

Commodity Programs and Beyond in the 2008 Farm Bill

James L. Novak

Not since 1985 have the words agriculture, farm or some recognition of production agriculture been omitted from the title of a farm bill. Some see this as a sign of the decline in Congressional support for agricultural programs. In the Food, Conservation and Energy Act of 2008 (FCEA), commodity funding was cut by an estimated \$12 billion from the 2002 Farm Bill. Despite cuts in programs affecting production agriculture, the FCEA still contains authorization for substantial spending on commodities, conservation, and specialty crops, and contains sufficient implications for trade agreements, to be properly called a farm bill.

The articles in this theme discuss major new and renewed provisions of the 2008 FCEA affecting traditional and specialty agricultural production and trade. ACRE a new commodity program based on state and farm revenue shortfalls, and increased spending on conservation programs are discussed in two separate articles. Provisions for specialty crops, which for the first time gained their own farm bill title, are also highlighted. A final article discusses commodity program implications for U.S. trade and trade agreements.

A state revenue based commodity program included in the farm bill provides a new and untested program for producer consideration. In this issue Carl Zulauf, Michael Dicks and Jeffrey Vitale describe "ACRE" and what it means in comparison to more traditional farm support programs.

James Pease, David Sweickhardt and Andrew Seidl follow up with a discussion of major conservation program provisions of the farm bill and implications for future funding for "working lands" programs. The relative increase in the importance of conservation over 2002 is highlighted.

Articles in this Theme:

ACRE (Average Crop Revenue Election) Farm Program: Provisions, Policy Background, and Farm Decision Analysis 29

Conservation Provisions of the Food, Conservation and Energy Act of 2008: Evolutionary Changes and Challenges 36

The U.S. 2008 Farm Bill: Title X and Related Support for the U.S. Specialty Crop Sector 41

The WTO and U.S. Domestic Support in the Food, Conservation, and Energy Act of 2008 46

For the first time, specialty crops have their own farm bill Title X ("Horticulture and Organic Agriculture.") Mechel Paggi and Jay Noel explore key provisions of this title and the potential benefit to U.S. specialty crop agriculture.

In the final article, Eric Wailes and Parr Rosson look at the implications of the farm bill for international trade agreements. Issues such as how domestic agricultural supports in the legislation affect U.S. trade commitments and how they are likely to affect future trade negotiations are explored.

Guest editor James Novak (novakjl@auburn.edu) is an Extension Economist and Professor in the Department of Agricultural Economics and Rural Sociology at Auburn University, Alabama.

ACRE (Average Crop Revenue Election) Farm Program: Provisions, Policy Background, and Farm Decision Analysis

Carl R. Zulauf, Michael R. Dicks, and Jeffrey D. Vitale

JEL Classification: H100

Farm support programs based on price have been an integral part of farm policy since the 1930s. However, two concerns have emerged with existing price-based programs. One is that the current marketing loan and counter-cyclical programs provide little protection when yields are low. Widespread reduction in yields raises prices and reduces or eliminates payments from these two programs while localized reduction in yields reduce marketing loan payments for affected individual farms because marketing loan payments are based on production. The second concern is that farmers can receive marketing loan and counter-cyclical payments even when revenue is above average because high yields more than offset low prices.

After decades of debate, a revenue assurance program finally became a reality in the new *Food, Conservation and Energy Act of 2008*. Specifically, farmers are offered the choice of the following program options:

Traditional Suite of Farm Programs

Direct Payments
Marketing Loans
Counter-Cyclical Payments

ACRE Suite of Farm Programs

Direct Payments at 80% of full rate
Marketing Loans at 70% of loan rate
ACRE State Revenue Program

Many concepts included in the ACRE state revenue program were first contained in the Integrated Farm Revenue Proposal by Carl Zulauf. American Farmland Trust was the first organization to endorse these concepts, followed by the National Corn Growers Association. Senators Richard Durbin of Illinois and Sherrod Brown of Ohio provided

initial congressional support and co-authored the first bill (S.1872) containing a program that became ACRE.

This article describes the legislative provisions and policy background of the new ACRE state revenue program, as well as some analytical results that provide insights into the farmer decision regarding which suite of programs to choose.

Comparison: Current Programs vs. ACRE State Revenue Program

The direct payment program pays farmers a fixed dollar amount per historical base acre. This dollar amount does not change with market prices or with production on the farm. Like direct payments, counter-cyclical payments are based on historical production. In contrast, marketing loan payments are based on current production. Both the counter-cyclical and marketing loan programs are price-based programs. Congress specifies the marketing loan rates and counter-cyclical target prices in the Farm Bill. These fixed support rates essentially establish a floor or lower bound on the per unit value of the crop, as payments are triggered when market price drops below them. The creation of a floor reflects the policy objective of traditional price support programs, which is to assist farmers with managing the systemic risk of chronically low market prices that extend over a long period of years. A systemic risk is a risk beyond the control of an individual producer. The combination of direct payment, counter-cyclical, and marketing loan programs will be referred to in this article by the acronym DCP+ML.

In contrast, ACRE's policy objective is to assist farmers with managing the systemic risk of a decline in revenue of a crop over a short period of years. Revenue is defined as

U.S. price times state yield. ACRE's policy objective is implemented by establishing the following revenue guarantee for each state and crop combination (crops are barley, corn, upland cotton, oats, peanuts, pulse crops, rice, sorghum, soybeans and other oilseeds, and wheat):

(90%) x (2-year moving average of U.S. crop year cash price) x (5-year Olympic moving average [excludes high and low values] of state yield per planted acre)

A state revenue payment is triggered for a given crop and year when actual state revenue (state yield per planted acre times U.S. crop year price) is less than the state's ACRE revenue guarantee. This difference is the state's ACRE payment rate. For any crop in any year, the payment rate cannot exceed 25% of the crop's state revenue guarantee. ACRE's state revenue guarantee cannot increase or decrease more than 10% from the prior year's guarantee. Over time, the guarantee will follow prices and yields up and down. Thus, ACRE's revenue guarantee is not a floor, implying that ACRE will not provide protection against chronically low prices.

Receipt of an ACRE payment also requires that a farm's revenue for the crop and year be less than its benchmark revenue for the crop. The latter equals (1) the product of the farm's 5-year Olympic average yield per planted acre times the 2-year U.S. average price, plus (2) the farm's insurance premium if the farmer bought insurance for the crop.

The ACRE revenue protection payment is made on acres planted to eligible crops, but total planted acres covered by ACRE are capped at the farm's total base acres. Total payment a farm receives from ACRE is the sum of (1) 80% of the farm's current direct payment, (2) ACRE revenue protection payments, and (3) marketing loan payments at a 30% lower loan rate.

This discussion focuses on ACRE's basic features. Additional details on ACRE are contained in the appendix.

ACRE's Policy Innovations Relative to Current Programs

The ACRE state revenue program has several important departures from DCP+ML:

- **ACRE's target is revenue not price.** Revenue is more closely related to financial position and risk than price because revenue includes both price and yield.
- **ACRE's revenue target is not fixed;** it changes with U.S. prices and state yields.
- **A farm level revenue loss condition must be met for a farm to receive an ACRE payment.** This requirement is an attempt to address the concern that a farm can receive marketing loan and counter-cyclical payments even when it has above-average revenue.
- **ACRE is partially coordinated with crop insurance.** Historically, farm support and crop insurance programs have been enacted independently, creating the potential for overlapping payments and for farm programs to reduce the incentive to buy crop insurance. ACRE's farm revenue benchmark includes crop insurance premiums, thus providing an incentive to buy crop insurance.

In addition, capping the state revenue payment at 25% of the state revenue guarantee is an attempt to minimize double payments from crop insurance and ACRE because farmers commonly buy crop insurance with a 75% or lower coverage level.

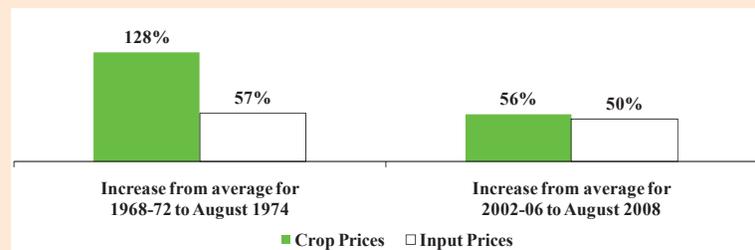
Policy Foundation For ACRE

A rarely-discussed hole exists in the traditional farm safety net. The combination of higher prices, higher production costs, and fixed support prices provide the foundation for farm financial stress.

History and economic theory tell us that high farm prices will decline as supply responds to incentives and expands faster than demand. But, history and economic theory do not tell us if the decline will occur in one, two, five, etc. years. Moreover, high farm prices, especially when based on strong growth in demand, increase the demand, and in turn price, for farm inputs. Because costs are increasing and support prices are fixed at levels substantially below market prices, a large price decline that lasts a year or two can lead to financial stress in the agricultural sector.

