

The law mandates federal support for a specific list of commodities. For most of these commodities, support began during 1930s Depression era efforts to generally raise farm household income when commodity prices were low because of prolonged weak consumer demand. While initially intended to be a temporary effort, the commodity support programs survived, but have been modified away from supply control and commodity stocks management to direct income support payments.

Critics of commodity programs agree on the underlying fundamental economic conditions that make stability more difficult to achieve for agriculture than for some other sectors. However, they argue that (1) current programs are highly distorting of world production and trade, (2) the levels of subsidies are high and have become capitalized into land prices and rents that raise the cost of production and make the United States less competitive in global markets,¹⁴ and (3) the benefits are concentrated among a comparatively small number of commodities produced on a small number of large farms.¹⁵

Supporters of commodity subsidy programs may not contradict the critics, but do point out that other nations have distorting subsidy programs and/or trade barriers that should be eliminated if the United States is to make reforms. Landowners are

¹³ This section is by Jasper Womach.

¹⁴ Because decoupled payments are certain and known, they are efficiently capitalized into land values and rents. Since nearly 60% of the direct payment acres are rented, the primary beneficiaries are absentee landowners. Mary E. Burfisher and Jeffrey Hopkins, *Farm Payments*, Amber Waves, Economic Research Service, USDA, February 2003.

¹⁵ James MacDonald, Robert Hoppe, David E. Banker, *Growing Farm Size and the Distribution of Commodity Program Payments*, Amber Waves, Economic Research Service, USDA, February 2005.

concerned about a loss of rents and wealth if land prices drop in response to a reduction in the subsidies. Similarly, rural communities are concerned about any large decline in the real estate tax base that supports local schools, roads, and other community services. While large farms do receive most of the production-linked subsidy payments, recipients argue that lower input costs and marketing efficiencies make large farms efficient and small farms uneconomic in the production of bulk commodities. Therefore, targeting subsidies to small farms, recipients say, would encourage inefficient production.

As Congress moves increasingly closer to the 2007 expiration of current farm support programs, policymakers face design of a new law that (1) meets the nation's domestic needs, (2) satisfies this country's international trade obligations under the World Trade Organization, and (3) fits within budgetary constraints. Secretary of Agriculture Johanns has repeatedly stated that his objective is for commodity assistance to be equitable across commodities, predictable in terms of design regularity, and beyond challenge within the framework of the World Trade Organization (WTO).

Program Design and Operation

The mandatory commodity provisions of Title I of the 2002 farm bill require support for 25 farm commodities. Producers of so-called "covered commodities" (food grains, feed grains, oilseeds, and upland cotton)¹⁶ are eligible for fixed "direct payments," "counter-cyclical payments," and nonrecourse "marketing assistance loans" and "loan deficiency payments." Producers of other so-called "loan commodities" (including extra long staple, or ELS cotton, dry peas, lentils, small chickpeas, wool, mohair, and honey) are eligible only for nonrecourse marketing assistance loans and loan deficiency payments.¹⁷

The law mandates that raw cane sugar prices and refined beet sugar prices be supported through a combination of limits on domestic output that can be sold and nonrecourse loans for domestic sugar, implemented taking into account U.S. commitments to import sugar under trade agreements. Farm-level milk prices are supported by guaranteed government purchases of nonfat dry milk, cheese, and butter at set prices. Additionally for milk, Milk Income Loss Contract (MILC) payments are made directly to farmers when farm-level milk prices fall below specified levels.

The 2002 farm bill is noteworthy for several important changes to previous commodity policy. Counter-cyclical payments were added as a new support tool after several years of congressionally mandated *ad hoc* "emergency" market loss

¹⁶ Food grains include wheat and rice, and feed grains include corn, sorghum, barley, and oats. Oilseeds include soybeans, sunflower seed, rapeseed, canola, safflower, flaxseed, mustard seed, crambe, sesame seed, and peanuts.

¹⁷ There are numerous terms and phrases associated with farm support programs and agriculture policy in general that are explained in CRS Report WP03001, *Agriculture: A Glossary of Terms, Programs, and Laws*, at [<http://www.congress.gov/erp/lists/WP03001.html>].

payments were made in response to low market prices.¹⁸ Soybeans, minor oilseeds, and peanuts were brought under the support framework for “covered commodities.” Those who lost peanut marketing quotas under this change were compensated with “buyout” payments. The “loan commodities” category was broadened beyond only ELS cotton to include six additional commodities (honey, wool, mohair, dry peas, lentils, small chickpeas) that had not received support under the previous farm bill. Sugar support was modified to include domestic production controls, in addition to import quotas, as a price-boosting mechanism. For milk, the farm bill added direct income support payments to the already existing practice of purchasing and disposing of surplus stocks through nonmarket channels.

Commodity support programs are financed through the USDA’s Commodity Credit Corporation (CCC). **Table 1** shows spending by commodity and year. The cost of commodity support programs over the six-year life of the 2002 farm bill is expected to total about \$78.8 billion, or about \$13.1 billion annually. Eighty-two percent of spending is for five crops (corn, 34%; cotton, 23%; wheat, 9%; soybeans, 10%; rice, 6%).

Table 1. Commodity Credit Corporation Support Outlays, by Commodity, FY2002-FY2005 (Actual) and FY2005-FY2007 (Estimated)

Commodity	FY02	FY03	FY04	FY05	FY06Est	FY07Est	Average
	(million \$)						
Corn	2,959	1,415	2,504	6,243	8,862	4,609	4,432
Wheat	1,190	1,118	1,173	1,232	1,009	1,140	1,144
Rice	1,085	1,279	1,130	473	634	443	841
Cotton, Upland	3,307	2,889	1,372	4,245	3,627	2,551	2,999
Dairy	622	2,494	549	40	604	745	842
Soybeans	3,447	907	595	1,140	357	1,206	1,275
Peanuts	129	1,562	259	408	447	285	515
Sugar	-130	-84	61	-86	0	0	-40
Honey	(3)	1	3	8	7	-2	2
Wool & Mohair	-1	20	12	7	10	11	10
Other Commodities	574	1,234	-72	2,618	1,074	1,244	1,112
Total, all commodities	13,179	12,835	7,586	16,328	16,630	12,234	13,132

Source: Data are obtained from Farm Service Agency, USDA, *Table 35. CCC Net Outlays by Commodity and Function*, July 2006. The CCC also funds several mandatory USDA conservation and rural development programs that are not included in the above table.

¹⁸ The 1996 farm bill eliminated a target price, deficiency payments program that was directly connected to current marketing year prices and a farmer’s actual production. The new counter-cyclical payments were based on current-year market prices and farmer’s historical production base, not the current crop choice or actual production level.

Two developments have occurred since enactment of the 2002 farm bill that could substantially reshape domestic support policy. These include (1) the movement from a federal budget surplus to record annual deficits and the expectation of continuing large deficits for the foreseeable future, and (2) the WTO dispute settlement ruling against the United States in a case brought by Brazil concerning U.S. cotton subsidies.

The federal deficit situation likely will constrain farm bill legislation more than was the case for the 2002 farm bill. Furthermore, even if current law is extended intact, a forecast for high commodity prices likely will result in a CBO budget baseline for commodity support that is lower than spending levels reached over the past five years. In addition, some Democratic leaders have stated an intention to follow a pay-as-you-go policy with regard to new legislation.

The WTO ruled on March 3, 2005, that certain aspects of U.S. cotton support — Step 2 marketing provisions and export credit guarantees — functioned as illegal subsidies and must be removed. As a result of these developments, a key question likely to be asked of virtually every new U.S. farm policy proposal is how it will affect U.S. trade commitments to the WTO. In addition to the existing commitments, the Doha Round negotiations, before they collapsed in July 2006, anticipated that the domestic amber box spending ceiling would be subject to a new 20% initial cut from its current \$19.1 billion level with further cuts to follow. The entire tenor of the Doha round, with the United States in the lead, anticipated major reduction in production and trade-distorting subsidies as well as the elimination of import barriers. This gave impetus to serious examination of opportunities to make U.S. farm subsidies “greener.”¹⁹ While the Doha round has been indefinitely suspended, the greening of farm support remains a serious consideration.

The policy trend across member countries, engendered by WTO commitments and dispute settlement rulings, has been to shift domestic support away from programs that are most market-distorting (i.e., amber box programs such as direct farm income and price supports linked to production and market prices) and toward green box programs that cause minimal market distortion and are exempted from WTO spending limits. Exempted from amber box limits are “decoupled” farm subsidy payments — these are payments not linked to current production decisions. “Direct payments” for the covered commodities fit into the exempt category. The most notable exempted programs include such activities as agricultural research and extension, conservation and the environment, rural development, food security stocks, domestic food aid (e.g., food stamps), farm disaster payments, and structural adjustment programs.

Prospective Issues and Options

Payment Limits. Questions of whether there should be farm-level limits on commodity payments and what those levels should be have been controversial for many years. Some argue that very large farms should not receive subsidies at all, but

¹⁹ In this context, greener means making support less production and trade distorting, thereby qualifying as green box support under WTO rules.

that if they do, at least there should be limits. Others argue that farm commodity programs should not discriminate based on farm size or any other income or wealth consideration because the goal is to stabilize and support the entire sector, not particular households. In fact, limits have been imposed on direct farm payments since the early 1970s when target price deficiency payments were first enacted.²⁰

The debate has intensified in recent years because payment money is increasingly going to a comparatively small number of large farms. For example, in 2005, about 55,000 farms with sales over \$500,000 received \$5.7 billion (6.2% of the payment farms received 36% of the payments).²¹ This concentration of payments has raised questions of equity and has been charged with contributing to the absorption of smaller farms by large farms.

Tightening the payment limits also has been proposed as a way to reduce the cost of the commodity programs when there are budget pressures. In the FY2006 budget request to Congress, the USDA included a proposal to save \$1.2 billion over 10 years by tightening payment limits from the current level of \$360,000 per person to \$250,000, as well as counting commodity forfeitures and certificate gains toward the limits and applying the limits to dairy payments. Among commodities, rice and cotton — two southern crops — have a greater concentration of payments than do the other payment crops. This has created a largely regional split among some Members of Congress on the issue, with many northerners favoring tighter limits and many southerners opposing any change.

Supply Controls and Import Quotas. Sugar and milk are the only two commodities currently supported by maintaining farm prices above what the market might otherwise dictate. Sugar utilizes nonrecourse loans and a system of import tariff rate quotas and domestic marketing allotments to limit supplies and support prices. Farm milk prices are indirectly supported through USDA purchases of surplus dairy products from dairy processors at specified prices. Also, dairy farms benefit from direct payments when market prices fall below a mandated target price under the Milk Income Loss Contract (MILC) program; from established minimum farm prices for fluid-grade milk under federal milk marketing orders; and from dairy export subsidies through the Dairy Export Incentives Program (DEIP).

At issue for Congress is whether to continue programs that potentially raise market prices, which critics contend are the most market-distorting because they encourage excess production. Periodic efforts in the past to significantly alter or phase out these programs have not succeeded. Supporters contend that the support mechanisms are necessary to protect farms from foreign competition. While the import-limiting programs impose little cost on the federal budget, the producer

²⁰ The 2002 farm bill created a Commission on the Application of Payment Limits for Agriculture to examine the issues, and its final report is available at [http://www.usda.gov/oce/reports/payment_limits/].

²¹ Data are based upon the Economic Research Service, USDA, Agricultural Resource Management Survey (ARMS), available at [<http://www.ers.usda.gov/briefing/farmincome/Data/govpmt.arms05.salesclass.xls>].

subsidy reported to the WTO for 2001 (the most recent year reported by the United States) amounted to \$4.5 billion for milk and \$1.1 billion for sugar.

Some consideration has been given to direct payments as an alternative to supply controls. However, cost is a major deterring factor. Target prices and deficiency payments were added to the milk support framework in the 2002 farm bill with a projected cost estimate of \$2 billion for FY2003 through FY2005. However, no change was made to the support price for milk. Consequently, after its first two years of operation, the MILC program paid out over \$2 billion, and CCC dairy acquisitions cost \$600-\$700 million in FY2002 and FY2003. High milk prices in 2004 and 2005 kept surplus dairy product purchases to a minimum.

Another policy option, possibly for sugar, is a buyout of the supply control features of price support. The 2002 farm bill included a buyout of peanut marketing quotas, the supply control feature of the peanut price support program. The peanut quota buyout paid about \$1.221 billion to about 8,600 farms (averaging \$142,000 per farm) as compensation for the loss in value associated with termination of peanut marketing quotas. Peanut producers now receive the benefit of direct payments, counter-cyclical payments, and marketing assistance loans and loan deficiency payments. Tobacco marketing quotas on some 57,000 farms were terminated after the 2004 crop, and \$9.6 billion will be paid out over 10 years as buyout compensation (the equivalent of a lump sum payment of \$102,000 per farm using a 5% discount rate). In contrast to peanuts, tobacco buyout funds come from tobacco product manufacturers, and future tobacco production is not set to benefit from any federal support program.

Green Payments. Some contend that commodity support programs should be replaced with incentive payments to protect natural resources (such as land, water, air, and/or wildlife), or possibly to enhance scenic, recreational, or open space amenities. This concept has been tagged as a green payments policy in the United States, while in the European Union (EU) it is called agri-environmentalism. While the term green reflects the environmental enhancing character of these programs, such payments also typically qualify as green box under WTO agriculture subsidy rules.

The 2002 farm bill included a new Conservation Security Program (CSP) that was intended to be a comprehensive green payments program because it would encourage integrated whole-farm planning and reward producers who proactively conserve environmental resources across their entire agricultural operation. Stringent eligibility criteria designed by USDA to reward only the highest levels of additional conservation, and a comparatively low spending limit of \$202 million in FY2005, have constrained participation.

In contrast to the United States, EU farm policy since 1985 has included payments to farmers to compensate for costs incurred or income forgone for undertaking agri-environmental measures that meet farm policy and rural development objectives. Such measures include, among other things, reducing use of fertilizer and chemical inputs, adopting organic production methods, maintaining countryside and landscape, or managing land for leisure activities or public access. Successive reforms of the EU's Common Agricultural Policy (CAP) have placed

greater emphasis on such green payments — and increased funding for them — as agri-environmental measures have been integrated into a broad rural development policy. In addition to meeting desirable social goals, EU policymakers view shifting funds from commodity support to rural development, including agri-environmental programs, as more compatible with multilateral efforts in the WTO to curb domestic support, while maintaining support that is not, or is at most minimally, trade-distorting.

Buyout of Commodity Programs. The buyout of peanut and tobacco marketing quotas has stimulated thought about a buyout of all commodity support programs. Agricultural economist David Orden launched this discussion at USDA's 2005 Agricultural Outlook Forum. He suggested that a buyout of the 2002 farm programs could focus on direct payments, counter-cyclical payments, and/or loan rate price guarantees. His analysis determined that buying out farm support payments would substantially raise short-term budget costs, but would reduce expenditures in the long run.²² Other presenters at the forum asserted that a buyout would only be effective if future Congresses did not re-enact support payments, especially during the next downturn in the farm economy, when there likely would be pressure for additional assistance.

Devolving Commodity Programs to the States. Economists at the USDA's Economic Research Service have examined the concept of shifting farm program funds to states (called devolution). The argument is made that the wide diversity of U.S. farms, commodities, land and water resources, and problems argue for state-designed responses that meet local objectives, rather than national programs.

Would devolution undermine national farm policy goals such as income stability for farmers and the economy or food security? Economists at ERS respond "probably not," given the relatively small number of U.S. farmers and the relatively small share of farming in the national economy.

Stabilization of farmers' incomes can be addressed through Federal programs but also by private means, such as forward pricing, crop yield or revenue insurance, futures, and options. And, in contrast to the 1930s when the programs were initiated, commodity programs have little redistributive effect, as the bulk of payments goes to farm households with incomes above the U.S. nonfarm average. Food security for the U.S. no longer depends exclusively on domestic production, which means that national commodity policies are not the only determinant of whether Americans have enough to eat.²³

A decision to devolve all or most of the expected \$10 to \$15 billion in annual commodity payments to the states would involve difficult choices, such as how to divide it among the states. Further, the states could not be allowed to use the funds

²² David Orden, *Key Issues for the Next Farm Bill: Is a Farm Program Buyout Possible*, USDA Agricultural Outlook Forum, February 24, 2005, at [<http://www.usda.gov/oce/forum/2005%20Speeches/Orden.pdf>].

²³ Susan Offutt, Betsey Kuhn, Mitchell Morehart, *Devolution of Farm Programs Could Broaden States Role in Ag Policy*, Amber Waves, November 2004, at [<http://www.ers.usda.gov/AmberWaves/november04/features/devolutionofprograms.htm>].

in ways that violate international trade agreements. However, devolution could enable the states to change the objectives and mix of programs being delivered to their farmers and rural communities.

A disadvantage of a devolution policy is that the current recipients of farm subsidies likely would lose some or all of the benefits of future spending. The expected consequence would be a decline in land values and reduction in land rental rates. To the extent that subsidies have not been decoupled from production, there could be some shifting of production between commodities, and the lower land prices and lower rental rates could result in increased production if the lower costs of land make U.S. producers more competitive in the global marketplace — an advantage for the nation.

Revenue Insurance. Farmers now benefit from a combination of income support payments to offset low prices and indemnity payments to offset production losses. This suggests an implicit target revenue goal on the part of the federal government. Supporting revenue is reasonable because farmers pay their expenses with revenue. However, the various farm subsidy programs currently are designed and operated independently. Consequently, the programs may fail to effectively support farm revenue. For example, generally poor weather, such as a widespread drought, may drive crop prices up and marketing loan and counter-cyclical payments down. At the same time, yield losses may not be sufficiently catastrophic to trigger crop insurance indemnity payments or to prompt congressional adoption of disaster payments. Similarly, there are years when low prices are offset by high yields so that farm income is adequate to cover expenses, yet on top of that there are substantial price-linked support payments to further boost income.

For about the last decade, several federally subsidized revenue insurance products have been offered to producers as part of the federal crop insurance program. These policies indemnify for diminished revenue, whether from reduced yield or from low market prices. By 2004, revenue insurance was purchased on 126 million acres, 60% of all eligible crop land in the crop insurance program. A possible option for the next farm bill is to expand current pilot programs so that a producer can insure the revenue of the entire farm (possibly including livestock), rather than individual crops. Several years of recent experience with federally subsidized revenue insurance now provide empirical information from which to evaluate universal farm revenue insurance as a farm support alternative. Analysis at Iowa State University indicates that modifications can be made to current revenue insurance products that make them:

ideally suited to hit congressional revenue targets. Either low prices or low yields can trigger a payment. But low prices by themselves will not trigger a payment if yields are high enough to raise revenue above the 90 percent level. And low yields will not trigger a payment if prices are strong enough. In addition, if payments arrive when aggregate market revenue exceeds its target level, then at least the payments would flow to those regions that experienced inadequate revenue because of low yields Rationalizing commodity, disaster, and crop insurance programs by replacing them with a single-payment program ... would increase program transparency, eliminate program duplication, reduce

administrative costs, and largely eliminate over- and under-compensation of farmers.²⁴

Current crop and revenue insurance products are classified as nonspecific subsidies under current WTO rules. To receive this classification, the level of subsidy must be below 70% of the indemnity benefits paid to farmers. The National Corn Growers Association has gone farther than any other group in specifying a revenue insurance option as an alternative to several features of the current support framework.²⁵ Their proposal would insure crop-specific net revenue, in contrast to a whole farm insurance option favored by some.

Related CRS Reports:

CRS Report RS21905, *Agriculture in the WTO Doha Round: The Framework Agreement and Next Steps*, by Randy Schnepf.

CRS Report RS20840, *Agriculture in the WTO: Limits on Domestic Support*, by Randy Schnepf.

CRS Report RL31095, *Emergency Funding for Agriculture: A Brief History of Supplemental Appropriations, FY1989-FY2005*, by Ralph M. Chite.

CRS Report RS21999, *Farm Commodity Policy: Programs and Issues for Congress*, by Jim Monke.

CRS Report RL33271, *Farm Commodity Programs: Direct Payments, Counter-Cyclical Payments, and Marketing Loans*, by Jim Monke.

CRS Report RL32624, *Green Payments in U.S. and European Union Agricultural Policy*, by Charles E. Hanrahan and Jeffrey Zinn.

CRS Report RS21493, *Payment Limits for Farm Commodity Programs: Issues and Proposals*, by Jim Monke.

CRS Report RS22187, *U.S. Agricultural Policy Response to WTO Cotton Decision*, by Randy Schnepf.

²⁴ Bruce A. Babcock and Chad Hart, Judging the Performance of the 2002 Farm Bill, *Iowa Ag Review*, Spring 2005, at [http://www.card.iastate.edu/iowa_ag_review/spring_05/article1.aspx].

²⁵ National Association of Corn Growers, *Forging a New Direction for Farm Policy*, October 19, 2006, at [http://www.ncga.com/news/notd/pdfs/10_23_06NFSA.pdf].

Specialty Crops²⁶

Sales of fruits, vegetables, and tree nuts account for nearly one-third of U.S. crop cash receipts and one-fifth of U.S. agricultural exports, according to USDA's Economic Research Service (ERS).²⁷ When floriculture, greenhouse, and nursery crops are included, specialty crops account for approximately 50% of all U.S. cash receipts of farm crops (and about one-fourth of total crop and livestock receipts). Despite their relatively large share of crop receipts, specialty crops occupy only about 3% of U.S. harvested cropland. Although certain states and regions are predominant, nearly every state has some commercial specialty crop production within its borders.

Although specialty crops are not eligible for support under USDA's farm commodity price and income support programs, their production is closely linked with the major program crops in several ways. For example, according to a November 2006 report by ERS, 80% of the land planted to vegetables for processing (sweet corn, tomatoes, dry beans, and potatoes) is located on farms that likely also receive direct and countercyclical payments because they rotate the vegetable crops with program crops.²⁸

On the other hand, some specialty crop producers have testified strongly in favor of extending a 2002 farm bill provision (originating in the 1996 farm bill) that restricts producers of the major commodities from planting fruits and vegetables on program acreage if they do not have a history of doing so. These producers argue that allowing program crop producers to switch even small numbers of acres to fruits or vegetables would negatively affect existing growers' annual income.²⁹ The November 2006 ERS report suggests that a number of constraints likely would prevent large-scale switch-overs from program to specialty crops if the restriction were lifted, but states that some individual producers could be significantly affected.

Finally, some stakeholders and policymakers are calling for specialty crop issues to occupy a larger role in farm bill policy discussions than in the past. They assert that the traditional farm commodity support programs are under pressure from constraints on the federal budget, from developments related to existing trade obligations, and from negotiations on further trade liberalization. Policies covering both subsidized and unsubsidized crops more comprehensively — such as providing more assistance through trade promotion, conservation, credit, marketing programs,

²⁶ This section is by Jean M. Rawson.

²⁷ USDA, Economic Research Service, *Fruit and Vegetable Background*, Outlook Report No. VGS-31301 56pp, April 2006, at [<http://www.ers.usda.gov/publications/vgs/apr06/vgs31301/>].

²⁸ USDA, Economic Research Service, *Eliminating Fruit and Vegetable Planting Restrictions: How Would Markets Be Affected?* ERS Report Number 30. November 2006. Available online at [<http://www.ers.usda.gov/publications/err30/>].

²⁹ See House Committee on Agriculture, Subcommittee on Livestock and Horticulture, Hearing, November 5, 2003, Serial No. 108-20, Review of Domestic Policies Affecting the Specialty Crop Industry. Available at [<http://agriculture.house.gov/hearings/108/10820.pdf>].

domestic food assistance, and research — could provide a way to address those pressures while increasing U.S. competitiveness, they argue.

