Green Payments as Foreshadowed by EQIP Dr. Sandra S. Batie,¹ Michigan State University

The Environmental Quality Incentives Program ²/₂ is the most current of a long list of conservation programs stretching back to the 1930s. Under the auspices of the 1996 Farm Bill, EQIP replaced several older programs: The Agricultural Conservation Program, the Water Quality Incentives Program, the Great Plains Conservation Program and the Colorado River Basin Salinity Control Program. The ACP program had been the program that allocated USDA cost sharing funds at the county level for soil erosion control, water quality protection practices and forestry management. It was administered by the Agricultural Stabilization and Conservation Service, now referred to as the Farm Service Agency. The ACP has been criticized for its high costs, inflexibility and "top–down" nature, as well as for not being targeted to achieve environmental outcomes. EQIP was, at least in part, a response to these criticisms. It is designed to be cost–effective, locally–driven and targeted to agro–environmental problems.

In one sense, EQIP follows a long tradition. The Soil Conservation and Domestic Allotment Act of 1936 provided for payments to farmers for "soil building" and "soil conserving" practices and paid farmers to shift lands away from "soil-depleting" to "soil-conserving" crops (Batie, 1985). However, in another sense, EQIP is a new generation of conservation programs which are designed to be more flexible and better targeted to environmental issues; EQIP can even be thought of as a "pilot" green payments program. That is, EQIP is a green payments program designed to pay farmers to "produce" environmental outcomes.

EQIP as a Traditional Program

First, consider EQIP as a traditional conservation program. Conservation programs have always been designed to add to farmer income; indeed, the original 1936 act was a constitutional way to support farm income and provide supply control — because "soil-depleting" crops were defined to be those crops in surplus (Batie, 1985). The political objective of farm income support has been embedded within all conservation programs since 1936 (Batie and Kramer, 1985).

However, starting with the 1985 Farm Bill and its conservation programs of the Conservation Reserve Program, Swampbuster and Sodbuster, farm income support program objectives have increasingly, but begrudgingly, given ground to environmental protection objectives (Batie, Shabman, and Kramer, 1986; Kramer and Batie, 1985).³ Not only were environmental programs added, traditional commodity programs were remodeled to require "cross compliance," that is, farmers had to show evidence of "good conservation behavior" before having access to other program benefits (Kramer and Batie, 1985).

The Conservation Reserve Program is an example of the evolutionary changes that occurred. CRP has served the twin goals of farm income support and environmental protection since 1985, but has, over time, been fine-tuned to better meet environmental targets. Initially focused on soil erosion, it changed with the 1990 Farm Bill to give more consideration to water quality concerns. An Environmental Benefits Index was used to prioritize contract offers (Batie, Schulz and Schweikhardt, 1997). Most recently, farmers can add parts of fields into the Conservation Reserve Program as buffer or filter strips rather than whole fields, gaining more environmental protection for each CRP dollar spent (Batie, Schulz, and Schweikhardt, 1997).

It is not difficult, therefore, to perceive EQIP as the next step in the tradition of adding programs and program elements to better protect the environment. Indeed, EQIP, by not requiring land retirement to obtain program benefits, complements the CRP program which does require such retirement.

EQIP as a New Generation Program

There is another way to view EQIP — not as a traditional conservation program, but as a new generation program that reflects the needs of the new global economy. Thus, we find that, historically, farm income support goals have been tempered not only by environmental objectives but also by budgetary constraints, by loss of rural political power, and by the need to maintain global

competitiveness. As Potter (1998) notes with reference to both the United States and European agricultural policy reform:

The budgetary crises of the mid–1980s were absolutely critical in changing the dynamic of the debate about agricultural policy reform. Without this spark, it is unlikely that the greening of farm policy would have ignited when it did (though agri–environmental policies would have emerged eventually) (p. 128).

It is the policy objective of global competitiveness that promises to make EQIP standout as something other than the next step in a long tradition of conservation programs. In pursuit of global markets, the United States had pledged itself in trade agreements — particularly the General Agreement on Tariffs and Trade — to liberalize trade and to remove subsidies to farmers that are coupled to farm production. This liberalization trend was one of the motivations for the decoupling of the farm program payments from production that occurred in the 1996 Farm Bill. Participating farmers now receive farm income payments as direct payments, but these payments are not tied to the quantity of program crop they produce. Such direct payments are "GATT–legal."⁴

When direct payments are substituted for commodity program payments however, they are readily perceived as welfare payments — transferring money from taxpayers to farmers. Neither farmers nor taxpayers are overly fond of such direct payments, and one might expect increasing political pressures to justify why the farm sector should continue to receive public support (Potter, 1998). Paying farmers to produce desired environmental outcomes is far more politically palatable and defendable. As Potter (1998) noted with respect to agricultural policy reform:

The effect, arguably, was to make national policy makers much more receptive to the dispositions of environmentalists... Far from challenging their traditional policy entitlements, arguments in favour of an expanded system of green payments offered the farm lobby a means of defence, provided agri–environmental reform could be presented as requiring a redirection rather than a net withdrawal of farm support (p. 128).