This stylized story played out when the farm boom of the 1970s became the farm crisis of the 1980s. Today, most people are aware that many crop prices have increased substantially since 2006. Fewer people are aware that the cost of farm pro-

Figure 1. Prices for U.S. Crops and Crop Production Inputs are Increasing... Just as in the 1970's



Notes: (1) Crop prices include all crops. (2) Crop production inputs include interest, taxes, and wages. (3) Source: U.S. Department of Agriculture, National Agricultural Statistics Service

duction inputs is rising rapidly as well (see Figure 1). In fact, relative to crop prices, input prices are increasing faster today than in the 1970s. Moreover, most crop prices are well above the price support rates enacted in the 2008 Farm Bill. The similarities with the 1970s do not mean that a farm financial crisis will emerge as in the 1980s, but it does suggest that policy should not ignore this possibility.

In the 1980s crisis, we learned that providing immediate assistance is critical to minimizing financial stress. Providing immediate assistance requires an appropriate policy mechanism for identifying when revenue is low. Given its objective of addressing systemic revenue risk, ACRE's mechanism is to calculate a revenue guarantee using moving averages of recent U.S. prices and state yields. ACRE focuses on revenue because revenue incorporates changes in costs of production, productivity, supply response, and price response over time, unlike a price-based safety net fixed at politically-determined levels. For example, if costs increase faster than production efficiency, supply will decline. Given that demand for crops responds relatively slowly to changes in price in the short-term, price and revenue should increase, resulting in an increase in ACRE's revenue guarantee. On the other hand, if production efficiency increases faster than costs, ACRE's revenue guarantee should decline as the resulting increase in production leads to lower prices and revenue.

In conclusion, economic theory suggests that ACRE's support level is implicitly tied to the cost of production adjusted for gains in productivity. By following prices and yields, ACRE provides protection in situations when costs increase faster than production efficiency (such as is happening now). In contrast, ACRE's support level will decline when productivity increases faster than costs. However, due to the use of historical

moving averages and a 10% limit on year-to-year changes in its revenue guarantee, ACRE should provide farmers a somewhat longer period of time in which to adjust to declining revenue.

Analysis of ACRE from the Farmer Decision Perspective

For farmers making a decision on participation in ACRE, a key question will be: "Does the ACRE suite of farm programs provide revenue to fill the gap in years when actual farm revenue is significantly below average farm revenue?"

One key factor in answering this question is the 20% reduction in direct payments under ACRE. This reduction can be thought of as ACRE's risk management fee. Using the average U.S. direct payment yield for program crops, the 20% reduction ranges from \$0.20 per acre for oats to \$19.24 per acre for rice (see Figure 2).

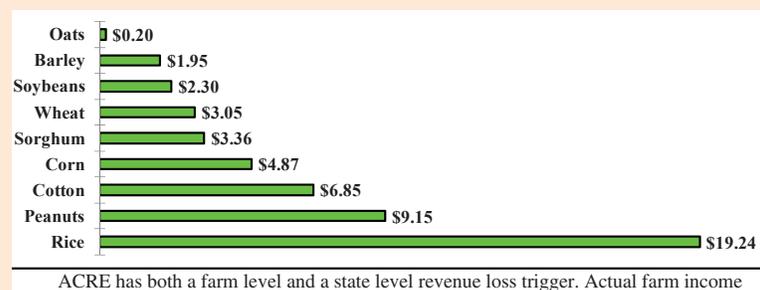
A second key factor is the timing and size of payments from ACRE. The results presented below are from an analysis of average annual payouts of the ACRE and DCP+ML programs over a 30 year historical period for corn, sorghum, soybeans and wheat in the principle and marginal production areas. The analysis uses (1) historic variability in county level yields adjusted to current levels of yield as a proxy for future yield variability and (2) the historic relationship between state yield and national price to pre-

dict the variability of future price at the U.S. Department of Agriculture average annual forecasted price for 2009-12. In essence, the results are for the representative average acres in the county.

ACRE has both a farm level and a state level revenue loss trigger. Actual farm income must be less than 100% of the farm's benchmark revenue in order for the farm to receive an ACRE payment (see the appendix for specifics). The state trigger occurred in 5 to 15 years depending on the state and the crop, or on average in about one-third of the 30 historical observations. The county farm trigger occurred in roughly twice as many years as the state trigger. These findings are not surprising since (1) the state trigger is set at a more restrictive 90% level compared to the 100% level for the farm trigger and (2) yield is more variable at the county than at the state level. Last, in only about 10% to 20% of the observations in which the state trigger occurred did the representative county farm not trigger.

The higher the average annual price the more likely that the ACRE suite of farm programs will pay out a higher average payment than the DCP+ML suite of programs. As average annual market price increases, DCP+ML payments decline since counter-cyclical payments are tied to fixed target prices and marketing loan payments are tied to fixed loan rates. In contrast, expected revenue payments and thus total payments (80%

Figure 2. 20% of Average U.S. Direct Payment Per Acre



of direct payments plus revenue payments) from ACRE increase as price increases. The reason is the associated increase in the state revenue guarantee and farm revenue benchmark. However, it is important to note that actual payments from ACRE may not equal expected payments. Actual payments depend on revenue declining for a state by at least 10%. Thus, if prices and revenue increase continuously in the future, ACRE revenue payments will be zero.

Figure 3 illustrates the importance of a producer's expectations of future prices. It contains the expected level of ACRE and DCP+ML payments at various average prices for 2009–12 using data for Champaign County, Ill. Payments are the same for ACRE and DCP+ML at average prices between \$2.30 and \$2.35. The higher are a producer's expectations of prices in the near future, the more likely is the ACRE program to generate larger income streams than the existing DCP+ML program.

Examination of the analytical results also indicate that expected payments from ACRE are larger (1) the lower is the correlation between changes in state yield and U.S. price and (2) the higher is predicted average annual (2009–12) state yield relative to the direct payment and counter-cyclical program yield. The lower is the yield–price correlation, the more likely that a decline in yield or price will trigger a revenue payment. The yield component of ACRE's revenue guarantee is continually updated since it is based on a moving average. In contrast, the payment yield for counter-cyclical and direct payments is fixed at a historical yield level. Thus, the higher are current yields relative to historical base yields, the greater is the expected payment advantage of ACRE.

Adding the crop insurance premium to a farm's revenue benchmark increases the revenue benchmark, and thus increases the chance of receiving

Figure 3. Effect of Corn Price on ACRE and DCP+ML Payments: Champaign County, Ill.

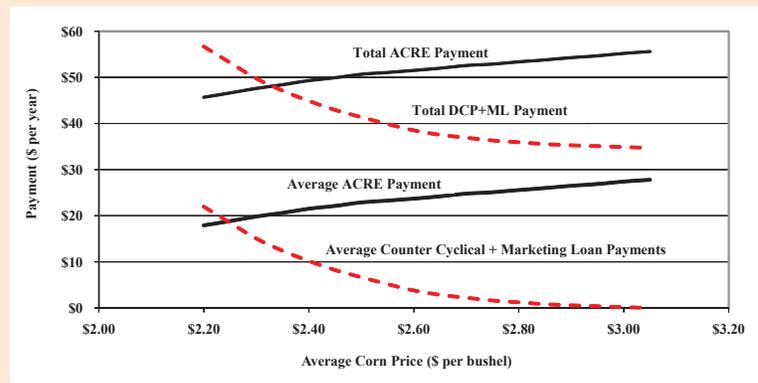


Figure 4. Comparison of ACRE and DCP+ML for Corn: De Kalb County, Ill.

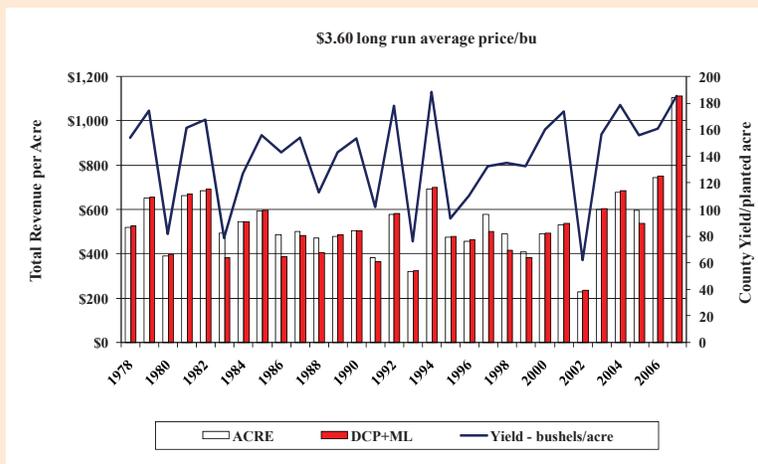
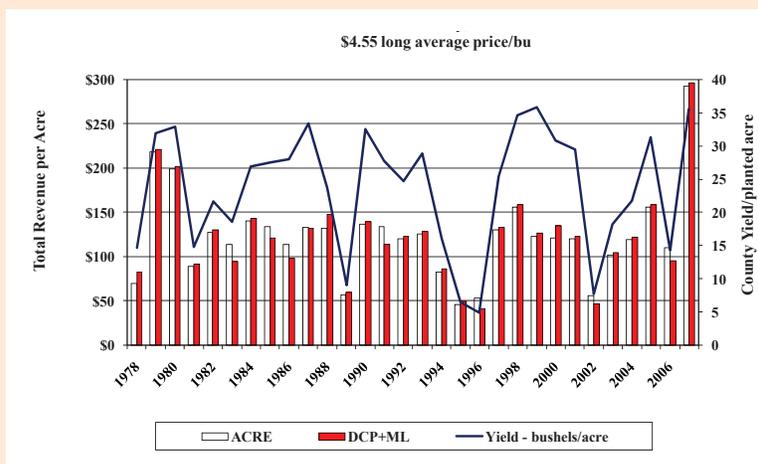


Figure 5. Comparison of ACRE and DCP+ML for Wheat: Texas County, Okla.



a payment from ACRE. The impact of adding the insurance premium is usually minimal, although the size of this impact increases as the insurance premium increases relative to the crop's revenue per acre.