Program Design and Operation

Although USDA traditionally has not subsidized specialty crops as it has bulk commodities, over the decades Congress has authorized a wide range of programs that facilitate the growth and benefit the economic health of the specialty crop sector, as well as other sectors of U.S. agriculture. Among the programs of particular importance to specialty crops are:

- **Marketing orders and agreements** — Marketing orders and agreements are sets of rules intended to enhance the marketing of a commodity. The rules apply to the handlers within a defined geographic region and may (1) establish quality standards for the commodity; (2) standardize packages and containers; (3) regulate the flow of product to market; (4) establish reserve pools for storable commodities; and (5) authorize production research, marketing research and development, and advertising. Currently there are 30 active marketing orders and agreements covering specified fruit, vegetable, and tree nut crops. The activities are financed by assessment fees (commonly called “check-off” fees) collected from handlers, usually at the time of sale. The Agriculture Marketing Service (AMS) oversees the programs to make sure the orders and agreements operate in the public interest and within legal bounds authorized by the Agricultural Marketing Agreement Act of 1937 (as amended). (Separately, USDA offers user fee grading and quality certification services, organic standards and certification, and market economic information and analysis that also are important to the specialty crop sector.)
- **Qualified Through Verification program** — The Food and Drug Administration (FDA) has the authority under the Federal Food, Drug, and Cosmetic Act to regulate the fresh and processed produce industries to ensure that products are safe and accurately labeled. However, since 1996, AMS has offered a voluntary, fee-for-service pilot program to assist produce packers in adopting science-based, preventive measures against food contamination in their plants. The Qualified Through Verification program is similar in approach to the preventive Hazard Analysis and Critical Control Point (HACCP) system used since 1996 by USDA’s meat and poultry regulatory agency, the Food Safety and Inspection Service (FSIS). The FDA has been encouraging the fresh and processed produce industries to adopt this preventive approach throughout the marketing chain.
- **Block grants to states** — The 108th Congress passed legislation that is widely regarded as a precursor to discussion of specialty crop issues in the 2007 farm bill. The Specialty Crops Competitiveness Act of 2004 (P.L. 108-465) authorizes an annual appropriation of \$44.5 million in fiscal years 2005 through 2009 for block grants to

states for them to award to research and marketing projects that promote the advancement of each state's specialty crops. From the annual appropriation for this program, each state receives \$100,000 and the balance is distributed based on the ratio of the value of each state's specialty crop production to the total value of U.S. specialty crop production. In the majority of cases, the state Department of Agriculture administers the program and uses the funds to support marketing, education, research, pest and disease management, production, and food safety projects.

- **Export promotion** — The USDA administers several export promotion programs that cover all commodities, but some are particularly important to specialty crops. The Market Access Program (MAP) shares the costs of marketing and promoting U.S. agricultural products overseas. The Quality Samples Program (QSP) helps create export sales of commodities, including fruits, vegetables, and tree nuts, by providing samples to foreign importers, thus paving the way for new partnerships between importers and U.S. exporters. The Technical Assistance for Specialty Crops (TASC) program funds competitive grants to eligible public and private organizations (i.e., federal and state agencies, trade associations, universities, cooperatives, and private companies) to conduct projects that address trade barriers (projects have included seminars, study tours, field surveys, and pre-export clearance programs, among other activities).
- **Crop loss assistance** — As with the major field crops, specialty crop producers receive benefits from several programs that compensate for yield losses if they are substantial. Federally subsidized crop insurance (administered by the Risk Management Agency but sold and serviced by private companies) is available for some 50 specialty crops in limited locations. When insurance is not offered, producers of some commercial specialty crops may be eligible for indemnification under USDA's Noninsured Assistance Program (NAP) for the cost of an administrative fee. In addition, for almost every year since 1988 Congress has authorized *ad hoc* disaster assistance that has covered losses of specialty crops as well as the major field crops.
- **Disease and pest protection** — Although the Department of Homeland Security conducts agricultural inspections of passengers and cargo at U.S. ports of entry, USDA's Animal and Plant Health Inspection Service (APHIS) is the primary agency charged with protecting U.S. agriculture from the introduction, establishment, and reemergence of plant pests and diseases that could harm production or damage export markets. Of particular importance to specialty crop producers are APHIS emergency control and eradication programs — supported wholly or in part with mandatory funds — for pests and diseases that appear suddenly and threaten significant economic damage.

- **Managing trade-related pest and disease issues** — APHIS officials are heavily involved in decisions related to U.S. exports and imports of fruits and vegetables. APHIS attachés work abroad with host country officials to establish and oversee foreign-based inspection programs to ensure that products designated for export are pest-free and that inspectors at U.S. ports of entry are aware of emerging problems. APHIS officials also participate on USDA trade agreement negotiation teams to solve sanitary and phytosanitary (SPS) issues so that the agreements can move forward.³⁰ In addition, APHIS is in charge of certifying that U.S. specialty crop exports meet other countries' phytosanitary regulations before they are shipped. APHIS's import and export activities are based on scientific risk assessments.
- **Fruit and vegetable purchases through child nutrition programs** — Federal cash assistance to schools, child care centers, and summer food program operators (among others) represents an important source of federal support for fruit and vegetable purchases. Providers use this aid to buy food items for use in the meals they serve. USDA estimates that fruit and vegetable purchases account for about 20% of the total. A separate program exists to give a limited number of schools funding to provide free fresh fruit and vegetables to students (the Department of Defense (DoD) Fresh program). This program has used supply chains for military bases to make smaller-sized deliveries of locally produced fresh fruit and vegetables to schools.
- **Research** — The large number of specialty crops and the dispersed nature of production throughout the nation discourage private sector research. This makes federally sponsored research critical to the future productivity of the industry. Publicly funded research to gain minor use pesticide approvals is a case in point. The 2004 Specialty Crops Competitiveness Act added specialty crop research to USDA's list of high priority research and extension activities, and established a permanent specialty crops subcommittee under an existing board to study the research needs of the sector and make recommendations. The Agriculture Research Service (ARS) is USDA's own research agency. The Cooperative State Research, Education, and Extension Service (CSREES) administers funds to the stateside components of the agricultural research network, which include the land grant colleges of agriculture, the state agricultural experiment stations, and the state cooperative extension services (providing research-based information and outreach). Annual CSREES block grants comprise only a small portion of their total

³⁰ SPS issues concern the health of animal (sanitary) and plant (phytosanitary) imports into the United States. Because SPS issues can be used as nontariff barriers to trade, they are a chronic source of disputes between countries and between importers and domestic producers and handlers.

funding (state, local, and private funds constitute the majority), but they are important to sustaining the core, ongoing research and extension programs at the state level.

Prospective Issues and Options

In addition to the program of block grants to states to support projects to increase the competitiveness of each state's specialty crops, P.L. 108-465 also contains provisions intended to facilitate exports, protect U.S. specialty crops from invasive pests and diseases, and increase agricultural research of importance to fruit and vegetable crop production. All of these provisions are expected to come up for further discussion in the context of the 2007 farm bill. In the 109th Congress, some Members introduced several legislative proposals containing a variety of additional approaches to supporting specialty crops (S. 2487, H.R. 3562/S. 1556, H.R. 6193). These bills called for mandatory funding for the majority of the programs they proposed. The following are some of the leading priorities of the specialty crop interests:

- Expand the rules under fruit and vegetable marketing orders to include implementation of contamination prevention programs;
- Encourage producers and processors to obtain third-party certification for following standardized handling practices (e.g., Good Agricultural Practices (GAPs), Good Manufacturing Practices (GMPs), ISO 9000) by offering partial reimbursement for certification;
- Reauthorize the program of block grants to states and support it with \$500 million annually in mandatory funds;
- Increase funding for the Market Access Program (MAP);
- Establish a position within the Office of the U.S. Trade Representative to help ensure that issues of importance to specialty crops are considered during trade agreement negotiations;
- Raise the payment limitations for disaster payments and the maximum income threshold for recipients to reflect the higher costs of production and crop values of specialty crops;
- Establish an SPS export petitions division within APHIS to enhance trade by expediting export certifications for specialty crops;
- Increase the mandatory funding available for emergency pest and disease eradication programs and expand compensation to growers affected by such programs;
- Expand the DoD Fresh program to reach 100 elementary or secondary schools in each state;
- Provide mandatory funding to expand basic, applied, and economic research of use to the specialty crop industry;
- Establish grant programs, supported by mandatory funds, to promote the use of specialty crop biomass waste for energy and fuels, as well as for other, value-added commercial products.

Related CRS Reports:

CRS Report RL32746, *Fruits, Vegetables, and Other Specialty Crops: A Primer on Government Programs*, by Jean M. Rawson.

CRS Report RL33520, *Specialty Crops: 2007 Farm Bill Issues*, by Jean M. Rawson.

CRS Report RL32951, *Specialty Crop Issues in the 109th Congress*, by Jean M. Rawson.

Animal Agriculture³¹

The meat and poultry industries do look to the federal government for leadership and support in resolving foreign trade disputes, establishing transparent, science-based rules for importing and exporting animal products, and reassuring domestic and foreign buyers alike that these products are safe, of high quality, and free from pests and diseases. Omnibus farm legislation often contains policy guidance and resources aimed at achieving these objectives.

Much is at stake economically: the farm value of animal production now averages about \$124 billion annually, more than half the total value of all U.S. agricultural production. Approximately 1.1 million of the nation's more than 2.1 million farms were classified by the 2002 Census of Agriculture as primarily an animal production operation. The total included more than 664,000 classified primarily as cattle farms and ranches, 55,000 as cattle feedlots, nearly 73,000 as dairy operations, 34,000 as hog/pig operations, 44,000 as poultry or egg producers, nearly 44,000 involved in sheep or goat production, and more than 228,000 involved in some other livestock activity (e.g., horses, bison, beekeeping, aquaculture).

These producers face intense pressures to become larger, more specialized, and more cost-efficient, to better compete in the increasingly global marketplace. Transactions today are moving away from live cash markets and toward contractual relationships that can provide a guaranteed supply of live animals at predetermined prices. More of these animals are being supplied by Canada (cattle, sows and pigs) and Mexico (cattle), and U.S. dominance as a leading exporter of red meats and poultry is being challenged by highly competitive countries like Brazil, Australia, India, Argentina, and New Zealand.

These trends continue at a time when feed costs have begun to rise significantly due largely to the government's promotion of ethanol (now largely corn-based) as an alternative fuel. In Congress, debate revolves around what, if any, role government should play in mitigating the economic impacts of structural changes and global challenges in the livestock, poultry, and meat processing industries. Other public policy concerns include animal agriculture's obligations with respect to environmental protection, food safety, and animal welfare.

Program Design and Operation

Most of the products of animal agriculture are not eligible for the types of price and income supports that Congress has written into farm bills for major crops such as grains, cotton, and oilseeds.³² Nor have meat and poultry producers generally sought such assistance, except *ad hoc* aid to recover losses caused by natural disasters such as droughts and hurricanes, and on occasion for destruction of animals for disease control.

³¹ This section is by Geoffrey S. Becker.

³² Milk, honey, and wool are notable exceptions. Price support programs for these commodities are discussed elsewhere in this report.

Prospective Issues and Options

Feed Prices and Production Support. Feed is the single largest input cost for cattle feeders and dairy, hog, and poultry producers, who are wary of government policies that can raise feed prices. These include commodity support or conservation programs that take cropland out of production, or ethanol incentives that bid up the price of corn, a key feed ingredient. Such incentives, i.e., tax subsidies and fuel standards mandates, have already helped to boost significantly the portion of the total U.S. corn crop going to ethanol. Animal producers will be paying close attention to a possible energy title in the 2007 farm bill or other legislation that might further bolster feed grain demand and prices.

As noted, animal producers are not eligible for commodity price and income support programs (except on crops they also may produce). Nor do they qualify for the federal subsidized insurance, which covers a portion of the value of production lost to natural disasters. Some cattle and hog producers in a limited number of states do participate in livestock revenue insurance programs being administered by USDA's Risk Management Agency (RMA), which provides protection from revenue losses whether due to natural causes or economic conditions. Also, Congress or the Administration periodically has made animal producers in declared disaster areas eligible for *ad hoc* federal payments, mainly to help defray the cost of purchasing off-farm feed following a disaster affecting on-farm feed production, or permitted producers to use conservation lands for haying and grazing. Whether the federal government should assume more of livestock and poultry producers' disaster risks, and whether such aid ought to be written into standing farm legislation, are among questions that may arise in the farm bill debate.

Market Competition and Packer Concentration. The past several decades have seen rapid changes in the structure and business methods of animal agriculture. Production and marketing have been moving toward fewer and larger operations, although the pace of these changes has varied widely across the sector. For example, smaller (i.e., fewer than 100-head) cow-calf operations (where beef cows are bred and born) represent a majority of such operations and hold nearly half of all U.S. cattle. On the other hand, larger (i.e., 1,000-head plus capacity) feedlots, which fatten cattle to slaughter weight, represent a tiny fraction of total U.S. feedlots but market the vast majority of fed cattle.³³

Live hog production has seen sweeping changes over the past 20 years. The number of U.S. farms with hogs declined from 667,000 in 1980 to 67,000 in 2005; those remaining have become much larger and less diversified. Operations with at least 10,000 hogs now represent less than 1% of all producers but more than half of total U.S. output, USDA reports. Farmers now are selling to fewer packers as well (see **Table 2**).

³³ Source: *Animal Production and Marketing Issues: Questions and Answers*, USDA, Economic Research Service Briefing Rooms, accessed December 29, 2006, at [<http://www.ers.usda.gov/Briefing/AnimalProducts/questions.htm#question2>].

Ownership or tight control of multiple production and marketing steps by a single firm (known as vertical integration or coordination) also is more common. Live animal auction barns and other open cash markets have rapidly given way to closed contractual arrangements between producers and meat packing companies, where sales terms including prices are set in advance.

Table 2. Red Meat Packer Concentration, 1985 and 2005

Type	Percent Slaughtered by Top 4 Firms	
	1985	2005
Hogs	32%	63%
Steers & Heifers	50%	80%
All Cattle	39%	71%

Source: USDA and *Cattle Buyers Weekly*.

Critics assert that these trends have enabled a relative handful of industry players to take control of markets and have undermined the traditional U.S. system of smaller-scale, independent, family-based farming. Farmers and ranchers now have weakened negotiating power, lower prices, and no choice but to “get larger or get out” of agriculture, they add. Others argue that structural changes in animal agriculture, processing, and marketing are a desirable outgrowth of factors such as technological and managerial improvements, changing consumer demand for a wider range of low-cost, convenient products, and expanding international trade.

A number of federal laws and agencies are responsible for ensuring that markets are open and competitive. For example, the Packers and Stockyards Act (PSA) of 1921, as amended (7 U.S.C. §181 *et seq.*) prohibits meat packers and poultry dealers from a variety of anti-competitive and antitrust practices such as engaging in any unfair, unjustly discriminatory or deceptive marketing; or apportioning supplies or manipulating prices to create a monopoly. USDA’s Grain Inspection, Packers and Stockyards Administration (GIPSA) administers the PSA. USDA’s Agricultural Marketing Service (AMS) is responsible for Livestock Mandatory Price Reporting (LMPR, P.L. 109-296), first passed in 1999 to address some producers’ concerns about low livestock prices, industry concentration, and the availability of accurate market information.

The Sherman Act (15 U.S.C. §§1-8) and Clayton Act (15 U.S.C. §12 *et seq.*), which cover but are not specific to agriculture, prohibit certain activities such as mergers and acquisitions that may restrict market access or suppress competition. The U.S. Department of Justice and Federal Trade Commission are primarily responsible for administration of these laws. The Capper-Volstead Act (7 U.S.C. §§291-292) confers limited exemption for antitrust liability to farmer cooperatives.

In each recent Congress, various bills have been proposed to address perceived competition problems in the livestock sector as well as other areas of agriculture. In 2001, the Senate Agriculture Committee debated whether to include, for the first time in an omnibus farm bill, a “competition” title. Proposed by then Committee Chairman Harkin, the title included provisions governing the terms of contracts between producers and the firms that buy their products, and requiring country of origin labeling (COOL) for retail sales of red meats, among other agricultural commodities. Supporters of the title cited statistics about the growing proportion of cattle and hogs being slaughtered and processed by the top four firms (which they believe limit their opportunities for selling animals), and expressed concerns about increased livestock and meat imports. Opponents, who argued that the title would stifle U.S. competitiveness and undermine the business relationships that producers willingly enter, won deletion of the title during committee mark-up. However, COOL was added through a subsequent Senate floor amendment and included in the final bill (see below.)

Several other so-called competition provisions also were adopted in the final 2002 bill. A “livestock” subtitle of Title X (Subtitle F) contained, among other sections, new authority for USDA’s Packers and Stockyards Administration to oversee swine production contracts, and gave explicit permission to livestock and poultry producers to discuss, with specified business associates, regulators, and families, the terms of contracts they have with processors. Variations of these provisions had been approved by the Senate during its floor debate on the farm bill. Another amendment, which the full Senate adopted in late 2001, would have prohibited meat packers from owning or controlling livestock for more than 14 days before slaughter. This amendment was removed by conferees prior to passage of the final bill in 2002, but interest in the proposal continues.

In the 109th Congress, S. 818 and S. 960 proposed to ban packer ownership of animals for more than seven days before slaughter; S. 960 contained additional restrictions on forward contracts for livestock. Future legislative actions, if any, on this issue could be informed by a \$4.4 million study of livestock and meat marketing practices now being completed for USDA.

Country-of-Origin Labeling. Title X of the 2002 farm bill requires retailers provide country-of-origin labeling for fresh beef, pork, and lamb (Section 10816 of Subtitle I).³⁴ This highly contentious program, which has yet to take full effect, could again be on the farm bill agenda of the 110th Congress. First adopted on the Senate floor in late 2001, mandatory meat COOL was to be in place on September 30, 2004, but language in the FY2004 consolidated appropriations act (P.L. 108-199) delayed implementation for meats, produce and peanuts, but not seafood, for two years, until September 30, 2006.

³⁴ The mandatory COOL provision also covers seafood, fruits and vegetables, and peanuts. USDA’s Agricultural Marketing Service is responsible for implementing the rules, and maintains an extensive website on COOL (at [<http://www.ams.usda.gov/cool/>]), with links to voluntary COOL guidelines, the seafood rule, the proposed mandatory rule for the other covered commodities, and a cost-benefit analysis.

Debate over COOL carried into the 109th Congress, which (in USDA's FY2006 appropriation, P.L. 109-97) postponed implementation for an additional two years — until September 30, 2008 (a provision in H.R. 2744). Other measures in the 109th Congress would have made COOL voluntary for meats (including H.R. 2068, S. 1300, and S. 1333). Still others (e.g., S. 135, S. 1331) would have expanded COOL requirements and/or accelerated its current implementation date.

The contrasting intents of these bills reflected the continuing divergence of opinion among lawmakers over whether a federally-mandated labeling program is needed. Some contend that mandatory COOL will provide U.S. products with a competitive advantage over foreign products because U.S. consumers, if offered a clear choice, prefer fresh foods of domestic origin, thereby strengthening demand and prices for them. Moreover, proponents argue that U.S. consumers have a right to know the origin of their food, particularly at a time when U.S. food imports are increasing, and whenever particular health and safety problems arise. They cite as one prominent example concerns about the safety of some foreign beef arising from the discoveries of bovine spongiform encephalopathy (BSE, or mad cow disease) in a number of Canadian-born cows (and two U.S. cows) since 2003. Supporters of the COOL law argue that it is unfair to exempt meats and produce from the longstanding country labeling already required of almost all other imported consumer products, from automobiles to most other foods. They also note that many foreign countries already impose their own country-of-origin labeling.

Opponents of mandatory COOL counter that studies do not provide evidence that consumers want such labeling. They believe COOL is a thinly disguised trade barrier intended to increase importers' costs and to foster the unfounded perception that imports may be inherently less safe (or of lower quality) than U.S. products. Food safety problems can as likely originate in domestic supplies as in imports, as evidenced by the more than 30 recalls of U.S. meat and poultry products announced by USDA in 2006 alone, these opponents point out. Opponents argue that all food imports already must meet equivalent U.S. safety standards, which are enforced by U.S. officials at the border and overseas; scientific principles, not geography, must be the arbiter of safety. Industry implementation and recordkeeping costs, estimated by USDA to be as high as \$3.9 billion in the first year and \$458 million per year after that, would far outweigh any economic benefits, critics add. (COOL proponents assert that these cost estimates were grossly exaggerated while some in industry claim they were too low).

Animal Identification for Disease Control. One aspect of the COOL debate was whether animal producers would have to keep detailed records on their animals' identity and whereabouts so that the government or retailers could properly verify country of origin. Many producers do not believe that USDA's Agricultural Marketing Service should extend such requirements to the farm level, because they are intrusive, costly, and unnecessary in meeting the intent of the law. At the same time, a growing number of producers do seem to agree that some type of universal animal identification (ID) program would be a beneficial tool in addressing animal disease problems.

Outbreaks of animal diseases like avian influenza (AI), foot and mouth disease (FMD), brucellosis, and tuberculosis are seen as perhaps the greatest potential threats

to animal production. Even where U.S. cases have been few (as with BSE) or quickly contained (as with various strains of AI), the impacts can be devastating economically, causing production losses, the closure of export markets, and a decline in consumer confidence. Some like AI and BSE have the potential to harm humans.

Despite several years of effort on the part of USDA, industry groups, and states — and public funding totaling an anticipated \$118 million through FY2007 — a universal U.S. system is not expected to be in place for some time, as policymakers attempt to resolve numerous questions about its design and purpose. Should animal ID be mandated? What types of information should be collected, on what animal species, and who should hold it, government or private entities? To what extent should producer records be shielded from the public and other government agencies? Should animal ID be expanded to traceability of meat and poultry products from farm to the consumer, or used for other purposes such as food safety or certification of labeling claims? How much will it cost, and who should pay?

Past bills to establish differing animal ID systems for animal disease purposes only, and those to require more extensive systems tracing products through the marketing chain, may re-emerge in the 110th Congress, possibly as a farm bill item. USDA's Animal and Plant Health Inspection Service (APHIS) has lead responsibility on matters of animal health, including animal ID. APHIS has indicated that it has the legislative authority to implement an animal ID program under the comprehensive Animal Health Protection Act, which was adopted as Subtitle E of Title X of the 2002 farm bill. This subtitle updated and consolidated a number of longstanding statutes that had been used to monitor, control, and eradicate animal diseases.

Animal Welfare. Farm animals are not covered by the Animal Welfare Act (AWA; 9 U.S.C. §2131 *et seq.*), which requires minimum care standards for most types of warm-blooded animals bred for commercial sale, used in research, transported commercially, or exhibited to the public. Farm animals are covered by other federal laws addressing humane transport and slaughter, however. Generally, many Members of the House and Senate Agriculture Committees have expressed a preference for voluntary approaches to humane methods of farm animal care.

Nonetheless, animal activists periodically seek new legislation that would further regulate on-farm or other animal activities, such as bills to prohibit the slaughter of horses for human food (which passed the House as H.R. 503 in September 2006); to require the federal government to purchase products derived from animals only if they were raised according to specified care standards; and to prohibit the slaughter for food of disabled livestock, among others. Agricultural interests recognize that animal welfare advocacy organizations, like the Humane Society of the United States and others, have large constituencies in many Members' districts, and these organizations have claimed some successes in recent years in winning animal care initiatives in some states and in the courts.

