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FARM PROGRAM PARTICIPATION AND POLICY PERSPECTIVES OF SUSTAINABLE FARMERS IN SOUTH DAKOTA

by
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Preface

This paper contains some of the descriptive results of on-farm interviews conducted during early 1989 with twenty-two sustainable farmers in South Dakota. These interviews constitute part of a study supported by Grant No. 88-56 from the Northwest Area Foundation (in St. Paul, MN) and by the South Dakota State University (SDSU) Agricultural Experiment Station. Detailed descriptive results of "other-than-farm policy" aspects of the on-farm interviews are contained in the forthcoming SDSU Economics Research Report 89-5, entitled South Dakota Sustainable Farmer Crop Rotations, Livestock Enterprises, and Risk Evaluation. Whole-farm economic analyses with data collected in some of the interviews are presently in process as part of Phase II of the Northwest Area Foundation-supported study. Results of those analyses will be contained in future reports.

The entire questionnaire used for these on-farm interviews will be contained in an annex to Research Report 89-5. The four questions (Numbers 6, 7, 20, and 21) which pertain to farm program participation and policy perspectives are also reproduced as an annex to the present Staff Paper.

We appreciate the willingness of Richard Shane and Brian Schmiesing to review and comment on a draft of this paper.

TLD, DLB, and DCT

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The practices and views regarding farm policy of more than twenty low-input/sustainable farmers in South Dakota are reported in this paper. First, the source of information for this paper is briefly described. Then, the farmers' participation in Federal commodity programs and their views on Federal farm program conservation compliance provisions are presented. Subsequently, the farmers' views on desired changes in Federal farm programs and on desired State and local government actions to promote sustainable agriculture are reported. Plans for SDSU sustainable agriculture policy analyses are briefly indicated at the end of the paper.

Farmer Interviews

Information on thirty-two sustainable (low-input, regenerative, alternative) farmers in South Dakota was obtained through a mail survey in the early summer of 1988. Detailed results of that survey have been reported in Taylor, et al. (1989). Follow-up on-farm interviews with a subset of those thirty-two were conducted during the winter of 1989. Twenty-two farmers who were beyond -- or at least well into -- the transition from "conventional" to "sustainable" agricultural practices were interviewed with a two-part questionnaire. The first part was mailed to them in advance, with a request that the farm operator complete that part prior to arrival of the interviewer. Subsequently, when the interviewer arrived on-farm at a mutually agreed time, the farmer and the interviewer went over Part I to clarify any questions that were not clear and to complete any portions not yet filled in by the farmer. Then, the interviewer proceeded to go through Part II of the questionnaire with the farmer (and spouse, if both were present).

Through this process, twenty-one of twenty-two questionnaires of both
Parts I and II were obtained. Because of time pressures on one farmer, only Part II was completed by him. For certain kinds of cross-classification analyses, it would only be legitimate to use data from the twenty-one farmers for whom both Parts I and II of the questionnaire were completed. However, in this Staff Paper, we are not conducting any cross classifications that would be adversely affected by including information from the farmer for whom only Part II information was obtained.

**Commodity Program Participation**

A series of questions was asked about the farmers' participation in acreage set-aside and commodity payment provisions of the Federal farm program. There were twenty-two responses for these questions. Among the questions was one about how set-aside acres fit into the farmers' sustainable (regenerative) rotations.

**Nature and level of participation**

Twenty-one of twenty-two farmers indicated that (since 1984) they have generally participated in acreage set-aside and commodity payment provisions of the Federal farm program. The farmer who does not generally participate indicated his reasons are primarily philosophical -- not wanting the government to tell him how to manage his farm.

Of the twenty-one who generally participate in the commodity programs, nine indicated that they generally participate at the minimum required set-aside levels, eight indicated that they usually participate at higher levels (i.e., with paid diversions), and four indicated that their level of participation (minimum vs. higher) varies from year to year. Most of those participating at minimum levels indicated that they wanted to plant as many acres as they could, consistent with their rotation and Federal farm program
requirements. Several of those participating at higher levels said that
taking advantage of paid diversions allowed them to put more land in legumes
such as alfalfa and clover or to "rest" more land; in effect, for some
farmers, the higher acreage diversion levels fit well in their rotation plans.
Those whose level of participation in the farm program has varied from year to
year said various circumstances, including the weather, influence their
decisions on whether or not to participate in the paid acreage set-aside
options.