Neither ACRE nor DCP+ML are substitutes for crop insurance. For the representative county farms, the lowest revenue years occurred when their yield was low and price had not increased sufficiently to offset the low yield. This situation most often occurred when yield-reducing weather events were on a geographical scale smaller than a state. Such declines in production generally are not large enough to cause price to increase. Figures 4 and 5 illustrate this discussion for corn in De Kalb County, Ill., and wheat in Texas County, Okla., respectively. The graphs are generated assuming U.S. Department of Agriculture average predicted prices for the 2009–12 crop years: \$3.60 for corn and \$4.55 for wheat. County average yields also are included in the figures. Significant yield shortfalls occur in six years in De Kalb County and 7 years in Texas County. The ACRE suite of programs provides higher revenue than the DCP+ML program in only two of the six years in De Kalb County and three of the seven years in Texas County. However, neither program provides much revenue protection in most of these years because the declines in yield occurred over a small area relative to the U.S. market. These findings clearly indicate a continued need for crop insurance.

Summary

Both ACRE and traditional price support programs address a systemic risk that occurs beyond the individual farm. However, ACRE addresses a risk associated with a market at or near equilibrium while traditional price programs address a risk associated with a market out of equilibrium. Compared with the current marketing loan and counter-cyclical price

programs, ACRE has several policy innovations: (1) ACRE's target is revenue not price, (2) ACRE's revenue guarantee is not fixed, (3) a farm level revenue loss must occur to receive an ACRE payment, and (4) ACRE is partially coordinated with crop insurance.

For most farmers, a central question will frame their decision regarding ACRE: "Over the period of participation, does ACRE improve the management of systemic revenue risk relative to current programs enough to compensate for the 20% reduction in direct payments and 30% reduction in loan rates?" Our analysis finds that at prices and yields forecast by the U.S. Department of Agriculture through the 2012 crop year, ACRE generally provides larger expected average annual total revenue and smaller variation in total revenue. The differences can be small, depending on what other assumptions are made. However, exceptions occur. For example, if prices and revenue continue to increase, the current programs will provide higher payments than ACRE because of ACRE's 20% reduction in direct payments.

As with any analysis, assumptions are important. These assumptions involve not only prices and yields, but also how the regulations will interpret the Farm Bill's ACRE provisions. The importance of regulations is illustrated by the current debate over whether the phrase, "the most recent crop year prices," means the "most recent crop years for which complete information exists" or "includes the current crop year." For the 2009 crop, this debate translates into whether ACRE's revenue guarantee is based on U.S. average cash prices for crop years 2007 and 2008 or for crop years 2006 and 2007. To put the significance of this debate in numerical context, average U.S. cash corn price is \$3.65 for 2006–07 vs. \$4.83 for 2007–08, using the latest data from the U.S. Department of Agriculture. Clearly, using 2007–08 instead of 2006–07

prices makes ACRE more attractive to farmers.

This analysis and economic theory suggest ACRE is most likely to benefit the following:

- (1) states with higher yield variability, which includes southeast and mid-Atlantic states;
- (2) crops with prices well above the loan rates—cotton prices are closest to the loan rate;
- (3) states with lower negative correlations between changes in state yield and U.S. price;
- (4) states and crops, notably corn, with larger increases in yields over last 25 years; and
- (5) producers whose planted and base acres differ substantively—ACRE better matches a farmer's production risk in this situation.

Decision aids to assess participation in ACRE are being developed and various analyses of ACRE have been completed or are underway. These will provide useful information to producers and share-renting landlords as they assess their decision. They also will need to consider the role of crop insurance as they put together their risk management plan. As this analysis clearly shows, neither ACRE nor the current set of programs will cover all low revenue situations on a farm, in particular those associated with localized weather conditions.

In conclusion, like any policy, ACRE's performance will be assessed in the real world. And, being a new policy, unintended consequences are likely. The combination of individual farmer decisions and policy experience will aid in more clearly defining policy objectives and will provide insights into the level and type of risk protection desired by producers across crops, states and regions. This information will provide vital input in future legislation. In short, ACRE will contribute to the evolutionary discussion that shapes and defines U.S. farm policy.

ACRE (Average Crop Revenue Election) Provisions

ACRE is a farm program option for barley, corn, upland cotton, oats, peanuts, pulse crops, rice, sorghum, soybeans and other oilseeds, and wheat for 2009–12 crops. Once made, the election of ACRE is irrevocable through 2012; but, its election can be deferred to the next year. The election of ACRE applies to all the above crops grown on a farm, but payments are made on an individual crop basis. ACRE must be selected (current farm programs are the default selection).

ACRE consists of

- Direct payments equal to 80% of full direct payments
- Marketing loan payments with loan rates set at 70% of the marketing loan rates
- ACRE revenue protection payments

ACRE Revenue Protection Payment to a Farm Equals (yields are per planted acre)

- a. [83.3% (85% for 2012 crop) of the farm’s acres planted to a crop]
- b. times lesser of [ACRE state revenue guarantee minus state actual revenue] or [25% of ACRE state revenue guarantee]
- c. times {[farm’s Olympic average yield (removes high and low yield) for 5 most recent crop years] divided by [state’s Olympic average yield for 5 most recent crop years]}
 - **ACRE state revenue guarantee** for a crop per crop year equals [90% times (simple average of U.S. cash price for 2 most recent crop years) times (state’s Olympic average yield for 5 most recent crop years)]
 - For 2010–12, revenue guarantee cannot change more than 10% from prior guarantee
 - Separate state revenue guarantees created for irrigated and nonirrigated land if a state’s planted acres are at least 25% irrigated and at least 25% nonirrigated
 - **ACRE actual state revenue** for a crop equals state yield times {higher of [U.S. average cash price for crop year] or [70% of crop’s marketing loan rate]}

Limitation on Planted Acres that can receive an ACRE Payment

- Planted acres that receive an ACRE payment cannot exceed a farm’s total base acres
 - If a farm’s total acres planted to ACRE program crops exceed the farm’s total base acres, the farmer chooses which planted acres to enroll in ACRE

ACRE’s Farm Trigger (yields are per planted acre):

- To receive an ACRE payment, a farm’s actual revenue for the crop must be less than the farm’s ACRE benchmark revenue for that crop year
 - Farm’s actual revenue for a crop equals farm’s actual yield times U.S market year price for crop for crop year
 - Farm’s ACRE benchmark revenue equals [(farm’s 5 year Olympic average yield) times (price in state’s ACRE revenue guarantee)] plus (per acre crop insurance premium paid by farmer for the crop for the year)

ACRE Payment Limit for a Person or Legal Entity:

- For direct payments: \$40,000 minus amount equal to 20% reduction in direct payments
- For ACRE revenue payments: \$65,000 plus 20% reduction in direct payments

For More Information

Dicks, Michael R. and Kim Anderson (2007). Analysis of Revenue Assurance Programs. *Western Economics Forum*, 6(2), 15-24.

U.S. Department of Agriculture, Economic Research Service (2008). The 2008 Farm Bill Side-By-Side Comparison. Available online: <http://www.ers.usda.gov/Farm-Bill/2008/>

U.S. Senate Committee on Agriculture, Nutrition, and Forestry (2008). Farm Bill Conference. Available online: <http://agriculture.senate.gov/>

Zulauf, Carl (2008). 2008 Farm Bill: With Focus on ACRE and SURE. Department of Agricultural, Environmental, and Development Economics, Ohio State University. Available online: <http://aede.osu.edu/people/publications.php?user=zulauf.1>

Zulauf, Carl (2007). U.S. Farm Policy at a Crossroads. *Perspectives on 21st Century Agriculture: A Tribute to Walter J. Armbruster*. Edited by Ronald D. Knutson, Sharron D. Knutson, and David P. Ernstes. IL: Farm Foundation. Pages 150-157.

Carl R. Zulauf (zulauf.1@osu.edu) is Professor, Ohio State University; Michael R. Dicks (michael.dicks@okstate.edu) is Professor, Oklahoma State University; and Jeffrey D. Vitale (jeffrey.vitale@okstate.edu) is Assistant Professor, Oklahoma State University.

