# POLICY ISSUES ARISING FROM IMPLEMENTATION OF THE 1985 FARM BILL CONSERVATION PROVISIONS

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The Conservation Title (Title XII) of the 1985 Food Security Act (FSA) is unique in the history of farm legislation. Its distinction arises, not because conservation goals have never been addressed by farm legislation (they have been included since the original farm bills of the 1930s), but because the 1985 FSA makes conservation goals consistent with and, to some extent, superior to commodity price support and farm income goals. This reorientation of legislative goals has necessitated new approaches to the implementation of conservation programs and gives new, often unfamiliar responsibilities to the programs' administrators.

## Implementation Status of Conservation Provisions

Provisions of the major new conservation programs authorized by the 1985 FSA are summarized in Table 1. Each of the programs is presently in a different stage of implementation.

The *Conservation Reserve Program* (CRP) was initiated early in 1986 and has undergone several modifications over subsequent years. The first sign-up for the program was held in March 1986 under an initial implementation scheme that identified 69 million highly erodible acres eligible for the program, and under which rental rate bids from potential participants were successful only if they were less than or equal to an unannounced maximum acceptable rental rate. Results of the first sign-up were disappointing. Less than 20 percent of only 4.8 million acres bid was accepted. In subsequent sign-ups, eligibility criteria were expanded to include more acreage eligible under different definitions of "highly erodible" land, and maximum acceptable rental rates were preannounced. A one-time bonus payment for corn acreage enrolled in the CRP was offered in 1987 to encourage participation in the Corn Belt. By the end of 1987, 22 million acres had been enrolled. In 1988, USDA made

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**Table 1. Major Conservation Provisions of the 1985 Food Security Act**

Conservation Reserve Program

Provides annual rental payments to land owners/operators retiring highly erodible and other environmentally critical lands from crop production for ten years. Also provides technical assistance and cost share payments up to 50 percent of the cost establishing a soil conserving cover on the retired land. Rental payments to any person may not exceed $50,000 per year. County enrollment limited to no more than 25 percent of cropland unless a special waiver is given by USDA. Program initiated in 1986.

Highly Erodible Land Provisions

- *Sodbuster*: requires that farmers who convert highly-erodible native range or woodland to crop production must do so under an approved conservation plan to maintain soil erosion at or below the soil loss tolerance level, or forfeit eligibility for USDA program benefits. Program initiated in 1986.
- *Conservation Compliance*: requires that farmers with highly-erodible land begin to implement approved conservation plans on such lands by 1 January 1990 and complete implementation by 1995, or lose eligibility for USDA program benefits.

Swampbuster

- Requires that farmers who convert wetlands to crop production lose eligibility for USDA program benefits unless USDA determines that conversion would have only a minimal effect on wetland hydrology and biology. Program initiated in 1986.

several additional changes. To encourage tree planting on CRP acreage, erodibility requirements were relaxed for enrollees who plant trees. To achieve greater water quality benefits from the CRP, land to be used as filter strip areas between cropland and bodies of surface water was made eligible for the program regardless of the erodibility of such land. To balance regional distribution of CRP land, maximum allowable rental rates were adjusted upward in low participation areas. These periodic changes represent increasing flexibility in the program as it matures towards its 1990 zenith. Additional changes are likely. Following the drought of 1988 and corresponding expectations for high commodity prices, only around 2.5 million acres were successfully bid into the CRP during its seventh sign-up. With about 27–28 million acres now enrolled, serious questions are arising about whether it is possible to meet the 40–45 million acre enrollment goal by 1990.

*Sodbuster and Swampbuster* provisions were also implemented soon after passage of the 1985 FSA. But it is difficult to judge from these programs' national performance the extent to which they have been enforced over the last two years. Since December 1986, eligibility for U.S. Department of Agriculture (USDA) farm program benefits has been forfeited by 105 farmers for converting highly erodible land to crop production without implementing a conservation plan. There are only five instances recorded of farmers having had farm program benefits revoked for converting wetlands to crop production. This low level of activity belies the serious effort now being pursued by farm interest groups to liberalize the definitions of swampbusting and sodbusting.

*Conservation Compliance*, the provision likely to have the broadest impact on the agricultural sector, is in a much earlier stage of implementation. While the general nature of compliance provisions has been advertised to farmers over the last two years, the rules and regulations for its implementation were only recently finalized and preparatory work for the program is still underway. By the summer of 1988, USDA had made determinations of the highly erodible status of close to 100 million acres of cropland, and informed owners and operators. By the end of 1988, USDA hopes to have completed 65 percent of the conservation plans that will need to be in place by 1990 for use as benchmarks to determine whether farmers are in compliance. In the meantime, though, the rules and regulations for compliance are somewhat less precise than originally envisioned by some proponents of compliance. Strict adherence to the soil loss tolerance rate will not be a criterion for conservation plan approval. It will be left to Soil Conservation Service field offices to judge whether plans are economically as well as technically feasible alternatives for meeting compliance.