Farmers participating in the 1989 commodity program could substitute
soybeans or sunflowers for 10-25 percent of their food or feed grain program
crop "permitted" acres. Seven of twenty-two farmers said they planned to
exercise that substitution option. Three more said they might, but a decision
had not yet been made at the time of their interviews.

Management of set-aside acres

A variety of responses was given to the question about how farm program
set-aside acres fit into the sustainable farmers' rotations.

Seven farmers indicate that they use summer fallow acres to meet at least
some of their set-aside requirements. This response was received more often
from farmers in the western and northern parts of South Dakota, where summer
fallowing is a common practice, than it was from farmers in the southeastern
part of the State. Two farmers in southeastern South Dakota did indicate that
they sometimes summer fallow set-aside acres, allowing them to clean up weeds
or to let the land rest for fertility purposes.

Small grain crops are sown on set-aside acres by eight of the farmers
interviewed. (Because some farmers use more than one practice on set-aside
acres, responses in this section exceed twenty-one, the number of farmers
participating in acreage set-aside programs.) This practice is particularly common among sustainable farmers in the southeastern part of the State. It is quite common for farmers in southeastern South Dakota to plant oats as a nurse crop for alfalfa (or, in the case of one farmer interviewed, for red clover); enough of the oats acreage to meet set-aside requirements is clipped before heading out, rather than harvested. Farmers will sometimes clip (as set-aside) those acres which are especially weedy.

One farmer in the southeast sows a spring wheat and sweet clover mix on set-aside acres, and uses the crop as a green manure plow-down. The wheat is allowed to go to seed, so after the crop is moldboard plowed in July, some wheat will come back as winter cover.

A farmer in northeast South Dakota said he sometimes plants rye in the fall on summer fallow set-aside acres. The rye helps control erosion over the winter and is then turned under in the spring as a green manure crop.

In addition to the farmer already mentioned who sows sweet clover together with wheat, seven other farmers grow sweet clover as a green manure crop on set-aside acres. The sweet clover is often established with a small grain nurse crop during the previous year. The clover is worked in with a plow or disc during the summer of the set-aside year. One of the farmers said he sometimes broadcasts barley, for winter cover, after plowing down his sweet clover.

Another crop grown on set-aside acres -- by three of the farmers interviewed -- is sudan grass. Two farmers use the sudan for grazing in the fall and winter, after the A.S.C.S. idling deadline has passed, and the third discs the crop in as a green manure crop in late summer.
Implications of Conservation Compliance Provision

The "conservation compliance" provision of the Food Security Act of 1985discourages production of crops on highly erodible land unless adequate protection from erosion is provided for. To remain eligible for U.S.D.A. program benefits, farmers with land that is classified as highly erodible must have an approved conservation plan by January 1, 1990 and the plan must be fully implemented by January 1, 1995 (Dobbs, 1986; Kovan, et al., 1987).

Farmers affected

Eight of the twenty-two sustainable farmers who were interviewed said that they have erodible land which must be in compliance with this conservation provision of the Food Security Act. The amount of highly erodible land for each of these eight farmers was from just a few acres to several hundred acres.

Compliance measures

The eight farmers were asked what measures they have taken or plan to take with this erodible land to come into compliance. Three farmers indicated their erodible land is or will be planted to grass and a fourth indicated his is in a combination of the Conservation Reserve Program (CRP) and pasture. One of the farmers planting grass also plans to plant some trees for wildlife. Another farmer said his erodible land is already seeded to alfalfa. One farmer anticipated the use of strip cropping and measures to keep crop residue on the surface. Another said that he already had terraces in place and that use of a Noble blade would leave adequate residue on the surface. Finally, one of the eight farmers simply said that his current farming practices satisfy the compliance requirements.
Compatibility with their sustainable farming systems

Next, we asked these eight farmers if the conservation measures they had taken or plan to take to be in "compliance" are compatible with the kinds of regenerative (sustainable) practices they would like to use anyway. Six of the eight responded yes. Of the two responding no, one indicated that the strip cropping he anticipates doing may be difficult on some fields. The other no respondent said that he would continue farming the land classified as highly erodible -- rather than to put it into grass and trees -- were it not for the compliance provision.

