ERS Report Summary

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This is a summary of an ERS report.

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The Future of Environmental Compliance Incentives in U.S. Agriculture

The Role of Commodity, Conservation, and Crop Insurance Programs

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What Is the Issue?

Environmental compliance means that producers who participate in most Federal agricultural programs must implement soil conservation plans on highly erodible cropland *and* refrain from draining wetlands for agricultural production or risk losing most farm financial assistance. Direct payments (DPs) are a type of commodity payment that has, in recent years, made up roughly half of the producer payments that could be withheld from producers who violate compliance requirements. These payments are an effective compliance incentive because they are substantial (roughly $5 billion per year), cover a large share of cropland (71 percent), and are paid annually regardless of crop production or prices. Direct payments, however, may be sharply reduced or eliminated in the next farm bill (due in 2012) to reduce Federal spending.

If direct payments end, compliance incentives could be maintained in several ways. Some farms will continue to receive conservation and disaster payments, which are also subject to environmental compliance. New commodity programs, which may be created as part of new farm legislation, could also help fill the gap. Extending compliance requirements to federally subsidized crop insurance, the only large USDA program not currently subject to environmental compliance, may be another way of providing incentives to farmers. Between 2005 and 2010, Federal subsidies paid 60 percent of crop insurance premiums—average annual expenditure of $4.1 billion, or about 80 percent of the $5 billion annual expenditure for direct payments during the same period. The extent to which crop insurance can fill the gap left by an end of direct payments, however, depends on the extent to which premium subsidies go to the producers who also received direct payments under the 2008 Farm Act, particularly for farms that contain highly erodible cropland or wetlands subject to compliance.

What Did the Study Find?

In 2010, an estimated 448,000 farms (about 20 percent of all farms) received direct payments and accounted for 283 million acres of cropland. In the absence of direct payments, 126,000 of these farms (28 percent of cropland) would still be subject to compliance because they also receive conservation payments. Farms that receive disaster assistance are also subject to compliance, although data limitations preclude an exact estimate of farms that receive (or are likely to receive) disaster assistance.

Roughly 141,000 farmers (7 percent), operating on 33 million acres of cropland (8 percent), received direct payments in 2010 but did not purchase crop insurance or receive conservation payments. For these farms, extending compliance requirements to cover crop insurance would not replace incentives lost if direct payments are ended.

In 2010, 181,000 farms (9 percent), operating on 141 million acres of cropland (36 percent), received direct payments and also purchased crop insurance, but did not receive conservation payments. For these farms, making crop insurance subject to compliance sanctions could compensate for compliance incentives lost if direct payments end. Regionally, direct payments tend to be larger than crop insurance subsidies in the Corn Belt and the South. Crop insurance subsidies are relatively large in the Great Plains, particularly the Northern Plains, and along the Eastern Seaboard.

Most environmentally sensitive land tends to be located in areas where crop insurance subsidies are smaller than direct payments. For example, 59 percent of cropland that is highly erodible due to wind is located in areas where direct payments exceed crop insurance subsidies. An even larger proportion of cropland that is highly erodible due to water (for sheet and rill erosion) is located in these areas. (Highly erodible land has an erodibility index of 8 or higher. The erodibility index measures the inherent propensity of a soil to suffer productivity damage due to soil erosion, incorporating both the propensity of the soil to erode and potential for damage due to erosion.)

How Was the Study Conducted?

The number of farms and acres covered by direct payments, conservation payments, and crop insurance were calculated based on the 2010 Agricultural Resources Management Survey (ARMS), developed by USDA's Economic Research Service (ERS) and National Agricultural Statistics Service (NASS). County-level data for the spatial distribution of crop insurance premium subsidies came from the Federal Crop Insurance Corporation's *Summary of Business* produced by USDA's Risk Management Agency (RMA). Direct payment data is based on county-level data from the Commodity Credit Corporation (CCC) and USDA's Farm Service Agency (FSA). Data on highly erodible land and farmed wetland is based on calculations from the 2007 National Resources Inventory (NRI) by USDA's Natural Resources Conservation Service (NRCS).