

Summary

Farm commodity programs may have encouraged crop production on environmentally sensitive land in the 1970s and early 1980s. Although unintended, farm program incentives to expand production may have increased environmental damage associated with agricultural production and undercut the effectiveness of conservation programs designed to mitigate that damage. Compliance provisions, introduced in the Food Security Act (1985 Farm Act), aim to counteract that influence.

In essence, compliance provisions leverage farm program payments for the environment; farmers who want to remain eligible for benefits from selected Federal agricultural programs, including price support loans and income support payments, must implement soil conservation systems on highly erodible land (HEL) and refrain from draining wetlands. The question addressed by this report is to what extent compliance provisions created sufficient incentives to motivate the types of behavioral shifts they were designed to address.

In fact, the annual rate of soil erosion on U.S. cropland declined by nearly 40 percent between 1982 and 1997. About a fourth of that decline can be directly attributed to compliance. But that is only part of the story. A large share of cropland erosion reduction occurred on land that was not subject to compliance requirements. Non-HEL cropland accounted for 38 percent of all cropland erosion reduction. This begs the question: How much erosion reduction would have been realized without compliance requirements? Reduced soil erosion on land not subject to compliance suggests that other factors, such as technology, information, and markets, played an important role in triggering large-scale erosion reduction. Conversely, compliance may have acted as a catalyst for change, accelerating the adoption of farming practices—such as conservation tillage—that can conserve soil and save farmers money.

Compliance mechanisms have clearly increased consistency between income support and environmental programs. While consistency is an important goal, this report focuses on the broader potential of the compliance mechanism as an agri-environmental policy instrument.

Compliance mechanisms may provide the best bang for the buck as a deterrent to environmentally damaging actions such as draining wetlands or bringing new HEL into crop production. Compliance sanctions are triggered only when a violation occurs. In contrast, using conservation payments to achieve these same ends is likely to be difficult or expensive. The difficulty is in deciding which wetlands or noncropped HEL are vulnerable enough to warrant conservation payments. If that is too difficult, policymakers could opt to subsidize protection of a significant share of these environmentally sensitive lands—an expensive alternative, indeed.

Compliance incentives have motivated farmers to reduce soil erosion on highly erodible cropland. Between 1982 and 1987, excess erosion (any erosion in excess of the maximum level consistent with maintaining soil productivity) on highly erodible cropland fell by 331 million tons annually. Nearly

90 percent of this reduction occurred on farms receiving government program payments, and thus can be directly attributed to conservation compliance.

Compliance incentives may deter producers from expanding crop production onto highly erodible land or wetland. Without compliance requirements, between 7 million and 14 million acres of highly erodible land or wetland that are not currently being farmed could be profitably converted to crop production, under favorable market conditions.

Existing government payments have the potential to leverage a broader set of agricultural conservation and environmental gains. The majority of cropland with potential for nutrient runoff is located on farms receiving government program payments. Whether these payments are large enough to spur farmers to address nutrient runoff depends on the methods available for remediation and their cost.

Because they depend on payments from other programs for compliance incentives, compliance mechanisms will be effective only on farms where government payments exceed the cost of required conservation actions.