Furthermore, such subsidies — or green payments — to farmers to maintain environmental amenities or to reduce agro–environmental problems are also "GATT–legal."

Thus, EQIP, which is a decoupled payment for environmental protection, can be considered the first green program of any significant magnitude in the United States that is not a land retirement program.⁵ Since EQIP can be viewed as our first serious green payment program, it is particularly worthy of careful analysis. At some future date, it may be that both U.S. environmentalists and producers will be searching for just such a well–designed green payment program. Presumably in a free trade world, producers will see an advantage to additional public payments — even if they are supporting environmental outcomes rather than commodity production. Environmentalists may turn to green payment programs as a politically acceptable method of achieving agro–environmental objectives.

Some questions that appear to be policy-relevant with respect to green payment programs are:

- 1. To what extent could (or should) green payments substitute for traditional commodity payments?
- 2. To what extent does EQIP reflect the characteristics of a well-designed GATT-legal green payment program?

Green Payments vs. Commodity Payments

The answer to the first question, "To what extent could (or should) green payments substitute for traditional commodity payments?" requires some assumptions as to objectives.

If the agro–environmental objectives of public policy are to improve those agro–environmental outcomes that are mostly related to water quality or which are closest to large populations, then there is a "disconnect" between green payment programs and traditional farm income support programs. In general, the geographic areas in the United States which have the greater agro–environmental problems as measured by a composite environmental index⁶ which tends to emphasize water quality

concerns, do not correspond well to the historical distribution of government support payments (Lynch and Smith, 1994). Much of the historic farm program payments were concentrated in the Great Plains and the wheat growing areas of eastern Washington and Oregon. However, most of the agro–environmental problems as defined by the index, are concentrated in the water–rich eastern part of the United States.⁷ Overlap between traditional commodity program payments is limited and is concentrated mostly on acreage near the Mississippi River (Lynch and Smith, 1994). A conclusion stands out from these comparisons: Green Payment Programs, if targeted at water–related agro–environmental problems, will not substitute well for traditional income support payments.⁸

On the other hand, if the agro–environmental objectives of concern are wind–blown dust and prairie land habitat, there is a better match between traditional and green payments. Wind–blown dust problems are found in the northern and southern plains; the same areas also have received high total farm program payments. Similar conclusions apply to the grassland bird habitat associated with the Great Plains and Mississippi Watershed (National Audubon Society, 1995).

Of course, there is little reason to assume that green program payments should replace income support payments, nor any reason to believe the public would demand such replacement. There is every reason, however, to believe that there will be political rent–seeking forces from affected farm interests to preserve previous income entitlements. Also, agencies can improve their political environment and assure their survival by spreading payments to many rather than target payments to a few (Skees, 1994). One way to restore income protection is to redistribute green payments toward the geographic patterns associated with traditional commodity program payments (Potter, 1998), but such a redistribution comes at the cost of reducing the cost–effectiveness of tax dollars spent for water–related environmental protection.

However, using green payments in lieu of traditional income support payments is difficult for at least three reasons. First, national level data is now available to identify when and where such a redistribution of green program payments would reduce overall environmental protection. If little environmental protection was the perceived outcome of a redistribution, environmental interest groups would predictably direct the general public's attention to this outcome. Indeed, if a significant redistribution of green payments to achieve income support goals occurs at the cost of neglecting important agro–environmental problems, the political acceptability of such subsidies will most likely evaporate, probably to be replaced with demands for regulation of farms to meet environmental goals.

Second, redirecting green payments to be income support payments appears to violate the GATT agreement which requires that green payments be part of clearly defined government environmental programs, have no or minimal trade distorting effects, and be limited to subsidizing the added cost or lost income from the practice adopted or technology shift accomplished (Potter, 1998). And, while the United States is currently in compliance with the GATT agreement, increased income support "disguised" as green support payments could, if large enough, result in exceeding the GATT guidelines for such support payments.

And, third, such redirection could put a strain on federal budgets, since targeting programs to carefully selected environmental problems should be more cost–effective and less expensive than broadly distributing payments in lieu of traditional income support payments.

Thus, assuming that the agro–environmental problems of most interest are those captured in an water–related environmental benefit index, the answer to the question of whether green payments could substitute for commodity program payments appears to be: "not well." Furthermore, this discussion suggests that as the fledgling EQIP program develops, we can expect to see it caught in a swirling set of political forces ... some pulling it to duplicate the old commodity program payment distributions, some to target certain agro–environmental problems, some to target other agro–environmental problems, some to target certain types or sizes of farms, some to spend money, and some to save money. Also, there is, and will continue to be, conflict as to who should be administering the program –– Farm Service Agency, Natural Resources Conservation Service, extension or consultants.

