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CROP INSURANCE

Additional Actions Could Further Improve Program's Financial Soundness

Statement for the Record by
Lawrence J. Dyckman, Director,
Food and Agriculture Issues,
Resources, Community, and Economic
Development Division

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Mr. Chairman and Members of the Committee:

This statement for the record summarizes our completed work on the federal crop insurance program since 1995. Our statement today is based on our reports issued in 1995, 1997, and 1998.[1]

Let me place our work in the context of concerns about this issue. As you know, farming is an inherently risky enterprise. Federal crop insurance is one of the primary mechanisms used by participating farmers to protect against the risk of losses caused by events such as droughts, floods, hurricanes, and other natural disasters. As the U.S. Department of Agriculture (USDA) has rapidly expanded the availability of crop insurance, from 59 crops insured in 1994 to 75 in 1999, and introduced new insurance products to protect farmers' revenue, so too have the federal government's costs for crop insurance increased. Since 1995, the federal government has expended an average of about $1.4 billion each year for the crop insurance program—including premium subsidies, insurance company reimbursements, and underwriting losses. The program will cost an estimated $1.6 billion in 1999.

Because of the program's rapid expansion and its significant financial costs to the government, we have been asked to examine various aspects of the crop insurance program. Our statement today focuses on our work examining whether USDA (1) has set adequate insurance rates to achieve the legislative requirement of actuarial soundness,[2] (2) appropriately reimburses participating crop insurance companies for their administrative costs, and (3) has established methodologies in the revenue insurance plans that set sound premium rates.

In summary, we reported that several aspects of the program are of concern and need attention. First, in 1995, we reported that premiums charged farmers for crop insurance were not adequate to achieve the actuarial soundness as mandated by the Congress. Our review showed that the basic premium rates for the six crops reviewed—barley, corn, cotton,

[1]Crop Insurance: Additional Actions Could Further Improve Program's Financial Condition (GAO/RCED-95-269, Sept. 28, 1995); Crop Insurance: Opportunities Exist to Reduce Government Costs for Private-Sector Delivery (GAO/RCED-97-70, Apr. 17, 1997); and Crop Revenue Insurance: Problems With New Plans Need to be Addressed (GAO/RCED-98-111, Apr. 29, 1998).

[2]At the time of our report, the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act of 1994 (P.L. 103-354, Oct. 13, 1994) required that USDA achieve a target loss ratio no greater than 1.10. Stated differently, insurance rates were to be set to generate revenue from premiums to cover at least 91 percent of the anticipated claims payments—termed 91 percent adequate. The Reform Act currently requires that USDA achieve a target loss ratio no greater than 1.075, or 93 percent adequate.

grain sorghum, soybeans, and wheat—were approaching actuarial soundness in 1995, but USDA's rates for some crops and locations and for some coverage and production levels were well below the legislative requirement. For example, about 24 percent of the crop insurance premiums for the six crops we reviewed in 1994 had basic rates that were less than 80 percent adequate for actuarial soundness. USDA subsequently took actions to improve the program's actuarial soundness, but some rates remain too low.

Second, in 1997, we reported that the government's administrative expense reimbursement (commissions) to insurance companies—31 percent of premiums—were greater than the companies' reported expenses to sell and service federal crop insurance. Furthermore, we stated that some of these reported expenses did not appear to be reasonably associated with the sale and service of federal crop insurance. The Agricultural Research, Extension, and Education Reform Act of 1998 subsequently revised reimbursement rates downward to 24.5 percent of premiums for most crop insurance. However, continued oversight of the reasonableness of the program's administrative reimbursement rate is necessary. Increased program participation and sales volume that could result from crop insurance reform may lead to lower delivery costs, warranting a downward adjustment in the rate.

Finally, in 1998, we reported our doubts about whether new USDA-supported revenue insurance plans were actuarially sound over the long term and appropriate to the risk each farmer presents to the program. Specifically, with respect to the most popular plan, Crop Revenue Coverage, we recommended that USDA's Risk Management Agency require the plan's developer to base premium rates on a revenue distribution or other appropriate statistical technique that recognizes the interrelationship between farm-level yields and expected crop prices. USDA, to date, has not fully acted on our recommendations.

This year the Congress is once again considering reforms to the federal crop insurance program. As you explore the various proposals to expand or restructure the program, changes should be considered in the context of the above concerns. Continued oversight of the federal crop insurance program is needed to help ensure, among other things, the adequacy of premium rates, the reasonableness of administrative expense reimbursements to companies, and the soundness of revenue insurance plans.

