

THE NEW FARM BILL AND COMMODITY PROGRAMS: AS SIMPLE AS 1,2,3?

Bradley D. Lubben¹

In an early morning ceremony on May 13, President George W. Bush signed the *Farm Security and Rural Investment Act of 2002*. Now that the legislation has been enacted, the hypothetical discussion will turn to actual implementation. USDA's Farm Service Agency will have a complex challenge to implement the commodity support programs in the coming months. Several questions will remain unanswered until the FSA determines specific procedures and policies, but certain details can be foreseen.

The income support programs established in the commodity title of the new Farm Bill are complicated and therefore, can be difficult to understand and interpret. Program participation decisions will require a comprehensive analysis of the legislation and the options available to producers.

The Safety Net

The new commodity support program sounds simple in concept as a three-part safety net. The safety net includes the marketing loan program and fixed payments that were an essential part of the 1996 Farm Bill as well as target prices and counter-cyclical payments that were the basic elements of the 1990 Farm Bill.

As an underlying support, covered commodities have a marketing loan program that operates just as the marketing loan has operated in the past. The primary change is an adjustment in most national average loan rates. The soybean loan rate is decreased while most other commodities are increased, including an increase in the rate for grain sorghum to a level on par with corn (Table 1). Under the legislation, most marketing loan rates are scheduled to drop in 2004. The Secretary of Agriculture was encouraged to review and make adjustments in county loan rates as the national average loan rates were adjusted to new levels. As a result, adjusted county loan rates did not necessarily change exactly the same as national average loan rates did. Of note, wheat loan rates were

set separately for each class of wheat. For example, hard red winter wheat has a different loan rate than soft red winter wheat in those counties that publish loan rates for both. Loan rates for minor oilseeds also saw changes, as they were set separately for each oilseed, including different loan rates for oil-type and confectionary sunflowers. As with the current marketing loan program, producers can receive benefits in the form of loan deficiency payments or marketing loan gains. Producers can also hold the commodity loan to maturity and forfeit the commodity to the government or avoid forfeiture by using generic certificates to repay the commodity loan without being subject to payment limitations of \$75,000 per individual per year.

The direct, or fixed payments that were introduced in the 1996 Farm Bill also continue under the new Farm Bill. The direct payment rates will be constant over the six-year life of the program (Table 1). The direct payments are scheduled to be paid out in two installments, with the first half available as early as December of the year prior to harvest and the remainder paid out the following October (in the year of harvest). For the 2002 direct payment, the full payment amount will be calculated under new program provisions. Then, the amount of fixed payments already made to producers under the existing Farm Bill for the 2002 crop year will be subtracted from the new direct payments for 2002, with the balance scheduled to be paid to producers after sign-up. The fixed payments are subject to a limit of \$40,000 per individual per year.

The new part of the safety net is a counter-cyclical payment based on a target price (Table 1). The counter-cyclical payment will mimic the old target-price/deficiency payment system, except for the new counter-cyclical payment being decoupled from production. When the price drops below the target price, farm income is supported with counter-cyclical payments. The counter-cyclical payment is equal to the target price minus the direct payment minus the

1

Extension Agricultural Economist, Kansas State University, 1515 College Avenue, Manhattan, KS 66502. Phone: 785.532.2276; fax: 785.532.5887; e-mail: blubben@ksu.edu. This document is designed to aid farmers with their farm program participation decisions. The risk of loss associated with farm management and farm program participation decisions can be substantial and no warranty is given or implied by the author or any other party. Each farmer must consider whether program decisions are appropriate for his or her situation. The document does not necessarily represent the views of Kansas State University. This publication represents information available as of August 14, 2002 and will be updated as new program details are available. This publication and other Farm Bill resources are available from Kansas State University at www.agecon.ksu.edu/agpolicy while additional Farm Bill information is available from USDA at www.usda.gov/farmbill.