The authors thank Allan Lines, Joe Schultz, and three anonymous reviewers for their helpful comments on the presentation and content of the paper.

Conservation Provisions of the Food, Conservation and Energy Act of 2008: Evolutionary Changes and Challenges

James Pease, David Schweikhardt, and Andrew Seidl

JEL Classifications: H59, Q58

The Food, Conservation and Energy Act of 2008 (FCE) continues the evolution of environmental conservation programs begun in the 1985 Farm Bill. This evolution was reflected in stakeholders' priorities as policy debate began with Farm Bill listening sessions in 2005, continued throughout the legislative debate, and culminated in the final version of the 2008 bill. Producers and citizen organizations identified conservation programs as central to future U.S. farm programs (Lubben, Bills, Johnson and Novak, 2006; Environmental Defense Fund, 2007). The Bush administration reinforced the importance of conservation in the farm bill debate with its proposals of January 2007, which included a \$7.8 billion expansion of conservation programs (U.S. Department of Agriculture, 2007). However, the economic context of the debate became less favorable for conservation programs as an unusually long legislative process continued throughout 2007 and into 2008. In particular, low grain stocks, increasing corn demand from the ethanol industry, high commodity prices, and increasing food prices led some to question whether increasing production should have a higher priority than conserving natural resources.

FCE 2008 objectives shift the conservation portfolio focus from land retirement to environmental protection of agricultural lands in production (working lands). The conservation portfolio of Land Retirement, Working Lands, Agricultural Land Preservation, and Technical Assistance has been in place since the 1996 Farm Bill. Land Retirement programs such as the Conservation Reserve program (CRP, begun in 1985) remove land from production on a temporary or permanent basis and compensate agricultural landowners for a portion of the income forgone. Working Lands programs such as the Environmental Quality Incen-

tives Program (EQIP, 1996) and the Conservation Security Program (2002) provide incentives to adopt conservation activities on agricultural lands and nonindustrial private forest lands currently in production. Agricultural Land Preservation programs preserve the agricultural production capacity of farmlands by public sector purchase of temporary or permanent easements of nonagricultural development rights. Technical assistance programs provide the institutional structure for agency personnel or approved third parties to deliver expertise for planning and implementing conservation activities. To better understand the conservation portfolio, it is useful to review the development of major programs.

Evolution of U.S. Conservation Programs

Prior to 1985, U.S. conservation programs focused primarily on soil conservation, with expertise provided by U.S. Department of Agriculture employees through the Conservation Technical Assistance Program. The current era of U.S. conservation programs began with Conservation Compliance Provisions and with creation of the Conservation Reserve Program in the 1985 Food Security Act, which retires agricultural land in exchange for 10 to 15 year annual payments based on estimated agricultural rental value. The primary stated goal of the CRP in its early years was to reduce soil erosion on highly erodible cropland (Sullivan, Hellerstein, Hansen, Johannson, Koenig, et al., 2004). CRP came to be directed at an evolving set of conservation objectives with only a single policy tool, long-term land retirement. This approach failed to address two issues of environmental protection in agriculture. First, CRP failed to address many environmental impacts of agricultural production such as water quantity and quality and wild-

©1999–2008 CHOICES. All rights reserved. Articles may be reproduced or electronically distributed as long as attribution to *Choices* and the Agricultural & Applied Economics Association is maintained. *Choices* subscriptions are free and can be obtained through <http://www.choicesmagazine.org>.

life habitat. Second, land retirement provided no means of achieving conservation objectives on land actively engaged in agricultural production. Consequently, these additional environmental policy objectives led policymakers to create new policy tools (Batie and Schweikhardt, 2007).

Because of CRP's narrow focus, the Federal Agriculture Improvement and Reform Act of 1996 established the Environmental Quality Incentives Program, which addresses a wider range of environmental concerns on agricultural lands in production. Environmental quality and agricultural production were considered compatible goals, and EQIP was designed to help producers meet new environmental standards (Zinn and Canada, 2007). The program provided cost-share and (optionally) incentive payments for producers to initiate and maintain conservation activities on working lands, with a specific focus on mitigating water pollution. Initially, 50% of EQIP funds were directed to solving resource problems on livestock operations, but waste management structures were ineligible for funding, and EQIP payment limits were so low that they discouraged participation by most large operations. The 1996 Act also introduced the Wildlife Habitat Incentives Program (WHIP) and the Farmland Protection Program (later changed to the Farm and Ranchlands Preservation Program) to purchase farmland development rights.

The 2002 Farm Bill increased both the funding and scope of issues addressed by conservation programs. CRP contract evaluations began to consider soil erosion, water quality protection, and wildlife habitat. The CRP acreage cap was increased, and other farm land retirement programs such as the CRP Farmed Wetlands pilot program, the Conservation Reserve Enhancement Program, and the Wetlands Reserve Program were continued and expanded. With funding of \$4.6 billion in the 2002 Act, EQIP

could enhance its response to livestock resource concerns and pursue broader conservation priorities of reducing nonpoint source water pollution, air quality impairments and erosion, as well as wildlife habitat deterioration. Eligibility was broadened, 60% of funding was directed to livestock resource concerns, and a new payment limit of \$450,000 was established. The 2002 Act also created the Conservation Security Program, a working lands program designed to reward producers who achieve and maintain above-benchmark standards of conservation management. This "green payments" program offered both cost-share and incentive payments to reach, maintain, or improve land stewardship by participation in one of three contract performance tiers. Funding was restricted after enacting the 2002 Act, so the program was offered only in selected watersheds in FY2004-06.

The evolution of conservation policy and programs has changed expense outlays among Land Retirement, Working Lands, Agricultural Land Preservation, and Conservation Technical Assistance programs (Figure 1). Major conservation program expenditures have increased by 79%, from \$2.56 billion in FY1996 to \$4.59 billion in FY2007. Land retirement funding represented approximately 70% of total conservation expenses until FY2001, and, while continuing to increase in nominal terms, declined to 52% of total expenditures in FY2007. Working Lands program funding increased from an average of approximately \$200 million per year during FY1996-01 to nearly \$1.5 billion in FY2007. Funding for farmland preservation programs has become a significant and growing part of conservation spending. However, technical assistance has not kept pace with increased conservation program funding, and has fallen steadily in absolute terms since FY2004. Technical assistance is primarily funded through annual appropriations to the Conser-

vation Technical Assistance program, but also receives payments for technical assistance to the CRP program and other program funding allocations. As such, Figure 1 underestimates to some extent actual expenditures for technical assistance.

Conservation Provisions in the 2008 Farm Bill

FCE increases conservation funding authority by \$4 billion over FY2008-12, most of it as mandatory funding with no requirement for annual appropriations. FCE provisions reflect an evolution of the U.S. conservation program portfolio to emphasize conservation on working lands. The following presents selected changes in Title II of the 2008 FCE, along with additional detail on CRP, EQIP, and the Conservation Stewardship Program (CSP).

Land Retirement Programs Continue to Play a Major, but Diminishing Role

- As shown in Figure 1, land retirement program expenses are forecast to total \$13.03 billion over FY2008-12 and average 8% higher than FY2007 expenses, but fall throughout the period as a percentage of total conservation program expenses.
- Currently, 766,000 active CRP contracts cover 34.7 million acres. Over FY2008-12, contracts will expire on an average of 3.8 million acres per year, raising questions about the environmental impacts of returning this land to production.
- The enrollment cap for CRP is continued at 39.2 million acres for FY2009, but will be reduced to 32 million acres for FY2010-12, while the Farmable Wetland Program cap is doubled to 1 million acres.
- Current CRP contracts can be amended to allow land uses such as biofuel production, wind turbines and grazing under certain conditions.

- New provisions will permit the transfer of lands under CRP contract to beginning, underserved or other special status farmers, with the existing owner receiving a bonus of up to two years of rental payments.
- The enrollment limit for the Wetlands Reserve Program is increased nearly one-third to 3.041 million acres, and the Wetlands Reserve Enhancement Program is established to address wetlands objectives at the watershed scale.

Working Lands Programs Receive Most Funding Emphasis

- As shown in Figure 1, working lands program funding is forecast to total \$11.88 billion over FY2008–12; it averages 61% higher than FY2007 expenses and is 45% of total conservation expenses in FY2012.
- In FY2007, there were 41,700 EQIP contracts in 50 states and territories with over \$784 million in contract commitments.
- EQIP funding is forecast to total \$7.23 billion over FY2008–12 and is 74% higher in FY2012 than in FY2007.
- EQIP payments are based on incurred costs (up to 75% cost-share) and foregone income (up to 100%) associated with practice adoption/maintenance, except that socially-disadvantaged, limited resource, and beginning producers will receive cost-share payments that are 25% above those of other producers (up to a maximum of 90%).
- EQIP payments may be made for conservation practices related to organic transition or production, for forest management practices on private nonindustrial forest land, or for water conservation or irrigation practices.