Other conservation practices

All twenty-two of the interviewed farmers were also asked to describe any other soil and water conservation practices in use on their farms. Among the often mentioned practices, with the number of farmers listing each practice in parentheses, were the following: use of shelter belts or single row tree belts (thirteen); use of sod waterways (eleven); contour farming and/or terracing (seven); and strip cropping (four). Two farmers also mentioned working fields across the slopes. Five farmers noted measures to leave plenty of crop residue on field surfaces, but undoubtedly more than those five use some such crop residue measures.

Desired Changes in Federal Farm Program

Policy makers at National and State levels are considering a wide array of incentives and regulations to foster more environmentally sound agricultural practices. These include more restrictive chemical pesticide regulation, special taxes on chemicals and fertilizers, broader and more stringent "compliance" provisions for farmers to qualify for Federal farm program benefits, and various changes in commodity components of the Federal
farm program to modify or possibly even sever the link between direct farm income support payments and crop production levels.

To obtain farmer perspectives on possible policy and program changes at the National level, we posed the following open-ended question in our interviews with twenty-one sustainable farmers: "What changes (if any) would you like to see in the Federal farm program to make it more supportive or encouraging of sustainable agricultural practices?" The responses can be broadly categorized as follows, with the number of such responses shown in parentheses (again, some farmers gave responses in more than one of the categories):

* Allow greater flexibility in crops grown (e.g., legumes included in crop rotations) without losing feed and food grain acreage "bases" (seven).

* Introduce new or stronger conservation/environmental compliance requirements and/or incentives (seven).

* Largely eliminate the current kinds of Federal commodity programs and concentrate on such things as multi-year land retirement and price stabilization (seven).

* Target federal farm program payments to family-size farming operations (three).

* Provide more funding for research on sustainable agriculture (two).

Illustrative responses in each category are now presented.

Greater flexibility in crops grown

Examples of statements made by farmers urging greater flexibility in crop acreage requirements of commodity programs follow (paraphrased):

-- It is hard to remain flexible with rotation schedules while maintaining corn base. I lose base every year because of sweet clover acres.

-- I would limit the corn acreage bases to 30-40% of total cropland on each farm, regardless of crop history. This would encourage proper crop rotations.
-- Broaden the list of crops that are supported.

-- The Federal farm program is currently geared toward more bushels (i.e., higher yields); we should focus more on programs that encourage rotations.

-- Guarantee no loss of income for one year if a legume is grown in place of wheat (or other cereal grain).

Conservation/environmental compliance

Farmers urging greater attention to conservation/environmental compliance requirements or incentives made such statements as the following:

-- Require farmers to use certain regenerative agricultural practices as a condition for receiving government payments.

-- Provide incentives for time-honored, proven, naturally regenerative practices such as strip cropping, clover under-sowing, uncompromised crop rotations, and tree planting.

-- Pay farmers who do not use synthetic fertilizers and other agricultural chemicals.

-- The Federal government should restrict the use of synthetic chemical inputs.

-- There should be no help to anyone destroying the land; the government is presently paying people to destroy the land.

-- Outlaw all below-the-ground chemicals. Allow only the contact-killers (the ones that interfere with photosynthesis). No chemicals in the ground would allow rejuvenation of life in the soil.

Substantially change the nature of Federal programs

Seven farmers urged substantial changes in the very nature of Federal commodity programs or even, in some cases, elimination of such programs. These are examples of their statements:

-- Get away from the farm program if it is practical.

-- Do away with Federal commodity programs and involve the government in tax and credit issues, instead. Provide a cover crop payment for up to 25-30 percent of the cropland on a farm; the payment would be for acres planted to regenerative crops (e.g., alfalfa, rye, clover), and farmers would be allowed to hay or graze those crops.
-- Construct a farm bill similar to the current soybean program.

-- The Federal farm program should make it against the law for merchants to buy agricultural produce for less than parity.

-- Expand the Conservation Reserve Program to all classes of soil or extend the Acreage Reserve Program from 1 year to 3-5 years. These policies would encourage land regeneration and support commodity prices.

**Target payments to family-size operations**

Focusing farm program payments on family-size operations was among the concerns of three farmers. Their feelings were expressed as follows:

-- Gear payments toward moderate sized farms or have smaller payment limitations.

-- There should be no Federal aid to farmers operating more acres than the average for their county.

