

# **Economic and Policy Conditions Necessary to Foster Sustainable Farming and Food Systems: U.S. Policies and Lessons from the European Union**

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The Committee for this study of “Twenty-first Century Systems Agriculture” asked me to address four areas: (1) the economic and policy conditions necessary to foster sustainable food and farm systems; (2) the policy lessons and models from Europe and other countries that might help the Committee frame issues; (3) alternative agriculture and the value chain—making alternative agriculture successful in today’s economic structure; and, if time permits, (4) the financial aspects of sustainable practices in the Midwest. I will attempt to do this by organizing my remarks and Power Point slides according to the following topical outline:

- Alternative visions of U.S. agriculture
- Policy options to support the sustainable agriculture vision
- Economic and related conditions affecting farming and food systems
- Lessons from the European Union
- Value chain issues in fostering ecological farming systems
- Economic competitiveness of ecological farming systems in the Midwest
- More on economics of organic agriculture

A list of the major articles and reports used in preparing these remarks appears at the end of this written testimony. Many other sources drawn on indirectly are listed in the respective reference sections of those articles and reports.

## **Alternative visions of U.S. agriculture**

Policy proposals for a nation’s food and farming system always rest on some vision for the system, whether or not the analyst or advocate recognizes that vision explicitly. Although there are many competing visions for the future of U.S. agriculture at

this time, most of the visions underlying proposals for a new U.S. farm bill—originally to be enacted into law in 2007 and now possibly in 2008—fit roughly into one of the following two categories:

- The **global competitiveness vision**—The recurring theme of policies proposed by those with this vision is maintaining and strengthening the competitiveness of U.S. agriculture in international markets. Individuals and organizations with this view have advocated agricultural policies intended to provide bases for successful resumption of World Trade Organization (WTO) negotiations under the current Doha Round. They also want U.S. agriculture to be on a strong footing to compete in an environment with reduced trade barriers and market distortions worldwide. This is an export-oriented vision, based on comparative advantage economic theory. Often implied in this vision is a U.S. agricultural system based on high-input, high-yield production of ‘commodity’ crops.
- The **sustainable agriculture vision**—This vision is more inward looking than the global competitiveness vision. The primary concerns of individuals and groups with this version are environmental quality, ecological sustainability, and the economic viability of small and moderate-sized family farms. Policy advocates with this vision are not ‘anti-trade’, but they place greater emphasis on the ‘Jeffersonian’ idea of a nation populated by independent family farms and on natural resource use that is sustainable for the indefinite future. This vision has evolved in recent years to be very similar to the European Union *multifunctionality* view of agriculture. (I will say more about multifunctionality later.) Healthy food has taken on much greater importance in this vision in recent years.

### **Policy options to support the sustainable agriculture vision**

My concern in this presentation will be with the sustainable agriculture vision. This does not imply that policies cannot sometimes support both visions. Groups representing both of these alternative visions of U.S. agriculture have advocated similar reforms in the system of ‘commodity supports’ in the new farm bill. (It does not appear that those commodity program reforms will be adopted at this time, however.)

Policy options to support sustainable agriculture can be grouped in four categories:

- Regulatory policies
- Environmental compliance measures tied to agricultural and energy subsidies
- Environmental stewardship payments

- Markets for environmental services (‘payments for environmental services’)

I will briefly discuss each of these types of policies in terms of their roles in encouraging the adoption of more sustainable agricultural systems. Most of my focus will be on what it will take to induce more farmers to adopt biologically diverse farming systems—organic and other ecologically integrated systems. The first step up from chemical intensive systems with little or no biological diversity are systems that incorporate somewhat more sustainable *practices*, such as reduced or minimum tillage or better fertilizer timing and placement. These practices can make particular farming systems—such as the Midwest corn/soybean system—more sustainable, or less unsustainable. However, it is very questionable whether systems that do not contain considerable biological diversity can keep agriculture in any given agro-climatic region truly ecologically sustainable over the long term. Therefore, I believe the challenge before the Twenty-first Century Systems Agricultural Committee is to chart paths to achievement of whole *systems* changes, in other words, transitions to much greater use of ecologically integrated systems.<sup>1</sup>

Farmers weigh many *goals* in their choices of farming systems. However, especially relevant for policy analysis purposes are their net income (profit), risk reduction, and natural resource stewardship goals. Therefore, we need to keep those goals foremost in our minds as we assess different policy options. Various economic and related conditions—what I call *contextual factors*—condition the effectiveness of policy options. Foremost among these contextual factors are prices and access to markets, available technologies, the structure of agriculture, and the current stock of social and human capital.