EQIP as a Green Payment Program

EQIP, as currently designed, is not intended to replace traditional commodity program payments, but

rather is an environmental protection program. Thus, the second question of "To what extent does EQIP reflect the desired characteristics of a 'GATT–legal' green program payment?" is appropriate. A recent Organization for Economic Co–operation and Development publication (OECD, 1997) listed three such characteristics: targeted, tailored and transparent. That is, as a green payment program having improved environmental outcomes as its ultimate goal, ideally one would want EQIP to be focused in a cost–effective way on achieving important agro–environmental outcomes (i.e., be targeted); to be designed to create effective positive incentives for landowners to take actions that will create these outcomes (i.e., be tailored); and to have accountability⁹ (i.e., be transparent).

The EQIP legislation, as written by Congress, encompasses most of these objectives. The general goal of EQIP is to "reconcile productivity and profitability with protection and enhancement of the environment" (16 USCA 3830(2)(B)(ii)(West Supp. 1998)) and "to maximize the benefits per [program] dollar expended" (16 USCA 3830(c)(3)(B)(West Supp. 1998)). There are multiple ways to read such legislation, but one way, arguably the most accurate way — is certainly consistent with a well–designed, targeted, tailored, transparent green payment program.

Assuming that a well-designed green program was the legislative intent there is, nevertheless, a long road from legislative intent to successful implementation. The political forces to pursue objectives other than environmental improvement; rent-seeking by various private and agency interests; lack of science-based data; administrative problems of communication and coordination; lack of resources; agency and farmer inertia; and program complexity can all interact and result in inadequate incentives for EQIP to reach its purported goal. While EQIP is a young, emerging program, preliminary evidence suggests that numerous implementation hurdles remain.

The analysis that follows examines these hurdles, mostly in the context of the Michigan EQIP program. It is my opinion that, in Michigan, most agency personnel in charge of implementing the program are seriously endeavoring to do an excellent job, faithful to the administrative intent of the law. Yet the hurdles associated with targeting, tailoring and achieving transparency are high. Should the United States design and implement larger and more comprehensive green payment programs, understanding the nature of these hurdles and Michigan's responses to them foreshadows potential future problems.

Targeting --- The Devil is in the Details

The first criterion of a well-designed program is targeting. Here the issue is whether those farmers who receive EQIP funds are farming the land which is significantly contributing to priority agro-environmental problems. While the EQIP legislation laid out general principles, the rule making for EQIP implementation added the details that are crucial in determining the actual impact of EQIP. Implementation details, such as the allocation formula, the short time for implementation, pressures to spend the funds, agency inertia and interagency coordination, all have made targeting difficult.

The Allocation Formula. While the general legislation allocated funds for the program, the rule–making process developed the allocation formula that determined how much each state would receive in EQIP funds. It was also a means to deliver the message that EQIP was different than ACP.

The development of the allocation formula however, was constrained by the requirement that half of EQIP funds must go to livestock concerns, that no less than 65 percent of the funds in any state could be allocated to priority areas, that tribal areas would have higher priority and that limits were set on the dollars per participant. Such constraints are typical of those imposed by Congress interested in spreading benefits more evenly across congressional districts (Wu and Boggess, 1998).

The formula was designed around an environmental benefit index oriented to water quality problems, so that states with significant water quality agro–environmental problems would get the larger share of the funds. However, strictly following the formula would have meant massive redistribution of funds away from those states with historically high ACP payments toward those states that had historically received much smaller funding amounts. Thus, the allocation application was altered so that states would not be overwhelmed by large non–incremental changes from historic funding and agency staffing levels. The reason behind this rule–making may have been fear of inadequate institutional capacity at the state and local level (Doering, 1998). Large (small) influxes of funds into states with small (large) programs and agency staff might be problematic. Another possible reason

may have been political, that is, massive redistributions of funds may have been politically unacceptable.

Once the formula allocations were altered so as to make the program less of a radical change from previous programs, future allocations of a more radical nature were compromised, due to the existence of new multi–year contractual obligations. That is, during EQIP's first year, many multi–year contracts were signed, creating a continued obligation for funds into states regardless of their re–ranking on the allocation formula in future years.

Speed of Implementation. Also, in the first year, the speed of implementation was, from the states' point of view, quite challenging. EQIP was law on April 4, 1996, but the implementation rules were not available to the states until May 22, 1997, due to numerous design delays and disagreements between USDA and the Office of Management and Budget. Yet EQIP started in fiscal year 1996. States had little time to understand the program, to personalize the program to their state, to gain final acceptance from headquarters, and to implement the program.