-- There should be a $50,000 payment limit per farm, based on the 1910-14 dollar. No payments should be made for produce representing more than 50 percent of the proven production capacity of the farm.

**More research in sustainable agriculture**

Two farmers also mentioned the importance of more research and information dissemination -- such as at Land Grant universities -- on sustainable agriculture. The U.S. Department of Agriculture's new "Low-Input/Sustainable Agriculture" (LISA) program was cited as a start in efforts to meet this need.

**Support for environmental focus**

It is not at all surprising that these twenty-one low-input/sustainable farmers proposed a variety of Federal farm program initiatives entailing greater environmental focus. However, recently released findings of a South Dakota State University survey also indicate rather broad-based farmer support for stronger Federal farm program conservation and environmental policies.
Janssen (1989) reports substantial support (64-70 percent) for and relatively little opposition (15-20 percent) to three major environmental policy issues among 490 respondents to a February-March 1989 random sample survey of South Dakota farmers and ranchers. The three environmental policy issues are:

(1) soil conservation and water quality compliance should be a condition for receiving farm program benefits, (2) government should regulate certain farming practices and land uses to reduce pollution of underground and stream water, and (3) Federal farm policies need to give greater attention than they do at present to encourage reduced use of synthetic chemical fertilizers and pesticides.

(Janssen, 1989, pp. 2-3)

Desired Actions for State and Local Governments

Twenty-one sustainable farmers were also asked "Are there things you think State or local governments should do to encourage or require agricultural practices that are more sustainable?" Those who responded "yes" (sixteen of twenty-one) were asked to explain. Their explanations are categorized as follows (again, the numbers of such responses are shown in parentheses and some farmers gave explanations in more than one category):

* Expand education on alternative farming practices and improve the knowledge level (concerning alternative practices) of Extension agents and local weed supervisors (eight).

* Provide stronger environmental quality controls and incentives, in such areas as spray drift and groundwater contamination (seven).

* Encourage or require more university research on sustainable agriculture practices (two).

* Various other explanations, such as to lower land taxes, provide livestock loans, provide more recognition for good land stewardship, and establish a State (South Dakota) "organically grown" certification label (five).

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1 The general focus of the interviews was on agricultural practices which are intended to be sustainable from both environmental and economic standpoints.
**Expanded education**

Half of the farmers who think State or local governments should take actions to encourage sustainable agriculture mentioned educational measures. Suggestions (paraphrased) included:

-- People need to be educated about underground water contamination.
-- Education is needed on the harmful effects of chemicals.
-- Information should be provided on alternative forms of weed control.
-- Extension agents need to know more about sustainable agriculture.
-- Township and county weed supervisors need to be more informed about alternative management practices. (One farmer had to spray organic ground because of a musk and Canadian thistle problem acquired from a neighbor.)
-- It may be helpful to educate chemical and implement company representatives about sustainable agriculture.

**Environmental quality controls and incentives**

Nearly as many farmers (seven) also mentioned State or local initiatives in the area of environmental quality controls or incentives. Examples of their suggestions follow:

-- We need to strengthen and enforce laws regarding spray drift and application of chemicals on windy days. (One farmer sent maps showing the locations of his organic fields to local aerial sprayers. The sprayers could then be more careful to avoid his fields, considering drift and wind conditions.)

-- We should stop ditch spraying by local governments and leave that responsibility to the property owners.

-- Penalize those who poison the air, water, crops, and land. However, we must be careful with laws, as they could be another way of driving small farmers off of the land.

-- Monitor groundwater contamination and soil erosion.

-- Strictly enforce groundwater laws and ordinances.

-- Encourage reduced chemical use.
Research

Two farmers listed more research on sustainable agriculture as a State initiative. One went so far as to say that all research institutions should be forced to spend as much money on sustainable agriculture research as they do on conventional agriculture research.

Other State and local government actions

A variety of other State and local actions to encourage sustainable agriculture practices were mentioned by some farmers, including the following:

-- Lower land taxes (the land will last longer and the water supply may be fit to drink).

-- Give awards and recognition to good stewards of the soil.

-- Establish a "South Dakota Organically Grown" certification label.

-- The State government could set up a livestock loan program to encourage modest livestock operations, which would make regenerative farming more feasible.