Table 1. Loan Rates, Direct Payment Rates, and Target Prices for Covered Commodities

	Loan Rates		Direct (Fixed) Payment Rates	Target Prices	
	2002-2003	2004-2007	2002-2007	2002-2003	2004-2007
Corn (bu)	\$1.98	\$1.95	\$0.28	\$2.60	\$2.63
Sorghum (bu)	\$1.98	\$1.95	\$0.35	\$2.54	\$2.57
Barley (bu)	\$1.88	\$1.85	\$0.24	\$2.21	\$2.24
Oats (bu)	\$1.35	\$1.33	\$0.024	\$1.40	\$1.44
Wheat (bu)	\$2.80	\$2.75	\$0.52	\$3.86	\$3.92
Soybeans (bu)	\$5.00	\$5.00	\$0.44	\$5.80	\$5.80
Minor oilseeds (lb)	\$0.0960	\$0.0930	\$0.0080	\$0.0980	\$0.1010
Rice (cwt)	\$6.50	\$6.50	\$2.35	\$10.50	\$10.50
Upland cotton (lb)	\$0.5200	\$0.5200	\$0.0667	\$0.7240	\$0.7240
Peanuts (ton)	\$355.00	\$355.00	\$36.00	\$495.00	\$495.00
Extra-long staple cotton (lb)	\$0.7977	\$0.7977	—	—	—
Graded wool (lb)	\$1.00	\$1.00	—	—	—
Non-graded wool (lb)	\$0.40	\$0.40	—	—	—
Mohair (lb)	\$4.20	\$4.20	—	—	—
Honey (lb)	\$0.60	\$0.60	—	—	—
Small chickpeas (cwt)	\$7.56	\$7.43	—	—	—
Lentils (cwt)	\$11.94	\$11.72	—	—	—
Dry Peas (cwt)	\$6.33	\$6.22	—	—	—

higher of the market price or loan rate. The direct payment makes up the guaranteed portion of the counter-cyclical payment and is paid even if market prices exceed the target price. As with marketing loan rates, the target prices are not constant over the life of the new program, but in fact, are scheduled to increase in 2004. The schedule for counter-cyclical payments is tied to the marketing year for each commodity. The first 35 percent of the estimated counter-cyclical payment is available as an advance payment to producers in October of the year of harvest (after sign-up for the scheduled October, 2002 payment). In the following February, the second 35 percent is available, bringing the total advance payments up to 70 percent. The producer has flexibility in choosing how much to receive in these first two payments, up to the 35 percent limit for the first payment and up to the 70 percent limit in total for the first two payments. The remaining balance of the actual counter-cyclical payment less advance payments is made following the marketing year for each commodity (July for wheat, October for corn, grain sorghum, and soybeans). If the remaining balance is negative, producers will have to repay the amount of overpayment. The counter-cyclical

payments are subject to a limit of \$65,000 per individual per year.

Regardless of market price, the fixed payment is guaranteed. When the market price drops below the target price less the direct payment, a counter-cyclical payment will be made. When the market price falls as far as the loan rate, the counter-cyclical payment will reach its maximum. When the market price drops below the loan rate, the counter-cyclical payment will not get any larger, but the marketing loan will make up for further price declines via the loan deficiency payments and marketing loan gains. Using the payment rates in Table 1 for 2002-2003 as an example, a counter-cyclical wheat payment will be made whenever the market price for wheat falls below \$3.34 (\$3.86 target price minus \$0.52 direct payment). The further the wheat price drops below \$3.34, the larger the counter-cyclical payment, up to a maximum of \$0.54 per bushel (\$3.86 target price minus \$0.52 direct payment minus \$2.80 loan rate).

The basic framework of the safety net hides the complexity involved in program participation and

enrollment decisions. Each part of the safety net is paid on a different payment base, requiring program participants to make a multi-part decision during sign-up.