- Payments under EQIP contracts may not exceed \$300,000 in any 6-year period.
- The Conservation Security Program is reconstituted as the Conservation Stewardship Program (CSP). In FY2007, 19,391 active contracts covered approximately 15.4 million acres.
- The CSP receives total budget authority of \$3.79 billion over FY2008–12, and FY2012 forecast expenditures are 199% of FY2007 expenses.
- CSP is given an enrollment target of 12.769 million acres per year, and over FY2009–12, USDA is directed to manage the CSP such that payments average no more than \$18 per acre.
- The reconstituted CSP provides a simpler system for adopting, improving, and maintaining conservation practices rather than the 3-tier system used under the 2002 Farm Act.
- Funding authorization for the Wildlife Habitat Incentives Program is continued at \$85 million per year, cost-share payments are increased to 25% of costs incurred, and eligible lands include private agricultural, nonindustrial private forest and tribal lands. In FY2007, WHIP had 358,000 acres under contract.

Agricultural Land Preservation Programs Expanded

- As shown in Figure 1, land preservation program forecast expenses total \$1.04 billion over FY2008–12, averaging more than triple the actual FY2007 expenses for purchase of development rights. Farm and Ranchlands Preservation Program (FRPP) purchased development rights on 533,000 acres over FY1996–07.
- Funding for the FRPP is increased from \$97 million to \$200 million per year, and the objectives of the

program are expanded to include protecting agricultural use and related conservation values and increasing the opportunities for partnership with government and nongovernment organizations.

- The Grasslands Reserve Program is authorized to expand ten-fold to enroll 1.22 million acres during FY2008–12, the definition of eligible lands is expanded to include those with historical or archeological importance, and up to 10% of enrollment may come from expiring CRP contracts.

Technical Assistance Funding Stable

- There are no new funding authorizations for technical assistance from Natural Resources Conservation Service (NRCS) or through Technical Service Providers, and because technical assistance is subject to annual appropriations, it is not expected to increase over FY2008–12.

Other Provisions

- Most conservation programs have program-specific payment limits, and a blanket income limitation prohibits conservation payments to persons or entities with average adjusted gross income greater than \$1 million unless at least two-thirds of adjusted gross income is farm income.
- Direct attribution to a person is required for conservation program payments.
- Cooperative conservation projects at the community, ecosystem or watershed scale will receive 6% of all conservation program funds.
- USDA is to develop technical guidelines for measuring and reporting environmental services provided by farm, ranch, and forest lands, with priority directed to emerging carbon markets.

Opportunities and Challenges for the FCE 2008

On its surface, the Food, Conservation, and Energy Act appears to be a logical extension of past trends—an increase in funding for virtually all programs without dramatic program revisions. However, FCE 2008 and the 2002 Farm Bill can be viewed as “two steps forward, one step back” for conservation. On one hand, program funding and focus have expanded rapidly, while on the other, political distaste continues for targeting conservation programs to the most critical environmental problems such as impaired waters rather than allocating funds “equitably” among states (Claassen, 2007). Increased emphasis on working lands programs promises better environmental results per program dollar, but USDA is prohibited from selecting contract proposals on the basis of lowest cost. Although conservation funding increases in FCE, conservation costs have risen even faster during the commodity boom, both in terms of cash investments and of producer income foregone. Moreover, it seems unlikely that FCE

spending will meet the levels outlined in the Act. Federal budget deficits are rising rapidly and U.S. economic conditions are worsening. It is likely that Congress will take action to restrict nondefense spending, and “mandatory” conservation spending is likely to be a target.

Viewed from an alternative perspective, FCE 2008 signals the maturation of the conservation program portfolio in a new era. What issues and questions will be most critical in the next era? First, conservation programs now constitute a central element of farm policy—no future farm bill will be passed without a significant, possibly predominant role for conservation programs. Second, the 2008 bill appears to both broaden and strengthen the political commitment of all stakeholders to conservation programs. The political economy of programs that meet the interests of farmers, environmental activists, and the general public suggests the emergence of a stable social and political trade-off between increased agricultural production and improved environmental quality. As a consequence, all farm bills in the foreseeable future

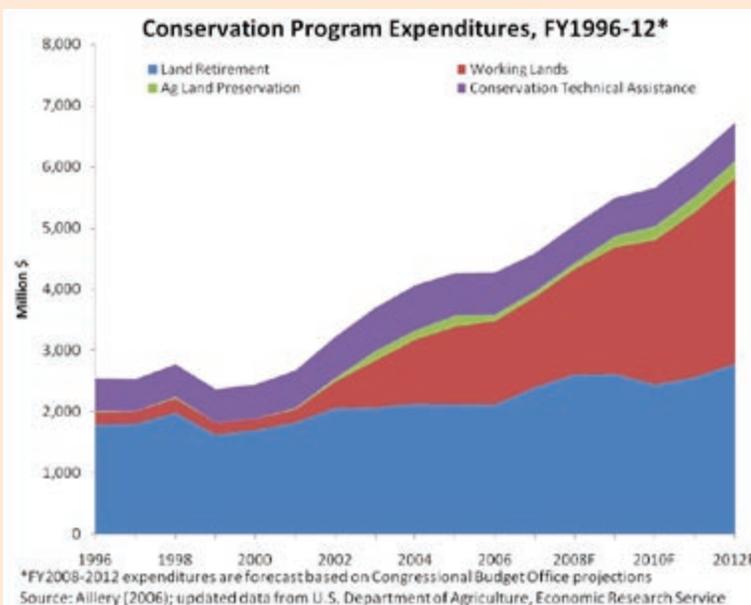
will probably have prominent working lands programs addressing a wide range of environmental issues. Third, as the emphasis on technical assistance-intensive conservation practices on working lands grows, the issue of human capital resources in NRCS must come to the fore. Simply said, an agency whose funding for technical assistance has stagnated during rapid growth of conservation program funding cannot be expected to adequately deliver and monitor programs. Some have referred to staffing issues at federal agencies as having reached “crisis” levels (Liebowitz, 2004). Questions requiring closer scrutiny in the near future include whether such a situation exists at NRCS, and what human capital investments are necessary to deal with the problem. Fourth, as conservation and agricultural policy develop, the issue of policy consistency will become more acute. Social and political questions to be addressed include: To what degree is a U.S. biofuels-driven energy policy consistent with conservation goals and policy? To what degree should income support or risk management policies be merged with working lands conservation policies, and what policy tools and procedures will be needed to achieve multiple policy targets (Lubowski, Bucholtz, Claassen, Roberts, Cooper et al., 2006; Batie and Schweikhardt, 2007)? In all likelihood, the next era of conservation policy will be dominated by these questions.

For More Information

Aillery, M. (2006, March). *Contrasting Working-Land and Land Retirement Programs* (Economic Brief Number 4). Washington, DC: U.S. Department of Agriculture, Economic Research Service. Available online: <http://www.ers.usda.gov/Publications/EB4/>.

Batie, S. and Schweikhardt, D. (2007). *The Green Payments Debate: Alternative Paradigms and*

Figure 1. Actual and Forecast Conservation Program Expenditures, FY1996–12



- Resulting Tradeoffs. In *Perspectives on 21st Century Agriculture: A Tribute to Walter J. Armbruster*, Oak Brook, IL: Farm Foundation, 2007.
- Claassen, R. (2007, May). Emphasis Shifts in U.S. Conservation Policy. Amber Waves, Perspectives on Food and Farm Policy, Volume 5, May 2007. Washington, DC: U.S. Department of Agriculture, Economic Research Service, Available online <http://www.ers.usda.gov/AmberWaves/May07Special-Issue/Features/Emphasis.htm>.
- Environmental Defense Fund (Press Release 2007, October 2). New Polls in Five States Show Farm Subsidy Cuts and More Conservation Spending Would Improve Public's View of Congress.
- Liebowitz, J. (2004). *Addressing the Human Capital Crisis in the Federal Government: A Knowledge Management Perspective*. Amsterdam: Butterworth-Heinemann.
- Lubben, B., Bills, N., Johnson, J., and Novak, J. *The 2007 Farm Bill: U.S. Producer Preferences for Agricultural, Food, and Public Policy* (Publication 2006-01, September. National Public Policy Education Committee. Oak Brook, IL: Farm Foundation.
- Lubowski, R., Bucholtz, S., Claassen, R., Roberts, M., Cooper, J., Gueorguieva, A., and Johansson, R. (2006, August). Environmental Effects of Agricultural Land-Use Change: The Role of Economics and Policy. Economic Research Report No. ERR-25, August 2006. Washington, DC: U.S. Department of Agriculture, Economic Research Service. Available online <http://www.ers.usda.gov/Publications/ERR25/>.
- Sullivan, P., Hellerstein, D., Hansen, L., Johansson, R., Koenig, S., Lubowski, R., McBride, W., McGranahan, D., Roberts, M., Vogel, S., Bucholtz, S. (2004, October). The Conservation Reserve Program: Economic Implications for Rural America. Agricultural Economic Report No. (AER-834). Washington, DC: U.S. Department of Agriculture, Economic Research Service. Available online <http://www.ers.usda.gov/Publications/AER834/>.
- U.S. Department of Agriculture (2007, January). *2007 Farm Bill Proposals*. Available at <http://www.usda.gov/documents/07finalfbp.pdf>.
- Zinn, J. and Canada C. (2007). Environmental Quality Incentives Program (EQIP): Status and Issues (Congressional Research Service Report RS22040).
- James Pease (peasej@vt.edu) is Professor, Department of Agricultural and Applied Economics, Virginia Tech, Blacksburg, Va. David Schweikhardt (schweikh@msu.edu) is Professor, Department of Agricultural, Food, and Resource Economics, Michigan State University, East Lansing, Mich. Andrew Seidl (andrew.seidl@colostate.edu) is Associate Professor, Department of Agricultural and Resource Economics, Colorado State University, Fort Collins, Colo.*
- Appreciation is expressed to Roger Claassen, U.S. Department of Agriculture, Economic Research Service for his assistance in providing program funding data.*