**Regulatory policies.** Regulatory policies for agriculture come primarily from the Environmental Protection Agency (EPA), rather than the U.S. Department of Agriculture (USDA). However, USDA programs can either support or undercut EPA regulations. The 2002 Federal farm bill changed the Environmental Quality Incentives Program (EQIP) to allow cost-share funds for manure management systems of large livestock operations—so-called Confined Animal Feeding Operations (CAFOs). At the time, CAFOs were coming under increased regulatory pressure to build and maintain more effective waste management systems, systems that were likely to be quite expensive. In effect, this change in EQIP caused taxpayers to pick up the tab for a significant share of these costs. Many people concerned with sustainable agriculture viewed this policy change as, essentially, an underwriting of costs of inherently unsustainable, large, concentrated livestock operations.

We probably now are at a juncture where we need to seriously consider the use of more regulations for control of some types of agricultural negative externalities. Failure

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<sup>1</sup> The conceptual framework for analyzing the impacts of public policies on agricultural sustainability that I am using is depicted in Power Point slide number 5, which is Figure 1 in South Dakota State University Economics Research Report 2001-1 (2001), by Dobbs and Pretty (in the list of reference material). See pp. 16-19 in that report for a discussion of this framework.

to make large livestock systems pay their own costs of complying with EPA regulations was a major policy mistake, in my view. There may be other areas where we should also make somewhat greater use of regulations. The European Union, for example, has moved away from cost-share policies for nitrate contamination, and now relies on regulatory measures.

**Environmental compliance measures.** The environmental cross-compliance provisions of the 1985 farm bill have been valuable for helping induce adoption of some agricultural *practices* that reduce negative externalities and enhance natural capital. However, they are not comprehensive enough to induce *system* changes that would retain or bring about much greater biodiversity.

The partial, but important, ‘decoupling’ of commodity subsidies in the 1996 farm bill (some of which was later reversed in the 2002 farm bill) did facilitate a movement of farmers away from continuous corn, where that practice remained, to the already widely practiced corn/soybean system. Although hardly diverse, the corn/soybean system is much preferable ecologically to continuous corn. With very high corn prices the last couple of years, however, we have seen some movement back to corn-following-corn. In my view, Federal farm bill cross-compliance provisions should prohibit corn-following-corn. There may be other ecological diversity minimums in other parts of the country that should be added to our Federal farm bill compliance provisions.

**Environmental stewardship payments.** In contrast to regulatory measures, which are based on the ‘polluter pays’ principal, environmental stewardship payments, implicitly at least, are based on the ‘provider gets’ principal. In other words, providers of good environmental stewardship get rewarded. In reality, however, ‘good’ and ‘bad’ stewardship are really points along a continuum. Stated another way, the line that separates ‘positive’ from ‘negative’ externalities is subjective. Economics alone cannot specify that line. What deserves to be regulated and what deserves to be rewarded are up to societal decisions. Economics and other sciences, however, can help greatly in understanding the consequences of practical distinctions and associated policy responses.

The predominant approach to promoting greater ecological sustainability in U.S. agriculture up to now has consisted of environmental stewardship payments in various forms. The latest such stewardship payment program of conceptual significance is the Conservation Security Program (CSP), introduced as part the 2002 farm bill. I would like to see much greater emphasis on programs like the CSP. However, it is quite difficult for stewardship payment programs to induce widespread *system* changes given the extreme imbalance between ‘commodity’ payments and ‘conservation’ (stewardship, or agri-environmental) payments under U.S. farm bills. Only 5 percent of FY03-07 USDA outlays were for conservation programs, compared to 22 percent for commodity (including crop insurance) programs.

The ability of stewardship payment programs to induce adoption of more ecologically sound farming systems is severely challenged in times of high commodity (corn, soybean, wheat, etc.) prices. In fact, in the current commodity price environment, it

is likely to prove difficult to even hold on to some of the ecological gains that have been made over the last decade or so.

**Payments for environmental services.** In a broad sense, government environmental stewardship payments constitute a type of ‘payment for environmental services’. However, there has been much policy discussion in recent years of payments for environmental services in the private or quasi-private sector. These may complement government stewardship payments when particular farming systems involve ‘public good’ and ‘private good’ co-products.

The best example of this is organically certified food. Consumers have shown willingness to pay some price premium for organic food products, not only because of what they think organic agriculture does for the environment (a ‘public good’ or ‘positive externality’), but also because of perceived ‘private good’ aspects, including food safety and nutritional quality.