Animal welfare provisions are, on occasion, placed in farm bills. Title XVII, Subtitle F of the 1985 farm bill (P.L. 99-198) directed the Secretary to set new minimum standards of care for handling, housing, feeding, water, sanitation, ventilation, and so forth; and increase penalties for AWA violations, among other things. Section 2503 of the 1990 farm bill (P.L. 101-624) extended certain pet

protections. The amendments also increased civil and criminal penalties for AWA violations. Title X of the 2002 farm bill: called on USDA to fully enforce the Humane Methods of Slaughter Act (§10305); excluded birds, rats and mice, and horses not used for research, from AWA coverage (§10301); delineated prohibitions on interstate movement of animals for fighting (§1302); and required USDA to report on the humane treatment of nonambulatory livestock (§10815).

The Animal Care Division of USDA's Animal and Plant Health Inspection Service has primary responsibility for enforcing the AWA and several other animal welfare statutes, including the Horse Protection Act (15 U.S.C. §1821 *et seq.*) The humane slaughter law is within the purview of USDA's Food Safety and Inspection Service.

Related CRS Reports:

CRS Report RL32012, *Animal Identification and Meat Traceability*, by Geoffrey S. Becker.

CRS Report RS22493, *The Animal Welfare Act: Background and Selected Legislation*, by Geoffrey S. Becker.

CRS Report 97-508, *Country-of-Origin Labeling for Foods*, by Geoffrey S. Becker.

CRS Report RS21978, *Humane Treatment of Farm Animals: Overview and Issues*, by Geoffrey S. Becker.

CRS Report RS21842, *Horse Slaughter Prevention Bills and Issues*, by Geoffrey S. Becker.

CRS Report RS21994, *Livestock Price Reporting: Background*, by Geoffrey S. Becker.

CRS Report RL33325, *Livestock Marketing and Competition Issues*, by Geoffrey S. Becker.

Trade and Export Promotion³⁵

The United States is the world's largest exporter of agricultural products. The volume of U.S. agricultural exports, as a share of production, has ranged from 21% to 23% in recent years. The value of U.S. agricultural exports, as a share of the value of production, has averaged about 18% recently. Total U.S. agricultural exports have grown steadily over the past two decades, rising from around \$26 billion in FY1986 to a forecast \$77 billion in FY2007. (**Figure 2** displays the growth of exports and imports over time). All categories of agricultural exports have grown, but exports of horticultural products have become the largest single component of U.S. farm exports. Exports of pork and poultry meat also have shown rapid growth. Beef products were among the fastest-growing components of U.S. agricultural exports until most foreign markets banned imports of U.S. beef following the 2003 discovery in the United States of a cow with bovine spongiform encephalopathy (BSE, or "mad-cow disease"). The effect of BSE on U.S. beef exports illustrates the impact that animal diseases can have on farm product trade as well as the way veterinary restrictions can affect trade in meat products.

U.S. agricultural trade is influenced by a number of factors, especially global income and population growth. Other important factors are global commodity supplies and prices, exchange rates, government support policies, trade policies, and trade agreements. While many of these factors are beyond the scope of congressional action, agricultural trade policy and commercial export promotion programs typically have been dealt with in the trade title of the omnibus farm bill.

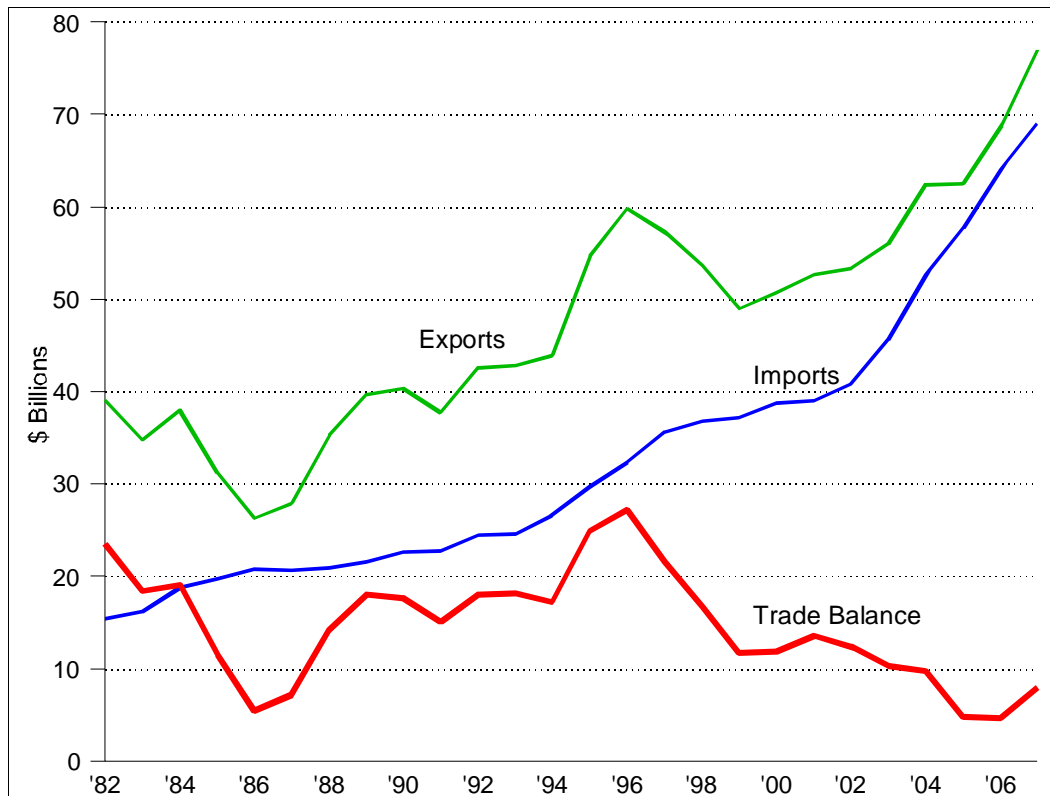
Agricultural imports have grown more steadily than agricultural exports over the past two decades, increasing from about \$21 billion in 1986 to a forecasted \$69 billion in 2007. With growth in imports since 1996 has come a shrinking agricultural trade surplus. The excess of agricultural exports over imports, as high as \$27 billion in 1996, is forecast to be \$8 billion in 2007. Competition from agricultural imports raises concerns among some producers and policymakers, but farm bill trade titles generally have not addressed import issues.³⁶

The new round of World Trade Organization (WTO) multilateral trade negotiations, launched in Doha, Qatar, in 2001, was suspended in July 2006. For agriculture, the Doha negotiations aimed to strengthen existing multilateral rules and disciplines by making further reforms in market access, export subsidies, and domestic farm support. Most U.S. agricultural groups would support these negotiations only if U.S. negotiators could open new markets for U.S. farm products in exchange for reductions in U.S. trade-distorting domestic support. When U.S. negotiators concluded that market access offers from developed and developing countries were insufficient to convince U.S. farmers to accept reductions in trade-distorting domestic support, the round collapsed.

³⁵ This section is by Charles E. Hanrahan.

³⁶ Historical agricultural trade data are from USDA, ERS [<http://www.ers.usda.gov/Data/FATUS/DATA/XMS1935fy.xls>]. Forecast data are from *Outlook for U.S. Agriculture Trade*, Nov. 22, 2006, at [<http://www.fas.usda.gov/cmp/outlook/2006/Nov-06/AES-11-22-2006.pdf>].

Figure 2. U.S. Agricultural Exports and Imports, FY1982-FY2007 Forecast



Source: USDA, Economic Research Service.

Program Design and Operation

Since the 1970s, farm bills or free-standing legislation have contained trade provisions that authorize export promotion. Trade titles have either amended existing programs or added new programs to promote commercial exports of U.S. agricultural products. USDA's Foreign Agricultural Service (FAS) administers all the export promotion programs.

In addition to enumerating U.S. agricultural negotiating objectives for bilateral, regional, and multilateral trade negotiations, Title III of the 2002 farm bill extended and authorized funding through FY2007 for USDA's export promotion programs:

- Export credit guarantees for commercial agricultural sales (the so-called GSM programs) were extended at previously authorized funding levels.
- The Export Enhancement Program (EEP), which subsidizes exports of mainly grains and cotton was extended, although it has been little used since 1995.

- The Dairy Export Incentive Program (DEIP), which subsidizes such dairy products as cheese, butter, and skim milk powder, has been used in each year of the current farm bill except 2005.
- The Market Access Program (MAP) and the Foreign Market Development Program (FMDP) partially fund agricultural trade organizations' and other groups' efforts to promote U.S. farm products in overseas markets.
- Other programs authorized in the trade title of the 2002 farm bill include programs to provide samples of U.S. farm products to overseas buyers, to promote exports of specialty crops by addressing phytosanitary barriers to trade, and to develop markets for U.S. farm products in emerging markets.

In addition, Title III called for the Secretary of Agriculture to develop a global strategy for marketing U.S. agricultural exports and authorized a program to promote exports of bio-engineered agricultural commodities.

Prospective Issues and Options

In considering renewal of the export promotion programs, Congress will again be confronted with questions of program direction and funding. Levels of spending and volumes of product subsidized under EEP and DEIP already are subject to limitations under the existing Uruguay Round Agreement on Agriculture (URAA). The URAA also prohibits introducing new export subsidies. In practice, EEP has been used very little in recent years, while DEIP has been used in four of the past five years and is expected to be used during the final year of 2002 farm bill authority. Decisions about export subsidies could be affected by outcomes of the Doha Round agriculture negotiations. Prior to suspension of the Doha Round, preliminary agreements had been reached to eliminate agricultural export subsidies by 2013 and to eliminate the subsidy components of other export programs. Elimination of export subsidies has been a longstanding aim of U.S. agricultural trade policy, but those Doha Round preliminary agreements are now on hold.

Market promotion programs such as MAP and FMDP are not considered to be trade distorting under the URAA, and therefore are not subject to internationally agreed spending disciplines. Neither have these programs been targets for cuts or elimination in the Doha Round agriculture negotiations. If multilateral negotiations were to result in new curbs on export subsidies and export credits, the market promotion programs could become more attractive to Congress as vehicles for funding export promotion. Some agricultural groups, for example specialty crop producers, have proposed substantial increases in MAP, whose current funding level is \$200 million annually. (**Table 3** shows spending levels under the 2002 farm bill for the export promotion programs.) Elimination of MAP funding altogether has been proposed, but not adopted, in previous farm bill (and annual appropriations) debates. It typically has been argued that MAP is a form of corporate welfare and an expense that could be financed by the private firms and organizations that benefit from the program.

**Table 3. USDA Export Promotion Spending Levels,
FY2002-FY2007**

	FY02	FY03	FY04	FY05	FY06	FY07 Est.
	(Million \$)					
Export Promotion Programs	3,577	3,399	3,878	2,799	3,343	3,464
<i>Export Enhancement Program (EEP)</i>	0	0	0	0	0	28
<i>Dairy Export Incentive Program (DEIP)</i>	55	32	3	0	2	35
<i>Market Access Program (MAP)</i>	100	110	125	140	200	200
<i>Foreign Market Development Program (FMDP)</i>	34	34	34	34	34	34
<i>CCC Export Credit Guarantees (GSM programs)</i>	3,388	3,223	3,716	2,625	3,107	3,167
Foreign Agriculture Service	198	195	197	206	217	227
Total Programs and Administration	3,775	3,594	4,075	3,005	3,560	3,691

Source: USDA, *Annual Budget Summaries*, various issues. CCC Export Credit Guarantee program activity level represents the value of export loans that are guaranteed, not federal expenditures.

Maintaining export credit guarantees as a viable tool for promoting exports may be particularly challenging in view of the decision by a WTO dispute panel in the U.S.-Brazil cotton case that they are effectively prohibited export subsidies because they do not fully cover their operating costs. Such programs have financed an average of \$3.3 billion per year of U.S. agricultural exports since 1999 — mainly grains, oilseeds and products, and cotton. In response to the cotton case decision, the United States has eliminated its program of long-term credit guarantees and instituted a risk-based fee structure to cover the costs of providing short-term credit guarantees. Further change could be in store if Doha Round negotiations result in further limiting or eliminating the subsidy elements of this kind of export financing. Supporters of guarantees also are concerned that changes required to comply with the WTO cotton panel decision and under consideration in the Doha Round may make the credit programs less attractive to foreign buyers of U.S. products.

Related CRS Reports:

CRS Report RL33144, *The WTO Doha Round: The Agricultural Negotiations*, by Charles E. Hanrahan and Randy Schnepf.

CRS Report RS22187, *U.S. Agricultural Policy Response to the WTO Cotton Decision*, by Randy Schnepf.

CRS Report RL33553, *Agricultural Export and Food Aid Programs*, by Charles E. Hanrahan.

Crop Insurance and Disaster Assistance³⁷

Agriculture is generally viewed as an inherently risky enterprise. Farm production levels can vary significantly from year to year and by location, primarily because farmers operate at the mercy of nature, and frequently are subjected to weather-related and other natural disasters. Since the Great Depression, policymakers have been persuaded that the federal government should absorb some portion of the weather-related production losses that otherwise would depress farm income and could alter farmer's decisions about what to produce in some high-risk locations.

Federal multi-peril crop insurance is the primary ongoing crop loss assistance program. It is permanently authorized by the Federal Crop Insurance Act, as amended (7 U.S.C. 1501 *et seq.*), and is administered by USDA's Risk Management Agency (RMA). This is complemented with the Non-Insured Assistance Program, administered by the Farm Service Agency (FSA), which is available to producers not offered insurance coverage. Lack of insurance availability occurs in locations where there is insufficient production history to determine actuarial risks of a crop or in regions where production of a specific commodity is relatively small. Following a widespread and severe drought in 1988, Congress approved a large *ad hoc* disaster assistance program to supplement the ongoing disaster programs. Such *ad hoc* assistance subsequently has become routine.

Program Design and Operation

Federal crop insurance policies are marketed and serviced by private insurance companies. In purchasing a policy, a producer growing an insurable crop may select a level of crop yield and price coverage and pay a portion of the premium, which increases as the levels of yield and price coverage rise. The remainder of the premium is covered by the federal government. Coverage is made available through various insurance products, including revenue insurance (which allows a participating producer to insure a target level of farm revenue rather than just production levels). According to USDA, the federal crop insurance program provided coverage in 2006 to over 100 crops covering more than three-fourths of planted acreage in the country. Although the list of covered commodities has grown in recent years, 80% of total policy premiums (and federal subsidies) are accounted for by just four commodities — corn, soybeans, wheat and cotton.

Because the program is not subject to periodic reauthorization, major changes to the crop insurance program usually are not addressed in the context of an omnibus farm bill. Over the past 25 years, the program has been subject to three major legislative enhancements (1980, 1994 and 2000)³⁸ each of which has pumped additional federal dollars into the program in order to enhance farmer participation levels in anticipation of precluding the demand for *ad hoc* disaster payments.

³⁷ This section is by Ralph M. Chite.

³⁸ Federal Crop Insurance Act of 1980 (P.L. 96-365), Federal Crop Insurance Reform Act of 1994 (P.L. 103-354), Agriculture Risk Protection Act (ARPA) of 2000 (P.L. 106-224).

Since the last major modification in 2000, the federal subsidy to the crop insurance program has averaged about \$3.0 billion per year, up from an annual average of \$1.1 billion in the 1990s and about \$500 million in the 1980s (**Table 4**). Nearly two-thirds of the current federal spending is used to subsidize insurance policy premiums, and the balance primarily covers the government share of program losses and reimburses participating private insurance companies for their administrative and operating expenses.

Table 4. Government Cost of Federal Crop Insurance

Fiscal Year	Program Losses or (Gains) ^a	Federal Premium Subsidy	Private Company Admin. Expense Reimbursements	Other Costs ^b	Total Gov't. Cost
	Million \$				
2000	196	1,353	540	86	2,175
2001	725	1,707	648	82	3,162
2002	1,182	1,513	656	114	3,465
2003	822	1,873	743	150	3,588
2004	-303	2,386	899	142	3,125
2005	-688	2,465	782	139	2,698

Source: Primary data are from USDA Office of Budget and Program Analysis. Totals may not add due to rounding.

a. The difference between total premiums (farmer and government paid) and total indemnity payments for crop losses, plus or minus any private company underwriting losses or gains.

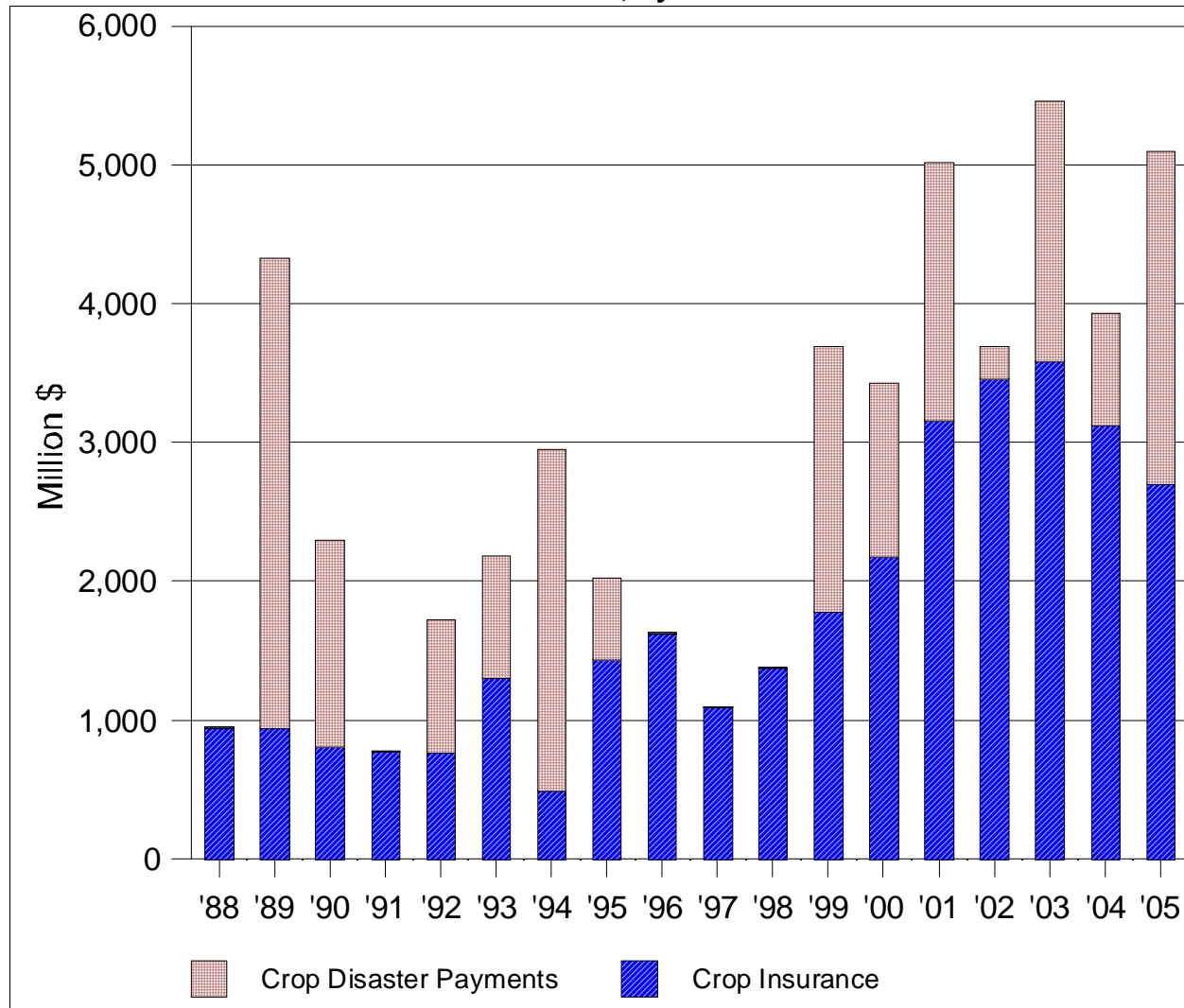
b. Other costs primarily include federal salaries of the Risk Management Agency and beginning in 2002, various research and development initiatives mandated by the Agriculture Risk Protection Act of 2000.

Although the scope of the program has widened significantly over the past 25 years, the anticipated goal of crop insurance replacing disaster payments has not been achieved. Until just recently, in virtually every crop year since 1988, Congress has provided *ad hoc* disaster payments to farmers with significant weather-related crop losses. These have been made available primarily through emergency supplemental appropriations, regardless of whether a producer had an active crop insurance policy. The exception to the historical pattern is crop years 2005 and 2006. A persistent effort was made during the Second Session of the 109th Congress to enact disaster assistance, but the effort did not succeed.

Since 1988, total disaster payments have amounted to more than \$20 billion. Over the past six years (FY2000-FY2005), farmer benefits under both the federal crop insurance program and *ad hoc* supplemental disaster payments have averaged

\$3.3 billion per year.³⁹ The average government cost over the same period rises to \$4.4 billion per year when other costs of crop insurance (particularly those associated with the private insurance companies) are included (**Figure 3**).

**Figure 3. Crop Insurance and Disaster Payments:
Total Federal Cost, by Fiscal Year**



Source: Primary data are from USDA's Table 35, CCC Net Outlays by Commodity & Function for disaster payments, and USDA's Office of Budget & Program Analysis for crop insurance.

Prospective Issues and Options

Administration Proposals to Reduce Costs. The Administration's budget request for FY2006 contained several crop insurance legislative proposals that it said would encourage farmers to buy higher levels of insurance coverage, save the

³⁹ While Congress did not approve disaster assistance for the 2005 or 2006 crop years, outlays in FY2005 were for losses related to the 2004 crop year.

government \$140 million annually, and preclude the need for *ad hoc* disaster payments. None of these proposals were approved by Congress, but they could surface in debate on the next farm bill. These proposals include (1) a requirement that farmers purchase crop insurance as a prerequisite for receiving farm commodity payments; (2) a 2% to 5% reduction in the portion of the premium that is paid by the government, with larger reductions at lower levels of coverage; (3) a requirement that producers pay 25% of the premium (up to \$5,000) for catastrophic (CAT) coverage, instead of the current requirement that a producer pay a \$100 administrative fee and no premium; and (4) a 2% reduction in the reimbursement rate to private crop insurance companies for administrative and operating expenses.

Premium Reduction Plan. Several other crop insurance issues currently are being monitored in Congress and could carry into the 2007 farm bill debate. For example, some groups have expressed concern about a Premium Reduction Plan (PRP) currently being offered by USDA. The PRP allows crop insurance companies that can demonstrate cost savings in their delivery of insurance to sell policies to their customers at a discount. For example, one eligible company has reduced its costs by selling its policies directly to customers online. Independent agents, who sell insurance on behalf of the crop insurance companies, are concerned that the PRP reduces their total commissions and damages their profitability. Some farm groups contend that the plan encourages cherry-picking of the best customers and might leave smaller farmers uninsured. The FY2006 agriculture appropriations act (P.L. 109-97) prohibited RMA from using any of its funds to administer the PRP for the 2007 crop year.

Insurable Yields. An issue that was addressed in the Agriculture Risk Protection Act (ARPA) of 2000 (P.L. 106-224), but continues to be of interest, involves the concerns of farmers with multiple years of significant crop losses. Since the level of insurance coverage is determined by an individual producer's actual production history, producers with multiple years of crop losses tend to have lower average historical crop yields and hence are assigned insurable crop yields that are reduced by these losses. Although P.L. 106-224 placed limits on how low a producer's insurable yield could fall, some producers still maintain that their assigned yields are below their potential production. Some groups also are concerned that a participating producers' historical crop yields underestimate current yields being achieved with new technologies.