Background

Farming has always been an inherently risky enterprise because farmers operate at the mercy of nature and frequently are subjected to weather-related perils such as droughts, floods, hurricanes, and other natural disasters. Since the 1930s, many farmers have been able to transfer part of the risk of loss in production to the federal government through subsidized crop insurance.

Major legislation enacted in 1980 and 1994 restructured the crop insurance program. The 1980 legislation enlisted, for the first time, private insurance companies to sell, service, and share the risk of federal insurance policies. Subsequently, in 1994, the Federal Crop Insurance Reform and Department of Agriculture Reorganization Act revised the program to offer farmers two primary levels of insurance coverage, catastrophic and buyup. Catastrophic insurance is designed to provide farmers with protection against extreme crop losses for a small processing fee. Buyup insurance provides protection against more typical and smaller crop losses in exchange for a producer-paid premium. The government subsidizes the total premium for catastrophic insurance and a portion of the premium for buyup insurance.

Farmers who purchase buyup crop insurance must choose both the coverage level (the proportion of the crop to be insured) and the unit price (such as, per bushel) at which any loss is calculated. With respect to the level of production, farmers can choose to insure as much as 75 percent of normal production or as little as 50 percent of normal production at different price levels. With respect to the unit price, farmers choose whether to value their insured production at USDA's full estimated market price or at a percentage of the full price.

In recent years, USDA has introduced a new risk management tool called revenue insurance. Unlike traditional crop insurance, which insures against losses in the level of crop production, revenue insurance plans insure against losses in revenue. The plans protect the farmer from the effects of declines in crop prices or declines in crop yields, or both. Like traditional buyup insurance, the government subsidizes a portion of the premiums. One of the plans, called Crop Revenue Coverage, is available in many states for major crops. Two other plans, called Income Protection and Revenue Assurance, are available to farmers in only limited areas.

USDA reimburses the insurance companies for the administrative expenses associated with selling and servicing crop insurance policies, including the expenses associated with adjusting claims. Between 1995 and 1998, USDA

paid participating insurance companies about $1.7 billion in administrative expense reimbursements.

In addition to receiving an administrative expense reimbursement, the insurance companies share underwriting risk with USDA and can earn or lose money according to the claims they must pay farmers for crop losses. Companies earn underwriting profits when the premiums exceed the crop loss claims paid for those policies on which the companies retain risk. They incur underwriting losses when the claims paid for crop losses exceed the premiums paid for the policies that the companies retained. Between 1995 and 1998, USDA paid participating insurance companies about $1.1 billion in underwriting profits.

Critical to the success of achieving an actuarially sound crop insurance program is aligning premium rates with the risk each farmer represents. The riskiness of growing a particular crop varies from location to location, from farm to farm, and from farmer to farmer. If the rates are too high for the risk represented, farmers are less likely to purchase insurance, lowering the revenue from premiums and the usefulness of the program to farmers. Conversely, if the rates are too low, farmers are more likely to purchase crop insurance, but because the rates are too low, the revenue from premiums will be insufficient to cover the claims. Therefore, USDA sets different premium rates for the various coverage and production levels, which vary by crop, location, farm, and farmer. Consequently, hundreds of thousands of premium rates are in effect. To set premium rates, USDA calculates a basic rate for each crop in each county for the farmers who buy insurance at the 65-percent coverage level and whose normal production level is about equal to the average production in the county. From this basic rate, USDA makes adjustments to establish rates for other coverage levels and for those farmers whose production levels are higher or lower than the county's average.

Changes in Premium Rates for Traditional Crop Insurance Have Improved the Program's Actuarial Condition, but Some Rates Remain Too Low

In 1995, we reported that for the six crops we reviewed—barley, corn, cotton, grain sorghum, soybeans, and wheat—basic premium rates overall were 89 percent adequate, on average, to meet the Congress's legislative requirement of actuarial soundness. However, we found that while overall premiums were approaching actuarial soundness, USDA's rates for some crops and locations and for some coverage and production levels were too low.

For the 183 state crop programs[3] we examined, 54 had basic premium rates that were adequate to achieve actuarial soundness. These 54 programs were generally those that had the greatest volume of insurance. For the remaining 129 programs, 40 had premium rates that were near the target level. However, the other 89 programs, representing about 24 percent of the crop insurance premiums for the six crops in 1994, had basic rates that were less than 80 percent adequate for actuarial soundness.