Another much cited example is that of the New York City water authority. In this case, water users, through their collective water authority, have paid farmers in the Catskills watershed to carry out whole farm plans to satisfy their water quality objectives.

Therefore, one important policy tool for government authorities is to help create the conditions and circumstances for these environmental service markets to function. We did this in the case of organic agriculture through Federal legislation in the 1990s that eventually led to national standards and procedures for more uniform organic certification. This has not been without its problems and shortcomings, however.

While private or quasi-private sector payments for environmental services can play an important role in helping promote some aspects of agricultural sustainability, they are no panacea. Most major sustainable agriculture challenges contain significant ‘public good or externality’ components that can only be effectively addressed if regulations, cross-compliance measures, or government stewardship payments also are part of the policy package.<sup>2</sup>

**Contextual factors.** I have already alluded to a couple of contextual factors that strongly condition the ability of policy measures to promote greater environmental sustainability. I noted the high proportion of USDA spending on commodity programs, relative to conservation programs, and currently ‘high’ commodity prices as inhibiting factors.

Related to the relatively high Federal spending on commodity program subsidies is the form of those subsidies. There was much discussion of the form of these commodity subsidies in the National Research Council’s 1989 **Alternative Agriculture** report. Tragically, the magnitude and form of these commodity subsidies have continued to constitute a major inhibiting factor over the ensuing two decades. The 1996 Federal

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<sup>2</sup> I have not discussed fines or taxes on negative externalities as a separate policy category, as I consider them to be part of the ‘regulatory’ portfolio.

farm bill was intended to make a break with the past by ‘decoupling’ major portions of the farm price and income support program from farmers’ planting decisions. This was something consistently called for by economists, whether their concerns were international trade or sustainable agriculture. Unfortunately, rather than building on and further extending this decoupling process in the next farm bill, the 2002 farm bill took a major step backward. One commodity subsidy mechanism that had been eliminated with the 1996 bill (the target price/deficiency payment mechanism) was restored in a different form (the counter-cyclical payment mechanism) in 2002, and farmers also were able to update acreage and yield bases. If there was any expectation on the part of American farmers that we were truly on a decoupling path, these actions certainly undermined such expectation for many years into the future. The net result is that farmers continue to have very powerful incentives to keep much of their acreage in the few crops to which most of the commodity payments are directly or indirectly tied—namely corn, soybeans, wheat, rice, and cotton.

Interestingly, reform proposals for farm policy to replace the 2002 legislation coming from both those with the *global competitiveness* vision and those with the *sustainable agriculture vision* have strongly emphasized much greater ‘decoupling’. At this stage in the new farm bill legislative process, however, it is quite clear that this kind of reform will not happen in 2008.

Time and space do not permit my saying much about *technologies* and *social and human capital*, though I will refer to one form of social capital in my discussion of value chain issues. I do need to say something here about the *structure of agriculture* as a contextual factor, however.

The structure of agriculture that has evolved in the post-World War II period increasingly inhibits the adoption of organic and other ecologically integrated farming systems. These farming systems tend to be more labor and management intensive than what have come to be considered ‘conventional’ systems. Both very large and small, part-time farms often are more conducive to specialized and capital intensive farming systems. Moderate sized farms, in which at least one family member can devote full-time attention to the farm, are best suited to the time requirements and complexities associated with ecologically integrated systems. Yet even moderate sized farms have less available family labor than in earlier eras.

Small-acreage farms devoted to fruits, vegetables, or animal products—especially if the products are primarily for local markets—can be well suited to ecological farming, however, if there is at least one family member involved full time in the farming operation.

Although the current America farming structure is, indeed, an *inhibiting* factor, we should not consider it to be a *prohibiting* factor. Just as the current structure gradually evolved over time with the adoption of farm chemicals and ever-larger machinery, some aspects of our farming structure could evolve to be more compatible with ecological farming systems if those systems were to become much more widespread.

## Lessons from the European Union

Agricultural policy dialogue in the European Union (EU) has for some time now rested on a *multifunctionality* view of agriculture. This is the view that agriculture does more than just provide food, fiber, energy, and timber. It has many functions and purposes, thereby potentially producing a wide range of outputs or services. Agriculture that depletes organic matter or erodes soil externalizes costs that others in society must bear. But agriculture can also serve positive functions, such as sequestering carbon, enhancing wildlife, providing valued landscapes, preserving wetlands that reduce flooding, enhancing biodiversity, and providing rural employment.

