10-15-1999

Implications of "Freedom to Farm" for Crop System Diversity in the Western Corn Belt and Northern Great Plains

Thomas Dobbs
South Dakota State University

Linda Dumke
South Dakota State University

Implications of "Freedom to Farm" for Crop System Diversity in the Western Corn Belt and Northern Great Plains

by Thomas L. Dobbs and Linda M. Dumke*

Economics Staff Paper 99-3

October 1999

Papers in this series are reproduced and distributed to encourage discussion of research, extension, teaching, and public policy issues. Although available to anyone on request, Economics Department Staff Papers are intended primarily for peers and policy makers. Papers are normally critiqued by some colleagues prior to publication in this series. However, they are not subject to the formal review requirements of South Dakota State University's Agricultural Experiment Station and Extension Service publications.

Support for research on which this paper is based came from South Dakota State University's Agricultural Experiment Station Project H-056, entitled "Implications of Risk and other Factors for Diversified and Sustainable Farming Systems". Thanks are extended to Jamie Pourier and Lisa Carr for assistance with data. We appreciate reviews of a draft of this paper by Alan May and James Smolik. However, we are responsible for the interpretations and any remaining mistakes in the paper.

---

*Dobbs is Professor of Agricultural Economics at South Dakota State University. Dumke, formerly a Graduate Research Assistant in Economics at South Dakota State University, is presently an adjunct faculty member at Southwest State University, in Minnesota.

Implications of "Freedom to Farm" for Crop System Diversity in the Western Corn Belt and Northern Great Plains

by
Thomas L. Dobbs and Linda M. Dumke

Introduction

The Federal Agricultural Improvement and Reform Act (FAIR) Act of 1996, popularly know as "Freedom to Farm", represented a fundamental shift in the primary policy mechanism for supporting farm incomes in the United States (U.S.). Crop-specific "deficiency payments" were replaced by "production flexibility contract payments", scheduled to run through the year 2002 and, presumably, then terminate. The total amount available for contract payments nationwide started at $5.6 billion in fiscal year (FY) 1996, was to reach $5.8 billion in FY 1998, and was to decline to $4 billion in FY2002 (ERS, 1996, p. 1). Allocations to each contract farm are based on the farm's historical base acreage and yield, not on current acreage planted to individual crops. Thus, farmers have almost unlimited planting flexibility under "Freedom to Farm".

Will this flexibility result in more crop system diversity over time? Advocates of less chemical-intense and more diverse-rotation farming systems often have felt that previous farm bills, with their crop-specific subsidies, contributed to the near disappearance of diverse rotations in most parts of the U.S. In a companion report, we recently analyzed the historical evolution and narrowing of crop systems in seven eastern South Dakota counties (Dumke and Dobbs, 1999). That analysis indicated that the narrowing of crop systems over the past half-century has been due to interactions of several factors, including Federal farm policy. Farm price supports policies prior to the 1996 farm bill tended to disproportionately support particular crops, such as corn and

wheat. Research and technology development--in both public and private sectors--also have focused heavily on a few major crops, especially corn, wheat, and soybeans in the Western Corn Belt and Northern Great Plains. Due to equipment costs, larger farm sizes, spouses and teenage children spending less time in farm work, and the amount of management attention needed to effectively produce and market different products, farmers have increasingly specialized in just a few crop and livestock enterprises. Moreover, markets gradually disappeared in some areas for certain crops such as flax.

We concluded from the historical portion of our analysis that, while past Federal farm policies have contributed to the narrowing of crop systems, changes in farm policies alone are unlikely to cause substantial crop system diversity. However, we also went beyond the historical analysis to focus specifically on farmers' perceptions about likely impacts of the 1996 farm bill.[1] We report our findings in that area in this paper.

The 1996 Federal farm bill

After six decades of conditioning price support payments on various kinds of planting restrictions, the FAIR act was passed with the intention of largely "decoupling" support payments from market prices and specific commodities. During a one-time signup in 1996, eligible farmers had the option of entering 7-year contracts with the U.S. Department of Agriculture to receive Production Flexibility Contract Payments (PFCPs). To be eligible, a producer's farm had to have an established base acreage of wheat, corn, sorghum, barley, oats, upland cotton, or rice for 1996 (ERS, 1996). During the 7-year program, farmers are able to plant any crops, except for some limitations on fruits and vegetables, on 100 percent of their total contract acreage; there are no longer any set-

[1] See Dumke (1999) for more complete explanations of both the historical analysis and the analysis of focus group perceptions about impacts of the 1996 farm bill.

aside requirements. Farmers are able to have an unlimited amount of haying and grazing on their land. They must, however, continue to comply with conservation and wetland protection requirements and continue to use the contract acreage for an agricultural or related activity (FSA, 1996).