In most states, there was also no time to have a truly locally–driven process, at least in the first year (FY 1997). The implementation rules contain a process whereby local conservation districts convene local work groups to propose Conservation Priority Areas. For the first year in Michigan, CPA's were largely identified and designed from the state NRCS staff level since the late publication of the rules did not allow sufficient time for local conservation districts to take the necessary action. In addition, there was inadequate time to let farmers know of the program and encourage their participation — a task made even more difficult by the complexity of the program.

Also, there were challenges associated with changing agency roles and identities. In particular, NRCS became the lead agency usurping the role previously held by FSA. The change of roles lead to some frictions that were confounded by the requirement that FSA was responsible for disbursing the funds. The need for concurrence of FSA to spend money, in many cases, slowed the process and increased tensions. In addition, new agency roles and identities led to some confusion for the farm community as to which agency was truly in charge.

Pressure to Spend Funds. There was significant pressure to be certain that the EQIP funds were spent, since EQIP is a multi–year program and failure to spend funds can be interpreted as reason to reduce future years' funding. Also, any EQIP funds in any year not allocated by September 30th are no longer available.

This pressure to allocate all the funds available is typical of all agencies with grant–giving responsibilities. As Pressman and Wildavsky (1973) note in general:

Whether it has a lot to give or just a little, the granting organization must get rid of what it has. It is a mover of money. Its task is to remove a certain amount of money from its coffers in the time period allotted. ... An important internal goal for any organization is the rationalization of its work schedule. It must secure for itself a stable flow of business so that it can allocate its time and resources (p. 137).

As Libby (1998) has noted, these pressures and constraints assure that the objective of obtaining the "maximum benefits per program dollar spent" will be compromised.

Agency Inertia. The difficulties of timing and funding constraints provided an additional motivation for states — particularly those already so inclined — to make the new EQIP look like the old ACP. Limiting change meant limiting the transaction costs as well as political fallout from non–incremental changes. Although the NRCS headquarters refused to accept state programs that were "business–as–usual," the inertia in the program implementation was none–the–less quite real. It is a yet–to–be–resolved empirical question as to whether the distribution of historical ACP payments are significantly different from the new EQIP payments, but the political and pragmatic pressures remain for broadly defining EQIP eligibility.

Targeting --- It's Not Easy to be Green

Additional targeting difficulties stemmed from the complexity of the program design, the

locally-driven process and information gaps.

Program Complexity. There are also targeting difficulties posed by the complexity of the EQIP program (Batie, Schulz and Schweikhardt, 1998). In Michigan, for example, implementation of EQIP is guided, in large part, by the State Technical Committee which reviews proposals for identifying and funding priority areas addressing environmental problems, and it makes recommendations to the NRCS State Conservationist as to which proposals should be approved. Several criteria are used to select the priority areas: the significance of the agro–environmental problems, expected producer participation, estimated program cost, and whether other financial and technical assistance is available. If a proposal is selected, a Conservation Priority Area is created. Currently, Michigan has 14 of these CPA's.

However, farmers who have significant problems, but are not in the priority areas are also eligible for funds. Funds are available for Statewide Priority Resource Concerns. Michigan currently has six priority resource concerns listed — such as riparian corridor management systems, groundwater resource protection systems or animal production management systems. In Michigan, in 1997, 25 percent of the 206 EQIP contracts and 30 percent of the EQIP funds were in SPRC (Batie, Schulz and Schweikhardt, 1998).

The complexity of determining eligibility for EQIP from a farmer viewpoint is reflected in Figure 1, where a farmer must determine whether he or she is in a CPA or eligible for SPRC funds, or ineligible. In a water abundant state like Michigan, EQIP contracts in CPAs and in SPRCs are probably assisting farmers to pursue worthwhile environmental goals. However, the dual targeting of both regions and problems, underlain with imperfect local data on environmental problems, would appear to leave few Michigan farmers ineligible for EQIP funds.

Figure 1

Is farm located in a designated Michigan CPA?	Yes	
-----------------------------------------------	-----	--

The program's complexity also posed hurdles for state program design. For example, in Michigan, the required offer index (bidding competition) was omitted. The State Technical Committee and NRCS in Michigan were concerned that the proposed competitive bidding by farmers — essentially indicating what the farmer would pay above the minimum required to protect the environment — would lead to bidding competition with contracts being awarded to more wealthy farmers at the expense of poorer ones. The Michigan State Technical Committee and NRCS saw no obvious way of addressing these issues, and ultimately omitted the offer index from the Michigan program. The Michigan program was approved by NRCS headquarters without the offer index.