As with the existing program, marketing loan benefits are paid only on actual production. On the other hand, fixed payments are based on 85 percent of the selected acreage base and existing payment yields. The counter-cyclical payments will be based on 85 percent of the same acreage base as selected for the fixed payments, but the program yield base may be updated in some scenarios. These complex payment formulas will require producers to make a corresponding set of complex decisions at program sign-up.

Commodity Program Enrollment Decisions

A sequential decision-making process awaits producers at program sign-up. Each FSA farm number is considered separately, meaning participants could make different program decisions for each farm number. Actual program sign-up could begin by late September or early October and will run through March of 2003. Given the complex set of decisions to be made, each farm number could be considered through the following set of steps:

1. **Decide whether to participate in commodity programs.** In 1996, this was the only decision for producers to make. As with the 1996 Farm Bill and previous programs, conservation compliance is necessary for program participation. However, producers did not have to participate in previous farm programs in order to be eligible to sign up for this one.
2. **If the decision is to participate in the program, then decide which acreage base to use.** A producer can update the acreage base for all covered commodities to the average of total planted and prevented planted acreage for the 1998-2001 crop years. Alternatively, a producer can keep the current program acreage base that was used to calculate fixed payments under the existing Farm Bill and simply add oilseed acres, subject to acreage constraints.

Under the new program, oilseeds now receive fixed and counter-cyclical payments in addition to other commodities. Previously, oilseeds only received marketing loan benefits and did not have an acreage base and payment yield. Thus,

regardless of the option producers make about acreage and yield updates, they can add oilseeds to the calculation provided they grew any oilseeds during the 1998-2001 crop years.

To establish an oilseed acreage base, a producer can count the average of the total planted and prevented planted acreage for the 1998-2001 crop years for each oilseed. All years are included in the average, including years of zero acreage. This calculation is done separately for each oilseed (soybeans, sunflowers, etc.)

If producers elect the first option above and update the acreage base for all covered commodities, they calculate the average acres for all crops for 1998-2001 in the same fashion as that done above for oilseeds.

If producers elect the second option, they can add their average oilseed acreage calculated above, limited to the difference between their average total acreage of all covered commodities for 1998-2001 and their existing program acreage base. Producers can add additional oilseed acres above this difference up to the average oilseed acres calculated above, but they must reduce one or more of the other crop bases on a one-for-one basis for each acre of oilseeds added above the limit.

On some farms, the existing program acreage base may exceed the average total acreage of covered commodities for 1998-2001 (due to the conversion of acreage to non-program crops including alfalfa, grass, etc.). On these farms, producers can choose not to add oilseeds and instead keep their entire existing program acreage base, provided they have at least that amount of acreage in agricultural use. If producers still want to add oilseeds to the base in this situation, they would first have to give up all of the excess base acreage and then give up one acre of existing base for each acre of oilseeds added to the base.

Finally, some farms have an established history of double-cropping, where a producer has a crop of wheat and a second crop such as soybeans, sorghum, or sunflowers on the same acre in a given year. In these cases, the total acreage of covered commodities for the farm will include both the primary and the secondary crop. As

such, both crops will be eligible for direct and counter-cyclical payments.

To illustrate the acreage decision, consider a 100-acre farm with an existing program acreage base of 50 acres of wheat, 30 acres of corn, and 20 acres with no program base. If that 100-acre farm averaged 50 acres of corn and 50 acres of soybeans over the 1998-2001 period, the producer could elect to use the current average acreage or “new” base and establish an acreage base of 50 acres of corn and 50 acres of soybeans. Alternatively, the producer could keep the “old” 50-acre wheat base and 30-acre corn base and add 20 acres of soybean base to reach the 100 acre maximum base. The producer could add additional soybean acres up to the 50-acre soybean average for 1998-2001, but would have to reduce either the wheat or corn base on a one-for-one basis for each soybean acre added above 20.

- 3. If the decision is to use the “new” acreage base, then decide which payment yield to use.** If producers choose to use the “new” acreage base, there are three options for selecting the payment yield. However, even if a producer chooses to keep the “old” base, there are yield calculations to make. If the “old” base is kept, the producer must keep the existing payment yields (“old” yields) and establish an equivalent “old” yield for any oilseeds added to the base.