Price supports, via nonrecourse loans and loan deficiency payments, are available to farmers holding Production Flexibility Contracts. If prices at harvest time are below a farmer's expectation, he or she can receive a loan from the government. The loan rates were

> set at 85 percent of the 5-year moving average of farm prices, subject to a maximum of $2.58 per bushel for wheat and $1.89 per bushel for corn, the same rate as in 1995 (ERS, 1996, p. 8).

Loan Deficiency Payments (LDPs) are available to farmers who agree not to place their crop under loan (ERS, 1996, pp. 9-10). These LDPs are based on the difference between loan repayment rates and market prices. At the time the FAIR Act was passed, it was felt that LDPs would not have much influence on farmers' planting decisions because market prices would normally exceed the loan repayment rates. However, prices have fallen so much in the few years since 1996 that loan rate levels are having an influence. Therefore, FAIR does not embody as much "decoupling" as many people expected!

Income support in the most recent previous farm bills was provided to farmers in the form of deficiency payments that were inversely related to market prices. Payments were received when market prices fell below the government established "target price" for each commodity. The amount of the deficiency payment was the difference between the target price and the market price or the nonrecourse loan rate, whichever was higher (ERS, 1996).

Many of the environmental provisions of the 1990 Food, Agriculture, Conservation, and Trade (FACT) Act were continued, with minor changes, in the 1996 FAIR Act. Cost-share and incentive programs have been available to farmers to incorporate more environmentally sound production practices. Many features of the Water Quality Incentive Program (WQIP), part of the 1990 Farm Bill, were incorporated in the broader Environmental Quality Incentives Program (EQIP) in the 1996 bill. Under EQIP, crop and livestock producers are able to enter 5- to 10-year contracts for cost-share or incentive payments and technical assistance to enhance their current crop or livestock operations with conservation and environmental improvements. (ERS, 1996)

Federally subsidized crop insurance was continued under the 1996 farm bill. Also, the revenue insurance pilot program authorized under the 1994 Federal Crop Insurance Reform Act was continued and expanded (ERS, 1996). Various forms of revenue insurance, in effect, cover both price and yield risks, in contrast to coverage only of yield risk under conventional crop insurance plans.

Related analyses

Just one year after its passage and implementation, initial impacts of the 1996 FAIR Act were assessed by Schertz and Johnston (1997) through panels of farm managers and operators. Eight panels were convened between January and May 1997. Five of the panels were in the Great Plains and Corn Belt; the closest to South Dakota was one in North Dakota. The panel discussions focused on "major agricultural developments, changes in lease arrangements, price expectations, and risk strategies, and changes in crop mixes." (Schertz and Johnston, 1997, p. 3) Johnston and Schertz (1998) reported that many farm operators did shift crop mixes as a result of the planting

flexibility provisions in "Freedom to Farm". Although panelists generally did not expect large changes in the aggregate acreages planted to major crops, they did expect individual farmers to be quite price responsive and to respond to niche market and other profit opportunities by changing their crop mixes and rotations. It is interesting to note that the North Dakota panelists, on average, expected the land they managed to be even more concentrated in wheat by 2000-2002 (45 percent) than it was in 1996 (39 percent). The Illinois panelists expected the overall acreage percentages devoted to corn and soybeans on land they manage to remain about the same in 2000-2002 as in 1996--45 percent for corn and 43 percent for soybeans. (Johnston and Schertz, 1997, pp. 12-13) Therefore, in some regions, changes on individual farms were not expected to lead to much greater aggregate crop mix diversity.

Writing nearly two years after passage of "Freedom to Farm" for the February 1998 USDA Agricultural Outlook Forum, Karmen stated the following:

> Two years ago the biggest unknown concerned farm policy. In 1996, we assumed a continuation of the then-current farm legislation--acreage reduction programs, target prices, deficiency payments, and a smaller CRP program than today's levels. The 1996 farm bill was signed soon after that outlook conference ended, and farmers planted more acres than we anticipated for wheat and soybeans. Was this in response to the new legislation giving farmers the "freedom to farm?" Most likely not. Higher-than-expected prices at planting time encouraged farmers to plant more and poor weather conditions in several regions of the country prompted farmers to change their crop mix. (Karmen, 1998, p. 192)