Plans for Policy Analyses

The preceding pages provide some insights on farmers' own perspectives about how farm and related environmental policies might be shaped to provide more stimulus to sustainable agriculture practices. Building on some of these perceptions and on proposals coming from a variety of other sources, several policy changes and initiatives have been identified for evaluation in whole-farm economic analyses at South Dakota State University (SDSU). Data from several of the farmers interviewed in South Dakota have been used to construct whole-farm models to be employed in these analyses.
The following Federal commodity policy changes are presently being considered for analysis:² (1) reduce target prices significantly; (2) leave farm program "base yields" frozen (at their present levels), and assure farmers who switch to sustainable practices that their base yields will not be reduced if their average actual yields should decline; (3) introduce more acreage base flexibility by allowing a certain amount of legumes (such as alfalfa and clover) into the farmer's rotation without sacrifice of feed or food grain base; (4) decouple Federal farm income support from crops grown; and (5) enact mandatory acreage allotments or marketing quotas for particular crops to significantly restrict supply and raise market prices, as the only or principal means of Federal farm income intervention.

Other, non-commodity, policy initiatives could also be taken by the Federal government or by State governments in attempts to encourage sustainable agriculture practices. Options presently being considered for analysis at SDSU include: (1) taxes on synthetic chemical inputs (fertilizers and pesticides) and (2) payment incentives for non-use of synthetic chemical inputs.

Policy options such as ones listed in the above paragraphs will be analyzed -- one at a time -- and compared to a "baseline" which consists of continuing with the kind of Federal farm program that resulted from the 1985 Food Security Act. The "baseline", therefore, consists of (1) target prices

²Several of the policy changes or options under consideration have been jointly identified by Washington State University (WSU) researchers Dr. Doug Young and Ms. Kathleen Painter and by the South Dakota State University (SDSU) authors of this Staff Paper. Dr. Young is directing a Northwest Area Foundation-supported sustainable agriculture study which has policy analysis objectives that closely parallel objectives included in SDSU's research. Thus, some common policy options will be analyzed in the WSU and SDSU studies.
which have generally been above market prices of major feed and food grains; (2) relatively low loan-support levels; (3) deficiency payments on several major crops to allow farmers to achieve roughly "target" price levels; (4) commodity-based acreage set-aside requirements for major feed and food grains, except for soybeans; (5) a long-term (10-year contracts) Conservation Reserve Program (CRP); and (6) conservation compliance provisions, which must be met in order to participate in farm income support programs. The various policy options will be analyzed for how they are likely to increase or decrease whole-farm net incomes -- relative to the baseline situation -- and how they would probably induce or constrain attempts by farmers to expand their use of "sustainable" production practices.
References


Policy

6. What changes (if any) would you like to see in the Federal farm program to make it more supportive or encouraging of sustainable agriculture practices?

7. Are there things you think State or local governments should do to encourage or require agricultural practices that are more sustainable?
   Yes  No
   If Yes, explain:

20. Government farm program

   a. Crop  Base Acres*  Base Yield*
      Corn
      Wheat
      Oats
      Barley
      Sorghum
      Other?
      *Indicate if the base acres (as a proportion of cropland) and yields are different for the part of your farm with the principal regenerative rotation.

   b. Since 1984, have you generally participated in acreage set-aside and commodity payment provisions of the Federal farm program?
      Yes  No  (If no, skip to part e.)

   c. If Yes, usually at the minimum required set-aside levels or often at higher levels? Explain:
d. How do your set-aside acres fit into your regenerative rotations?

e. If no, why don't you participate?

f. If you are participating in the 1989 farm program, do you plan to substitute soybeans or sunflowers on 10-25% of a program crops permitted acres?  ____ Yes  ____ No

21. Conservation compliance

a. Do you have land which must meet special "conservation compliance" provisions of the 1985 Federal Farm Bill?  ____ Yes  ____ No

b. If Yes

(1) How many acres of the land you farm does this apply to? ______

(2) What are the location(s), legal description(s), and soil and slope characteristics of the field(s) involved?

(3) What measures have you taken -- or do you plan to take -- to come into compliance?

(4) Are those measures compatible with the kinds of "regenerative" ("sustainable") practices you would like to use anyway?

c. Describe any other soil and water conservation practices (i.e., sod waterways, terraces, shelter belts, etc.) and their importance in your operation.