We reported that premium rates that were too low generally occurred when the historical databases used for establishing rates added or deleted years of severe losses, thus affecting USDA's estimate of expected crop losses. USDA did not increase the rates where necessary. For example, for one of the crops we reviewed, USDA did not increase the rates as much as it could have when (1) severe losses from 1993 were added to the database for establishing the 1995 rates and (2) a year from the 1970s when losses were lower was deleted from the database. According to USDA, it had not sufficiently raised rates out of concern that higher rates would discourage farmers from buying crop insurance.

Furthermore, when we examined the rates at various levels of coverage and production, we found that the rates were (1) too high for coverage at the 75-percent level and (2) too low for farmers with above-average crop yields. As a result, the rates for both coverage and production levels were not always aligned with risk. This occurred because USDA did not periodically review and update the calculations it used to adjust rates above and below the basic rate.

To set premium rates for the 75-percent coverage level, USDA applies pre-established mathematical factors to the basic rate. However, these factors have not resulted in rates that are aligned with risk. For crops insured at the 75-percent coverage level, USDA set premium rates ranging

[3]Each crop insured in a state is counted as a state crop program. An example of a state crop program is corn in Iowa. In 1994, for the six crops reviewed, USDA offered insurance for a combination of 183 states and crops.

from 19 to 27 percent more than required. As a result, the 1994 income from premiums was about $30 million more than required for this coverage. Although grain sorghum had the greatest percentage of rates in excess of those required, corn had the greatest amount of additional premium income because its program is much larger.

USDA also adjusts the basic rates for a farmer's individual crop yields. USDA's basic rate applies to the farmer whose average yield is about equal to the average for all producers in the county. However, many farmers' average yield is above or below the county's average, and USDA's research shows that the higher a farmer's yield, the lower the chance of a loss. Therefore, USDA establishes rates for different yield levels using a mathematical model. The rates per $100 of insurance coverage decrease as a farmer's average yield increases; however, the mathematical model overstated the rate decrease. According to our analysis, the rates at higher average crop yields were too low for the six crops reviewed. We reported that for these above-average yields, USDA's rates in 1995 should have been from 13 to 33 percent higher than they were.

Subsequent to our 1995 report, USDA took action to increase premium rates an average of 6 percent and developed a plan to periodically evaluate the mathematical factors used to set rates. These actions have contributed to the federal crop insurance program's achieving a loss ratio well below the target in recent years, thereby improving the program's financial soundness. However, although overall premium rates appear adequate, rates for crops in some states remain too low. For example, since 1996, the loss ratio has averaged 1.36 for cotton in Texas and 1.45 for peanuts in Alabama, well exceeding the target loss ratio. Thus, premium rates for these farmers may be too low. Consequently, USDA needs to continue to monitor and adjust premium rates to ensure they are appropriately aligned with risk.

Opportunities to Reduce Government Costs for Private Sector Delivery

In 1997, we reported that USDA's administrative expense reimbursements to participating insurance companies selling traditional buyup insurance—31 percent of premiums—were much higher than the expenses that can be reasonably associated with the sale and service of federal crop insurance. For the 2-year period we reviewed, 1994 and 1995, the companies reported $542.3 million in expenses, compared with a reimbursement of $580.2 million—a difference of about $38 million. Additionally, about $43 million of the companies' reported expenses could not be reasonably associated with the sale and service of federal crop insurance to farmers.

Therefore, we reported that these expenses should not be considered in determining an appropriate future reimbursement rate for administrative expenses.

The expenses that could not be reasonably associated with the sale and service of federal crop insurance included the following:

- payments of $12 million to compensate executives of an acquired company to refrain from joining or starting competing companies,
- fees of about $11 million paid to other insurance companies to protect against underwriting losses,
- bonuses of about $11 million tied to company profitability,
- management fees of about $1 million assessed by parent companies with no identifiable benefit to subsidiary crop insurance companies, and
- lobbying expenditures of about $400,000.

In addition, we found a number of expenses reported by the companies that, while in categories associated with the sale and service of crop insurance, seemed to be excessive under a taxpayer-supported program. These expenses included agents' commissions of about $6 million, paid by one company, that exceeded the industry standard.