To establish an oilseed program yield, producers take the average yield per planted acre for the years of 1998-2001, excluding any year in which the oilseed was not planted. For any year in which the farm yield is less than 75 percent of the four-year county average yield, a yield equal to 75 percent of the four-year county average yield per planted acre will be substituted.

In some counties, four-year average county yields per planted acre are available for both irrigated and non-irrigated production. In those counties, the yield calculation is more complex. The farm’s average yield per planted acre for each year is still a straight-forward calculation based on total acres and total production across both irrigated and non-irrigated systems, resulting in a blended yield. However, the relevant average county yield must also be a blended yield of both irrigated and dryland production. The blend is based on the

proportion of irrigated and dryland acres on that farm (not the county).

As an example, consider four-year average county yields of 50 bushels/acre for irrigated soybean production and 35 bushels/acre for dryland soybean production. If two-thirds of the soybean acreage in the county was dryland and one-third was irrigated, the overall average county yield would be 40 bushels/acre. But, the relevant average county yield to be used as a basis for the substitute must be a ratio of the irrigated and non-irrigated acreage on the farm. If on the farm, two-thirds of the soybean acreage was irrigated and one-third was non-irrigated, then the relevant average county yield would be 45 bushels/acre (the weighted average of one-third of the acreage at 35 and two-thirds of the acreage at 50).

If the producer raised the crop under only one system (irrigated or non-irrigated), then the relevant county average yield would come from the specific four-year average county yield for that practice (irrigated or non-irrigated). In many counties however, separate yields will not be available and the relevant county average yield is simply the composite county average yield for all practices, even if the producer has both irrigated and non-irrigated production.

There are also questions about county average yields for the different practices of regular versus double-crop production (such as soybeans, sorghum, or sunflowers following wheat). Yield expectations are generally lower for double-crop production relative to regular, full-season production, yet published county average yields combine both practices. FSA may determine appropriate or assigned yields that are different than the published county average yields in those counties where double-cropping has been present.

As a basic example, consider a farm with average soybean yields per planted acre of 20 bushels/acre in 1998; 50 bushels/acre in 1999; no planted acres in 2000; and 55 bushels/acre in 2001. This farm is in a county with only a single composite four-year average county yield published of 40 bushels per planted acre. To calculate the average yield, the producer takes the higher of the farm yield or 75 percent of the average county yield for each year in which the crop was planted on the farm. For 1998, the

producer counts the higher of 20 bushels/acre or 75 percent of 40 bushels/acre, which equals 30 bushels/acre. Thus, the producer would count a yield for 1998 of 30 bushels/acre. In similar fashion, the producer would count a yield of 50 bushels/acre in 1999, nothing in 2000 (since planted acreage equals zero), and 55 bushels/acre in 2001. The resulting average yield for the farm is equal to 45 bushels/acre (the average of 30, 50, and 55).

After working through all of these rules and considerations, the producer will end up with an average farm yield that is a “new” yield representative of the 1998 through 2001 production period. To adjust this yield relative to other program commodities for which payment yields were frozen in 1985, the average farm yield is adjusted by the ratio of the national average yield for the oilseed for 1981 through 1985 by the national average yield for the oilseed for 1998 through 2001. Based on U.S. production numbers for soybeans, the “new” soybean yield calculated above of 45 bushels/acre must be multiplied by 78 percent to produce an “old” soybean yield of 35.1 bushels/acre that is equivalent to other commodity payment yields. The appropriate ratio for other oilseeds may differ, as is the case for sunflowers, where the ratio has been set at 80 percent.

As noted above, producers have three options to update payment yields if they update their base acreage to the “new” base. The first option for payment yields is simply to keep the “old” yields. This option would appear to be attractive only if average farm yields actually declined between 1981-1985 and 1998-2001.