He went on to say that even though the USDA knew what farm policies to expect the following year (1997), there were still shortcomings in the crop acreage forecasts for that year. Soybean acreage, for example, was underestimated. He asked whether the higher

than expected soybean acreage was a response to the "Freedom to Farm" legislation, to higher prices, or to weather conditions. His response was that "It's likely a combination of all three, but it's difficult to rank the relative importance of each." (Karmen, 1998, p. 192)[2]

More recently, Lin, et al. (1999) have provided quantitative estimates of the impacts of the increased flexibility provided by "Freedom to Farm" on regional and US acreages of major crops. They compared estimates of acreages from 1996 through 2005 under (a) provisions of previous (1990) farm bill provisions and (b) the "Freedom to Farm" (1996) provisions. They attributed the differences to the 1996 legislation's flexibility provisions. For the U.S. as a whole, the 1996 flexibility provisions appear to have greater impacts on corn, soybean, and cotton acreages than on wheat acreage. U.S. wheat acreage was estimated to be about the same, on average, over the years 1996-2005 under the 1996 legislation as under the previous legislation. However, corn acreage was estimated to be 1-2 million acres lower, on average, and soybean acreage was estimated to be higher by an average of more than 2 million acres. The authors say

[2] Alan May, Extension Grain Marketing Specialist at South Dakota State University, reviewed a draft of this Staff Paper. In response to this quote from Karmen, May expressed his opinion about causal factors at work in South Dakota. He feels that price was the primary motivation for increased acres of soybeans in South Dakota in 1997. "Freedom to Farm" was the initial catalyst, he said, in that it allowed producers the flexibility to shift acres. A combination of declining prices for wheat, quality problems posed by scab, and higher prices for soybeans made the decision to shift an easy one. As far as weather is concerned, according to May, the massive snow pack in the northern tier of South Dakota counties meant that a shift to row crops was likely. Delayed planting of small grains seemed imminent. However, an "early" spring in 1997, with rapid snowmelt, allowed for a better small grain planting season than expected. May thinks that if soybean prices had not been so favorable and if wheat price and quality problems had been tempered, the shift to soybeans in 1997 would not have been so substantial.

> Increased planting flexibility allows producers to make a switch from corn to soybeans based on market signals, without having to be concerned with government payments or base protection. This finding is consistent with the steady rising trend in the soybean share of U.S. soybean-corn acres in recent years, from 44 percent in 1996 to 45.8 percent in 1997, and to 48.3 percent in 1999. (Lin, et al., 1999, p. 7)

Lin and colleagues found that the current (1996) legislation is likely to slow corn acreage expansion in the traditionally wheat-dominated Central and Northern Plains. However, the legislation "would facilitate soybean acreage expansion in this region" (Lin, et al., 1999, p. 7). Regional production patterns for wheat were found to remain largely unchanged.

Focus and methods of analysis

The geographic focus of this paper is a seven-county area of eastern South Dakota, covering much of the Big Sioux Aquifer (Figure 1). The southern portion of this area is on the edge of the Western Corn Belt and the northern portion is on the edge of the Northern Great Plains. Corn and soybeans now dominate the Western Corn Belt. Historically, wheat and other small grains dominated the Northern Great Plains. However, that region has seen substantial growth over time in acreages of oilseed crops like sunflowers and soybeans, as well as an expansion in corn acreage. Since the study area is in the transition zone between two major U.S. crop regions, our analysis provides insights into potential impacts of the 1996 farm bill in both regions.

The seven counties that were included in the study area were: Codington, Hamlin, Deuel, Brookings, Lake, Moody, and Minnehaha. Special attention was given to Codington and Moody Counties, as they were chosen to represent the northern and

southern ends of the study area. The crop histories of the seven-county area and of these two counties are presented in Dumke and Dobbs (1999).

Focus group interviews in Codington and Moody Counties in November and December 1997 constitute the primary information source for this paper. Two focus groups were formed in each county, for a total of four groups. We also formed one additional focus group consisting of plant scientists at South Dakota State University, which we met with in April 1998. Criteria and methods for identifying focus group participants, eventual makeup of each focus group, and procedures for conducting the focus group interviews are described in Dumke and Dobbs (1999). The focus groups were used to gain insights on both (a) factors influencing the historical evolution of local crop systems and (b) possible impacts of the 1996 farm bill on future crop system diversity. Our summary of the focus group participants' views on the historical evolution of local crop systems is found in Dumke and Dobbs (1999), and the present paper covers their views on possible impacts of the current farm bill.