There are also several programs or provisions that are authorized by the 1985 FSA but have not at this point been implemented. For example, the act authorizes a multi-year setaside program for which no implementation strategy has been developed.

## Old Lessons Retaught

As focus begins to shift towards development of a 1990 farm bill, it is useful to review what has been learned in the course of implementing the present legislation. As a first experience with farm legislation that: (1) incorporates goals unassociated with farmers and food consumers; and (2) relies on differentiating land by its physical characteristics, implementation of the 1985 FSA conservation provisions provides valuable lessons for the success of future environmental quality provisions within a farm bill.

Experience in carrying out the conservation provisions of the 1985 FSA has mostly reaffirmed some time-tested policy principles.

### Actions Speak Louder than Words

Are the conservation provisions of the 1985 FSA proving successful in achieving the goals envisioned by those who originally developed or lobbied for the legislation? Quite possibly, they are. But if they are not, it is due to the significant transformation that takes place as policies evolve from legislation (words) to implementation (action).

The conservation provisions of the 1985 FSA are broad and discretionary. They legislate goals, but are not overly specific with respect

to means. Thus, the performance of the legislated programs depends almost entirely upon the implementation process (Dicks and Grano).

Given only broad guidance and a great deal of discretionary power, it is up to USDA as the implementing institution to determine who may participate in each program, what incentives will be offered for participation, and how participants will be selected. The specific tools applied to define these parameters and the strategy employed to use those tools are what determines the manner and extent to which broadly legislated goals are actually achieved.

There is certainly wisdom in this approach. It places control of the programs in the hands of those who possess the best data and technical knowledge of program parameters. It also assures that flexibility can be built into the programs to adapt to changing social or economic conditions.

But the discretionary approach is also uncertain. It can mean that the actions resulting from implementation do not coincide with some observers' interpretation of the legislation. For example, the charge is currently being leveled that USDA has "taken the teeth out of Conservation Compliance" by leaving determinations of compliance up to the judgment of local officials under vaguely specified guidelines. We have yet to witness whether the guidelines for Conservation Compliance will result in major improvements in the consistency between conservation and commodity programs, but it is clear that the eventual result will have much more to do with the program's implementation than its legislation.

**You Can't Please Everyone**

Another notable characteristic of the 1985 FSA conservation provisions, particularly the CRP, is the multiple-objective nature of the legislation. The CRP alone is to meet five sets of objectives (soil erosion reduction, commodity supply control, farm income maintenance, improved wildlife habitat and improved water quality), according to the legislation. Only limited guidance was given regarding the weights that legislators placed on the various objectives. Thus, it was largely up to the implementors to decide on the objectives' prioritization.

While it is entirely possible to manage a single policy instrument in a manner that maximizes net social welfare, when a program has multiple goals, no single goal is likely to be maximized without trading off performance in achieving another goal or goals. For example, let's look at the CRP in light of the conflicts and complementarities between its erosion reduction and surplus commodity supply control objectives. To a certain extent, these two objectives are complementary. When acreage is enrolled in the CRP, surplus crop production will decline by a percentage of the acreage retirement effect. How-

ever, because there is no correlation between the erodibility and the productivity of land, one cannot target the most highly erodible land for CRP enrollment without giving up some supply control. Similarly, using the CRP to maximize supply control would require significant forfeiture of the program's potential to reduce soil erosion.

The implementors of programs with nonprioritized multiple objectives must either: (1) independently designate the primary objective and target the program to maximize that one goal while relegating others to "second best" criteria; or (2) muddle through by meeting all objectives to some extent while maximizing none. In either case, some interest groups concerned with maximum achievement of particular goals will be unsatisfied.

**No Free Lunch**

One of the original selling points for the conservation provisions was that they would pay for themselves. The CRP, in particular, was estimated to be achievable at no net cost to the federal budget. The theory, quite reasonable at the time it was offered, was that direct budget savings (in the form of deficiency payments foregone by giving up a portion of commodity program base acreage when enrolling in the CRP) and indirect cost savings (through commodity price enhancement brought about by mass acreage retirement via CRP) would more than offset the cost of rental and cost share payments to CRP participants. In addition, Sodbuster and Swampbuster would reduce the amount of program slippage otherwise realized by bringing new land into production, and Conservation Compliance would extend the benefits of acreage reduction beyond the program payment period.

During the first two years of CRP implementation, it did, indeed, look as if the program was proceeding at no net cost. Rental payments were relatively low for acreage initially enrolled and, because commodity prices were low, the value of deficiency payments foregone was high. The latter was, for awhile, offsetting the former.