The U.S. 2008 Farm Bill: Title X and Related Support for the U.S. Specialty Crop Sector

Mechel S. Paggi and Jay E. Noel

JEL Classification: H100

The Food, Conservation and Energy Act of 2008 (FCEA), provided a landmark in U.S. agricultural policy by including for the first time a separate title dealing specifically with issues related to the fruit, vegetable tree nut, floriculture and nursery sectors of agricultural economy (specialty crops). The bill dedicates almost \$3 billion in funding over five years to areas of importance to the sector including nutrition, research, pest and disease, trade, conservation and block grant funding for individual State initiatives. In addition, specialty crops continue to receive direct and indirect benefits from other sections of the legislation related planting restrictions associated with programs for crops such as wheat, corn, soybeans and cotton, crop insurance and general nutrition programs. This article summarizes key provisions of Title X of the 2008 Food, Conservation and Energy Act and related support for U.S. specialty crop agriculture and discusses their potential benefit to the U.S. specialty crop agriculture.

There were approximately 304.3 million acres of harvested cropland in the United States in 2006. Specialty crops harvested acreage was 11.2 million harvested acres or approximately 3.7% of the 2006 total harvested cropland. This percentage has remained relatively constant over the past five years.

Specialty crops are produced throughout the United States. The Upper Midwest and Northwest have the largest vegetable acreage for processing, while California, Florida and Texas harvest the largest share of fresh vegetable and melon acreage. California is the largest producer of grapes, strawberries, peaches, nectarines, avocados, and kiwifruit. It also leads in fresh-market orange production and tree nut production. Florida is the largest citrus producer, while Washington is the largest apple producer for both fresh and processing. Midwest and Northeastern states are important producers of processed fruit products while Florida leads in the production of citrus juices. Floriculture production

takes place in 40 different states. The Southern states are the largest producers of floricultural products followed by the Western states, then Midwest states and the Northeastern states. Nursery crops are produced in 17 states. Leading producing states, in order of size of production (acres) are Oregon, Pennsylvania, Michigan, North Carolina, Tennessee, Florida, and California.

The 2006 value of total U.S. cropland production was approximately \$122.8 billion dollars excluding the production value of nursery and floriculture. If nursery and floriculture production value is included, the total cropland value of production becomes approximately \$139.7 billion dollars. Specialty crop production accounts for \$51.4 billion of that figure or 36.8% of the total cropland production value. The average 2003–2006 percentage of production value is approximately 37%. The fact that specialty crops are grown on a relative small amount of cropland acreage and yet account for a substantial share of the cropland production value was used extensively by specialty crop stakeholders in their arguments for greater federal government support in the 2008 Farm Bill debate.

U.S. Government Support to Fruits and Vegetables: Pre-FCEA

As noted, the major component of the 2008 Farm Bill of importance for this paper was the creation of a separate title and expanding existing program benefits for the fruit, vegetable and nut sector of the U.S. agricultural economy. It is useful to review briefly some of the major ways government programs affected specialty crops in the past to have a basis for determining the potential impact the changes resulting from passage of the FCEA may have for the U.S. specialty crop industry. Before turning to long-standing programs contained in previous farm bills, a review of some ad hoc support for specialty crops is in order.

Ad Hoc Legislation

Areas of federal support for specialty crops outside of specific farm bills include legislation to provide funding for states to administer programs on behalf of the industry. For example, the Emergency Agricultural Assistance Act (EAAC) of 2001 provided states with block grants to promote specialty crops. The act provided almost \$160 million to all 50 states and Puerto Rico. The funds allocated to the states were used to fund a variety of programs and the decision on what programs to fund was left almost entirely to the individual states, with the provision that the programs funded improve the competitiveness of U.S. specialty crops.

The specialty crop block grant program continued with the passage of Specialty Crop Competitiveness Act (SCCA) of 2004 (PL 108-465). SCCA block grants are used to support programs in research, marketing, education, pest and disease management, production, and food safety. The initial legislation (HR 3242) called for an annual appropriation of \$470 million in mandatory funds from the Commodity Credit Fund to support the block grant program. The final bill authorized the program subject to annual appropriations, and limited funding to \$44.5 million per year; \$7 million was actually appropriated in FY 2006.

Crop Insurance and Disaster Assistance

Federally subsidized crop insurance programs are available for many crops, including specialty crops. Under the federal crop insurance program, USDA authorizes private insurance companies to sell and service insurance policies, while the government provides subsidized reinsurance and compensates them for administrative costs. Besides paying costs and covering losses for insurance companies, the government pays much of the premium.

Marketing Orders and Agreements

Marketing orders and agreements allow collective action among industry participants for product definitions, promotion, and research. Federal marketing orders and agreements for fruits, vegetables, melons, and tree nuts were first authorized in the Agricultural Marketing Agreement Act of 1937 (AMAA). There are currently 32 authorized federal marketing orders in place for fruits, vegetables and tree nuts, covering many of the major crops and production locations.

Generic Promotion, Research, and Information Programs (Check-off Programs)

Federally regulated but industry funded generic promotion, research, and information programs have also been used in the marketing of specialty crops. The origin of check-off programs dates back to the 1954 promotion program for wool. Currently specialty crops with free standing promotion, research and information programs include mangos, cultivated blueberries, popcorn, potatoes, watermelons, and Hass avocados.

Export Promotion

The federal government also provides direct support for the international marketing of many specialty crops. The USDA Foreign Agricultural Service Market Access Program (MAP) provides federal matching funds to assist in the overseas marketing of U.S. agricultural commodities. Funding is provided in annual allocation of USDA Commodity Credit Corporation funds on a competitive grant basis. In 2007 MAP allocated almost \$200 million to promote a variety of U.S. commodities. Specialty crops accounted for 35% of MAP fund allocations, with about \$56 million going to promote export marketing efforts of 30 commodity groups and related organizations.

Food Assistance and Nutrition/ Food Purchases

Nutrition assistance programs play a role in federal support for the fruit and vegetable sector through direct commodity purchases and increased demand for food. The USDA operates 20 nutrition assistance programs with expenditures of about \$54 billion in FY2006, accounting for 55% of USDA total spending. These programs are operated by the USDA's Food and Nutrition Service (FNS). In addition, USDA's Agricultural Marketing Service (AMS), Farm Service Agency (FSA), and Commodity Credit Corporation (CCC) play roles in the procurement and distribution of food commodities for some programs.

An important component of these programs for the fruit and vegetable sector is the purchases made possible from "Section 32" allocations. The Section 32 funds are a permanent appropriation that has been part of federal support programs since 1935. The program sets aside the equivalent of 30% of annual customs receipts to support the farm programs. Most of that appropriation is transferred to the U.S.D.A. to fund general child nutrition programs. A certain amount of Section 32 money is set aside each year to purchase commodities that are not supported by other federal programs and make them available to schools and other food distribution programs. Purchases of these commodities by the AMS currently exceed \$750 million per year. A five year average of \$308 million has been spent to purchase fruits and vegetables from these funds.

Research and Extension

USDA conducts research, extension and economics projects for programs related to the specialty crop industry through four USDA agencies: the Agricultural Research Service (ARS), Cooperative State Research, Education and Extension Service

(CSREES), and Economic Research Service (ERS) and the National Agricultural Statistics Service. The total FY 2007 research budget of these agencies was approximately \$2.6 billion: about 2.1 percent of USDA's FY 2007 budget.

A recent review of research efforts on the part of ARS, CSREES, NASS, and ERS provides a perspective on the level of federal research expenditures relative to specialty crops. The total ARS budget for research on crops in FY 2005 was \$476.1 million, with 33.7% allocated to fruits, nuts, and vegetables and 6.3% to trees, shrubs, flowers, potted plants, bedding and ornamental turf. In FY 2003, CSREES invested approximately \$79.6 million to support research, extension, and education focused on specialty crops, representing about 7.2% of a total budget of \$1.1 billion.

Plant Health and Safety

The USDA Animal and Plant Health Inspection Service (APHIS), is the agency responsible for dealing with issues related to invasive pests, harmful insects such as the Mediterranean fruit fly, dealing with foreign countries' import requirements, and negotiating science-based standards to protect U.S. agricultural exports from unjustified barriers to trade. The total APHIS budget for FY 2007 was about \$1.2 billion. However the amount going to deal specifically with fruit and vegetable issues is difficult to isolate. The one program that is uniquely related to fruits and vegetables is the fruit fly exclusion and detection program, with an annual appropriation of \$59 million.