Locally–driven Process. In Michigan, as with many states, the local conservation districts play a crucial role in the successful functioning of EQIP, because EQIP is based on locally determined conservation needs. Local conservation districts have the responsibility to establish local work groups to determine the most significant natural resource needs of the community. The local work group then quantifies the natural resource needs and obtains funding to resolve the environmental problems. One source of funding is the identification of a Conservation Priority Area eligible for EQIP funds.

There are targeting difficulties built–in to this locally–driven process where local work groups convened by local conservation districts¹⁰/₋ determine top priority environmental needs (generally county–based). While the State Technical Committee is a filter to assure a state–level priority perspective is adhered to, they still must respond to the proposals of local work groups. There is little guarantee that responding to local priorities will translate into the targets that would have been identified by a broader state–level or regional–level identification process.

Too often local conservation districts lack the institutional capacity and resources to get the job done. Indeed, in many situations, they may not even "buy into" the vision of EQIP as a green payment program. In Michigan, the local districts are directed by an unpaid elected board who can easily view EQIP as an "unfunded mandate," rather than an opportunity to achieve local conservation and environmental goals. Also, in Michigan, the CPA's are re–examined yearly. In Michigan in 1997 and 1998, the same CPAs were selected but three new ones were added in 1998. While the transaction costs of yearly adjustments may be high, yearly adjustments can allow for fine–tuning the program to achieve more environmental improvement. However, adding CPAs or changing boundaries also translates into more farmers having access to EQIP funds and multi–year contracts, and brings into question whether the EQIP program is adequately targeted to true priority agro–environmental problems.

Information Gaps. Because the science that links farming practices with environmental outcomes is fragmentary and incomplete, targeting is not based on actual environmental monitoring and improvements. Rather, farmers are paid for certain management and conservation practices such as vegetative barriers, grade stabilization structures, conservation cropping rotations, pest management and the like that are designed to minimize delivery of identified pollutants and that are assumed therefore to relate to environmental outcomes. It will take much more research to determine if this type of targeting is effective at maximizing the economic returns to pollution reduction.

Also, because of information gaps, it is difficult to assure that the funds only go to practices that "would not otherwise be initiated without government assistance as required by GATT." Still, many would argue that EQIP is "greener" than a program based on the bushels produced of an agricultural commodity or the previous ACP program. Whether one thinks EQIP is a targeted green payment program may depend on what alternative program is used for comparison.

Tailoring -- Pushing on a Kite

The second criterion of interest in a green payment program is "tailoring." Here the issue is whether the technical assistance advice and choice of practices funded by EQIP is tailored to the farmers' needs to assure the desired environmental outcome. The Farm Service Agency determines which farmers are eligible to apply for EQIP funds, but the NRCS is responsible for approval of all conservation plans, including those prepared by non–NRCS conservation consultants. In Michigan, applications are ranked according to ranking criteria specific to environmental problems relative to other applications. Applications are reviewed, with the highest ranking selected and recommended for approval for an EQIP contract. The Farm Service Agency County Committee has the authority to give final approval for an EQIP contract. Unsuccessful applications are deferred and remain on the ranking register until they are approved, until their application is withdrawn, or until the available funds are depleted at the end of the fiscal year (Batie, Schulz and Schweikhardt, 1998).

One difference between EQIP's and ACP's application process is the new role of NRCS in ranking applications relative to their potential impact on environmental problems. However, like ACP, EQIP has few mechanisms and minimal budget to reach those farmers who should be adopting environmentally protecting practices if environmental goals are to be achieved. Rather, the NRCS and FSA primarily react to the farmers who identify themselves and apply for funds.

There is definitive research to suggest that the approach of taking applications from whoever walks in the agency door will miss many farmers whose farms are important contributors to local agro–environmental problems (Batie, 1994). Farmers may not know that EQIP exists, they may believe themselves ineligible, they may believe they do not have an agro–environmental problem associated with their farm, they may wish to avoid the costs of meeting the eligibility criteria, they may not want to be judged by the local FSA County Committee, they may not believe the preventive actions embedded in EQIP are worth the funds, or they may not participate for many other reasons (OTA, 1990).

While EQIP education assistance funds were used to inform a broad range of farmers about the program, EQIP is not well-designed nor funded to adequately address the need for active outreach to priority farmers. EQIP did not fully fund overhead for technical assistance, forcing the NRCS to do "more with less." Some states' NRCS may be able to steal from other budgets and adequately handle the applications that are approved, or get more assistance from the extension service, but a more proactive stance is probably asking more than most NRCS offices can deliver by themselves.

Even the existing procedure does not suggest much selectivity. Monthly selections of the top of the ranking register of applications raises the possibility that if an applicant waits long enough, his or her application will be selected. From an agency point of view, however, it makes sense to keep selecting

applicants on the basis of the best first until all the money is allocated.

Tailoring --- Whose Job is This Anyway?