It is now becoming increasingly apparent that the CRP cannot be fully enrolled at a cost below the Commodity Credit Corporation (CCC) payments it precludes. The first parcels of land enrolled in the CRP were likely those with the lowest reservation price demanded by their owners or operators. The average CRP rental rate has since been creeping upward, reflecting the simple fact that in order to obtain larger quantities of a good, the average price must rise. If we also consider that the land enrolled initially may have lower productivity than the remaining eligible acreage, attempting to enroll not just more but also better quality land implies even steeper rental rate increases will be necessary.

Furthermore, the rate of return to land in production has risen as commodity prices have increased; gradually at first, and then more

suddenly due to drought conditions this summer. As farmers' expectations shift towards increasing future commodity prices, the CRP will seem, even at modestly increased rental rates, an unattractive alternative. Program administrators have acknowledged that "while there is a lot of eligible land potentially available for CRP, the amount of eligible land where CRP offers rates of return of 10 percent or more is much smaller," and "to attract more eligible acres into CRP . . . , additional incentives would be needed" (Hertz, p. 16). In short, rental payments must exceed CCC cost savings or the CRP will fall short of its 40- to 45-million-acre goal.

It is not as if the cost of the CRP has no outstanding benefits associated with it. In fact, the program has had an unprecedented effect in reducing total soil erosion and the offsite damages associated with erosion. It is likely that the offsite, social benefits of the CRP outweigh the program's cost. But those new benefits did not come free of charge.

## Don't Put All Your Eggs in One Basket

One of the more novel features of the 1985 FSA conservation provisions—their consistency with commodity programs—may prove also to be their downfall. The Sodbuster, Swampbuster provision and Conservation Compliance were not just made consistent with other farm programs, they were inextricably linked with them by virtue of the fact that the enormity of the penalty for noncompliance is a function of the attractiveness of the other programs' benefits. This relationship works fine when there are conditions of surplus and low commodity prices, such as there were when the legislation was formulated. But now, with depleted stocks, rising commodity prices, and excellent prospects for high, near-term, market-determined farm income, the tight linkage between programs looks much less desirable.

As commodity program payment levels decline, both for legislated and unpredicted reasons, the penalty for noncompliance with the Sodbuster, Swampbuster provision and Conservation Compliance also diminishes. By tying these programs' incentives to the existence of other farm programs, we have made their success in conserving soil resources a direct function of unrelated programs' benefits.

Of course, even without the direct linkage between programs, land owners' and operators' personal tradeoffs between cultivation and conservation decisions are strongly influenced by prevailing market conditions. A range of factors beyond legislators' and implementors' control, such as drought, interest rates, exchange rates and foreign demand for agricultural goods, can have a greater effect on the success of the conservation provisions than any program-related variable.

## Good Decisions Rely on Good Information

The success of the new conservation approaches described by the 1985 FSA has relied, as well, on timely and reliable information transfer.

Low rates of initial bidding for entry to the CRP and unrealistic bidding during the first CRP sign-up have been attributed to a lack of adequate information by farmers about the program's implementation (Hertz; Ervin). Surveys conducted within the first year of CRP implementation found that many landowners either did not know whether their land was eligible for the program, or had incorrectly assessed their land's eligibility (American Farmland Trust; Esseks and Kraft). As recently as April 1988, more than 13 percent of 1,261 surveyed field representatives of the Soil Conservation Service, Agricultural Stabilization and Conservation Service, and Cooperative Extension Service felt that farmers in their counties inaccurately recognized the existence of "highly erodible land" on their cropland (Soil and Water Conservation Society). About one-fourth of that same group surveyed felt they needed more factual information and educational materials in order to implement the conservation provisions in their counties (Soil and Water Conservation Society).

The more flexibility that is built into a program, the more likely it is that its rules and regulations will be periodically modified to adapt to new conditions or refine program performance. While such flexibility is a desirable trait, it can also lead to problems in information transfer. The need to frequently communicate changes in CRP and Conservation Compliance program direction is a source of frustration to some local program administrators, and the receipt of conflicting information has been identified as one, albeit minor, reason that farmers are not participating in the CRP (Soil and Water Conservation Society).

On the other hand, it has been aptly pointed out that "farmers are astute and quickly learn the government strategy" for implementing flexible programs (Dicks and Grano). Once the game plan is figured out, farmers' own adaptive strategies can lead to paradoxical program results. For example, farmers participating in the CRP or those in compliance with highly erodible land provisions can still cultivate new or existing nonerodible lands in areas or in manners that create worse water quality or wildlife habitat problems than cultivating highly erodible lands. It is possible that commodity price increases attributable to the conservation provisions could encourage such behavior. And, certainly, the programs provide no disincentive for expansion of cultivation on fragile lands by those who do not typically participate in farm programs. Thus, information that feeds back the aggregate, net effects of the conservation provisions also is needed by program implementors. Unfortunately, the lags in provision of aggregate data are often too great to be useful in designing remedial action by program administrators.