The 1992 MacSharry reforms of the EU's Common Agricultural Policy (CAP) began to weaken the links between farm payments and production of agricultural commodities, by introducing a system of direct payments to farmers and moving away from market support as a way of securing farm incomes. To qualify for these payments, farmers had to comply with a range of specific controls that were intended to restrain production. Agenda 2000 reforms of the CAP officially added rural development (including enhancement of the environment), or **Pillar II**, as a major policy objective to the original CAP objective (**Pillar I**) of enhancing food security and farm incomes. Pillar II represented the ascendancy of *multifunctionality* to the center of ongoing CAP policy dialogue.

The Agenda 2000 reforms were followed by the comprehensive mid-term CAP review in 2003, with payments to farmers, in principal, being decoupled from production in the Pillar I (production) category and more funds being shifted to the Pillar II (rural development and environmental) category. Most Pillar I payments to individual farms were to be combined in the new Single Payment System, though EU member states were given some flexibility in the implementation of this system. More comprehensive environmental cross-compliance provisions also are being imposed as part of the 2003 reforms.

At the present time, implementation of the 2003 reforms is under review as part of a comprehensive CAP 'Health Check', which is to lay the groundwork for further reforms after 2013, but also may lead to some additional reforms even before then.

Individual EU countries continue to devised their own systems of implementation of most agri-environmental schemes. Concurrent with the consolidation of payments under Pillar I of the CAP, major changes are being made in England's agri-environmental schemes under Pillar II.<sup>3</sup> The 2003 mid-term review of the CAP has been implemented in England with the establishment of three new stewardship payment schemes, starting in 2005: Entry Level Stewardship, Organic Entry Level Stewardship, and Higher Level

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<sup>3</sup> Under the devolution of powers that has been underway for some time in the United Kingdom, agri-environmental policies (as with various other policies) often differ among England, Scotland, Wales, and Northern Ireland. Here, reference is only to England.

Stewardship. With the introduction of these schemes, the Environmentally Sensitive Areas and Countryside Stewardship Schemes—for the past 15-20 years the core programs, along with support of organic agriculture, of agri-environmental policy in England—are being phased out.

The aim of the Entry Level Stewardship (ELS) scheme, which is open to all farmers, is to encourage farmers to deliver simple environmental management in addition to cross-compliance requirements. This management focuses on improved water quality and reduced soil erosion, improved conditions for wildlife, maintenance and enhancement of landscape, and protection of historic features. Farmers have to complete a plan of the farm showing the main environmental features, called the Farm Environmental Record, and select options from a menu. ELS contracts are for 5-year terms.

The Organic Entry Level Stewardship (OELS) scheme is similar to the ELS, except the applicants must have at least part of their land registered with an organic inspection body as organic or in conversion before application. The objectives and basic measures under the ELS apply equally to the OELS, with only the detailed management guidance and award system differing.

The Higher Level Stewardship (HLS) scheme has been designed to be the most demanding scheme. Applicants must have entered one of the ELS schemes, and so all the basic requirements of those apply. HLS contracts are for 10 years, though occasionally they can be extended to 20 years. The aims are wildlife conservation, maintenance and enhancement of landscape quality and character, natural resource protection, historic environment protection, and promotion of public access to and understanding of the countryside. Unlike the entry level schemes, the HLS is competitive and is judged on environmental benefit per unit of expenditure.

Are there lessons for the U.S. in what has been underway with the EU's CAP reforms? In my view, first and foremost, we also should adopt a *multifunctionality* perspective of agriculture as the basis for our policy dialogue. Accepting a multifunctionality outlook has not, by any means, resolved all of the policy and budget conflicts about agriculture within the EU. There are on-going political battles within the EU, both collectively and within individual member states, about how much funding to switch from Pillar I to Pillar II. But the very fact that Pillar II (rural development and the environment) is on equal conceptual footing with Pillar I casts the dialogue and debates in quite different terms than we observe in our halls of Congress and the White House. Outside the U.S. 'agricultural establishment' and the House and Senate Agricultural Committees, we are having a very European style dialogue in the U.S. Many of the groups advocating reforms in the U.S. in recent years have been, in effect, carrying on a Pillar I vs. Pillar II debate. However, that broader perspective has not yet permeated the wider U.S. body politic. Until it does, when the final reconciliation battles are fought on each new U.S. farm bill, funding for commodity programs will continue to squeeze out adequate funding for agri-environmental and rural development programs.