EQIP has the potential to meet new environmental objectives, in part because it encouraged new roles and new partners. But change can be met with inertia and dissipate energies. FSA administered ACP, but now the administration of EQIP is headquartered with the NRCS – a reallocation of responsibilities that was quite contentious. And, for some, the new roles are difficult. One NRCS official, for example, referred with discomfort to the new NRCS role of administering the ranking criteria and managing land eligibility: "We are a state technical assistance agency, not a lottery."

It is also a challenge for an agency such as NRCS with its long history of conserving soil and protecting the environment throughout the nation to implement, evaluate and enforce a targeted environmental program such as EQIP. It is even more challenging to do so in a time of downsizing and limited resources. EQIP is not the only program for which NRCS and FSA are responsible. They must allocate their time and staff across many competing obligations.

There are also relatively new partnership roles with EQIP — such as the addition of environmental NGO (Non–Governmental Organization) representatives to the State Technical Committee. New roles and new partners mean higher transaction costs and more need for coordination. But telling agencies and NGO's to cooperate does not provide them a road map with how to get the job done. And many of these partners — FSA, NRCS, extension and environmental NGO's — have a long history of conflict, at least at the federal level, making coordination both difficult and problematic. It may well be that building coordination of this nature into EQIP could just as easily translate into the building of antagonistic administrative relationships. The truth of this statement will no doubt differ in different states and localities, but is a real possibility none–the–less.

While new roles and partnerships are both laudable and necessary, EQIP provides little guidance or resources to lower the transaction costs, to improve institutional capacities, or to defuse past animosities. If these constraints are large, fine-tuned tailoring is problematic at best.

Transparency -- Which Direction is Forward?

The final of the three criterion — of targeted, tailored and transparent — for a well-designed green program payment is most difficult. How does one evaluate and hold accountable a program such as EQIP? Ideally, the measure should be improved environmental outcomes, but, with rare exception, there is little or no baseline data nor monitoring from which to begin an evaluation. The science that links farming practices to water and air quality outcomes is fragmentary. Often long time lags occur between the changes on the farm and environmental improvements. Or environmental improvements are swamped by increased pollution from non–farm sources. In most states, there are no performance standards to act as quantified environmental quality objectives.

So, given the above, should EQIP's success be measured by the numbers of farmers who have successful applications, the smooth functioning of the EQIP process, the number and types of practices applied, the number of Conservation Priority Areas, the number of acres receiving EQIP funds, the number of dollars allocated, the number of farmers who are aware of the program, state EQIP budget growth overtime, or some other criteria? Perhaps the measure of success should be based on correlations of the distribution of EQIP funds with the traditional distribution of ACP funds or with known environmental problems? Until such time that performance standards and monitoring become more commonplace, true accountability of the program in the broadest sense will be elusive.

Actual vs. Ideal -- An Unfair Comparison

EQIP is far short of perfect marks on the green program criteria of targeting, tailoring and transparency. This statement is true even in a state such as Michigan where considerable effort has been put forth in good faith by agency personnel to get the program "on the ground" and to make a difference. But as I warn my classes, it is unfair to compare actual programs with ideal criteria. In a fair comparison, an analyst should only compare actual (ideal) program functioning with other actual (ideal) alternatives. We should not be surprised, given what we know about political economy and the history of agricultural, conservation and environmental programs that a new concept program such as EQIP has some flaws. Nor should we be surprised that EQIP implementation is somewhat divorced from policy intentions. Indeed, as Pressman and Wildavsky conclude:

Our normal expectation should be that new programs will fail to get off the ground and that, at best, they will take considerable time to get started. The cards in this world are stacked against things happening as so much effort is required to make them move. The remarkable thing is that new programs work at all (p. 109).

EQIP has "good intentions" to be a green payment program embedded in policy, but, to-date, the implementation process appears to have left a gap between promise and program performance. The reasons are, however, predictable and understandable. And, the program is still very young and evolving. Many participants are just beginning to understand EQIP's intent as part of a larger context. It may be way to early to judge its success. To quote Pressman and Wildavsky again:

If we thought from the beginning that they [the programs] were unlikely to be successful, their failure to achieve state goals or to work at all would not cry out for any special explanation. If we believed that intense conflicts of interests were involved, if people who had to cooperate were expected to be at loggerheads, if necessary resources were far beyond those available, we might wonder rather more why the programs were attempted instead of expressing amazement at their shortcomings (p. 87).

The Future of Green Program Payments

Still, the future of green program payments appears to be quite important. If nations continue toward more trade liberalization, green program payments may be one of only a few politically acceptable, politically stable, "GATT–legal" forms of government support for agriculture (Potter, p. 162). When this farm bill ends in 2002, there will be considerable debate on the next steps. Environmentalists and conservationists should be prepared with good arguments to obtain a share of those funds "to reconcile farming profitability with enhancement of the environment."