## Theory and Practice at Odds

While there is no doubt that the CRP and highly erodible land provisions are proving successful in substantially reducing soil erosion, many have questioned the cost effectiveness of the programs. Taff and Runge suggest that the CRP "is so encumbered with secondary objectives that it costs more and accomplishes less than it should" (Taff and Runge, p. 16). One analysis of CRP first-year performance finds that "net government cost could have been reduced while simultaneously increasing the extent to which erosion and supply control objectives were met" (Reichelderfer and Boggess, p. 1). Ervin explains the problem as "a lack of precision in identifying CRP benefits with enrollment criteria" (Ervin, p. 185). Since there are no criteria that identify the degree of off-site and on-site damages associated with parcels of land eligible for CRP or subject to the highly erodible land provisions, there is no mechanism for assuring that net social benefits are optimized and no guarantee that the benefits even exceed the programs' unit transaction costs.

A proposed solution to this problem, caused by an inherent lack of benefit-cost balancing instruments, is to implement enrollment and compliance procedures that incorporate variation in the character and value of program benefits across units of land (Phipps). Others propose a differentiation of conservation and supply control objectives into separate programs, each targeting land with characteristics that make it most appropriate for accomplishment of independent objectives (Taff and Runge).

Such suggestions for improved efficiency of program performance are laudable and have great merit in theory, but they quickly break down in practice. They presume both that: (1) there is a practical mechanism for characterizing each unit of land's erosion potential and productivity on continuous scales; and (2) associated market and nonmarket benefits of the lands' retirement can easily be measured. Unfortunately, the data required to do this are not available. Their collection, while adding precision to targeting of program benefits, would also add considerably to program costs. As one program administrator puts it: "Even in their current simplified forms, (these) programs are huge vastly complicated undertakings that require multiple volumes of written procedures, months of software development and months of training and implementation for roughly 3,000 county and state offices" (Harte, pp. 41–42). Even modest changes can add to the burden of understaffed local offices. Significant change would likely require new long-term and costly commitments to undertake detailed data collection efforts.

The limitations that data availability places on the precision of the farm program benefit-cost balancing act may be even more apparent as farm legislation continues to directly address conservation and environmental issues.

## Farm Programs: Not Just for Agriculture

With the passage of the 1985 FSA, farm legislation began what is likely to be a swift evolution away from strict focus on farm income and food and fiber costs towards increasing incorporation of environmental quality objectives. The 1985 FSA conservation provisions are a modest forebearer of an inevitable trend fueled by fading farm fundamentalism and increasing concern for water quality and other environmental problems related to agricultural production.

Due to the relative success of the conservation provisions in meeting social goals unrelated to agriculture sector performance, they have formed models for consideration of 1990 farm bill initiatives. Ideas have already informally surfaced from private interest groups and Congressional staffs for inclusion in the 1990 farm bill of such things as: (1) a "chemical compliance" provision modeled after Conservation Compliance but aimed at requiring farm program participants to use specified fertilization and pesticide use practices; (2) conservation easements for the preservation of wetlands; (3) water quality "compliance" with respect to management practices on land near well heads; and (4) expansion of the CRP to include more acreage targeted towards nonerodible but environmentally sensitive areas.

Experience gained in implementing the 1985 FSA conservation provisions offers some constructive guidance to development of a 1990 farm bill. From the preceding review of some lessons in progress, one might draw the following suggestions for current legislators and future implementors.

1. Policy formulators and legislators need to strike a delicate balance between specification of intent and discretion granted the policies' implementors; one that provides flexibility in program development but assures the policies' goals will be met.

2. Policy formulators and legislators need to consider either: (a) designating separate programs for independent policy objectives; or (b) assigning clear priorities to multiple-objective programs, if they are dissatisfied with the degree to which environmental quality goals are being met in current farm legislation.

3. It would be wise for all participants in the upcoming farm policy dialogue to recognize that if farm legislation is to address a new set of policy objectives, along with its standard protection of farm income and food prices, it is not likely to come without additional cost. No matter how complementary the set of policies legislated, if implementing agencies are to shift the area of programs' concerns, it will likely require new resources and administrative expense.

4. New policies and programs need to be designed in anticipation of shifting social and economic conditions; not tied to the short-term conditions existing at the time of policy formulation.

5. Local knowledge and information transfer will be especially critical to the successful incorporation of additional environmental quality goals into farm legislation, since site-specificity is likely to be an important factor in program implementation.

6. Assuring that new programs with environmental quality objectives are cost effective will require a great deal more data and information than is currently available to relate agricultural production to environmental quality and to place values on agricultural externalities.

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