More specific lessons to be drawn from the recent EU experience include:

- Move rapidly and more comprehensively on ‘decoupling’, as has the EU’s CAP with its Single Payment System.
- Enact a national organic transition program, patterned after ones that have been in effect for many years in the EU. Both House and Senate versions of the yet-to-be settled new farm bill contain provisions for such a program (though with different mechanisms).
- Integrate some of our major Federal ‘working lands’ environmental programs, based on whole-farm plans, as has England. The Senate version of our pending farm bill does integrate the EQIP and the CSP under a new Comprehensive Stewardship Incentives Program.

### **Value chain issues in fostering ecological farming systems**

Thus far, except for references to organic agriculture, I have written as if the agricultural products produced with more ‘sustainable’ systems are generally the same as those produced with ‘conventional’ systems. In fact, if sustainable farming systems are to be widely adopted, it is important that they not be limited to products that are viewed as specialty or niche products.

Nevertheless, the fact that many ‘ecologically produced’ foods presently are being marketed for their environmental, health, nutritional, and humane animal treatment characteristics means that there are challenges in developing cost-effective value chains. In addition to organic labels, products are being marketed under various other eco-labels and ‘natural food’ labels. Transaction costs in the food chain tend to be high when volume scale of individual ‘quality’ labels is small. Though markets for various quality labeled foods are growing rapidly, their shares of the total food market are relatively small, so far.

One issue is who bears these transaction costs? In the organic industry, most costs are initially born by farmers and others in the supply chain. Maintaining traceability in the supply chain is a very expensive process. However, supply and demand conditions ultimately determine the true incidence of these costs, so they are really born in part by consumers in the form of higher prices (‘price premiums’).

If the U.S. were to adopt the ‘Precautionary Principle’ that is the general operating principal in the EU, products that are perceived by society to carry special health or environmental risks due to their production or processing methods might need to carry precautionary labels. That would tend to shift some transaction costs from ecologically produced foods to foods that are more reliant on production and processing methods that involve synthetic chemicals, growth hormones, prophylactic antibiotics,

genetic engineering, and the like. Adoption of this Precautionary Principle approach in the U.S. does not seem likely in the very near future. However, at the very least, 'ecological' farmers and others in the supply chain should not be prohibited from using quality labels that identify their products as being free of characteristics such as these, provided they have credible verification systems in place.

Following are some suggestions for making ecological and other 'quality' labels more effective in supporting sustainable farm and food systems:

- Strengthen social capital by replicating emerging, successful models of cooperative networking and marketing. An example of such a model is the supply chain relationship between *Good Natured Family Farms* and Balls Food Stores in the Kansas City metropolitan area.
- Develop *terroir* (territorial) labels with greater integrity and sustainability criteria (i.e., the French model, with environmental criteria added).
- Avoid Federal or State-sanctioned food identification labels that are little more than 'branding'.

Although there are many challenges to make ecologically produced foods both profitable and affordable in the food chain, forces of rising energy costs and growing health concerns will increasingly tip the balance more in favor of foods that can make legitimate claims to environmental, health, or food safety characteristics. The obesity crisis and the numerous large-scale food safety incidents we are experiencing will increase the demand for ecologically grown and healthy food. Rising energy costs will make nationwide and global sourcing of food increasingly expensive. This favors the economics of foods produced with less fossil fuel intensive methods and foods marketed and consumed locally or regionally.

### **Economic competitiveness of ecological farming systems in the Midwest**

I have not recently undertaken a comprehensive review of economic studies of ecological farming systems in the Midwest since the 1989 **Alternative Agriculture** report. However, I do want to mention a few studies with which I am quite familiar, all of them dealing at least in part with organic agriculture.

Two longitudinal studies were undertaken at South Dakota State University (SDSU), one on an Experiment Station site in northeast South Dakota and one on a matched pair of farms in the east-central part of the State. In the matched pair study, both the conventional and the organic (alternative) farm were profitable operations, but the conventional farm was more profitable, on average, when price premiums that the organic farm received for some of its product were excluded from the calculations (Dobbs and Smolik, 1996, in the references for this presentation). The Experiment Station study, covering 7 years, found the organic (alternative) farming systems to be

economically competitive with conventional systems, even without factoring in probable organic price premiums, and they were more profitable, on average, than the ridge till and minimum till systems with which they were compared (Smolik, et al., 1995).