The second option is to partially update payment yields using both existing payment yields (“old” yields) and average farm yields per planted acre for all covered commodities for 1998 through 2001 (“new” yields). The average farm yields for each crop are calculated in identical fashion to the yields for oilseeds calculated above. Once these averages are calculated, then the updated yield is calculated as 70 percent of the difference between the “old” yield and the “new” yield added to the “old” yield. In the example above for soybeans, the partial update would equal 70 percent of the difference between 45 and 35.1 or 6.93 added to 35.1 for a total of 42.03 bushels/acre.

The third option is to partially update payment yields uses only the “new” yields multiplied by 93.5 percent. In the same soybean example, the partially-updated payment yield would equal 93.5 percent of 45, or 42.08 bushels/acre.

The same payment yield update options and formulas exist for all crops just as illustrated above for soybeans. A producer can choose any of the three options for payment yields, but must make the same decision for all commodities.

It is important to remember that all of these decisions are one-time decisions during sign-up that will remain in effect for the life of the new Farm Bill. In essence, there are four options available to producers under the above decisions if they decide to participate. First, producers can use their “old” acreage base plus “new” oilseed acreage and their “old” payment yields. Second, producers can use their “new” acreage base plus “old” program yields. Third, producers can use their “new” acreage base plus partially-updated yields based on “old” yields plus 70 of the difference between “old” and “new” yields. Fourth, producers can use their “new” acreage base plus partially-updated yields based on 93.5 percent of “new” yields.

Which of the four options is best for each individual producer could vary based on the producer’s preferences. A producer could decide to maximize the amount of guaranteed government payments (direct payments). Or, a producer could attempt to maximize the amount of expected government payments (direct and counter-cyclical payments). Alternatively, a producer concerned about risk could choose an acreage base and payment yield in an attempt to minimize farm income risk. Finally, a producer could be concerned about both risk and expected payments and examine the tradeoffs between the two in selected an acreage base and payment yield.

These decisions will in part be determined by the relative yields and acres for the different crops in 1998-2001 compared to the existing crop acreage base and program yields and thus will vary from farm to farm. As noted earlier, the decision is complicated by the fact that the different parts of the safety net are tied to different acreages and yields. The direct payment is tied to the “old” acreage base plus oilseeds or the “new” acreage base as selected in step 2 above, but must be based on “old” payment yields. The counter-cyclical payment is tied to the same acreage base as chosen for direct payments in

step 2, but is paid on the “old” or partially-updated payment yield as selected in step 3. The amount of marketing loan benefits are not affected by the base acreage and payment yield decisions because the loan program is tied only to actual production.

Understanding the acreage and yield choices and the payment bases for each part of the safety net are vital to determining expected payments under each of the four alternatives identified above. Tying these alternatives together with the producer’s preferences for maximizing payments or balancing expected payments and farm income risk makes the decision extremely complex.

Payment Limitations

As noted previously, specific payment limits apply to each of the three parts of the commodity program safety net. Marketing loan benefits, including loan deficiency payments and marketing loan gains, are subject to a \$75,000 limit per individual per year. However, forfeitures of commodities under loan to the government or repayments of loans with generic certificates remain available and not subject to the payment limit. The fixed payments are subject to a \$40,000 while the counter-cyclical payments are subject to a limit of \$65,000 per individual per year. Summed together, these three limits amount to a total of \$180,000 in payments per individual per year. These limits are in place for all covered commodities. Payments for peanut programs are covered under separate limits.

In addition to these payment limits, two other important payment limit features are present in the legislation. First, the existing three-entity rule is maintained for producers, meaning a producer can qualify for payments up to the full limit under one entity and can also qualify for payments up to half the limit under each of two additional entities. Summed together, this means that an individual can qualify for double the individual payment limit, or \$360,000 per year.

Second, the new Farm Bill does include a means test for farm program benefits. To qualify for payments, producers must have an average adjusted gross income over the previous three years of \$2.5 million or less or have at least 75 percent of the average adjusted gross income derived from farming, ranching or forestry operations.