Furthermore, and significantly, the demand for improved agro–environmental performance appears to be accelerating. It may well be that unless such improvement is forthcoming, regulations will be imposed on agriculture to meet new environmental standards. Green payments could be used to mute those demands by achieving improvements voluntarily, or to offset the costs of meeting new regulations.

However, the gap between the promise of a green payment program such as EQIP and the performance of the program will need to close for these events to occur. If EQIP, despite good intentions, fails to improve environmental outcomes, then it can neither mute demands for regulation nor offset regulatory costs. EQIP needs to be further refined to be better targeted, tailored and transparent if it is to meet its potential as a green payment program.

Furthermore, the program is presently quite modestly funded at \$200 million per year as compared to historic income support payments of \$7 billion to \$12 billion per year. If it is truly to make an impact on either farm income or environmental goals, EQIP must also be better funded. Until such time that better funding and improved implementation is a reality EQIP can, in reality, be considered only a fledgling "pilot program" of a possible new generation of environmental programs.

References

Batie, Sandra S. 1985 (April). "Soil Conservation in the 1980s: A Historical Perspective." *Agricultural History* 59(2): 107–123.

Batie, Sandra S. 1994 (December). "Designing a Successful Voluntary Green Support Program: What Do We Know?" pp. 74–94. In Sarah Lynch (ed.). *Designing Green Support Programs, Policy Studies Program Report #4*. Greenbelt, MD: Henry A. Wallace Institute.

Batie, Sandra S. 1997. "Environmental Benefits of Agriculture: Non–European OECD Countries," pp. 81–102. In *Environmental Benefits from Agriculture: Issues and Policies*. The Helsinki Seminar. Paris, France: OECD.

Batie, Sandra S., Leonard A. Shabman, and Randall A. Kramer. 1986. "U.S. Agricultural and Natural Resource Policy," pp. 132–138. In C. Ford Runge, ed., *The Future of the North American Granary: Politics, Economics and Resource Constraints in American Agriculture*. Ames, IA: Iowa State University Press.

Batie, Sandra S., Mary A. Schulz, and David B. Schweikhardt. 1997 (March). <u>"A Continuation of Environmental Conservation Policy: The Conservation Reserve Program." Staff Paper 97–16.</u> East Lansing, Michigan: Department of Agricultural Economics, Michigan State University. [Note: You will need the Adobe Acrobat Reader to view this document.]

Batie, Sandra S., Mary A. Schulz, and David B. Schweikhardt. 1998. <u>"The Environmental Quality</u> <u>Incentives Program: Locally Managing Resources." Staff Paper 98–03.</u> East Lansing, Michigan: Department of Agricultural Economics, Michigan State University. [Note: You will need the Adobe Acrobat Reader to view this document.]

Doering, Otto C. 1998. "Balancing Productivity and Environmental Benefits in the Environment Quality Incentive Program (EQIP)." Organized Symposium Presentation at the American Agricultural Economics Association Meeting, Salt Lake City, Utah.

Ervin, David E. 1997. Agriculture, Trade, and the Environment. OCDE/GD(97). Paris: Organization for Economic Cooperation and Development.

Food Security Act of 1985. 16 USCA 3830(2)(B)(ii)(West Supp. 1998).

Food Security Act of 1985. 16 USCA 3830(c)(3)(B)(West Supp. 1998).

Heimlich, Ralph. 1994 (December). "Targeting Green Support Payments: The Geographic Interface Between Agriculture and the Environment," pp. 11–54. In Sarah Lynch (ed.). Designing Green Support Programs, Policy Studies Program Report #4. Greenbelt, MD: Henry A. Wallace Institute.

Kramer, Randall A. and Sandra S. Batie. 1985 (April). "Cross-compliance Concepts in Agricultural Programs: The New Deal to the Present." *Agricultural History* 59(2): 307–319.

Libby, Lawrence W. 1998 (December). "Implementing Good Intentions: How Rules and Procedures May Alter Resource Policy Outcomes" pp. 136–149. In *Increasing Understanding of Public Problems and Policies*, 1997. Oak Brook: Illinois: Farm Foundation.

Lynch, Sarah and Katherine R. Smith. 1994. "Lean–Mean and Green...Designing Farm Support Programs in a New Era." Policy Studies Report #3. Greenbelt, MD: Henry A. Wallace Institute.

National Audubon Society. (Feb.) 1995. "Investing in Wildlife: Multiple Benefits for Agriculture and the American People." Washington, D.C.: National Audubon Society.

Organization for Economic Cooperation and Development (OECD). 1997. Environmental Benefits from Agriculture: Issues and Policies. The Helsinki Seminar. Paris, France, OECD.

Potter, Clive. 1998. Against the Grain: Agri–environmental Reform in the United States and the European Union. New York: CAB International.