Critics say that recent crop loss experience is more indicative of the current level of risk. Hence, to assign higher yields might encourage production in high risk areas and increase government costs. Some even argue that certain areas simply may be unsuitable for crops that farmers have become accustomed to planting. To support their case, critics point to USDA data showing that some 21,000 disaster payment beneficiaries (about 1 percent of recipients) collected aid more than 11 years out of 21, amounting to \$2.5 billion, or almost 10 percent of the total payments. Nearly 56% of the that money went to four states (Texas, North Dakota, South Dakota, Oklahoma).⁴⁰

⁴⁰ The USDA data were obtained and analyzed by the Environmental Working Group and (continued...)

Specialty Crop and Livestock Concerns. Some specialty crop growers (mainly fruits, nuts, and vegetables) contend that insurance products for their commodities are not available or are developed more slowly than for the more traditional crops. In part, this is because of the large number of specialty crops that are grown. Furthermore, because specialty crops have unique production and risk characteristics, individually customized insurance programs are required for the various crops. Consequently, some specialty crop growers have expressed interest in the expansion of whole-farm insurance programs, which allow farmers in some regions to insure the revenue of the entire farm rather than on a crop-by-crop basis. Others have proposed the formulation of farm savings accounts as a new risk management tool, which would allow farmers to contribute income to an account in a high-income year, and defer paying taxes on the contribution until its is withdrawn in the future in a low-income year.⁴¹ Similarly, livestock growers have expressed interest in expanding pilot programs and developing new programs to assist them in managing their price risks.

Waste, Fraud, and Abuse. For many years, policymakers have been concerned about waste, fraud, and abuse within the federal crop insurance program. The Agricultural Risk Protection Act (ARPA) of 2000 (P.L. 106-224) contained several provisions that were designed to enhance USDA's recognition of and response to challenges to program compliance and integrity. In response to the ARPA requirements, USDA used "data mining" techniques to compile an annual list of producers who either exhibit high loss ratios (i.e., high indemnity payments relative to total premiums), high frequency and severity of losses, or who are suspected of poor farming practices that might contribute to production losses. USDA estimates that the use of the spot-check list has prevented between \$70 million and \$110 million each year in improper payments. Mandatory funding authorized by ARPA for data mining and other ARPA-related program integrity activities expired at the end of FY2005. The FY2006 agriculture appropriations act (P.L. 109-97) included \$3.6 million in discretionary funds for data mining and warehousing activities, within the regular annual appropriations acts. However, future funding for this activity remains uncertain. Some would like to see permanent funding for program integrity activities addressed in the next farm bill.

Permanent Disaster Payments. Some policymakers, including the new incoming chairman of the House Agriculture Committee (Collin Peterson) have expressed interest in making permanent in the farm bill some level of disaster payments to supplement the crop insurance program.⁴² Supporters say that ongoing farm disaster programs do not adequately address emergency needs when a major disaster strikes and that USDA should have at its disposal a permanent source of disaster funds in the same manner as the Federal Emergency Management

⁴⁰ (...continued)

published on their website at [<http://www.ewg.org/issues/agriculture/20060926/index.php>].

⁴¹ Such tax favored saving accounts for farmers have been introduced in past Congresses under such names as Farm And Ranch Risk Management (FARRM) Accounts and Farm, Fish, And Ranch Risk Management (FFARRM) Accounts.

⁴² Frederic J. Frommer, *Peterson to push for permanent disaster aid program*, Associated Press Newswire, Nov. 27, 2006.

Administration (FEMA). Among the questions that would have to be addressed in the debate would be how such a program would be funded given current budget constraints, and whether the permanent availability of disaster payments would adversely affect participation rates in the crop insurance program.

Revenue Insurance Expansion. Historically, farm risks associated with low commodity prices have been shared with the federal government through the commodity price and income support programs. Separately, production risks associated with weather have been shared with the federal government through subsidized crop insurance (and supplemented by disaster payments). A proposed concept that has gained momentum recently is to combine these programs into a single revenue insurance program. The concept is not new and received some consideration by Congress during the 1985 farm bill debate. At its broadest, the concept could include whole-farm revenue coverage for possibly all farms in the nation. At its narrowest, there currently exist revenue insurance products that allow eligible producers to insure a target level of revenue rather than just production (currently available on major crops as part of the existing federal crop insurance program).⁴³

Most recently, the National Corn Growers Association proposed a version of revenue insurance that potentially would replace the commodity support programs and crop insurance programs for the so-called covered commodities (corn and other feed grains, soybeans and other oilseeds, wheat, rice, and cotton).⁴⁴ One justification for a shift from commodity support programs to a revenue insurance system is to reduce the production and trade distorting impacts of the federal commodity subsidies. However, even for revenue insurance programs there are limits under World Trade Organization (WTO) rules for what would qualify as “green box” or non-trade distorting support. Under current WTO rules, a federally subsidized revenue insurance program can provide benefits for a level of coverage only below 70% of revenue to qualify as non-trade distorting.

Related CRS Reports:

CRS Report RS21212, *Agricultural Disaster Assistance*, by Ralph M. Chite.
CRS Report RL31095, *Emergency Funding for Agriculture: A Brief History of Supplemental Appropriations, FY1989-FY2006*, by Ralph M. Chite.
CRS Report RL30739, *Federal Crop Insurance and the Agriculture Risk Protection Act of 2000 (P.L. 106-224)*, by Ralph M. Chite.

⁴³ Revenue insurance options are examined by Robert Dismukes and Keith H. Coble, “Managing Risk With Revenue Insurance,” *Amber Waves*, November 2006, at [<http://ers.usda.gov/AmberWaves/November06/Features/Managing.htm>].

⁴⁴ The proposal is explained in the National Corn Grower Association report titled *Forging a New Direction for Farm Policy*, October 19, 2006, at [http://www.ncga.com/news/notd/pdfs/10_23_06NFSA.pdf].

Agricultural Credit⁴⁵

The federal government has a long history of providing credit assistance to farmers. USDA's Farm Service Agency (FSA) issues direct loans and guarantees loans made by commercial lenders.⁴⁶ The direct and guaranteed loans are intended to assist farmer borrowers who do not qualify for regular commercial loans, but only if they are expected to eventually graduate to commercial loans. Authority for the size of the loan programs is specified in the 2002 farm bill and expires at the end of FY2007. At the same time that Congress examines and possibly modifies the FSA loan programs, it may address several issues concerning the Farm Credit System (FCS). FCS, second only to commercial banks as a holder of farm debt, is chartered by the federal government as a cooperatively owned commercial lender only to agriculture-related borrowers.

Other sources of credit for agriculture include commercial banks, life insurance companies, and individuals. **Figure 4** shows that commercial banks lend the largest portion of the farm sector's total debt (37%), followed by the Farm Credit System (30%), individuals and others (21%), and life insurance companies (5%). The Farm Service Agency provides 3% of the debt through direct loans, and guarantees another 4% of the market (additional loans issued by commercial banks and FCS). FCS is the largest real estate lender; commercial banks issue the most non-real estate loans.

Credit is an important input to agriculture, with all lenders holding about \$214 billion in outstanding farm loans in 2005. Yet only about 66% of farmers have any debt (farm or nonfarm), and only 38% have farm debt. The types of farms holding the most debt include the larger commercial farms that produce most of the output, and medium-sized family farms.

Creditworthy farmers generally have adequate access to loans, mostly from the largest suppliers — commercial banks, FCS, and merchants and dealers. According to reports from lenders, credit conditions are good, and default rates have been trending lower to levels not seen since before the credit crisis of the 1980s. Overall, USDA data show that debt-to-asset ratios for the farm sector have been stable or slightly declining over the past decade, indicating that the sector is not highly leveraged with debt. Recent strength in farm income has given farmers more capacity to repay their loans or borrow new funds. Farm equity has been rising because increases in debt typically have been more than offset by larger gains in land values.

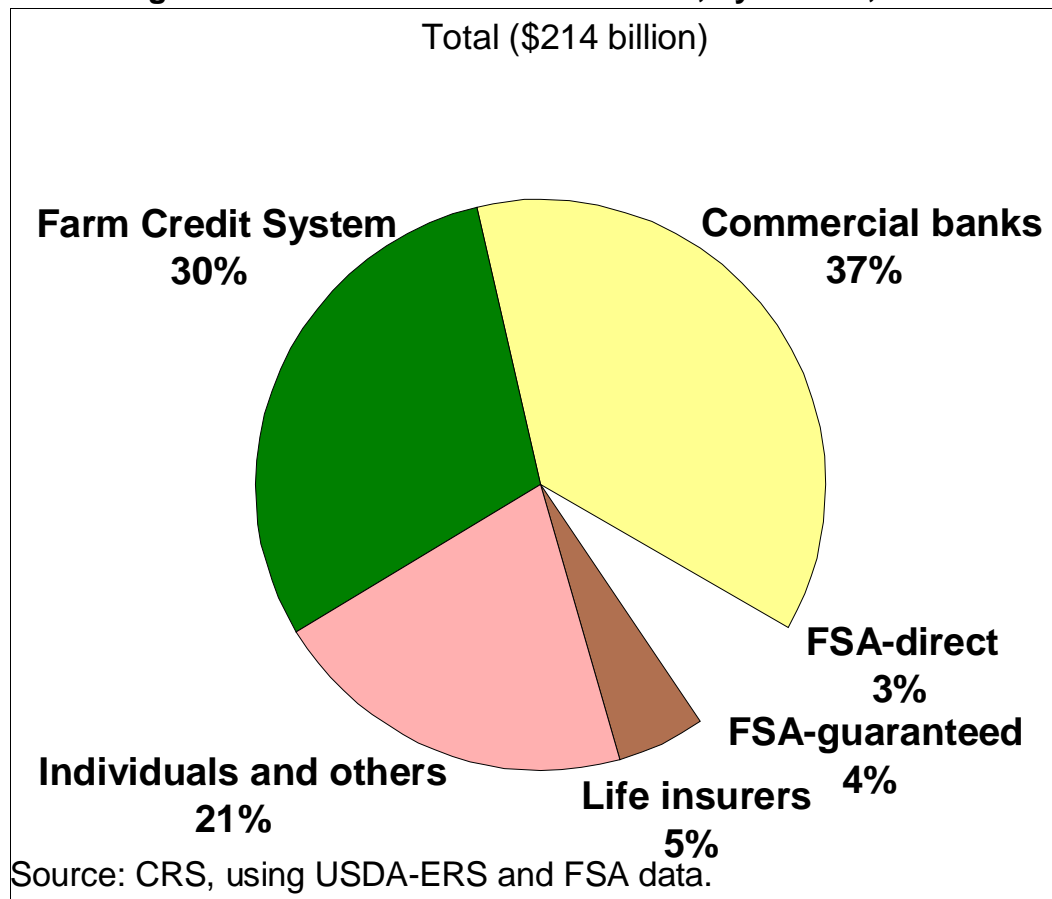
Nonetheless, despite the relatively strong farm economy in recent years, some farmers continue to experience financial stress due to individual circumstances, and may be unable to qualify for loans. Agriculture is also prone to business cycles that

⁴⁵ This section is by Jim Monke.

⁴⁶ Historically, the USDA's lending agency was the Farmers' Home Administration (FmHA), initially established in 1945. Departmental reorganization in 1995 moved the farm lending programs of FmHA into FSA, and the rural housing loans into the Rural Development agency.

may pose financial difficulties. Thus, many interests in production agriculture continue to see some need for federal intervention in agricultural credit markets.

Figure 4. Market Shares of Farm Debt, by Lender, 2005



Farm bills usually contain a credit title that makes policy changes to the underlying permanent statutes that authorize FSA and FCS.

Program Design and Operation

Farm Service Agency (FSA) Loan Programs. FSA loan programs have permanent authority under the Consolidated Farm and Rural Development Act (Con Act, 7 U.S.C. 1921 *et seq.*), and unlike the farm commodity programs, do not require periodic reauthorization. However, Congress typically uses the farm bill to renew the appropriations authority and make changes to the terms, conditions, and eligibility requirements.

FSA is referred to as a lender of last resort because it makes direct loans, in some cases at below-market interest rates, to eligible operators of family-sized farms who are unable to obtain commercial credit. FSA also guarantees timely payment of principal and interest on qualified loans made by commercial lenders, such as commercial banks and the Farm Credit System. FSA supplies about 3% (\$6 billion) of the sector's debt through direct loans, and guarantees loans made by other lenders that account for another 4% of the market (about \$9 billion).

FSA farm ownership loans can be used to purchase land, construct buildings, or make other farm improvements. Operating loans can be used to purchase equipment, livestock, feed, seed, fertilizer, fuel, and other supplies. The maximum direct farm ownership and farm operating loans are \$200,000 per borrower, while the maximum guaranteed farm ownership and farm operating loans are \$852,000 per borrower (adjusted annually for inflation). Emergency loans are available for qualifying natural or other disasters.

Since the 1980s, the emphasis within the FSA farm loan program has gradually shifted, toward making relatively fewer direct loans and issuing more in guarantees. This lessens farmers' reliance on direct federal lending, and helps leverage federal dollars, since guaranteed loans are cheaper to subsidize. In the late 1990s, about 30% of USDA farm loan authority was for direct loans. That share dropped to about 21% in FY2003, before rising again to about 25% in FY2004-FY2006.

Certain portions of the FSA farm loan program are reserved for beginning farmers and ranchers (7 U.S.C. 1994 (b)(2)). For direct loans, 70% of the amount for farm ownership loans and 35% of direct operating loans are reserved for beginning farmers for the first 11 months of the fiscal year (until September 1). For guaranteed loans, 25% of the amount for farm ownership loans and 40% of farm operating loans are reserved for such farmers for the first six months of the fiscal year (until April 1). Funds are also targeted to "socially disadvantaged" farmers based on race, gender, and ethnicity (7 U.S.C. 2003).

Authorizations vs. Appropriations. The 2002 farm bill approved a maximum loan authority of \$3.796 billion for direct and guaranteed loans for each of fiscal years 2003-2007 (7 U.S.C. 1994(b)(1)). Also, the law specified how this would be divided between direct and guaranteed loans, and within each of these categories how much could be used for ownership loans versus operating loans (see **Table 6** for the specific allocations). The farm bill further instructed that not more than \$750 million of the guaranteed operating loan amount may be used for the interest assistance (subsidized) guaranteed loan program (7 U.S.C. 1999), which reduces the interest rate on the loan by 4%.

Although the farm bill authorizes the multi-year "loan authority," appropriators control the annual appropriation to FSA that covers the federal cost of making loans (the "loan subsidy"). This loan subsidy is directly related to any interest rate subsidy provided by the government, as well as a projection of anticipated loan losses. The amount of lending that actually can be made (the appropriated loan authority) is several times larger than the appropriated loan subsidy. **Table 5** shows that appropriators have funded between 83% and 101% of the total \$3.796 billion in loan authority annually authorized in the 2002 farm bill. Direct operating loans have been appropriated 7%-14% more than authorized, and guaranteed farm ownership loans have been appropriated up to 39% more than authorized. These higher amounts were requested, in part, by the Administration.

Table 5. FSA Farm Loans: Farm Bill Authority vs. Appropriated Loan Authority

Loan Type	2002 Farm Bill Annual Authority, FY02-07	Appropriations Act Authority			
		FY03	FY04	FY05	FY06
Direct Loans	(Million \$)				
Ownership loans	205	130	128	208	206
Operating loans	565	605	614	645	644
a: Subtotal, direct loans auth. in 2002 farm bill	770	735	742	853	850
Other (boll weevil, Indian land)	NA ^a	102	102	102	102
Subtotal, all direct loans	NA	837	844	955	952
Guaranteed loans	(Million \$)				
Ownership loans	1,000	1,000	944	1,389	1,386
Operating, unsubsidized		1,700	1,193	1,091	1,139
Operating, subsidized rate	2,026	400	265	283	272
b: Subtotal, guaranteed	3,026	3,100	2,402	2,763	2,797
Total, of loans authorized in 2002 farm bill (a+b)	3,796	3,835	3,144	3,616	3,647
Total farm loan authority	NA	3,937	3,246	3,718	3,749

Source: CRS, using P.L. 107-171 and tables from the House and Senate Appropriations Committees.

a. Authorized levels are not stated in the 2002 farm bill for Indian land acquisition loans, boll weevil eradication loans, and emergency loans. Indian land acquisition loans are authorized from direct loans in 25 U.S.C. 488. Emergency loans are authorized such sums as necessary in 7 U.S.C. 1967.

Table 6 shows the loan subsidies that were appropriated to support the loan authority listed in **Table 5**. For example, for FY2006, \$150 million in total loan subsidy supported the \$3.7 billion in loan authority. This results in a “multiplier” of 25 (\$25 of loan authority for each \$1 of loan subsidy). Guaranteed loans have higher multipliers than direct loans, and farm ownership loans have higher multipliers than operating loans. The highest multiplier in FY2006 is 208, for guaranteed farm ownership loans. The lowest is eight, for subsidized guaranteed operating loans, which have a 4% interest rate subsidy. The multiplier is inversely related to the amount of subsidy or risk involved in making or guaranteeing a loan (i.e., the higher the multiplier, the lower the risk and subsidy, and vice versa).

Table 6. FSA Farm Loans: Appropriated Loan Subsidy and Administrative Expenses

Type of Loan / Expense	Appropriated loan subsidy (Million \$)			
	FY03	FY04	FY05	FY06
Direct loan subsidy				
Ownership loans	15.0	28.4	11.1	10.5
Operating loans	103.7	88.5	65.1	64.0
Indian land acquisition loans	0.18	0	0.11	0.08
Subtotal, direct loans	118.9	116.9	76.3	74.6
Guaranteed loan subsidy				
Ownership loans	7.5	5.1	7.4	6.7
Operating, unsubsidized	53.5	39.7	35.2	34.5
Operating, subsidized	46.9	33.8	37.6	34.0
Subtotal, guaranteed loans	107.9	78.6	80.2	75.2
Total loan subsidy	226.8	195.5	156.5	149.8
Salaries and administration	285.3	289.3	299.4	309.5
Total farm loan appropriation	512.1	484.8	455.9	459.3

Source: CRS, using tables from the House and Senate Appropriations Committees.

Loan subsidies to support the appropriated loan authorities have declined from \$226 million in FY2003 to \$150 million in FY2006 (**Table 6**). Much of this decline in appropriations was requested by USDA and is attributed to higher farm incomes, better repayment ratios, and lower interest rates. This has allowed the multiplier for the entire farm loan program to rise from 17 in FY2003 to 25 in FY2006.

Appropriations for salaries and expenses of the FSA personnel administering the loan program have risen 8.5% from \$285 million in FY2003 to \$310 million in FY2006 (**Table 6**), an increase that has just kept pace with inflation.

2002 Farm Bill Changes. As an example of the adjustments made to FSA programs by a farm bill, Title V of the 2002 farm bill (P.L. 107-171) authorized a level of loan authority for FY2003-FY2007 and expanded access to USDA farm credit programs for beginning farmers. Among several other provisions, the 2002 farm bill increased the percentage that USDA may lend for real estate loan down payments, and extended the duration of eligible loans. It also created a pilot program to guarantee seller-financed land contracts, and expanded emergency loan authority to include losses due to USDA-imposed quarantines.

Farm Credit System (FCS) Lending. The Farm Credit System (FCS) is a network of borrower-owned lending institutions operating as a government-sponsored enterprise (GSE). Congress established what is now FCS in 1916 to provide a dependable and affordable source of credit to rural areas at a time when

commercial lenders avoided farm loans. FCS is not a government agency, nor is it guaranteed by the U.S. government; and FCS is not a lender of last resort like FSA. FCS is a for-profit lender with a statutory mandate to serve agriculture. FCS is authorized to lend to farmers, ranchers, and harvesters of aquatic products. Loans may also be made to finance the processing and marketing activities of these borrowers, for home ownership in rural areas, for certain farm- or ranch-related businesses, and for agricultural, aquatic, and public utility cooperatives.

Current statutory authority for FCS is in the Farm Credit Act of 1971, as amended (12 U.S.C. 2001 *et seq.*), most notably revised by the Agricultural Credit Act of 1987. Statute and oversight by the Agriculture Committees determine the scope of FCS activity, and provide benefits such as tax exemptions. The system is regulated by the Farm Credit Administration.

As of June 2006, FCS had \$113 billion in loans outstanding, of which about 51% was in long-term agricultural real estate loans, 28% in short- and intermediate-term agricultural loans, 16% in loans to cooperatives, 2% in export financing, and 3% in rural home loans. The system holds about 30% of the farm sector's total debt (second to the 37% share of commercial banks) and has the largest share of farm real estate loans (38%). Funds are raised through the sale of FCS bonds and notes on Wall Street. Five large banks allocate these funds to 96 credit associations that, in turn, make loans to eligible creditworthy borrowers.

Prospective Issues and Options

Farm Service Agency Loan Program Issues. The 2007 farm bill is seen as a vehicle to set new loan authorization levels for FSA, although actual funding would continue to be set by annual appropriations acts.

Some have expressed a desire to increase the \$200,000 limit per farmer on direct farm ownership and operating loans.⁴⁷ These limits were set in 1984 for direct farm ownership loans, and in 1986 for direct operating loans, and have not kept pace with inflation. (Limits for guaranteed loans were raised in 1998 and indexed for inflation.)

Another potential issue is the “term limits” set in statute for farmer eligibility. Currently farmers are limited to receiving direct operating loan eligibility for seven years, and guaranteed operating loans for 15 years (including the seven-year period direct loan eligibility). A provision in the 2002 farm bill suspended application of the 15-year limit, but it again will be effective on October 1, 2007. An increasing number of farmers are reaching their term limits, and may face financial collapse if they are not able to “graduate” to commercial credit. Term limits are intended to prevent chronically inefficient farms from continuing to receive federally subsidized credit, but the political and social consequences of letting these “family farms” fail are sometimes unpleasant. Thus, there will be pressures to again extend the eligibility allowance.

⁴⁷ Glenn Keppy (Associate Administrator, USDA-FSA), testimony before Senate Agriculture Committee hearing, “Review USDA Farm Loan Programs,” June 13, 2006, at [<http://agriculture.senate.gov/Hearings/hearings.cfm?hearingId=1940>].

Farm Credit System Issues. In recent years, FCS has, to a limited degree, expanded its lending beyond traditional farm loans and into more rural housing and non-farm businesses. FCS also generally desires to update the Farm Credit Act of 1971, which last was amended comprehensively in 1987. In early 2006, FCS released a report titled *Horizons*, which highlights perceived needs for greater lending authority.⁴⁸ Some see *Horizons* as a precursor to legislative action, possibly in the 2007 farm bill, or to regulatory changes expanding the allowed scope of lending.⁴⁹

Commercial banks oppose expanding FCS lending authority, saying that commercial credit in rural areas is not constrained and that FCS's government-sponsored enterprise (GSE) status provides an unfair competitive advantage. Commercial banks assert that, with financial integration throughout the economy, there is no longer a credit shortage for agriculture and that federal benefits for FCS are no longer necessary. FCS debates this by asserting its statutory mandate to serve agriculture (and by extension, rural areas) through good times and bad, unlike commercial lenders without such a mandate.

The controversy over GSE status and lending authority was highlighted in 2004 when a private bank, Netherlands-based Rabobank, tried to purchase an FCS association. The board of directors of Omaha-based Farm Credit Services of America (FCSA) initially voted for the sale, indicating to some that FCS may no longer need government sponsorship. A general outcry by farmers and others led FCSA to withdraw from the deal at a sizable cost. In 2004, FCS asked Congress to eliminate the provision allowing institutions to leave the system (12 U.S.C. 2279d). Commercial bankers say that institutions should be allowed to leave FCS if they want more lending authorities than currently allowed. It is not clear whether Congress, in 1987, intended the provision to be used by outside companies to purchase parts of FCS.