Fruit and Vegetable Planting Restrictions

Beginning with the 1990 Farm Bill, producers who were participating in government commodity programs were allowed to plant other program crops on a portion of their program crop base acres but were generally prohibited from planting fruits, tree nuts, melons crops, wild rice or veg-

etables, including dry edible beans and potatoes. The amount of benefits gained by the fruit and vegetable sector from these restrictions is not directly measurable. Recent attempts to measure the benefits have provided a wide range of estimates. The results of studies providing quantitative estimates of the loss to the industry of removal of the restrictions range from \$1.7 to \$4.0 billion in the first year following removal.

The 2008 Farm Bill changed the fruit and vegetable planting restrictions by creating a CY 2009–12 pilot program to allow production of cucumbers, green peas, lima beans, pumpkins, snap beans, sweet corn, and tomatoes for processing on limited amounts of base acreage in Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin.

Provisions of the Food, Conservation and Energy Act of 2008

The difference in policy development in this farm bill can be traced to the organized efforts on the part of the industry to identify specific programs and policies, link the positive attributes of increased consumption of fruits and vegetables with human health and nutrition and to highlight equity issues surrounding a potential removal of planting restrictions on program crop subsidy beneficiaries. In large part this was accomplished by the formal coalition of over 120 organizations representing growers of fruits, vegetables, dried fruit, tree nuts, nursery plants and other products, The Specialty Crop Farm Bill Alliance. The alliance worked for almost three years to have their issues addressed explicitly in the 2008 farm bill. The following provides a review of the subtitles of Title X.

Subtitle A—Horticultural Marketing and Information

The programs included in Subtitle A cover a variety of issues including authorization for funding of initiatives for food safety education (\$1

million); promotion of farmers markets (\$3 million increasing to \$10 million annually in 2011 and 2012); increasing the coverage of specialty crop market news reporting (\$9 million annually); and perhaps most importantly the State Specialty Crop Block Grant program that allocates \$10 million increasing to \$55 million annually across all 50 States, Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands and the Commonwealth of the Northern Mariana Islands, with each entity receiving a minimum of \$100,000 with the balance allocated according to their value of specialty crop production.

Subtitle B—Pest and Disease Management

As the name implies, Subtitle B provides procedures and programs to better coordinate the work of federal and state agencies in their roles related to early plant pest detection, management and surveillance. The major components include funding for the various initiatives from the Commodity Credit Corporation and begin in 2009 at \$12 million, increasing to \$50 million annually in 2012 and each fiscal year afterwards. In addition, \$5 million annually is provided for the establishment of a National Clean Plant Network to establish centers for diagnosis and elimination of plant pathogens in planting stock.

Subtitle C—Organic Agriculture

Highlights of Subtitle C include increases in funding for the U.S.D.A. national organic certification cost-share program from \$5 million to \$22 million along with \$5 million to enhance the collection and reporting of data related to the production and marketing of organic products. In addition, funding is authorized to carry out the activities of the national organic program that regulates the harvesting and handling of organic products in the amount of \$5 million annually, increasing to \$11 million for fiscal year 2012.

Subtitle D—Miscellaneous

In Subtitle D, a matching grant program of an undetermined amount is established to address issues related to specialty crop transportation and a market loss assistance program for asparagus producers of fresh market and for-processing product to compensate growers for injury from imports during the 2004 to 2007 crop years. In addition, there are provisions for the transition of the National Honey Board that is composed of producers and packers to two boards: a Packer-Importer Honey Board and a U.S. Producer Honey Board, along with requirements that honey labels which bear any official certificate of quality or grade mark or statement must also show the country or countries of origin near the grade mark.

Other Farm Bill Support for Specialty Crops

As in previous bills support for specialty crops also exists within the programs and provisions of other Titles. Among the more important in non-Title X provisions are:

- Section 7311 — The Specialty Crop Research Initiative – provides CCC funds in support of matching grants on research topics related to the development and dissemination of science-based tools to address the needs of specific crops and their regions. (\$30 million in 2008; \$50 million each year 2009–2012.
- Section 3102 — Maintains the Market Access Program funding at \$200 million annually
- Section 3203 — Technical Assistance for Specialty Crop – Creates a Technical Assistance for Specialty Crop (TASC) fund of \$19 million over 10 years to report on and address issues related to significant sanitary and phytosanitary issues and/or barriers to trade facing U.S. producers of specialty crops.

- Section 4304 — Expands the Fresh Fruit & Vegetable Snack Program to all 50 states. Funding provided \$40 million in 2008 expanding to \$150 million in 2012.
- Section 4404 — Expands purchases of fruits and vegetables under Section 32 program. Increases the minimum threshold (currently at \$200 million per year) of funding levels: \$390 million in FY08; \$393 million in FY09; \$399 million in FY10; \$403 million in FY 11; and \$406 million FY12.
- Section 1107 — Fails to repeal the planting restrictions provisions associated with program crops; establishes a pilot project limited to production of vegetables for processing in limited quantities in selected states.

Concluding Observations

Perhaps the most notable accomplishment of U.S. specialty crop agriculture as the 2008 Farm Bill negotiations took place was the building an alliance of disparate specialty crop organizations that had the overall goal of getting the U.S. specialty crop specifically included in Farm Bill legislation.

That goal was achieved with the inclusion of Title X in the 2008 Farm Bill. The direct inclusion of U.S. specialty crops into the 2008 Farm Bill allowed two issues of importance to U.S. specialty crop agriculture to be addressed. These issues are: 1) increase domestic and international demand for U.S. specialty crops; and 2) expand research, technical, economic, market, and product development funding for U.S. specialty crop agriculture.

The above review of Title X and other sections of the 2008 Farm Bill that relate to U.S. specialty crops indicate that those issues were addressed with some success. It is difficult to determine at this point what the economic impact of U.S. specialty

crop agriculture inclusion in the 2008 Farm Bill will be. Will the increase in nutrition and food assistance funding directed at U.S. specialty crop agriculture increase profitability? If so, what specialty crop sectors will benefit the most? Will the research sustain or increase U.S. specialty crop agriculture's domestic and international competitiveness?

Perhaps the most intriguing question that will be addressed by U.S. specialty crop agriculture over the course of time that the 2008 Farm Bill is in place is whether U.S. specialty crop agriculture can maintain and build on its success.

For More Information

Food, Conservation and Energy Act of 2008, H.R. 2419, ENR, Title X – Horticulture and Organic Agriculture (Sec. 10001 – 10109).

Noel, J.E. & Schweikhardt, D. (2007). *Specialty Crop Block Grants: Concept, Design, and Public Finance Issues*. California Institute for the Study of Specialty Crops. <http://www.cissc.calpoly.edu/farmbill/policies>.

U.S.D.A. FY 2008 Budget Summary and Performance Plan. <http://www.obpa.usda.gov/budsum/fy-08budsum.pdf>

U.S. Specialty Crops: Opportunities and Challenges, Report of the Specialty Crop Committee on the National Agricultural Research, Extension, Education and Economics Advisory Board, June, 2006. http://nareeab.rec.usda.gov/nal_display/index.php?info_center=20&tax_level=2&tax_subject=419&topic_id=1813&placement_default=0#1

Richardson, Joe. Domestic Food Assistance: Legislative Issues in the 110th Congress. Congressional Research Service Report for Congress, RL33892, January 24, 2007.

Johnson, Rene and Jim Monke. Eliminating the Planting Restrictions on Fruits and Vegetables in the Farm Commodity Programs, Congressional Research Service Report for Congress, RL34019, May 25, 2007.

Mechel S. Paggi (mpaggi@csufresno.edu) is Director of the Center of Agricultural Business, California State University, Fresno. Jay E. Noel (jnoel@calpoly.edu) is Professor and Director of the California Institute for the Study of Specialty Crops, California Polytechnic State University.

The WTO and U.S. Domestic Support in the Food, Conservation, and Energy Act of 2008

Eric Wailes and C. Parr Rosson III

JEL Classifications: F13, Q18

Changes in the Food, Conservation, and Energy Act of 2008 have the potential to push domestic support for United States farmers above current and proposed commitments in the WTO. This article explores one of the inevitable questions that arise with the enactment of the Food, Conservation and Energy Act of 2008 regarding how the domestic agricultural support provisions in this legislation will affect United States commitments under the Uruguay Round Agreement on Agriculture (URAA). And further, how will the domestic supports fit with the proposals and negotiations in the Doha Development Agenda?

Much of the discussion going into the development of the 2008 Act identified four main pressures that would bear on its development, namely: federal budget issues, changing demographics, evolving structure of interest groups, and implications for WTO agreements and dispute panel findings (Mercier and Smith, 2006).