Pressman, Jeffrey L. and Aaron B. Wildavsky. 1973. Implementation. Berkeley, CA: University of California Press.

Skees, Jerry. 1994 (December). "Implementation Issues for Alternative Green Support Programs" pp. 95–109. In Sarah Lynch (ed.). Designing Green Support Programs, Policy Studies Program Report #4. Greenbelt, MD: Henry A. Wallace Institute.

U.S. Congress. Office of Technology Assessment. 1990 (November). Beneath the Bottom Line: Agricultural Approaches to Reduce Agrichemical Contamination of Groundwater. OTA–F–418. Washington, D.C.: U.S. Government Printing Office.

Wu, June Jie and William Boggess. 1998. "The Optimal Allocation of Conservation Funds." Corvallis, Oregon: Department of Agricultural and Resource Economics, Oregon State University. (Draft).

Footnotes

¹Sandra S. Batie is the Elton R. Smith Professor in Food and Agricultural Policy in the Department of Agricultural Economics at Michigan State University (<u>batie@pilot.msu.edu</u>). This paper was prepared for the American Farmland Trust Conference, July 23–24, 1998, Sycamore, Illinois. (Helpful review comments from Steve Davis, Otto Doering, Larry Libby and Mary Schulz are acknowledged with thanks.) (<u>Back to Text</u>)

²EQIP has an authorized budget of \$1.3 billion over the seven year period ending in 2002, with annual amounts of \$200 million per year and the lead agency is the Natural Resources Conservation Service. EQIP provides technical, financial and educational assistance to farmers and ranchers to prevent and control nonpoint pollution; one–half of the funds are directed toward livestock production and the remainder to more general agricultural priorities. (Back to Text)

³This period of immense transition in conservation programs — as they began the difficult swing to more environmental objectives — can actually be dated from the 1970s. Starting in the 1970s, information on agro–environmental problems became more readily available, thanks, in part, to the rise of environmentalism and USDA's response to environmentalist's demands. The National Resource Inventory is one example of a new information base that was so persuasive that it swayed policymakers to move in new directions. Of course, such use of this information required excellent policy entrepreneurs. (See Porter 1998 for a good review of much of this period.) (Back to Text)

⁴Even coupled payments would be "GATT–legal" at this time because the United States has already reduced coupled payments below those required by the GATT. However, it is realistic to assume that there will be, in time, trade agreement pressures to reduce coupled payments to farmers to zero. If that occurred, countries wishing to subsidize farmers would need to use direct payments to be "GATT–legal." (Back to Text)

⁵ Many environmentalists appeared to recognize this significance of EQIP as the first green program when they so fiercely debated the size of the livestock operations that would be eligible for EQIP. Many did not want to set the precedent that green payments would go to the larger scale, industrial operations. (Back to Text)

⁶The composite environmental index was comprised of 11 factors — potential soil productivity loss, sediment production, air quality, pesticide exposure, wildlife habitat improvement, nitrogen runoff, nitrate leaching, filter strips, pesticide leaching, flood–peak reduction and endangered species habitat (Heimlich, 1994). (Back to Text)

⁷In addition to Lynch and Smith (1994), see the NRCS site maps of the location of various agro–environmental problems (based on 1992 Natural Resource Inventory data) at <u>http://www.nhq.nrcs.usda.gov/land/index/intro.html</u>. (Back to Text)

⁸See Ervin 1997 and Batie 1997 for a discussion of how agro–environmental problems will not be resolved by agricultural policy reform by itself. (<u>Back to Text</u>)

⁹Accountability includes assuring that programs are transparent in their objectives and operation, evaluated as to their environmental outcomes, and monitored to assure compliance (OECD, 1997). (<u>Back to Text</u>)

¹⁰Conservation districts are the most obvious way from the standpoint of "capacity" to get a "locally–led" process (it was also the method intended by the legislation.) Michigan, unlike states such as Maryland or Virginia, has only farmers on its boards. These farmer–comprised boards will most likely reflect a prioritization of problems based on producer perceptions more than, say, those of recreationalists or other water users. But right now conservation districts appear to be the only existing locally–driven institutions for program implementation. (<u>Back to Text</u>) Views expressed are those of the author(s) and not necessarily those of the American Farmland Trust.

CAE/WP98–8 You may purchase a print copy of this paper by contacting Teresa Bullock, Phone: (815) 753–9347, E–Mail: <u>tbullock@niu.edu</u>.

CONTACT INFORMATION:

American Farmland Trust Center for Agriculture in the Environment 148 N. 3rd St. P.O. Box 987 DeKalb, Ill. 60115 Phone: (815) 753–9347 Fax: (815) 753–9348 E-mail: Ann Sorensen (<u>asorensen@niu.edu</u>), Director.

Top of Document.