Domestic Supports and World Trade Organization Commitments

The safety net programs for covered commodities described above as well as some of the specific programs for other commodities are mandatory spending programs not subject to budget authorization limits. In particular, the counter-cyclical payments and marketing loan benefits are tied to commodity prices and are not subject to total spending limits. If prices decline, total government spending increases.

However, under the Uruguay Round Agreement on Agriculture, the United States committed itself to limits on the amount of domestic supports that fit within the category of “amber box” programs. “Amber box” program are those that are shown to distort international trade patterns. The U.S. limit agreed to under the Uruguay Round is approximately \$19.1 billion in “amber box” program spending per year.

To facilitate the support programs in the new Farm Bill and also remain in compliance with the WTO commitments, the legislation says that “If the Secretary [of Agriculture] determines that expenditures... subject to the total allowable domestic support levels... will exceed such allowable levels for any applicable reporting period, the Secretary shall, to the maximum extent practicable, make adjustments in the amount of such expenditures during that period to ensure that such expenditures do not exceed such allowable levels.” In short, the support levels advertised in the payment rates in the safety net remain subject to possible reduction under scenarios of low market prices and high government spending levels that threaten to exceed WTO limits.

Other Commodity Programs

While the predominant focus of the Farm Bill debate has centered on the safety net for the covered commodities, it is important to remember that several other commodities are also included in the new Farm Bill. A brief summary of the additional programs follows for each commodity.

Peanuts. The provisions in the new Farm Bill substantially change the traditional peanut program of marketing quota into a system of fixed payments, counter-cyclical payments, and marketing loans (Table 1). In addition, current quota holders are

eligible for a quota buyout payment of \$0.11 per pound for five years.

Sugar. The new Farm Bill generally re-authorizes existing sugar programs by extending current price supports. The new provisions eliminate the one-cent-per-pound forfeiture penalty under the non-recourse loan program as well as the marketing assessment, but re-establish the non-net-cost concept of the program. Under the new provisions, the Secretary of Agriculture is given authority to establish a marketing allotment program for sugar producers.

Dairy. The dairy provisions in the new Farm Bill include a re-authorization of basic support programs for milk at the level of \$9.90 per hundredweight. In addition, a national dairy market loss assistance program was authorized through September, 2005 as a replacement for the Northeast Interstate Dairy Compact under the former Farm Bill. The program will pay producers nationally whenever the Class I fluid milk price in Boston (as per the applicable milk marketing order) is below \$16.94 per hundredweight. The amount of payment will be 45 percent of the difference and will be paid on up to 2.4 million pounds of milk per year per eligible producer.

Wool, Mohair, and Honey. The new Farm Bill re-establishes supports for wool, mohair, and honey which were terminated in 1996. For all three commodities, a marketing loan is created similar to other commodities (Table 1).

Pulse Crops. The new Farm Bill also establishes marketing loans and loan deficiency payments for the pulse crops of small chickpeas, lentils, and dry peas (Table 1). As with other commodity loan rates, the rates are scheduled to decline in 2004.

Emergency Assistance and Other Programs. The new Farm Bill contains several other provisions, including \$20 million over three years for incentive payments for hard white wheat production. Growers of 2000 crop year apples are eligible for a share of \$94 million in market loss assistance payments. And onion growers in Orange County, New York who suffered crop losses in one or more years from 1996 through 2000 are eligible for a share of \$10 million in supports.

Payment Limitation Commission. Finally, the commodity title establishes the "Commission on the Application of Payment Limitations for Agriculture." The commission will study the potential impacts of further payment limitations on the receipt of direct government payments as they affect farm income, land values, rural communities, agribusiness, planting decisions, and supply and price responses of agricultural commodities. The commission is scheduled to conduct a one-year study and report findings back to the respective agricultural committees in the Senate and the House of Representatives.