The Farm Credit Administration (FCA), the federal regulator of FCS, addressed the termination issue in July 2006 with an amended regulation. The changes allow more time for FCA to review the request, more communication, and more shareholder involvement (71 FR 44409, August 4, 2006).

The scope of lending authority could grow under an October 2006 proposed rule to expand eligibility for farm processing and marketing loans (71 FR 60678, October 16, 2006). The intent appears to be to allow financing for larger value-added farm processing firms that are being built with more outside capital and involvement than in previous decades. Opponents fear that the proposed regulations would open the door to more non-farm or non-agriculture financing by FCS. Congress may be asked to weigh in on these issues through statutory changes.

⁴⁸ The *Horizons* report is available at [<http://www.fchorizons.com>].

⁴⁹ Bert Ely, "The Farm Credit System: Lending Anywhere but on the Farm," at [<http://www.aba.com/NR/rdonlyres/E1577452-246C-11D5-AB7C-00508B95258D/45256/Horizons2006ELYFINAL.pdf>].

Related CRS Reports:

CRS Report RS21977, *Agricultural Credit: Institutions and Issues*, by Jim Monke.

CRS Report RS21278, *Farm Credit System*, by Jim Monke.

Conservation and Environment⁵⁰

Federal agriculture conservation programs have largely addressed soil and water conservation and pollution problems associated with crop and livestock production. However, increasing attention is being paid to wetlands restoration, wildlife habitat, farmland protection, and other objectives. While the programs are broadening and techniques to address the problems are changing, the basic approach has remained unchanged — voluntary farmer participation encouraged by providing land rental payments, cost-sharing funds, technical assistance, education, and basic and applied research. Conservation programs avoid using regulations and emphasize partnerships with relevant public and private entities to address common concerns.

The closest the conservation effort comes to regulation is with three compliance programs — Sodbuster, Swampbuster, and Conservation Compliance. Producers can lose specified federal farm program benefits if they cultivate highly erodible lands that have not been previously cropped (Sodbuster), drain wetlands (Swampbuster), or cultivate highly erodible cropland without implementing a conservation plan (Conservation Compliance).

With authorization of the Conservation Reserve Program (CRP) in the 1985 farm bill, Congress began a 20 plus-year expansion of programs and spending that may not yet have ended. Before 1985, the few conservation programs that existed were funded through annual appropriations amounting to about \$1.0 billion annually. Spending is now about \$5.2 billion annually and most of it is mandatory and supplied by the Commodity Credit Corporation (the same source that finances the commodity support programs). As measured by spending, the conservation effort today is largely cropland retirement. Other approaches now being emphasized include creating buffers to protect water bodies from nearby crop production and reducing tillage to prevent erosion (and save energy).

The 2002 farm bill altered the conservation effort in two especially significant ways. It mandated a large increase in funding for many conservation programs, and it created a new Conservation Security Program (CSP) to reward producers practicing conservation on land in production. So called working lands conservation may gain prominence over cropland retirement as agriculture becomes an increasingly large supplier of the nation's renewable energy and more land is needed to produce energy crops. This likely will be one of the major debates in the 2007 farm bill.

Program Design and Operation

The current conservation portfolio includes about 20 distinct programs, many of which were enacted in recent farm bills. Starting in 1985, each succeeding farm bill has expanded the range of conservation problems to be addressed as well as program tools and funding. In some cases, the programs are subsets of overarching programs that apply to a specific place or a specific resource, but with unique provisions and eligibility rules. A list of the larger programs follows in **Table 7**.

⁵⁰ This section is by Jeffrey A. Zinn.

Table 7. Major Conservation Programs and Expenditures, FY2005

Program and Description	FY05 Expenditures (Million \$)	Share of \$5.2 Bil. Total
Land Retirement Programs		
Conservation Reserve Program (CRP). Removes producing cropland into conserving uses, typically for 10 years. Conversion must yield adequate levels of environmental improvement to qualify (environmental benefits index). Farmers receive annual rental payments, and cost-sharing is available to establish permanent vegetative cover. Total program acreage is limited to 36.4 mil.	\$1,828.0	35.2%
Wetlands Reserve Program (WRP). Restores and protects wetlands via long term rental agreements (10 year) and permanent or temporary (30-year) easements. Land owners receive technical and financial assistance. Program acreage is limited to 250,000 annually.	\$276.1	5.3%
Grasslands Reserve Program (GRP). Restores and protects grasslands, while maintaining grazing, via long term rental agreements and easements. Total program limit of 2 million acres and \$254 mil.	\$71.3	1.4%
Working Lands Programs		
Environmental Quality Incentives Program (EQIP). Provides cost-share payments and technical assistance to producers to plan and install structural, vegetative, and land management practices to alleviate conservation problems; 60% of the funds are targeted to livestock producers. Program to be administered in an environmentally beneficial and cost-effective manner.	\$1,024	19.7%
Conservation Security Program (CSP). Provides technical and financial assistance for improvements in conserving environmental resources on farmland that meets soil and water criteria standards set by NRCS. Participation limited to watersheds specified each year.	\$201.6	3.9%
Conservation Operations (CO), and Conservation Technical Assistance (CTA). Funds planning and implementation assistance to apply natural resource conservation systems, consisting of one or more practices, on private lands. Support provided through field staff located in almost all counties.	\$696.6	13.4%
Farmland Protection Program (FPP). Provides funds to state and local governments and qualified private organizations to purchase conservation easements from willing sellers to protect topsoil by limiting nonagricultural uses of the land.	\$111.8	2.6%

Source: Expenditure data are from USDA. Note that with the exception of Conservation Operations, all of these major programs receive mandatory funds rather than appropriated funds.

Prospective Issues and Options

The upcoming farm bill debate may include four broad conservation topics: land retirement, funding levels, green payments, and measuring accomplishments. These topics could be integrated with each other, or they could be addressed largely independently of each other. Other topics could include invasive species eradication, encouraging the production of energy crops on conserved land, and creating programs that apply to a specified place, such as a designated watershed.

Land Retirement. Authorization to enter into new contracts under all of the land retirement programs — Conservation Reserve (and its subprograms), Wetlands Reserve, and Grasslands Reserve — will expire at the end of FY2007. Hence, reauthorizing these programs and adjusting them to respond to changing needs may be high priorities.

Land retirement programs have been attractive to some producers in recent years because they have received rental payments at acceptable levels. Also, conservationists and environmentalists have been pleased with the significant natural resource improvements to the agricultural landscape that have appeared on these lands. These programs currently retire almost 40 million acres, approaching 10% of the country's cropland, and their annual cost accounted for more than 40% of conservation spending in FY2005. The Conservation Reserve Program is the largest, retiring more than 35 million acres, and is currently the most expensive conservation program as well. However, with the exploding market for ethanol driving higher prices, especially for corn, producer interest in land retirement may be declining. Some forecasts are that these higher commodity price levels may last for multiple years, thus shrinking farmer interest in land retirement for some time.

In this changed setting there may be interest in retiring less land in the future, and in giving some currently retired land the opportunity to return to production. One proposal, for example, would allow early withdrawal of certain lands from the CRP without penalty if the land will be used to produce energy crops. Commodity users, including those who need corn as a feedstock for ethanol, those who use corn for livestock feed, and those who supply foreign export markets, want to make sure that cropland is not retired if it can be cropped and managed to protect the environment. Some analysts currently estimate that between 5 and 10 million additional acres of corn will need to be planted in 2007 to meet growing demand.

Production agriculture and environmental interest groups likely will take opposing sides on some aspects of the policy debate. For example, wildlife groups may seek the continued benefits provided by large tracts of retired lands that provide natural habitat. There may be opportunities to satisfy multiple objectives by retiring small acreages or parts of fields that provide more concentrated environmental benefits (e.g., stream buffers); by creating more site-specific or resource-specific intensive treatments, such as the current program to enroll isolated small wetlands; or by prioritizing land retirement to achieve such goals as habitat protection for endangered species or protection of wildlife migratory paths.

Funding Levels. Total funding for conservation has grown rapidly since FY1990. **Table 8** shows the growth since FY2001. The portion of funding going to

each of the five broad activity categories identified in the table has been evolving. Rental and easement payments to retire land from production now constitute the largest category of conservation spending (37% of total). However, the most rapidly growing category, especially in recent years, has been cost-sharing assistance (now 21% of the total). During the same time period, funding for data collection and research and for public works (mostly small watershed projects) are a declining portion of the total.

Most conservation programs funded through the Commodity Credit Corporation have grown rapidly since the 2002 farm bill, and now account for about 80% of conservation spending. For example, the Environmental Quality Incentives Program (EQIP), the basic cost-sharing program on land that is farmed, had been authorized at \$200 million per year under the 1996 farm bill. Under the 2002 farm bill, it was authorized to grow almost every year, reaching \$1.3 billion in FY2007. Funding for other programs, such as the Farmland Protection Program and the Wildlife Habitat Incentives Program, also have been growing rapidly.

Table 8. USDA Funding for Conservation Activities, FY2001-FY2005

Activity Category	FY01	FY02	FY03	FY04	FY05 Budget Authority	Increase FY01 to FY05
	(Million \$)					
Technical assistance, extension, admin. ^a	1,046	1,114	1,270	1,393	1,519	45%
Cost sharing	366	535	383	971	1,185	224%
Public works, including emergencies	174	135	77	179	262	51%
Rental and easement payments ^b	1,651	1,974	2,045	2,011	2,099	27%
Data collection and research	465	484	508	529	546	18%
Total, all categories	3,705	4,242	4,283	5,083	5,611^c	51%

Source: Primary data from USDA, Office of Budget and Program Analysis.

a. Activities of the four USDA agencies engaged in supporting conservation: the Natural Resources Conservation Service (NRCS), Farm Service Agency (FSA), Forest Service, and Extension Service.

b. A large majority of these payments go to farmers through the Conservation Reserve Program.

c. Actual appropriations were close to \$5.2 billion because Congress limited mandatory funding in several programs by a total of more than \$400 million below the authorized amount.

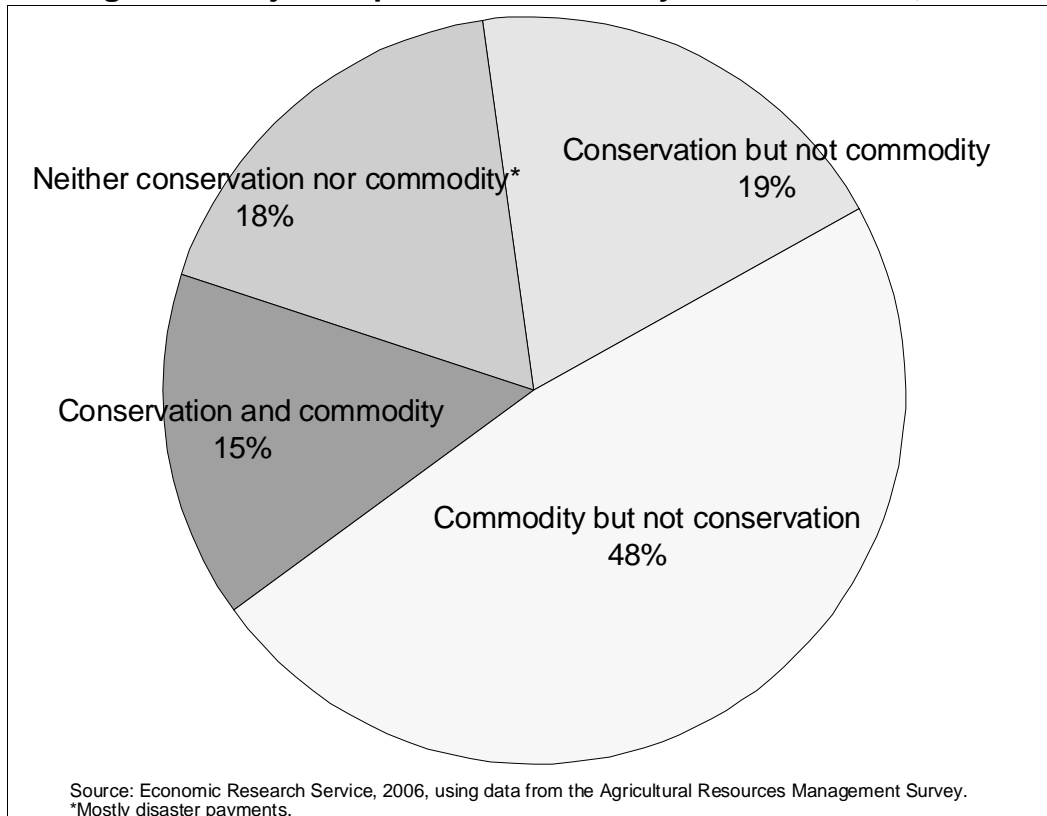
The demand to participate in some conservation programs also continues to grow. A major justification for the large increases in funding in the 2002 farm bill was to reduce or eliminate a large and growing backlog of applications. However, participation and unfunded backlogs remain large. Congress has options for dealing with the backlog by again increasing funding for these programs, or by setting higher

eligibility standards, which likely would reduce applications and approvals. It also may consider whether the relative funding for the current mix of approaches and programs — between the land retirement and working lands programs — remains appropriate.

Green Payments. The term “green payments” refers to providing financial rewards to producers based on the extent of their conservation activities. Aside from any environmental benefits, a shift from commodity subsidies to green payments is seen by some as a way to support farm income, forge a stronger link between conservation and farm income objectives, and still comply with World Trade Organization (WTO) obligations (by qualifying as green box if the program does not increase production and is not trade-distorting).

The Conservation Security Program (CSP), enacted in the 2002 farm bill, is one model for translating the concept of green payments into a program. The CSP was enacted as the first true entitlement program for conservation, meaning that all producers who met eligibility qualifications could receive payments. Some of its supporters thought it might become one of the largest conservation programs, in terms of spending, within a few years. However, implementation has moved slowly and Congress has tightly limited the funding each year. Congress likely will debate whether the CSP, based on what has been learned from the limited experience, remains the preferred vehicle for providing green payments or whether other designs might be preferred.

Some would like to use green payments as an additional way to support farmer income by replacing or supplementing some of the traditional commodity programs. They view green payments as a way to transfer funds to producers who provide environmental services. Such an approach has the potential to reach many more farms than now participate in federal conservation programs. Based on analysis by the Economic Research Service, about 285,000 (14%) of the nation’s 2.1 million farms received federal conservation payments in 2003. As shown in **Figure 5**, about 15% of farms receiving commodity program payments also receive conservation payments, a proportion lower than some would anticipate given the availability of CRP benefits for marginally productive cropland.

Figure 5. Major Purpose of Federal Payments to Farms, 2003

According to proponents, a green payments program could be designed to give greater attention to conservation goals that are currently addressed only in a limited fashion, if at all, including:

- reducing atmospheric CO₂ through improved soil and crop management to help alleviate global warming;
- supporting efforts to protect endangered species and their habitat;
- eradicating incompatible invasive species;
- providing better coordination for managing resources in private and adjacent public lands;
- addressing water scarcity and use patterns in the arid West;
- reducing pollution in waterways from agricultural sources, including addressing hypoxia in the Gulf of Mexico and other places; and
- protecting and restoring small forested areas on farms.

Measuring Conservation Accomplishments. As funding for conservation has increased and the conservation mission has expanded, Congress has grown more interested in learning about the accomplishments of this effort. Questions center on how programs benefit agriculture, the environment, and the rural landscape, and how enduring these benefits might be (especially since production agriculture is dynamic with producers changing crops, equipment, and management practices from year to year).

If the farm bill debate occurs in a setting where conservation proponents must respond to significant budget constraints, any information that can identify large or enduring accomplishments could be critical to preventing funding reductions. USDA's Natural Resources Conservation Service and Agricultural Research Service, in partnership with several other agencies inside USDA and beyond, have initiated a major program to better respond to such questions, but the lengthy study periods may mean that few answers will be available in time to inform this farm bill debate. This evaluation effort, the Conservation Effects Assessment Project (CEAP), is spending about \$8 million annually to document the accomplishments of conservation. NRCS hopes to have some preliminary information about cropland to contribute to this farm bill debate. With more time, CEAP should develop more information and analysis to contribute to future farm bill debates.

Related CRS Reports:

CRS Report RL32940, *Agriculture Conservation Programs: A Scorecard*, by Jeffrey Zinn and Tadlock Cowan.
CRS Report RL33556, *Soil and Water Conservation: An Overview*, by Jeffrey A. Zinn.

Energy⁵¹

Agriculture-based renewable energy production — especially biofuels and wind power — has expanded dramatically during the past two years, with profound implications for the U.S. agricultural sector. Most notably, the escalating demand for corn as a feedstock in ethanol production has driven grain and oilseed prices sharply higher since September 2006.⁵² Prices for oilseeds and other grains that compete with corn for cropland also experienced similar sharp price rises during that period. As agriculture-based energy production expanded, so has the level of support provided under federal and state programs. Total federal and state biofuel subsidies have been estimated in the range of \$5.5 to \$7 billion per year.

Prospects for continued growth in biofuel production and related strong commodity prices have been greeted in some quarters as the long-awaited economic breakthrough for the agricultural producers and small towns, but many market watchers, policymakers, and producers from other agricultural sectors question the potential consequences of continued rapid growth of U.S. biofuel production.

Biofuels are liquid fuels produced from biomass. The major U.S. biofuels are ethanol (98% from corn), and biodiesel (90% from soybean oil). Fuel ethanol is generally blended in gasoline to reduce emissions, increase octane, and extend gasoline stocks. Biodiesel is used directly as an alternative diesel fuel. The potential development of a cellulosic-based ethanol industry is presently impeded by the state of cellulosic conversion technology, which still is expensive relative to corn-based production. However, the enormous potential supply of low-cost cellulosic plant material available in the United States makes it an attractive prospective feedstock.

U.S. ethanol production has been expanding rapidly, rising from about 175 million gallons in 1980 to 4.8 billion gallons per year in 2006. Ethanol now dominates U.S. biofuel production. Biodiesel production is at a much smaller level, but has also shown growth, rising from 0.5 million gallons in 1999 to an estimated 75 million gallons in 2005. U.S. ethanol production presently is underway or planned in 22 states located primarily around the central and western Corn Belt, where corn supplies are most plentiful. USDA estimates that 20% of the 2006 corn crop (or 2.15 billion bushels) will be used by the ethanol sector to produce nearly 6 billion gallons of ethanol during the 2006/07 crop year. Ethanol production is projected to continue growing rapidly through at least 2010 on the strength of both market forces as well as the extension of existing and the addition of new government incentives. Those incentives include a per gallon tax credit of \$0.51, a mandate to use renewable vehicle fuels of 7.5 billion gallons by 2012, and a tariff on imported ethanol of \$0.54 per gallon.

⁵¹ This section is by Randy Schnepf.

⁵² For example, Iowa's statewide average daily corn price rose from \$1.87 per bushel on September 14, 2006, to over \$3.44 by November 30, 2006 — a rise of 84% due primarily to rapid ethanol production capacity expansion and the expectation of substantial future increases in corn demand.

By mid-December 2006, the pace of ethanol plant expansion was well on its way to exceed the RFS goal (7.5 bil. gal. by 2012) with 5.3 billion gallons of annual ethanol production capacity currently in operation and another 4.4 billion gallons of capacity under construction and potentially on-line by early 2008.⁵³ Based on a conversion rate of 2.75 gallons per bushel, the rapid expansion of ethanol production capacity suggests that the U.S. ethanol sector will need over 3 billion bushels of corn as feedstock in 2007 and over 3.6 billion bushels in 2008 (34% of the 2006 crop).

Crop-Based Biofuel Concerns Emerge. The rapid growth in agriculture-based biofuel production has generated a sharp runup in corn and other grain and oilseed prices since September 2006. While higher crop prices suggest higher incomes for crop producers, the prospect of sustained higher livestock feed costs coupled with the likelihood of a substantial expansion in corn planting have led many economists and market participants to question the unintended consequences of continued large federal incentives in support of what has been a very profitable ethanol sector in 2005. Concerns include the following:

- Dedicating an increasing share of the U.S. corn harvest to ethanol production will lead to higher prices for all grains and oilseeds that compete for the same land resulting in higher livestock feed costs, potentially higher food costs, and likely lower U.S. agricultural exports.⁵⁴
- A potential large expansion in U.S. corn planting (whether due to expansion onto more marginal soil environments or alteration of traditional corn-soybean rotation that dominates Corn Belt agriculture) is likely to lead to increased soil tillage and the potential for higher levels of soil erosion, increased applications of nitrogen fertilizer, herbicides, and other chemicals and the potential for runoff or leaching, and increased use of diminishing aquifers to irrigate production in the Central Plains.
- In addition to the increased livestock production costs associated with corn feeding, protein-meal markets are likely to experience further distortions associated with expanded production of the main ethanol by-product — distillers dried grains (DDG) — which can be used as a relatively high (30%) protein meal. Dairy and other cattle

⁵³ Renewable Fuels Association, “Industry Statistics: U.S. Fuel Ethanol Production Capacity,” at [<http://www.ethanolrfa.org/industry/statistics/>], Dec. 12, 2006. The rapid growth in capacity is evidenced by a quickly out-of-date July 2006 estimate that by 2010, U.S. ethanol production would reach 9.2 billion gallons and use 27.6% (3.5 billion bushels) of the U.S. corn crop (Food and Agricultural Policy Research Institute (FAPRI) FAPRI, July 2006 Baseline Update for U.S. Agricultural Markets, FAPRI-UMC Report #12-06, University of Missouri).

⁵⁴ The Nebraska Cattlemen Association expressed this concern in a policy resolution summarized in a press release of December 1, 2006, stating “because the availability of affordable, high quality feedstuffs is crucial to the profitability of the beef industry; and because the beef industry is competing with the ethanol industry for corn, that Nebraska Cattlemen supports a transition to a market based approach for the usage and production of ethanol. Further, it says Nebraska Cattlemen is opposed to any additional federal or state mandates for ethanol usage and/or production.” [<http://www.nebraskacattlemen.org/>].

are better able to increase DDG in rations than are poultry and pork. As a result, dairy and cattle operations located in reasonable proximity to an ethanol plant can substitute DDG for higher cost corn and soybean meal. Poultry and pork operations, on the other hand, are likely to see their feed costs increase with rising corn prices because of their limited ability to switch to the less expensive DDG.

- Expanding the national ethanol use mandate based on midwestern ethanol production implies increased pressure on the nation's transportation infrastructure to assist in delivering ethanol to non-producing regions, or to assist in delivering corn to ethanol plants in corn-deficit regions.
- In addition, under prospects of eventual over-production of ethanol capacity, any sudden or unexpected change in the economic balance of ethanol, corn, and gasoline prices could quickly erode corn-based ethanol's profitability, leaving many small-town investors in the lurch and small communities without the promised rural development impact.

If realized, many of these concerns also likely imply substantial regional variation in terms of net gainers and losers in local agricultural economies.

Wind Energy Overview. Wind-generated electricity production systems involve a turbine or turbines built close together to form a wind farm. In contrast with biofuel energy, wind power has no feedstock costs. Instead, electricity production depends on the kinetic energy of wind (replenished through atmospheric processes). As a result, its operating costs are low, but the initial capital investment in equipment (primarily the turbine, blades and connection to the power grid) needed to set up a utility-scale wind energy system is substantially greater than for competing fossil or biofuels. In 2004, less than 1% of wind power capacity installed nationwide was owned by farmers.⁵⁵ As of October 23, 2006, an estimated 10,492 MW of capacity was installed and operational in the United States, with another 7,942 MW either under construction or in planning.