Thus, we reported that opportunities existed for the government to reduce its reimbursement rate for administrative expenses while still adequately reimbursing companies for the reasonable expenses of selling and servicing crop insurance policies. Subsequent to our report, the Agricultural Research, Extension, and Education Reform Act of 1998 revised reimbursement rates downward to 24.5 percent of premiums for traditional buyup insurance. However, as changes are made to the crop insurance program that increase participation and sales volume, downward adjustments to the reimbursement rate may be warranted.

Problems With USDA-Supported Revenue Insurance Plans Need to Be Addressed

In 1998, we reported shortcomings in the way premium rates are established for each of the three revenue insurance plans we reviewed. Appropriate methods for setting rates for these plans are critical to ensuring the financial soundness of the crop insurance program over time. We reported that the Crop Revenue Coverage plan did not base its rate structure on the interrelationship between crop prices and farm-level yields—an essential component of actuarially sound rate setting. For example, a decline in yields is often accompanied by an increase in prices, which mitigates the impact of the decline in yields on a farmer's revenue.

Because this plan did not recognize this interrelationship, the premium adjustments may not be sufficient over the long term to cover claims payments and may not be appropriate to the risk each farmer brings to the program. We were not able to determine whether premium rates for this plan were too high or too low.

In contrast, the rate-setting approaches for the Revenue Assurance and Income Protection plans were based on a likely statistical distribution of revenues that reflects the interrelationship between crop prices and yields. However, the two plans had several shortcomings that were not as serious as the problem we identified for Crop Revenue Coverage. For example, in constructing its revenue distribution, we found that the Revenue Assurance plan used only 10 years of yield data (1985-94), which was not a sufficient historical record to capture the fluctuations in yield over time. Furthermore, 3 of these 10 years had abnormal yields: 1988 and 1993 had abnormally low yields, and 1994 had abnormally high yields. Additionally, Income Protection based its estimate of future price increases or decreases on the way that prices moved in the past. This approach could be a problem because price movements in the past occurred in the context of past government programs, such as commodity income-support payments, which were eliminated by the 1996 farm bill. In the absence of the above government programs, the price movements may have been considerably more pronounced. While favorable weather and stable crop prices generated very favorable claims experience over the first 2 years that the plans were available to farmers, these shortcomings raise questions about whether the rates established for each plan will be actuarially sound and fair—that is, appropriate to the risk each farmer presents over the long term.

Furthermore, while the plans were initially approved only on a limited basis, USDA authorized the substantial expansion of Crop Revenue Coverage before the initial results of claims experience were available. In doing so, USDA was acting within its authority to approve privately developed crop insurance plans in response to strong demand from farmers. USDA's Office of General Counsel advised against the expansion, noting that an expansion without any data to determine whether the plans or rates are sound might expose the government to excessive risk. While Crop Revenue Coverage was expanded rapidly, Revenue Assurance and Income Protection essentially remain pilot plans with no nationwide availability.

As a result of the shortcomings with the revenue insurance plans' rating methods and to ensure premiums were appropriate to the risk each farmer presents, we recommended that the Secretary of Agriculture direct the Administrator of the Risk Management Agency to address the shortcomings in the methods used to set premiums. Specifically, with respect to all three plans, we recommended that the Secretary direct the Risk Management Agency to reevaluate the methods and data used to set premium rates to ensure that each plan is based on the most actuarially sound foundation. With respect to Crop Revenue Coverage, which does not incorporate the interrelationship between crop prices and farm-level yields, we recommended that the Risk Management Agency direct the plan's developer to base premium rates on a revenue distribution or another appropriate statistical technique that recognizes this interrelationship. While USDA subsequently took action to improve the actuarial soundness of the Revenue Assurance plan, it has not, to date, acted on our recommendations regarding the other two plans.

As the Congress considers proposals to reform the federal crop insurance program and improve the safety net for farmers, the issues in our reports remain important to the success of the program. Specifically, premiums in all areas of the country should be set at levels that are actuarially sound and represent the risk each farmer brings to the program. Furthermore, continued oversight of the reasonableness of the program's administrative reimbursement rate is necessary. Increased program participation and sales volume that could result from crop insurance reform may lead to lower delivery costs, warranting a downward adjustment in the rate. Finally, before revenue insurance plans are expanded to cover new crops, USDA needs to ensure that the plans are based on an actuarially sound foundation.

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