More recent studies similar to the SDSU Experiment Station-based study have been carried out by the University of Minnesota and Iowa State University. The research in Iowa indicated that an organic corn/soybean/oats/alfalfa rotation system could be more profitable than a conventional corn/soybean rotation even without price premiums, but the organic system was less profitable when a charge for purchasing compost was included in the organic budgets (Delate, et al., 2003). In a similar study in Minnesota, the 4-year organic rotation consisting of corn, soybeans, oats, and alfalfa had higher average net returns over the period 1990 through 1999 than conventional corn/soybean rotations when organic price premiums were included. When organic price premiums were excluded, the organic system still had higher average net returns, but the differences were not statistically significant (Mahoney, et al., 2004).

A study that we conducted a few years ago at SDSU examined conventional, organic, and ecologically diverse but not organic systems, using a ‘typical farm’ simulation approach. We used 2002 farm bill assumptions, but used average market prices for the period 1997-2001 (prices much lower than at present). Our results suggested that both organic and non-organic systems that are ecologically diverse can be more profitable than conventional corn/soybean systems in the region of southeastern South Dakota that we studied—with or without Federal Commodity payments or price premiums for the organic systems (Dobbs and Streff, 2006).

In spite of the apparent economic competitiveness of ecologically diverse systems in southeastern South Dakota—before the recent dramatic increases in commodity prices—conventional corn/soybean systems are far more prevalent in the area. What does this possibly imply?

- Factors other than average or ‘typical year’ profitability appear to have been holding back adoption of organic and other ecologically diverse farming systems.
- The magnitude of Federal ‘commodity’ payments has made it easier for farmers to stay with ‘conventional’ systems.
- Agri-environmental stewardship payments may be needed to overcome obstacles to adoption of organic and other ecologically integrated farming systems.

## **More on the economics of organic agriculture**

I will say just a bit more here about organic price premiums and apparent barriers to adoption of organic farming systems.

Slide number 30 in my Power Point presentation shows the average ratio of U.S. organic to conventional prices for corn, soybeans, and wheat during the 9-year period 1995-2003. Also shown are the ratios as of January 2008 (for the Upper Midwest). The ratios are as follows:

- Corn, 1.76 9-yr. ave., 2.16 in Jan. 2008
- Soybeans, 2.52 9-yr. ave., 2.05 in Jan. 2008
- Wheat, 1.75 9-yr. ave. (spring wheat), 1.79 in Jan. 2008 (all wheat)

Of course, just because price premiums have been available to many farmers, that does not mean that they have been equally available to all. Individual farmers may obtain very modest or no premiums on some of their organic production in any given year.

The 2002 Organic Farmers' Survey by the Organic Farming Research Foundation provided insights into obstacles faced by organic farmers, including difficulties sometimes in obtaining 'adequate' price premiums. The top eight organic production, marketing, and regulatory problems facing organic farmers, according to respondents to that survey, were:

- Weather-related production losses
- Organic certification costs
- Obtaining organic price premiums
- High input costs
- Lack of organic marketing networks
- High labor costs
- Weed-related production losses
- Production losses due to pests or diseases

## Reference Material

The following sources were drawn on for this panel presentation. Many other sources (including numerous USDA reports) cited in the reference section of each report or article also were drawn on indirectly.

### Journal articles

- Dobbs, T.L., and J. Pretty. (available on-line in September 2007; print issue of volume this article will appear in not yet published) Case study of agri-environmental payments: The United Kingdom. *Ecological Economics*.
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### **South Dakota State University reports**

(These reports can all be found on Ag Econ Search: <http://agecon.lib.umn.edu/>)

Dobbs, T.L. 2007. Time for change in U.S. farm policy: Fundamental reform emphasizing institutions based on agriculture's 'multifunctionality'? SDSU Economics Commentator 484.

Dobbs, T.L. 2007. Competing visions of U.S. agriculture: Can we have our cake and eat it too in reforming Federal farm policy? SDSU Economics Commentator 483.

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Dobbs, T., and J. Pretty. 2001. Future directions for joint agricultural-environmental policies: Implications of the United Kingdom experience for Europe and the United States. SDSU Economics Research Report 2001-1 and University of Essex Centre for Environment and Society Occasional Paper 2001-5.

### **Food & Society Policy Fellow articles**

Various articles by Thomas Dobbs dealing with the current debate on a new U.S. Federal farm bill appear on his page of the W.K. Kellogg Foundation Food & Society Policy Fellows website: <http://www.foodandsocietyfellows.org/fellows.cfm?id=97410>