Program Design and Operation

Since the late 1970s, U.S. policymakers at both the federal and state levels have enacted a variety of incentives, regulations, and programs to encourage the production and use of agriculture-based renewable energy. Motivations cited for these legislative initiatives include energy security concerns, reduction in greenhouse gas emissions, and raising domestic demand for U.S.-produced farm products. Renewable energy production plays a key role not just in agricultural policy, but also in energy, tax, and environmental policy. As a result, many of the federal programs that support renewable energy production in general, and agriculture-based energy production in particular, are outside the purview of USDA and have legislative

⁵⁵ Farmers situated in optimal wind-harvest locations typically leasing their land for wind power projects. Capital costs generally run about \$1 million per megawatt (MW) of capacity, which discourages farmer ownership.

origins outside of the farm bill. For example, the primary supply-side incentives for biofuels and wind energy production are production tax credits in the U.S. tax code under the domain of the Internal Revenue Service. The primary demand-side federal biofuel policy intervention is a national Renewable Fuels Standard (RFS), which requires an increasing volume of domestic biofuel use and has its origins in the Energy Policy Act of 2005 (P.L. 109-58). Major federal incentives include:

- A biofuel production excise tax credit of \$0.51 per gallon of ethanol, \$1.00 for every gallon of agri-biodiesel (i.e., virgin vegetable oil and animal fat), and 50¢ for every gallon of non-agri-biodiesel (i.e., recycled oils such as yellow grease). The production tax credits were extended through 2010 for ethanol and through 2008 for biodiesel under the American Jobs Creation Act of 2004 (P.L. 109-357).
- A 2.5% *ad valorem* tariff and a most-favored-nation duty of 54¢ per gallon of ethanol (for fuel-use) applied to U.S. imports from most countries (ethanol imports from Caribbean Basin Initiative countries enter duty-free).
- A wind energy production tax credit (PTC) that provides a 1.8¢ credit for each kilowatt-hour of electricity produced by qualifying turbines built by the end of 2007 for a 10-year period. This PTC was extended through 2007 under P.L. 109-357.
- A Renewable Fuels Standard (Energy Policy Act of 2005, P.L. 109-58) that mandates renewable fuels blending requirements for fuel suppliers — 4 billion gallons of renewable fuels must be blended into gasoline in 2006; the blending requirement grows annually until reaching 7.5 billion gallons in 2012.
- A small producer income tax credit (26 U.S.C. 40) of 10¢ per gallon for the first 15 million gallons of production for ethanol producers whose total output does not exceed 60 million gallons per year.
- A small producer income tax credit (26 U.S.C. 40A) of 10¢ per gallon for the first 15 million gallons of production for biodiesel producers whose total output does not exceed 60 million gallons per year.
- USDA's Bioenergy Program (7 U.S.C. 8108), which provided incentive payments (contingent on annual appropriations) on year-to-year production increases of renewable energy during the FY2001-FY2006 period.

Federal support for the development of agriculture-based renewable energy production systems is also provided in the form of loans, grants, and loan guarantees; research, development, and demonstration assistance; educational program assistance; and procurement preferences. Also, several states have their own incentives, regulations, and programs in support of renewable fuel research, production, and consumption that supplement or exceed federal incentives.

Although no commercial cellulosic ethanol production has occurred yet in the United States, two provisions of the 2002 farm bill (P.L. 107-171) — including Section 2101 which allows for the use of some Conservation Reserve Program lands for wind energy generation and biomass harvesting for energy production — and

several provisions of the Energy Policy Act of 2005 (EPACT, P.L. 109-58) have encouraged research in this area. In particular, Section 1501 of EPACT requires that, by 2013 and every year thereafter, at least 250,000 gallons of ethanol be derived from cellulosic biomass.

Energy Provisions in the 2002 Farm Bill. The 2002 farm bill contained, for the first time, a separate energy title (Title IX). In particular, the nine provisions of Title IX were intended to support the development and expansion of agriculture-based biofuels. Those provisions that were funded and implemented include:

- Section 9002, establishing a federal procurement preference for biobased products.
- Section 9004, mandating CCC funding of \$1 million per year for FY2003-FY2007 for competitive grants awarded to nonprofit organizations that engage in biodiesel fuel education programs to facilitate greater motor fuel use of biodiesel.
- Section 9006, mandating CCC funding of \$23 million per year (for FY2003-FY2007) for a Renewable Energy Program, administered by USDA's Rural Development Agency, of loans, loan guarantees, and grants for farmers, ranchers, and rural small businesses that purchase renewable energy systems or make energy efficiency improvements.
- Section 9008, mandating CCC funding of \$5 million in FY2002 and \$14 million for each of FY2003 through FY2007 for research and development of biofuels and bio-based products under the Biomass Research and Development Act of 2000. The program is administered jointly by USDA and the Department of Energy (DOE).
- Section 9009, extending through FY2011 the Carbon Cycle Research Program, which providing grants to land-grant universities for carbon-cycle research with on-farm applications.
- Section 9010, mandating CCC funding of not more than \$150 million per year for FY2003-FY2006 for Bioenergy Program payments to biofuel producers who generate year-to-year increases in production using agricultural commodities as feedstock.

Several provisions of Title IX were never funded or implemented. These include:

- Section 9003, authorizing biorefinery development grants to encourage expanded biofuel production capacity (subject to appropriated funds).
- Section 9005, authorizing the Energy Audit and Renewable Energy Development Program to assist producers in identifying their on-farm potential for energy efficiency and renewable energy use (subject to appropriated funds).
- Section 9007, directing that USDA and DOE jointly work to apply hydrogen fuel cell technology to farms and rural communities under a memorandum of understanding.

The 2002 farm bill also contains programs that encourage the research, production, and use of renewable fuels such as ethanol, biodiesel, and wind energy systems in two additional titles — Title II (Conservation), and Title VI (Rural Development). In particular, Section 2101 of Title II amends the 1985 farm bill to allow the use of some CRP lands for biomass harvesting for energy production and wind energy generation. Title VI provides additional support for renewable energy projects in the form of loans and grants under USDA's Rural Development Agency programs.⁵⁶ These include:

- Loans and Loan Guarantees for Renewable Energy Systems (Section 6013), which allows loans for wind energy systems and anaerobic digesters.
- Business and Industry Direct and Guaranteed Loans (Section 6017(g)(A)), which expands eligibility to include farmer and rancher equity ownership in wind power projects.
- Value-Added Agricultural Product Market Development Grants (Section 6401(a)(2)), which expands eligibility to include farm- or ranch-based renewable energy systems. Since 2003, USDA has given priority consideration to grant applications that dedicate at least 51% of the project costs to biomass energy.

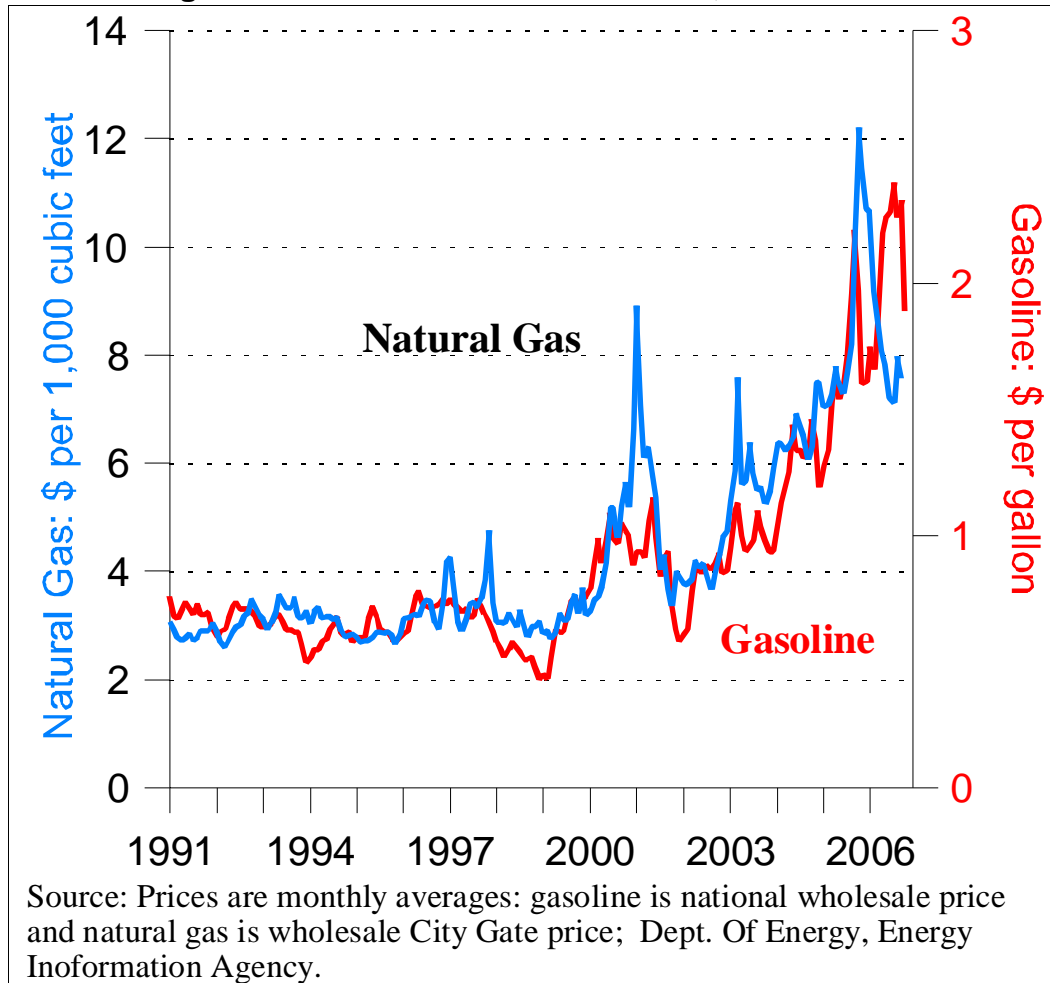
Prospective Issues and Options

Escalating and volatile energy prices have important consequences for the U.S. agricultural sector, which is both a consumer and an increasingly important producer of energy. Energy costs, which have increased and become more volatile since 1999 (see **Figure 6**), are expected to play an important role in discussions of agricultural policy. Energy prices surged upward in 2005 due to international events and the devastating hurricanes Katrina and Rita, which wreaked havoc on U.S. energy infrastructure and markets.

Agriculture's total use of energy is low relative to other U.S. producing sectors. In 2002, agriculture's share of total U.S. direct energy consumption was about 1%. However, within the agriculture sector, energy is a critical and sizable input. Agriculture uses energy directly as fuel or electricity to operate machinery and equipment, to dry grain, to heat or cool buildings, and for lighting on the farm. Energy is used indirectly in the form of nitrogen fertilizers made from natural gas and pesticides made from petroleum.

Energy's share of agricultural production expenses varies widely by activity, production practice, and locality. Since the late 1970s, total agricultural use of energy has fallen by about 28%, as a result of efficiency gains related to improved machinery, equipment, and production practices. Despite these efficiency gains, total energy costs of \$31.1 billion in 2005 represented 14.3% (4.5% direct and 9.7% indirect) of annual production expenses of \$223.1 billion. As a result, unexpected changes in energy prices or availability can substantially alter farm net revenues, particularly for major field crop production.

⁵⁶ For more information see [<http://www.rurdev.usda.gov/rd/energy/>].

Figure 6. U.S. Wholesale Fuel Prices, 1991 to 2006

High natural gas prices have already contributed to a substantial reduction in U.S. nitrogen fertilizer production capacity — over a 23% decline from 1998 through 2003. In the short run, price- or supply-related disruptions to agriculture’s energy supplies could result in unanticipated shifts in major crop and livestock production, with subsequent effects on farm incomes and rural economies. In the long run, a sustained rise in energy prices may have serious consequences for agriculture, causing shifts in cropping and production practices, and possibly driving resources away from the sector. As a result, policymakers may be asked to help agricultural producers find ways to become more energy-independent. Two primary ways of facilitating on-farm energy independence are by improving efficiencies in on-farm energy use, or by increasing agriculture’s share of renewable energy production.

Various energy market factors, including prospects for continued U.S. oil import dependence coupled with strong petroleum prices, are likely to reinforce the interest of policymakers in supporting domestic renewable fuel production. Issues include:

- What role should agriculture-based renewable energy production play in meeting the nation’s energy needs?

- What is the appropriate role of government in developing agriculture-based renewable energy production?
- Will there be long-run unintended market effects for other crops and the livestock sector, as well as for the environment, conservation, trade, and possibly consumers?
- Can available government programs mitigate, offset, or redirect potential unwanted consequences?
- Is there a place for government energy policy within the farm bill or does jurisdiction belong elsewhere?

The new Chairman of the House Agriculture Committee, Collin Peterson, has already stated that energy will be his top priority in the 2007 farm bill and that he plans on adding a new subcommittee on energy.⁵⁷ He has also expressed strong interest in increasing support for cellulosic ethanol production, including additional research funding, as well as the possibility of establishing a 5-to-6-million-acre addition to the CRP program dedicated to the production of biomass crops such as switchgrass.

Other policymakers have expressed interest in providing additional funds to support activities directly related to expanding biofuel production such as increased research on corn breeding for higher starch content or on livestock breeding to better incorporate ethanol by-products in feed rations; increased investments in infrastructure and transportation to help market and distribute biofuels; and more research and development support for animal waste digesters both as a waste management tool and as a source for energy production from the captured methane. Additionally, some Members of Congress have proposed expanding the Renewable Fuels Standard's mandate beyond the 7.5 billion gallons currently required in 2012 (a provision that is outside the jurisdiction of the Agriculture Committees).

However, biofuel production is not without its shortcomings. Any proposed increase in the mandate for ethanol and biodiesel likely will raise questions about the fuels' energy, environmental, and financial impacts. While ethanol proponents, including corn farmers and ethanol producers, cite ethanol's benefits, some question whether its higher cost and potential environmental impacts may limit its desirability. As the public grows more aware of these shortcomings, the potential benefits of biofuels are likely to be more carefully weighed against their costs, perhaps diminishing some of the euphoria that surrounded the rapid ethanol expansion of 2006 and making policymakers' choices a bit more difficult.

⁵⁷ Speech given at the Farm Foundation Farm Bill Forum, December 6, 2006.

Related CRS Reports:

- CRS Report RL32712, *Agriculture-Based Renewable Energy Production*, by Randy Schnepf.
- CRS Report RL30758, *Alternative Transportation Fuels and Vehicles: Energy, Environment, and Development Issues*, by Brent D. Yacobucci.
- CRS Report RL33572, *Biofuels Incentives: A Summary of Federal Programs*, by Brent D. Yacobucci.
- CRS Report RL32677 *Energy Use in Agriculture: Background and Issues* by Randy Schnepf.
- CRS Report RS21930, *Ethanol Imports and the Caribbean Basin Initiative*, by Brent Yacobucci.
- CRS Report RL33290, *Fuel Ethanol: Background and Public Policy Issues*, by Brent D. Yacobucci.
- CRS Report RL32530, *World Oil Demand and its Effect on Oil Prices*, by Robert Pirog.
- CRS Report RL33714, *Natural Gas Markets in 2006*, by Robert Pirog.

Agricultural Research, Extension, and Education⁵⁸

Several factors have emerged since 2002 that could influence the consideration of agricultural research, education, and extension policies when Congress next visits this USDA mission area in the context of a 2007 farm bill. The current farm bill was debated in a time of budget surpluses; Congress will construct the next bill in an era of large federal deficits. Funding is the first of several major factors that will affect the upcoming debate. The other factors concern specialty crop issues, pressure to reform long-standing methods of distributing federal funds for agricultural research, and trade.

Program Design and Operation

The mandate to conduct research of direct benefit to U.S. agriculture was part of the mission of the USDA when it was first established in 1862. The nationwide agricultural research, education, and outreach (extension) system now comprises: (1) the Agricultural Research Service (ARS), USDA's in-house science agency, which also has research centers at locations across the United States; (2) the Economic Research Service (ERS), an entirely Washington, D.C.-based social science agency; (3) the National Agricultural Statistics Service (NASS), a data-gathering agency headquartered at USDA, with offices in most states and U.S. territories; and (4) the Cooperative State Research, Education, and Extension Service (CSREES), which is headquartered at USDA and administers a variety of grant programs, as well as the federal funds that pass through to the state partners.

The state partners — also originally created by Congress in 1862 — are the colleges of agriculture at land grant universities in 50 states and eight U.S. territories, with their affiliated state agricultural experiment stations, schools of forestry and veterinary medicine, and cooperative extension. There also are 18 historically black land grant colleges of agriculture (the 1890 institutions) and 31 Native American colleges that gained land grant status in 1994 (referred to as the tribal colleges).

Agricultural research, education, and extension have played critical roles in the huge increase in U.S. agricultural productivity since World War II. Advances in the basic and applied agricultural sciences are considered fundamental to increases in farm sector profitability, to competitiveness in international agricultural trade, to environmental protection, and to improvements in human nutrition and food-related health.

Recently revised calculations on the rate of return on federal investment in agricultural research estimate it to be 6.8% per year. The federal-state research system also supports USDA's regulatory programs in the areas of meat, poultry, and egg inspection, foreign pest and disease exclusion, and control and eradication of crop and livestock threats, among other things.

⁵⁸ This section is by Jean M. Rawson.

Prospective Issues and Options

Funding versus Inflation. USDA currently spends \$2.4 billion on agricultural research, education, and extension, which represents 3.1% of the total USDA budget and about 2% of all federal research and development (R&D) funding. The department distributes annually appropriated funds directly to the intramural agencies: ARS, ERS, and NASS. CSREES distributes the federal appropriation for state research, education, and extension in the form of (1) block grants (divided among states according to formulas in authorizing legislation); (2) competitive grants (awarded by peer review panels); and (3) congressional earmarks. A portion of ARS's annual funding also is earmarked for research locations and projects specified in annual appropriations laws.

The 2002 farm bill included a number of provisions to increase the money available for research and extension by requiring states to match a higher percentage of federal funds than previously. The most significant and controversial provision of the 2002 act was the reauthorization of the Initiative for Future Food and Agriculture Systems (IFAFS), a competitive grants program supported by mandatory funds made available by savings stemming from the 1997 reform of the food stamp program. Appropriators have prohibited the use of mandatory funds to support the initiative in all but two years since Congress originally authorized it in 1998.

Although in some years Congress has appropriated more money to the existing research, education, and extension programs (supported by discretionary funds) than either the House- or Senate-passed appropriations bills contained,⁵⁹ the data show that, when adjusted for inflation, funding for research has not increased significantly since the 1980s (see **Figure 7**). Growth in funding since 1996 has brought the level back to about where it was in the early 1990s when measured in inflation-adjusted dollars. Scientists also point out that, as in medical science, the cost of new, high-tech equipment for cutting-edge agricultural research traditionally exceeds the inflation rate by a significant percentage, meaning that incremental increases often result in only level, or even negative, effective funding rates.

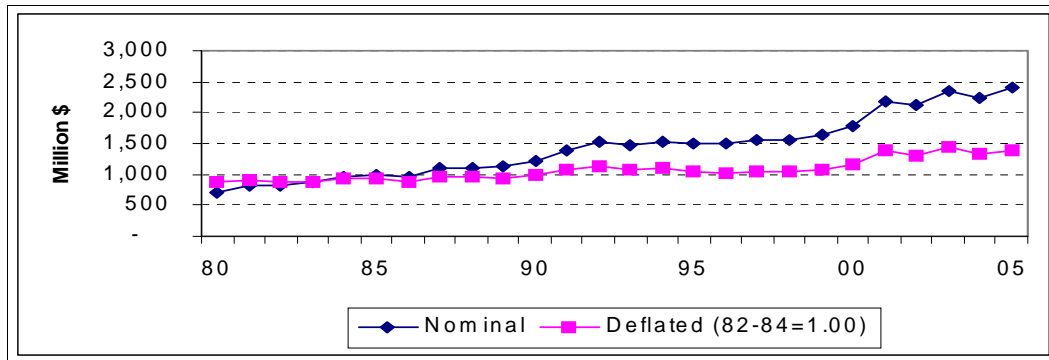
The rise in nominal dollars, particularly from 1996 through 2001, was largely due to reduced overall pressure on the federal budget and all non-defense research and development spending grew during that period.⁶⁰ In addition, in FY2000 and FY2001, USDA was able to spend \$120 million in mandatory funds on IFAFS. Funds appropriated specifically for anti-terrorism activities, not basic programs, are a significant factor in the increases in the FY2001-FY2005 period.⁶¹

⁵⁹ Conferees have sometimes raised the funding above the level specified in the bills.

⁶⁰ American Association for the Advancement of Science (AAAS) R&D Budget and Policy Program. Historical tables are available at [<http://www.aaas.org/spp/rd/>].

⁶¹ Funding data are compiled and calculated by CRS from the Budget of the U.S. Government, FY1974-2006. Data used for generating the graph includes annual appropriations for (1) ARS salaries, expenses, buildings and facilities; (2) CSREES research and education programs, and integrated programs (beginning in FY2000); and (3) Forest Service research.

Figure 7. USDA Research Funding, in Current and Deflated Dollars, FY1980-FY2005



Source: Primary data are from the Budget of the U.S. Government deflated using the consumer price index.

Giving Fruits and Vegetables a Higher Priority. The specialty crop industry (producers, handlers, and retailers of fruits, vegetables, tree nuts, and nursery products) is making a coordinated effort to have its issues addressed in the 2007 farm bill. At three separate House Agriculture Committee field hearings in 2006, the majority of specialty crop producers on the panels argued strongly in favor of providing greater support to the industry through expanded agricultural research and extension spending, among several other proposals. Agriculture Secretary Mike Johanns also has spoken in support of this idea.⁶²

Formula Funding Versus Competitive Grants. Pressure has been mounting for more than a decade to reform the mechanisms by which federal dollars for agricultural research and extension are distributed among research performers. USDA differs from other federal science agencies in allocating the majority of its annual research appropriation to intramural research, to projects designated by individual Members, and to block grants to the state land grant universities for their distribution among research areas. In contrast, the National Institutes of Health and the National Science Foundation distribute the majority of their annual funding through competitive grants. Despite criticisms that the task of writing applications for competitive grants is a costly use of researchers' time, the scientific community has used this method for decades, and maintains that peer-reviewed, competitive grants have proven to be the best means of eliciting the most qualified proposals and supporting the best research.⁶³ On the other hand, it also has been argued that peer

⁶² Testimony from field hearings on federal farm policy held February 6, 2006, in Auburn, Alabama; February 7, 2006, in Fayetteville, North Carolina; and March 3, 2006, in Stockton, California, is available on the House Agriculture Committee website at [<http://agriculture.house.gov/hearings>]. Remarks by Agriculture Secretary Mike Johanns to the Commodity Classic, Anaheim, California, March 3, 2006, are available online at the USDA website, [<http://www.usda.gov>], under "Transcripts and Speeches."

⁶³ Since 1989, the Board on Agriculture and Natural Resources of the National Academy of Sciences (NAS) has issued three reports containing recommendations for reforms to the federal-state agricultural research system, including a doubling in the percentage of funds disbursed through competitive grants. See [<http://dels.nas.edu/dels/banr.shtml>] for NAS (continued...)

review may favor research that uses traditional approaches and focuses on more established subjects, and may stifle more innovative proposals.

As expected, proposals to distribute a greater portion of USDA research appropriations competitively cause concerns for both federal and state scientists. Given the historically flat budget for research, scientists and administrators currently receiving funds tend to perceive proposed changes in funding mechanisms as a threat.

Proposal for a National Institute for Food and Agriculture.