In the end, with the enactment of the Food, Conservation and Energy Act (FCEA) of 2008 on May 2, 2008 it appears that at least the first three pressures did generate reforms in the 2008 Act compared to the previous Farm Security and Rural Investment Act of 2002. This is reflected in new titles such as Horticulture and Organic Agriculture, Livestock, Commodity Futures, and Crop Insurance and Disaster Assistance. The act also provides reforms in payment eligibility and limits. However, with respect to domestic farm support, nearly all of the basic farm safety net that accounts for the notification by the United States on domestic support commitments with the WTO remains intact, including price supports for dairy and sugar, loan deficiency payments, direct payments and counter-cyclical payments. Changes in the dairy support program include shifting support to product prices rather than the milk price. This will affect how the program is notified under the U.S. Aggregate Measure of Support (AMS), although

it will not greatly affect program operation. The 2008 Act provides few reforms that address in any substantive way U.S. obligations under the WTO. In fact it may be argued that the 2008 farm bill potentially creates more payment exposure to meeting WTO obligations than its predecessor.

U.S. Commitments on Domestic Support under the Agreement on Agriculture

The United States and some thirty other countries agreed in the Uruguay Round Agreement on Agriculture to a scheduled reduction of trade-distorting domestic support. As part of this agreement, the members agreed to notify the WTO annually regarding the payments made under several categories of domestic support, including Green Box (minimally trade-distorting), Blue Box (trade-distorting but subject to supply control) and Amber Box (trade distorting). Amber Box includes the Aggregate Measure of Support (AMS) which is subject to the scheduled reduction, and the *de minimis* support that is not. Both the AMS and *de minimis* payments are further divided into non-product specific and product specific. (Under the *de minimis* provision if product specific or the non-product specific payment totals are not larger than 5% of their respective total market value of production, then the support does not have to be included in the total AMS.)

At the end of the scheduled reduction period of the Uruguay Round Agreement on Agriculture in 2000, the annual spending constraint on U.S. AMS was U.S. \$19.1 billion. It will remain at this level until a new agreement is negotiated and ratified by member nations. Domestic support payments subject to constraints are monitored and implemented by the Agriculture Committee of the WTO. "Notifications" of support payments are submitted by members. Notifications however have been slow. Only within the past year has the U.S. submitted notification

of domestic support commitments for the marketing years 2002, 2003, 2004 and 2005, as shown in Table 1. (WTO document G/AG/N/USA/60 of 9 October 2007)

Programs that count toward the U.S. AMS commitment based on current U.S. notification include: loan deficiency payments, marketing loan gains, other product specific support including storage payments and commodity loan interest subsidies, market price supports for dairy and sugar, and non-product specific supports including irrigation programs, grazing programs and federal crop insurance (indemnities less premiums paid notified as non-product-specific amber box *de minimus*). (See CRS Report RS20840, Agriculture in the WTO: Limits on Domestic Support, by Randy Schnepf, listed in For More Information section)

Key Changes in the 2008 Act Likely to Affect AMS Notification

Minor changes are authorized in the 2008 Act for the marketing loan program, direct payment program and the price-based counter-cyclical program. The direct payment program (notified by the U.S. as Green Box) and the counter-cyclical program (notified as non-product-specific Amber Box *de minimus*) are mentioned here because in the recent Brazilian cotton dispute panel finding and appeal. The panel found that U.S. payments under the Production Flexibility Contract and Direct Payment programs do not qualify for WTO's Green Box category of domestic spending because of their prohibition on planting fruits, vegetables, and wild rice on covered program acreage. While the counter-cyclical program was not considered in the dispute, it also is subject to prohibition on planting specialty crops. Even though in the Doha July 2004 Framework, the U.S. succeeded in obtaining agreement on counter-cyclical payments as Blue Box, without a Doha Round agreement, this Blue Box notification would be also likely

Table 1. U.S. Notification of Domestic Agricultural Support Payments to the WTO

ITEM	2002	2003	2004	2005
	U.S. \$ Billion			
Amber Box	\$9.6	\$6.9	\$11.6	\$12.9
Amber Box Limit (WTO Ceiling)	\$19.1	\$19.1	\$19.1	\$19.1
Green Box – No Limit	\$58.3	\$64.1	\$67.4	\$71.8

Source: USDA, News Release No. 0278.07, October 4, 2007.

subject to dispute. See Mercier (2004) and Schnepf (2007) for information on the Brazilian dispute. More significant is the introduction of the Average Revenue Crop Election (ACRE) program. This program is offered to program commodity producers as an alternative to the counter-cyclical payment (CCP) program beginning in 2009.

The CCP program, enacted as part of the 2002 farm bill, is triggered by low commodity prices relative to fixed target prices; ACRE provides a risk management tool to address either or both low yields and low prices. Two triggers must be met before an ACRE payment occurs. First, state-level ACRE guarantee revenue per acre must exceed the actual state revenue per acre and second, the farm ACRE benchmark revenue per acre must exceed the actual farm revenue per acre. The state ACRE guarantee is the 5-year Olympic average state yield times the average of the past two years' national price times 90% for the specified crop. The actual state revenue will be the state yield per planted acre times the national average market price or 70% of the national loan rate. The farm ACRE benchmark is the farm's 5-year Olympic yield per planted acre times the average of the past two years' national price plus the per acre insurance premium on the crop. The state ACRE guarantee revenue cannot increase or decrease more than 10% during 2010-2012 from the previous year's state ACRE guarantee revenue level.

Because the payments are triggered or coupled to current production, market prices and yields, payments under this program will likely be Amber Box and count against the AMS constraint. See the accompanying article by Zulauf, Dicks and Vitale in this issue for more details on the ACRE program.

The commodity title also increases the loan rate for sugar a quarter cent per year for 3 years and changes the overall allotment quota to be a minimum of 85% of domestic consumption. The Act extends the Milk Income Loss Contract program until 2012, increases the payment rate and eligible poundage and provides price supports for cheddar cheese, butter, and nonfat dry milk.

Notification of 2008 Payments Under Existing Commitments

Projections of market prices for most program crops supported by the 2008 Act will imply that the notification values on loan deficiency payments and marketing loan gains will help keep AMS product specific payment levels well below \$19.1 billion. (See USDA Long-Term Projections to 2017 at http://www.usda.gov/oce/commodity/ag_baseline.htm and FA-PRI 2008 U.S. and World Agricultural Outlook at <http://www.fapri.ia-state.edu/outlook2008/>) The primary concern will focus on the payments that are likely to flow from expected high participation on the ACRE program by corn, wheat and soybean producers. This program will not go

into effect until the 2009 marketing year but exceptionally high market prices in 2007 and 2008 provide the potential for large payments in the 2009 and possibly 2010 marketing years should market prices decline.

Potential for Changes in WTO AMS Commitments

A successful conclusion to the Doha Round negotiations remains elusive as reflected by the July 2008 mini-ministerial collapse. The U.S. offered to reduce overall trade distorting support (Blue Box + Amber Box + non-product-specific *de minimis* + product-specific *de minimis* limits) from \$48 billion to \$15 billion contingent on matching market access offers by other WTO member nations. It also agreed under the same contingency to reduce the AMS trade-distorting commitment of \$19.1 billion down to \$7.64 billion. Again, with sustained high crop prices, market price supports for sugar and milk will account for most of the payments against this proposed new limit. However, as suggested above, the potential payment exposure from the ACRE program

could easily strain the ability of the U.S. to remain below the proposed \$7.64 billion limit. Not until and unless a new round is completed will this become a real concern. Even then, how the U.S. Congress may address the potential of exceeding the AMS remains unclear.

For More Information

Josling, T., Blandford, D., Arha, K., & Sumner, D.A. (2007). U.S. Commodity Programs and WTO Commitments. In Arha, K., Josling, T. Sumner, D.A. & Thompson, B.H. eds. *U.S. Agricultural Policy and the 2007 Farm Bill*. Stanford University Woods Institute for the Environment. Stanford, CA. Available online: <http://woods.stanford.edu/ideas/farbill/results.html>

Mercier, S. (2004). "The WTO and US Agricultural Policy: Intersections and Consequences." *Choices*, pp 31-36. American Agricultural Economics Association. Available online: <http://www.choicesmagazine.org/2004-4/policy/2004-4-08.htm>

Mercier, S. and Smith, V. (2006). "Domestic Farm Policy for 2007: Forces for Change." *Choices*, pp 209-214. American Agricultural Economics Association. Available online: <http://www.choicesmagazine.org/2006-4/resource/2006-4-01.htm>

Schnepf, R. (2007). *Brazil's WTO Case Against U.S. Agricultural Support: A Brief Overview*. CRS Report for Congress RS22728. Available online: www.nationalaglawcenter.org/assets/crs/RS22187.pdf

Eric Wailes (ewailes@uark.edu) is the L.C. Carter Chair Professor, Department of Agricultural Economics and Agribusiness, Division of Agriculture, University of Arkansas, Fayetteville. C. Parr Rosson III (CPR@ag.tamu.edu) is a professor, extension economist, and director of the Center for North American Studies, Department of Agricultural Economics, Texas A&M University, College Station, Texas.

The authors would like to thank two anonymous referees for helpful comments.