Policymakers and stakeholders have become increasingly interested in the idea of a national institute for agricultural research, partly to avoid controversy over reforming funding distribution methods within the current system, and also as a way to separate the funding needs of the traditional research programs from those of an institute having similar structure, standing, and purpose to the National Institutes of Health. In the 2002 farm bill, Congress required USDA to create a task force to evaluate “the merits of establishing National Institutes focused on disciplines important to the progress of food and agriculture sciences” (H.Rept. 107-424).

The task force’s report, delivered to the Secretary of Agriculture in July 2004, recommended the creation of a National Institute for Food and Agriculture (NIFA) as a separate and independent entity within USDA.⁶⁴ The NIFA would support basic research through competitively awarded, peer-reviewed grants, and be under the direction of a distinguished scientist. The task force indicated that NIFA’s annual budget (provided through annual appropriations) should build to \$1 billion over a five-year period, and emphasized that the institute’s mission “should supplement and enhance, not replace, the existing research programs of USDA.” Companion bills introduced in the 109th Congress reflect the task force proposal, but no action was taken on them (S. 2782/H.R. 5832).

The land grant college community⁶⁵ in the states also established its own project to evaluate how a national institute might be structured. Although it is still a draft document, the CREATE-21 proposal of the National Association of State Universities and Land-Grant Colleges was put before the community for a vote in September 2006 and received a strongly favorable response. The association is now

⁶³ (...continued)
publications on this subject.

⁶⁴ *National Institute for Food and Agriculture: A Proposal*, report of the Research, Education, and Economics Task Force of the U.S. Department of Agriculture, July 2004, [<http://www.ars.usda.gov/SP2UserFiles/Place/00000000/national.doc>]. Some Members of Congress introduced legislation in the 109th Congress proposing an alternative to the proposed National Institute for Food and Agriculture within USDA. H.R. 1563/S. 767, the National Food and Agricultural Science Act of 2005, would have established a Division of Food and Agricultural Science within the National Science Foundation. The Director of the Division was to coordinate its research agenda after consultation with the Secretary of Agriculture. All funds were to be distributed through competitive grants.

⁶⁵ Land grant colleges of agriculture were initially established under a grant to each state authorized by the Morrill Act of 1862 for the purpose of providing support for colleges of agriculture and mechanical arts.

working on crafting a legislative proposal from the approved draft proposal.

The CREATE-21 draft proposal incorporates all the key elements of the USDA task force recommendations, with some major changes.⁶⁶ The proposal would place all of USDA's existing research programs within the new institute, including ARS, ERS, Cooperative Extension, and the research functions of the Forest Service. It would gradually increase the percentage of competitive grant funding supporting basic and applied research, and it would designate existing funding programs (e.g., Hatch Act formula funds for research, Smith-Lever formula funds for Extension, and cooperative forestry and veterinary funds) as "capacity funding" necessary to "establish, preserve, or expand the research, teaching, and extension capacity of the federal-state partnership."

Although the general response to the NIFA concept has been positive, no hearings were held on the proposals introduced in the 109th Congress and it is still too early to determine the positions of various stakeholder groups. Not all of the voters on the draft CREATE-21 proposal were in favor of it, although the majority were. Many issues are likely to arise if Congress decides to make major reforms to agricultural research, education, and extension programs and policies.

Just a few of the questions that Congress might address are: Should mandatory funds be diverted from the major commodity support programs to support research? What would be the impact on the federal-state partnership in research and extension if money for NIFA is diverted from existing programs? If more research results come from scientists outside the land grant universities who receive competitive grants, what would be the impact on the Cooperative Extension System and its traditional customers?

Research, Education, and Extension Are Green. A number of policymakers and stakeholders want to make federal support to agriculture less production and trade-distorting. They aim to make farm support "challenge-proof" in the WTO. Consistent with this goal is a growing collection of policy analysis showing that much of the commodity support spending has been capitalized into land values, which then raises the costs of production. In contrast, research, extension, and education have a long history of lowering production costs and improving both the quantity and quality of output. It is argued that shifting resources from commodity support to research, education, and extension is an attractive policy option that enhances U.S. agriculture and is "green" in the context of WTO rules on federal support.

Related CRS Reports

CRS Report RL33327, *Agricultural Research, Education, and Extension: Issues and Background*, by Jean Rawson.

⁶⁶ The CREATE-21 proposal and background information are available at [<http://www.create-21.org>].

Rural Development⁶⁷

Some rural areas, such as those within commuting distances of metropolitan areas or with environmental amenities and/or affluent retirees, are thriving. Other rural areas with sparse populations and declining economies continue to face significant challenges. The less diversified the local economy, the more vulnerable it is to economic downturns and the more difficult it may be to create new competitive forces in these areas during periods of recovery.

When agricultural production and related businesses dominated rural economies, federal policies that strengthened and improved agriculture also tended to strengthen and improve the well-being of most of America's small communities and rural residents. As the power of this linkage has declined, many observers have felt that rural policy has been left fragmented and unfocused, comprising a patchwork of programs and initiatives rather than a coherent policy. Agriculture remains the primary policy framework for Congress's consideration of rural issues, and questions have been raised about whether current rural policies and programs are helping to create new economic capacity in rural America that will generate future competitive advantages.

Researchers and others who discuss conditions in "rural" America most often refer to conditions in nonmetropolitan areas. Metropolitan (metro) and nonmetropolitan (nonmetro) areas are delineated by county. In June 2003, the Office of Management and Budget (OMB) released the Census 2000 version of metropolitan (metro) and nonmetropolitan (nonmetro) areas, a classification system often used to define urban and rural America. In this most recent update, nonmetro America comprises 2,052 counties, contains 75% of the nation's land, and is home to 17% (49 million) of the U.S. population.

In the middle of the 20th century, nearly 40% of the rural population lived on farms, with about a third of the rural workforce laboring in production agriculture. Currently, less than 10% of rural people live on farms and only 6.5% of the rural workforce is directly employed in farm production. Off-farm income sources now account for approximately 89% of farm household income. Many of the counties where agricultural production represents 20% or more of labor and proprietor income (predominantly in the Great Plains and upper Midwest) have seen population losses between 2000 and 2005. Today, manufacturing accounts for over a quarter of rural private sector earnings.

Program Design and Operation

More than 88 programs administered by 16 different federal agencies target rural economic development. USDA administers the greatest number of rural development programs and has the highest average of program funds going directly to rural counties (approximately 50%). The Rural Development Policy Act of 1980 designated USDA as the lead federal agency for rural development. By authority of the 1994 USDA reorganization act (P.L. 103-354), three agencies are responsible for

⁶⁷ This section is by Tadlock Cowan.

USDA's rural development mission area: the Rural Housing Service (RHS), the Rural Business-Cooperative Service (RBS), and the Rural Utilities Service (RUS).

The portfolio of loan and grant programs administered by RUS, RHS, and RBS provides much of the support for rural infrastructure, housing, and business expansion and retention. An Office of Community Development provides further community development support through state offices. The mission area also administers the rural portion of the Empowerment Zones/Enterprise Communities Initiative and the National Rural Development Partnership.

Periodic rural development legislation generally amends three major authorizing statutes: (1) the Consolidated Farm and Rural Development Act of 1972 (P. L. 92-419, the Con Act), (2) the Food, Agriculture, Conservation, and Trade Act of 1990 (P.L. 101-624, the 1990 farm bill), and (3) the Rural Electrification Act of 1936. The 2002 farm bill (P.L. 107-171) reauthorized long-standing loan and grant programs through 2007.

Farm bills are designed to benefit rural America and many believe they have. The overwhelming majority of that assistance, however, has gone to a narrow slice of rural people — the growers of subsidized crops. The 2002 farm bill (P.L. 107-171) bill spent approximately 82% of funds on farmers and 0.7% on non-farm rural development efforts. According to research conducted by the Kansas City Federal Reserve's Center for the Study of Rural America, counties getting the most payments have seen no growth in jobs, businesses, or population.⁶⁸ The study reports that from 1992 to 2002, 21% of such counties lost jobs and 60% lost population. Farm payments, says the study, don't create new engines of economic growth; they create dependency on even more payments.

Historically, rural development programs have been funded through annual appropriations. However, the 1996 farm bill (P.L. 104-127) created the Fund for Rural America as one of the first mandatory rural development programs. Subsequently, the 2002 farm bill established several new mandatory rural development programs to support innovative and alternative agricultural development, enhanced telecommunications access, and new financial mechanisms for rural capital development. Mandatory funding for most of these programs, however, has been blocked either entirely or partially by appropriators. Several of the programs have been partly funded through discretionary appropriations in FY2004-FY2007 (e.g., Value-Added Products grants and Renewable Energy Systems grants). These initiatives and their authorized funding levels are provided in **Table 9**.

⁶⁸ Mark Drabestott. "Do farm payments promote economic growth?" *The Main Street Economist*, March 2005, [http://www.kc/frb.org/Rural Center/mainstreet/MSE_0305.pdf].

Table 9. Reductions in Mandatory Rural Development Programs

Program	Annual Authorized Level under 2002 Farm Bill	FY2006 Appropriation P. L. 109-97
	Million \$	
Enhancement of Rural Access to Broadband (§ 6103)	\$50	\$0
Rural Business Investment Program (§ 6029)	\$100	\$0
Rural Strategic Investment Program (§ 6030)	\$100	\$0
Value-added Product Market Development Grants (§ 6401)	\$120	\$20.5 ^a
Rural Firefighters (§ 6405)	\$40	\$0
Renewable Energy Systems (§ 9006)	\$23	\$23 ^a
Bioenergy Program (§9010)	\$150	Not to exceed \$60
Biomass R&D (§9008)	\$14	Not to exceed \$12

a. Funds were provided only through discretionary appropriations.

Prospective Issues and Options

Farmers, it is increasingly recognized, depend on a healthy rural economy more than that economy depends on farmers for its vitality. The need to strengthen the capacity of rural areas to compete in a global economy is becoming more widely appreciated as the competitive limitations of traditional extractive industries, commodity subsidies, and peripheral manufacturing, as mainstays of rural development policy become more obvious.⁶⁹

At issue will be whether current farm policies, which rely heavily on commodity support payments and subsidies to a few commodity production sectors, help, hinder,

⁶⁹ Drabentstott, Mark. "A New Rural Economy: A New Role for Public Policy." Testimony prepared for House Committee on Agriculture, Subcommittee on Conservation, Credit, Rural Development, and Research. March 30, 2006, Washington, D.C.

or have little impact on the development of economically viable rural communities. Rural manufacturing, which tends to be lower-skilled and lower-waged, also is undergoing restructuring with the loss of manufacturing to foreign competition. While growth of the service sector now dominates in rural America, service employment in many rural areas tends to be in lower-wage personal services rather than business and producer services. Continuing population and economic decline in many farming and rural areas is compelling policymakers and rural areas to consider new sources of competitive advantage, innovative ways of providing public services to sparse populations, and new ways of integrating agriculture into changing rural economies.

Economic development efforts in some areas have targeted entrepreneurial strategies. These approaches attempt to capitalize on a particular area's social, economic, and environmental assets to build endogenously on existing strengths. They seem to depend on development of a local entrepreneurial culture. Linking public and private sources to build "business incubators" is a common strategy, as is developing ties with area colleges and universities. Communities also apply entrepreneurial energy to making their local governments, schools, and hospitals more efficient, for example through telecommunication innovations.

Currently, a widely touted rural development strategy is the production of fuel ethanol from corn especially, and also wheat and barley. While ethanol is the most visible product, other by-products and co-products also may have rural development potential. Wet milling of corn for ethanol can also produce starches, corn oil, amino acids, high-protein animal feeds, and commercial-grade carbon dioxide. Farmer-owned cooperatives around the country have begun such projects, and they have gained market share in ethanol. As the technology for ethanol production improves, feed stocks other than grain (e.g., corn stover, switchgrass) could become new sources of ethanol, further stimulating the local and regional economies of areas where agricultural production is still important.

Regardless of the particular rural economic development path chosen in a particular area, four elements of economic development practice may become more significant and require new policies or reconsideration of the effectiveness of existing policies and practices:

- ***Building and Strengthening Small and Medium-Sized Businesses.*** Much economic development is oriented to simple quantity growth (increasing the number of new jobs created or retained). That may or may not be the same as improving the quality of life for rural citizens and strengthening the long-term potential of rural or smaller communities. A development emphasis on quality growth, (e.g., income growth and higher per capita community/regional income) can contribute to maintaining capital assets and to creating and retaining high-wage jobs. Viable rural communities will need to create an environment where small and medium firms can flourish. This could also include new community-based farming enterprises (e.g., niche farming, specialty crops). Technology-based development could require different kinds of public support than many rural businesses have traditionally needed.

- ***Improving Workplace Skills.*** Worker training is too often independent of economic development initiatives. Community employment initiatives that combine training with local business development could assist the creation/expansion of local businesses. An example is work-based training “ladders” where workers gain initial skills in one area and then move on to other local businesses in a coordinated training and employment structure.
- ***Improving Intergovernmental Planning.*** With many small communities losing tax base because of business and population losses, providing essential services is likely to become a major issue throughout the country. Medical care, child and youth services, transportation, education, and income support may diminish in communities and regions that are ill-equipped to take on such burdens. Greater multi-jurisdictional planning and coordination among local and regional entities could be an effective strategy to achieve the scale efficiencies that too many communities will find difficult to achieve. Federal assistance may be a needed catalyst.
- ***Evaluation and Investment in Infrastructure.*** The evidence for the importance of infrastructure in rural economies is significant: it increases the base of public capital; it contributes to increased productivity; and it increases direct employment (e.g., construction). Returns on infrastructure investment can vary. In addition, different infrastructure components can affect different economic sectors (water supply and highway links are more critical to manufacturing than to retail or business service providers, and business service providers have more need for convention facilities, advanced telecommunications, and airport service).

The trends noted above suggest a range of issues potentially affecting a rural development title in a 2007 farm bill.⁷⁰ These issues may include:

- conservation and environmental restoration as rural employment opportunities;
- creating new sources of economic growth and development for rural areas;
- stemming rural population out-migration;
- vertical integration and coordination of agriculture into agri-food value chains and implication for rural areas;
- developing rural entrepreneurial capacity;
- rebuilding an aging rural physical infrastructure;
- bio-based energy production;
- public service delivery innovations in sparsely populated areas;

⁷⁰ Legislation was introduced in the 109th Congress directed at a variety of rural needs including strengthening the rural workforce, providing new telecommunications capacity, creating a new regional authority, and stemming rural population loss.

- increasing suburbanization and the conflicts between agriculture and suburban development;
- human capital deficiencies in rural areas;
- regional efforts for economic development; and
- connecting businesses and rural communities with broadband telecommunications infrastructure.

Related CRS Reports:

CRS Report RL31837, *An Overview of USDA Rural Development Programs*,
by Tadlock Cowan.

Foreign Food Aid⁷¹

The United States is the world's leading supplier of food aid for humanitarian relief and economic development. During the period 1995-2005, the United States contributed almost 60% of total global food aid. The European Union is the second largest provider, with a contribution during the same period of 25%. The United States is also the major contributor to the United Nations World Food Program (WFP), a UN agency that provides humanitarian food relief in times of emergency need. Over 50% of WFP's food aid resources were provided by the United States during 1995-2005.

Program Design and Operation

Foreign food assistance programs date from 1954, when the United States' major food aid program (P.L. 480, subsequently known as Food for Peace) was enacted, although surplus commodities had been donated to foreign countries under legislation that preceded the 1954 act. Trade titles have either amended existing programs or added new commodity food aid programs as humanitarian or development assistance to mainly low-income foreign countries. USDA's Foreign Agricultural Service (FAS) administers all of the food aid programs except the largest, P.L. 480 Title II (commodity donations), which is administered by the U.S. Agency for International Development (USAID).

The trade title of the 2002 farm bill extended and amended the major U.S. foreign food aid programs through 2007. Those programs include:

- Titles I, II, and III of P.L. 480, the Food for Peace program, which, respectively, provide long-term, low-interest loans to developing and transition countries to purchase U.S. agricultural products; commodity donations for humanitarian relief and development activities; and government-to-government donations of food. Changes in the law reinforced both the market development and economic development components of the programs.
- The Food for Progress Program (FPP), which provides commodities to countries committed to a market economy in agriculture.
- The Bill Emerson Humanitarian Trust (BEHT) (the successor to the Food Security Commodity Reserve in the 1996 farm bill), which provides commodities and cash primarily to meet unanticipated emergency food aid needs.
- Food for Education (FFE) (officially the McGovern-Dole International Food for Education and School Feeding and Child Nutrition Program), a new food aid program that provides commodities, funds, and technical assistance mainly for school lunch programs in poor countries.

⁷¹ This section is by Charles E. Hanrahan.

One other important food aid program, donations of surplus commodities under Section 416(b), is not authorized in farm bills as it is permanently authorized in the Agricultural Act of 1949. (See **Table 10** for program spending levels.)

Table 10. U.S. Foreign Food Aid Spending Levels, FY2002-FY2007

Program	FY02	FY03	FY04	FY05	FY06	FY07 Est.
	Million \$					
P.L. 480 Food Aid	1,270	1,960	1,809	2,115	1,408	1,310
Section 416(b)	773	213	173	76	0	0
Food for Progress (FFP)	126	137	138	122	158	161
Food For Education (FFE)	0	100	50	90	103	103
Total	2,169	2,410	2,170	2,403	1,669	1,574

Source: USDA, *Annual Budget Summaries*, various issues.

Prospective Issues and Options

During the life of the current farm bill, the Administration tried, unsuccessfully, to use the annual appropriations process to make a number of administrative and substantive changes in the food aid programs. For example, in FY2003, the President's budget proposed that Congress streamline implementation responsibility for food aid programs by reducing the number of food aid programs and giving USAID responsibility for all development components of U.S. food aid programs. This would have meant that USAID would use Title II funding to carry out the kinds of development assistance provided under Food for Progress or Section 416(b), administered by USDA. As part of its budget submission to Congress in FY2006, the President's budget proposed legislative language to transfer \$300 million from P.L. 480 to a famine account, administered by USAID, for use in purchasing non-U.S. commodities for distribution in emergency food aid programs. Farmers, agribusinesses, and private organizations that use food aid to finance development projects opposed this proposal, which was subsequently rejected by both House and Senate appropriators. A similar proposal in the FY2007 budget submission also was rejected by the appropriations committees.

U.S. food aid issues raised in appropriations debates may be considered during a farm bill debate. The idea of substituting cash for commodities for emergency relief could re-emerge as Congress debates food aid program reauthorization. It is argued that disaster response would be less expensive, more efficient, and more timely if cash were used to purchase emergency food aid in countries where the emergency is happening or in regions nearby. Emergency commodity shipments from the United States for emergencies can take three to five months to arrive and often are no longer needed when they do arrive. Also, transportation costs currently account for about half the money appropriated to finance P.L. 480 commodity

donations for humanitarian response to emergencies. Opponents argue that using cash to purchase emergency food aid would reduce U.S. food aid because the coalition that supports commodity food aid (farm groups and private voluntary organizations) would not support a cash program.

Another issue that frequently arises during appropriations debates concerns the allocation of food aid commodities between humanitarian emergencies and development projects. Although the 2002 farm bill mandates that three-fourths of commodity donations be allocated to development projects (unless waived by the President), rarely has that level been met as demand for emergency food aid has burgeoned. As a result, more commodities have been allocated to emergencies than to development activities in recent years. Organizations that use food aid to finance development projects along with their supporters in Congress may seek ways to make food aid a more reliable and dependable source of finance for development activities.

Committee reports accompanying appropriations bills since FY2003 have emphasized that P.L. 480 Title II was intended primarily to support development activities and stressed the role of the Bill Emerson Humanitarian Trust as a source of emergency food assistance. The BEHT could become the subject of renewed interest as a vehicle for providing emergency food assistance, leaving more scope for P.L. 480 Title II to be used for development activities. To make the BEHT a reliable source for meeting unanticipated emergency need, Congress would need to replenish and reimburse the trust for the release of stocks.

Critics complain that food aid is primarily a convenient outlet for U.S. farm surpluses, and a source of aid that tends to diminish when these surpluses decline. These critics may seek more stability in U.S. food aid levels (even though, they agree, the United States has been the leading provider of food aid worldwide). Questions regarding the effects of food aid on U.S. commercial sales, and on the farm economies of developing countries, have been raised not only by food aid critics in multilateral negotiations but also by some major U.S. charitable organizations that have relied extensively on food aid to finance development projects. Critics question the effectiveness of mechanisms in the farm bill as well as the existing international machinery designed to monitor commercial displacement and disincentive effects. Although preliminary agreement was reached in the now-suspended Doha Round negotiations to eliminate food aid that displaced commercial sales, that agreement is now on hold. One of the largest U.S. private voluntary organizations, CARE, has announced that it will phase out the sale of food aid commodities in developing countries to finance development projects (known as monetization) by 2009.

Related CRS Reports

CRS Report RL33553, *Agricultural Export and Food Aid Programs*, by Charles E. Hanrahan.

CRS Report RS21279, *International Food Aid: U.S. and Other Donor Contributions*, by Charles E. Hanrahan and Carol Canada.

CRS Report RL31927, *Trends in U.S. Foreign Food Aid*, by Carol Canada.

Domestic Nutrition Assistance⁷²

The nutrition title accounts for approximately 62% of all farm bill spending. The lion's share of this nutrition spending is for the Food Stamp program, which is widely viewed as the federal government's primary response to the food needs of low-income Americans. Nutrition assistance programs (all administered by USDA) also play a role in federal support for the agricultural sector through direct commodity purchases and increased demand. Omnibus farm bills have become the legislative vehicle for reauthorizing expiring authorities and appropriations, especially for food stamps and several smaller domestic food programs; most recently, the 2002 farm bill reauthorized expiring nutrition program authorities and appropriations authorizations through FY2007.

Congress uses farm bills as an opportunity to review the administration, effectiveness, eligibility and benefit rules, and funding levels of some nutrition programs — and as a place for new initiatives. In addition, the nutrition title serves the political objective of bringing urban Members into the farm bill process. Occasionally, the large budget for nutrition programs also serves as a tempting target for other Agriculture Committee priorities when spending is constrained.

The USDA oversees almost 20 domestic nutrition assistance programs, spending some \$54 billion in FY2006, over half of USDA's outlays. Virtually all the programs are administered by states, schools, or local grantees under federally prescribed rules. Federal oversight of these programs (e.g., regulations governing program operations) is the responsibility of the USDA's Food and Nutrition Service (FNS). In addition, the Agriculture Marketing Service (AMS), the Farm Service Agency (FSA), and the Commodity Credit Corporation (CCC) play roles in the procurement of commodities for some programs. The upcoming farm bill is may cover five program areas, accounting for 65% of federal nutrition aid spending.⁷³ They include:

- the Food Stamp program in the 50 states, the District of Columbia, Guam, and the Virgin Islands;
- programs operating in lieu of the regular Food Stamp program — nutrition assistance block grants for Puerto Rico, American Samoa, and the Northern Mariana Islands, along with the Food Distribution Program on Indian Reservations (FDPIR);
- The Emergency Food Assistance Program (TEFAP);
- the Commodity Supplemental Food Program (CSFP); and
- Community Food Projects.

⁷² This section is by Joe Richardson.

⁷³ The farm bill typically does *not* include provisions affecting child nutrition programs (like the school meal programs) or the Special Supplemental Food Program for Women, Infants, and Children (the WIC program), except where levels of commodity assistance to schools are involved. These program areas normally are dealt with through periodic child nutrition reauthorization laws, and the next reauthorization is scheduled for 2009.

Moreover, the 2002 farm bill added statutory authority and mandatory funding for a new Seniors Farmers' Market Nutrition Program (SFMNP) and established a pilot program to distribute free fruit and vegetables in schools (later expanded and made permanent).

All farm bill domestic nutrition assistance programs, except for the CSFP and the administrative/distribution-cost component of TEFAP, are treated as *mandatory entitlements* for budget purposes. Taken together they represent about one-third of USDA spending (outlays) and are estimated at \$35 billion or more for FY2006.

A number of issues for the 2007 farm bill have emerged. However, as with the 2002 bill, action on most of them will depend heavily on budgetary considerations. Major programs and issue areas are outlined below.

Food Stamps⁷⁴

The Food Stamp program is the largest of all the nutrition assistance programs and accounts for 95% of the spending in the nutrition title of the farm bill. It is the foundation for the federal effort to give low-income households the chance to obtain at least a minimally adequate diet, and is a major factor in overall federal policy of support for the poor.

The purpose (and structure) of the program has evolved over time. It is meant to play a role in three areas of federal public policy:

- First, food stamps originated as a way of providing an outlet for surplus agricultural production, with the notable side benefit of supporting poor families. However, its goals and role in the country's support system for the low-income population have shifted and expanded greatly. It continues to pay for significant new food purchasing power, thereby helping the agriculture sector.
- Second, it now also is seen as the government's primary response to important concerns about the overall "food security" status of the low-income population, although only an estimated 60% of eligible individuals choose to participate by the most recent count (2004). A 2006 USDA Economic Research Service (ERS) study reports that, in 2005, 11% of U.S. households were "food insecure," and that the prevalence of "very low food security" (previously denominated as "food insecure with hunger") was 3.9%.
- Third, the Food Stamp program has become an integral part of the overall "safety net" for the needy. It now ranks as the fourth largest needs-tested program and is the only nationally standard program aiding low-income households. According to ERS, when its benefits are added to other income, food stamps are estimated to move almost 10% of recipients out of poverty, and, for a typical low-income recipient family with children, food stamps can provide some 25% of their purchasing power.

⁷⁴ Authorized under the Food Stamp Act; 7 U.S.C. 2011 et seq.

Program Design and Operation. The regular Food Stamp program provides inflation-indexed monthly benefits to low-income households that supplement their own spending on food; benefits vary by income, household expenses (like shelter costs), and household size, but generally not by state or region. They are delivered through electronic benefit transfer (EBT) cards that are used like debit cards. Eligibility for food stamps is primarily based on a household's financial status. Monthly gross income must be below 130% of the inflation-indexed federal poverty income guideline for the household's size (e.g., \$1,800 for a three-person household), and liquid assets must be under \$2,000 (\$3,000 for those households with elderly/disabled members). However, some households can be "categorically eligible" if they participate in another income-tested program like cash welfare. And certain categories are barred irrespective of their financial need (e.g., many noncitizens, able-bodied adults without dependents not meeting a work test).

Program costs are shared with the states, which administer the program under generally uniform federal rules. The federal government pays the full cost of benefits and about half the cost of administration, operating work/training programs for recipients, and outreach and nutrition education efforts. States pay the remainder.

The level of food stamp spending varies with participation, which is closely linked to economic conditions and eligibility rules, and benefit levels, which are indexed to food costs and also reflect recipients' income and non-food expenses. Since the 2002 farm bill, participation has increased substantially, from some 19 million persons per month in FY2002 to 26.1 million (August 2006), and the average monthly benefit level has jumped from \$80 a person in FY2002 to \$94 in August 2005.⁷⁵ Costs have grown from \$20.6 billion in FY2002 to more than \$33 billion estimated for FY2006.

Finally, the Food Stamp program has a "quality control" system that measures the degree to which eligibility and benefit decisions are erroneously made. The most recent national quality control statistics (for 2005) show historically low error rates (e.g., 4.5% of benefits over-issued). States with persistently high error rates can be assessed financial sanctions; those with very low rates can receive bonus payments.

Prospective Issues and Options. The 2002 farm bill greatly expanded eligibility for noncitizens, raised benefits modestly for larger households (by counting less of their income), and allowed states to provide "transitional" food stamps for families leaving the Temporary Assistance for Needy Families (TANF) program. In addition, the 2002 bill set up a number of state options to ease access to the program and administrative burdens on applicants/recipients and program operators and revamped the quality control system to reduce the number of states subject to financial sanctions and grant bonus payments to states demonstrating exemplary administrative performance. Virtually no program cuts were made.

⁷⁵ To put these participation figures into perspective, it should be noted that the all-time high in food stamp participation was reached shortly before enactment of the 1996 welfare reform law — 27.5 million persons a month in FY1994. The all-time low for the modern program was in FY2000 — 17.2 million persons a month.

A preliminary list of major potential issue areas that have emerged at this time includes the following.

- **Eligibility.** Proposals to both loosen and tighten current rules governing the eligibility of noncitizens are likely. The House version of the bill implementing spending reductions to comply with the FY2006 budget reconciliation measure would have further limited eligibility for noncitizens. Moreover, any changes made in immigration law may call for revision of food stamp eligibility rules. Currently, states may make households participating in states' Temporary Assistance for Needy Families (TANF) programs categorically eligible (automatically eligible) for food stamps. The Administration contends that states have taken advantage of this rule to make those with financial resources well above normal food stamp standards eligible, simply by providing some minimal TANF-linked services. Various limits on categorical eligibility have been advanced. Opponents of the current restrictions on participation by able-bodied adults without children (ABAWDs), which bar eligibility after three months unless the individual meets a work-related test, contend that they should either be abolished as too punitive (and administratively complex) or eased. These restrictions were put in place in the 1996 welfare reform law.
- **Assets.** Current policy excludes most, but not all, retirement savings from consideration as assets when testing for food stamp eligibility. The Administration and others have supported disregarding *all* retirement savings to avoid penalizing those who have saved for retirement, but are temporarily in need. The Food Stamp program's dollar asset limits have not been significantly changed in over 25 years. A number of critics argue that they should be raised, or abolished, to encourage saving and simplify administration.
- **Use of Benefits.** Food stamp benefits can be used for virtually any food purchase; they cannot be used for alcohol, tobacco, hot prepared food, or dietary supplements. Food choice has been a recurring theme in food stamp policy debates. Critics argue that nutrition-related limits should be placed on the types of food that can be bought with food stamps or that incentives be provided to purchase nutritional food items. In addition, another group of critics has proposed an expansion to allow food stamps to be used for dietary supplements, as in the Senate version of the 2002 farm bill.
- **Benefit Levels.** Food stamp benefits are increased for those with high shelter costs in relation to their income, but there are significant limits to this rule. As in earlier farm bill debates, program advocates would like to see these limits removed. Again, as in earlier farm bills, there are long-standing calls to increase or index the minimum benefit; it has not been changed since the 1970s and is seen as so low that it discourages participation. Arguing that the value of food stamp benefits has been eroded, some advocates would ask that

either the maximum benefit be raised or that the standard amount of income disregarded for all households be increased — effectively providing an across-the-board benefit increase.

- **Administration.** A number of states have taken, or are taking, major steps to revamp the way they administer food stamps, Medicaid, and the TANF program. While food stamp law requires that final eligibility/benefit decisions be made by government employees, these initiatives can involve privatizing (contracting out) many back-office administrative tasks and modernizing/streamlining administration through efforts like performing program intake by computer application — in both cases resulting in cost savings from fewer staff and offices and, it is hoped, better client service. There are no federal standards for these types of initiatives (e.g., with respect to client service/access, pilot testing), and many of those watching the current initiatives argue that some minimum standards should be set legislatively. As the result of experiences related to Hurricane Katrina, some have proposed allowing or requiring the federal government to increase its share of food stamp administrative costs (above the normal 50%) in the case of major disasters.
- **Program Access.** Although the participation rate among food stamp eligibles has increased noticeably since 2002 (when a number of changes were put in place to encourage this), it still is only 60%, and program advocates argue that further steps need to be taken. Procedural rules governing how applicants and recipients are treated, as well as rules relating to eligibility for applicants participating in other public assistance programs, could be changed to ease access to food stamp benefits for eligible households.

The Emergency Food Assistance Program (TEFAP)⁷⁶

TEFAP was begun in 1981-1982 as a temporary expedient designed, at least initially, to dispose of huge stocks of government-held food commodities and to address legislatively mandated reductions in food assistance programs, an economic recession, and concern over “hunger” and homelessness among the needy. The 1983 Emergency Food Assistance Act gave the program official status and authorized funding for administrative and distribution costs.

In the early years (through FY1988), the only significant federal expenditures involved were appropriations for administrative/distribution costs. The commodities provided were so-called “bonus” commodities, those acquired for farm-support reasons and held in excess of what was needed to fulfill other federal commitments (e.g., to school meal programs). The establishment of TEFAP helped reduce federal commodity stocks (and storage costs associated with them), provided an alternative

⁷⁶ Authorized under (1) Section 27 of the Food Stamp Act (7 U.S.C. 2036) and (2) the Emergency Food Assistance Act (7 U.S.C. 7501-7516).

source of food assistance for the needy, and was instrumental in supporting and expanding a network of emergency food aid providers.

In 1988, responding to the lack of bonus commodity inventories, Congress began the practice of mandating funding for TEFAP commodities, thereby creating a minimum “entitlement” to a certain level of commodity assistance. This entitlement component was written into permanent law by the 1996 welfare reform act (P.L. 104-193), which guaranteed the program \$100 million a year (increased to \$140 million in the 2002 farm bill). Additional bonus commodities continued to be made available — differing each year according to USDA acquisitions.

Program Design and Operation. Under TEFAP, the federal government provides food commodities to states along with grants for administrative and distribution costs. This assistance supplements other sources of food aid for needy persons and often is provided in concert with food bank and homeless shelter projects. Eligibility decisions for TEFAP — as both to recipients and participating emergency food providers — are made by states.

In addition to their allocation of the \$140 million in entitlement commodities, each state receives a share of the \$50 million a year appropriated as discretionary money to fund expenses associated with administration and distribution (storage, transportation) of the commodities. States’ entitlements to TEFAP commodities are supplemented with bonus commodities (about \$150 million in FY2005) that the USDA has acquired in its agriculture support programs.

Prospective Issues and Options. The 2002 farm bill increased the level of entitlement commodities to \$140 million a year. Since the 2002 farm bill, *bonus* commodity donations from USDA stocks to TEFAP have dropped dramatically — from over \$240 million in FY2003 to about \$150 million in FY2005, with estimates of less than \$100 million for FY2006. Because USDA commodities provide an important underpinning to emergency food assistance providers’ activities and they have come to rely on them, there are calls from providers and others for the 2007 farm bill to substantially increase the level of entitlement commodity assistance above the current \$140 million a year.

Commodity Supplemental Food Program (CSFP)⁷⁷

The CSFP was originally established in the late 1960s, under the authority of a series of appropriations laws, to provide aid to low-income women (pregnant and postpartum), infants, and children, who at that time had no other food assistance program to turn to for aid specific to their needs. Since then, the Special Supplemental Nutrition Program for Women, Infants, and Children (the WIC program) has largely taken over this role. However, the CSFP continues to operate and now serves mostly elderly low-income individuals who either need extra help beyond food stamp benefits or are reluctant to apply for food stamps.

⁷⁷ Authorized under Sections 4 and 5 of the Agriculture and Consumer Protection Act of 1973; 7 U.S.C. 612c note.

Program Design and Operation. The CSFP provides supplemental foods to low-income elderly persons (and some low-income pregnant, postpartum, and breastfeeding women, infants, and children) through over 140 projects in 32 states, the District of Columbia, and on two Indian reservations. Eligibility is limited to those with income below 130% of the federal poverty income guidelines (about \$13,000 a year for one person). The foods are purchased by the USDA and distributed through local grantees, and food packages received and distributed by CSFP projects are designed with the nutritional needs of recipients in mind. CSFP grantees also receive significant funding for administrative costs. The program is a discretionary program depending on annual appropriations decisions, and commodities and administrative funding generally are apportioned by the number of persons served in the prior year; if new money is appropriated or allocated “slots” are not used, new projects can be added. The commodities provided by USDA are of two types: (1) “entitlement” commodities bought with annually appropriated funds and included in the food packages and (2) “bonus” commodities donated from USDA stocks and provided in addition to, or as part of, food packages.

In FY2005, the CSFP served over 500,000 persons a month, 90% of whom were elderly. Some \$82 million in entitlement commodities and \$38 million worth of bonus commodities were distributed; food packages were valued at between \$18 and \$21 per person per month. Administrative cost support was \$29 million.

Prospective Issues and Options. The 2002 farm bill increased the proportion of appropriations earmarked for administrative costs. In its FY2007 appropriations request, the Administration proposed terminating the CSFP, as duplicative of other programs (the WIC program and food stamps). However, neither the House nor the Senate FY2007 agriculture appropriations measures adopted this position. CSFP advocates have, for a number of years, called for a change in rules that would boost the income eligibility limit from 130% of the federal poverty guidelines to 185% and are likely to raise the issue again in the 2007 farm bill.

Fresh Fruit and Vegetables

The 2002 farm bill addressed, for the first time, the availability of fresh fruit and vegetables in schools — because of growing concerns over childhood obesity and the types of foods offered through school meal programs. It also provided support for a Seniors Farmers’ Market Nutrition Program (SFMNP).

Program Design and Operation. A pilot project was established under which a small number of schools in a limited number of states and Indian reservations received funding to offer free fresh fruit and vegetables to students. The project was expanded, given mandatory annual funding, and made permanent through the 2004 child nutrition reauthorization law (P.L. 108-265) and further expanded and given added money in P.L. 109-97. In FY2006, about 400 schools in 14 states and three Indian reservations received support for this project, with funding of \$15 million.

The 2002 law also required that a minimum of \$50 million a year be spent on fresh fruit and vegetables to be acquired for school meal programs through the Department of Defense “Fresh Program” (“DOD Fresh”).

Finally, the 2002 bill provided statutory authority and mandatory funding for the SFMNP, under which low-income seniors receive vouchers that they may redeem at farmers' markets and roadside stands for fresh fruit and vegetables, like a similar program for WIC recipients.

Prospective Issues and Options. The fresh fruit and vegetable program set up by the 2002 farm bill has proved popular, and both the House and Senate appropriations bills for FY2007 included a significant expansion in funding and the number of states covered. It is possible that various proposals for further growth in the program would be advanced for the 2007 farm bill. Recommendations for continuation of and added support for the DOD Fresh set-aside or similar initiatives also can be expected.

A proposed change in the SFMNP is likely to be a provision barring the use of SFMNP funds to pay sales taxes, coupled with a rule disregarding the value of SFMNP benefits as financial resources for tax and public assistance purposes. This has been proposed by the Administration, was included in the House and Senate FY2007 appropriations measures, and mirrors what is now done for the WIC farmers' market program.

Forestry⁷⁸

Forestlands in the United States total nearly 747 million acres, about a third of all land in the country. These lands provide wood for lumber, plywood, paper, and other materials, as well as a host of environmental and ecological services, including recreation, clean water, wildlife habitat, and more. Ownership of forestlands is divided among (1) non-industrial private forest landowners (private owners who do not own wood processing facilities), with nearly 363 million acres (49% of the total); (2) the federal government, with 247 million acres (33% of the total); (3) state and local governments, with 70 million acres (9% of the total); and (4) industrial private owners (private owners who also operate sawmills and/or wood pulp/paper plants), with 68 million acres (9% of the total). Federal forestlands are administered largely by the Department of the Interior's Bureau of Land Management (with 48 million acres) and the USDA's Forest Service (with nearly 147 million acres). In addition to administering 155 national forests and various other designations, the Forest Service provides technical and financial assistance to non-industrial private landowners, directly and through state forestry agencies.

Three of the past four farm bills have contained separate forestry titles. Traditionally, farm bills address forestry assistance programs, but federal forest management and protection also is within the Agriculture Committees' jurisdiction. The next farm bill may include a forestry title to modify existing programs and possibly establish new options for forest land management and protection.

Program Design and Operation

Forestry assistance programs are managed primarily by the State and Private Forestry (S&PF) branch of the Forest Service. Funding is enacted in the annual Interior, Environment, and Related Agencies appropriations acts. There are three groups of forestry assistance programs. *Forest health management* includes programs to survey and control forest pests and pathogens (including invasive species) on federal and nonfederal (cooperative) lands. *Cooperative fire assistance* includes equipment, financial, and technical assistance to states and volunteer fire departments. *Cooperative forestry assistance* programs include:

- forest stewardship — financial and technical assistance to states for forestry programs;
- forest legacy — federal or state acquisition of lands or easements on lands threatened with conversion to non-forestry uses;
- urban and community forestry — financial and technical assistance for forestry activities in urban and community settings;
- economic assistance — financial and technical assistance for diversifying forest-dependent rural communities (Economic Action Program and Pacific Northwest Assistance); and
- forest land enhancement — cost-share assistance for forestry practices on private forests (Forest Land Enhancement Program (FLEP), enacted in the 2002 farm bill to replace the Forestry

⁷⁸ This section is by Ross W. Gorte.

Incentives Program (FIP), and Stewardship Incentives Program (SIP)).

Two smaller programs include *International forestry* and *Forest inventory* activities.

Prospective Issues and Options

Funding Levels. Appropriations for many forestry assistance programs rose in FY2001 in response to the National Forest Plan. This plan was prepared in September 2000 at President Clinton’s request in response to the severe summer 2000 fire season. Funding for forest health management and cooperative fire assistance have persisted at relatively high levels compared to those before FY2001. Also, funding for forest legacy has grown substantially, from less than \$3 million annually for most of the 1990s to an average of more than \$60 million annually over the past five years. In contrast to these programs, technical and financial aid to rural, forest-dependent communities — to help businesses and workers adjust to a more diverse, less traditional forest product based local economy — has declined. The Bush Administration proposed terminating funds for economic assistance in each of the past four budget requests; appropriations have declined from the FY2001 peak of \$63.6 million to \$9.5 million in FY2006. Such assistance has been popular locally, and is seen in part as a way to help use the excess biomass fuels that need to be removed from forests to reduce the risk from wildfires. Consequently, approaches to expand and fund FS economic assistance programs might be examined in the next farm bill.

Funding for the Forest Land Enhancement Program may attract attention in the upcoming farm bill. FLEP was enacted in the 2002 farm bill with mandatory funding of \$100 million through FY2007. However, actual funding has totaled \$50 million, and Congress, at the request of the Administration, has cancelled the remaining funding. This perceived “failure” to fulfill the “promised” funding likely will be a major part of the forestry debate in the next farm bill. Funding for forestry assistance programs is shown below, in **Table 11**.

Wildfire Protection. The threat of wildfires to forests and to communities and homes in the wildland-urban interface seems to have grown. The 2002 farm bill authorized a new community wildfire protection program, but the program has been funded only as part of state fire assistance, with no separate funds for community protection. As the threat from wildfire persists, wildfire protection options may be considered in the next farm bill.

Invasive Species. Invasive species, typically exotic plants and animals, are increasingly displacing or harming native plants and animals in the United States and worldwide. FS Chief Dale Bosworth described invasive species as one of the four major threats to the nation’s forests and rangelands.⁷⁹ Options and opportunities to prevent and control the spread of invasive species, especially forest pests and especially on private forestlands, might be a farm bill issue.

⁷⁹ The four threats noted are fire and fuels, invasive species, loss of open space, and unmanaged recreation [<http://www.fs.fed.us/projects/four-threats/>].

Table 11. Forestry Assistance Funding, FY1999-FY2007

Program	FY02 Actual	FY03 Actual	FY04 Actual	FY05 Actual	FY06 Enacted	FY07 Request
	(Million \$)					
Forest Health Mgmt.	80.3	97.7	123.3	126.6	124.8	95.8
Coop. Fire Assistance	95.0	104.9	122.5	86.9	92.4	69.7
Coop. Forestry	201.6	187.6	166.5	155.4	133.5	122.2
<i>Forest Stewardship</i>	33.2	32.0	31.9	32.3	34.1	33.9
<i>Forest Legacy</i>	65.0	68.4	64.1	57.1	56.5	61.5
<i>Urban & Community</i>	36.0	36.0	34.9	32.0	28.4	26.8
<i>Economic Assistance</i>	57.6	31.2	25.6	19.0	9.5	0.0
<i>Forest Land Enhancement</i>	9.8	20.0	10.0	15.0	5.0	0.0
International Forestry	5.3	5.7	5.9	6.4	6.9	4.9
Forest Inventory	5.0	5.0	4.9	5.0	4.6	0.0
Total	387.1	400.9	423.1	380.3	362.2	292.6

Source: USDA Forest Service, *Budget Justifications for Committees on Appropriations*, annual series. Amounts may differ from those shown in other documents because of the inclusion of State and Private Forestry funds, Wildfire Management funds, and supplemental and emergency appropriations. Through FY2002, Forest Land Enhancement data were appropriations for the Stewardship Incentives Program and the Forestry Incentives Program. As of November 24, 2006, the FY2007 Interior, Environment, and Related Agencies Appropriations Act had not been enacted.

Private Forestland Preservation. The environmental losses associated with conversion of forestlands to other, non-forest uses (e.g., agriculture and residential development) have generated concern. The substantial expansion of the forest legacy program reflects this growing concern. However, some stakeholders have suggested that non-market services from private forestlands (water quality, open space, carbon storage, wildlife habitat, biological diversity, etc.) might be compensated. The idea of federal support for developing markets for these traditionally non-market services has generated broad interest, and may be discussed as a possible forestry program in the upcoming farm bill.

Related CRS Reports:

CRS Report RL31065, *Forestry Assistance Programs*, by Ross W. Gorte.

Appendix: Titles and Subtitles of the 2002 Farm Bill (Farm Security and Rural Investment Act of 2002, P.L. 107-171)

- I. Commodity Programs
 - A. Direct Payments and Counter-Cyclical Payments
 - B. Marketing Assistance Loans and Loan Deficiency Payments
 - C. Peanuts
 - D. Sugar
 - E. Dairy
 - F. Administration
- II. Conservation
 - A. Conservation Security
 - B. Conservation Reserve
 - C. Wetlands Reserve Program
 - D. Environmental Quality Incentives
 - E. Grassland Reserve
 - F. Other Conservation Programs
 - G. Conservation Corridor Demonstration Program
 - H. Funding and Administration
- III. Trade
 - A. Agricultural Trade Development and Assistance Act of 1954 and Related Statutes
 - B. Agricultural Trade Act of 1978
 - C. Miscellaneous
- IV. Nutrition Programs
 - A. Food Stamp Program
 - B. Commodity Distribution
 - C. Child Nutrition and Related Programs
 - D. Miscellaneous
- V. Credit
 - A. Farm Ownership Loans
 - B. Operating Loans
 - C. Emergency Loans
 - D. Administrative Provisions
 - E. Farm Credit
 - F. General Provisions
- VI. Rural Development
 - A. Consolidated Farm and Rural Development Act
 - B. Rural Electrification Act of 1936
 - C. Food, Agriculture, Conservation, and Trade Act of 1990
 - D. SEARCH Grants for Small Communities
 - E. Miscellaneous
- VII. Research and Related Matters
 - A. Extensions
 - B. Modifications
 - C. Repeal of Certain Activities and Authorities
 - D. New Authorities
 - E. Miscellaneous
- VIII. Forestry
 - A. Cooperative Forestry Assistance Act of 1978
 - B. Amendments to Other Laws
 - C. Miscellaneous Provisions
- IX. Energy
- X. Miscellaneous
 - A. Crop Insurance
 - B. Disaster Assistance
 - C. Tree Assistance Program
 - D. Animal Welfare
 - E. Animal Health Protection
 - F. Livestock
 - G. Specialty Crops
 - H. Administration
 - I. General Provisions
 - J. Miscellaneous Studies and Reports