Before presenting results of the focus group interviews, we briefly present and describe some crop acreage changes since passage of the FAIR Act in 1996. Then we summarize the focus group findings on how crop systems are likely to be impacted, if at all, by the FAIR Act. Following that, there are brief sections in which we explain focus group opinions on potential crop system impacts of two particular sets of current Federal farm policy provisions--dealing with crop and revenue insurance and environmental quality.

Recent Crop System Changes

The last Agricultural Census prior to passage of the FAIR Act was the 1992 Census, and the only one since passage was the 1997 Census. Figures 2, 3, and 4 show the relative acreage harvested proportions of seven major crops (including all hay) in South Dakota, Codington County, and Moody County, respectively, in 1992 and 1997.[3] Each census is simply a snapshot in time, and one should be careful about drawing trend and causality conclusions from only two such snapshots. Nevertheless, these census snapshots are useful in setting the stage for our presentation of more detailed data and discussion of focus group findings.

We can see in Figure 2 that corn and wheat declined slightly between 1992 and 1997 in their respective percentages of land devoted to these major crops in South Dakota as a whole. Oats and barley also declined. Soybeans, on the other hand, increased from 15 to 21 percentage of the total acreage devoted to the seven crops. All hay remained at a quarter of the crop acreage devoted to these crops.

The same general patterns also were exhibited in Codington County (Figure 3) and Moody County (Figure 4). Soybeans went from 25 to 33 percent of the acreage harvested in Codington County between 1992 and 1997. In that county, soybeans were displacing wheat and other small grains, for the most part. The increase in soybean acreage in Moody County was from 42 to 46 percent. There was little small grain acreage remaining in Moody County by 1992, so the growth in soybean acreage there was largely at the expense of corn (at least in proportional terms). In 1992, there was less

[3] The pie charts and percentages shown in Figures 2-4 represent land devoted only to the seven crops (including all hay) indicated, and do not include land devoted to other crops and pasture.

soybean than corn acreage in Moody County, but there was slightly more soybean than corn acreage by 1997.

In our companion report (Dumke and Dobbs, 1999), we examined the historical evolution of six major crops in the Big Sioux Aquifer study area. Planted acres of those same six crops--corn, soybeans, wheat, oats, barley, and flax--since passage of "Freedom to Farm" are shown in Tables 1 through 6.

We can see in Table 1 that corn acreage planted in the seven-county study area of eastern South Dakota increased relative to the previous year in 1996, decreased in 1997, and then increased again in 1998. The net result was almost the same acreage planted to corn in 1998 as the average for 1991-95. The same pattern is evident for South Dakota as a whole. For the entire U.S., corn acreage increased in 1996 and 1997, but decreased slightly in 1998. By 1998, acreage planted to corn was 11 percent higher than the 1991-95 average in South Dakota and approximately 6 percent higher in the entire U.S. Corn acreage decreased by 6 percent in South Dakota in 1999, compared to 1998, and by 3 percent nationwide (NASS, preliminary data).

Changes in soybean acreage (Table 2) were greater than for corn. Acres planted to soybeans in the eastern South Dakota study area were only slightly higher (3.6 percent) in 1996 than in 1995, but acres increased by 9 percent (over the previous year) in 1997. There was a slight decrease in 1998, but acreage planted that year was 23 percent higher than the 1991-95 average. The general pattern was the same for South Dakota as a whole, but acreage planted to soybeans in the entire State was 52 percent higher in 1998 than the 1991-95 average. National soybean acreage increased every year from 1996 through 1998; acreage was 19.5 percent higher in 1998 than the 1991-95 average.

Soybean acreage expanded further in 1999; it was up by 13 percent over 1998 in South Dakota and by 2.5 percent nationwide (NASS, preliminary data).

The story for wheat acreage since passage of the 1996 farm bill (Table 3) is very different than that for soybeans. By 1998, wheat acreage was below the 1991-95 average in the Big Sioux Aquifer study area (nearly 18 percent), South Dakota (4 percent), and the U.S. (nearly 7 percent). Wheat acreage increased (over the previous year) at all three of these geographic levels in 1996; it again increased in 1997 in the study area, but decreased that year at both State and national levels. Wheat acreage decreased at all of the indicated geographic levels in 1998. Wheat acreage was down again in 1999, by nearly 14 percent (compared to 1998) in South Dakota and by 9 percent nationwide (NASS, preliminary data).

Acreages planted to oats (Table 4) and barley (Table 5) were down substantially by 1998--relative to the 1991-95 averages--in the study area, South Dakota, and the entire U.S. Oats acres decreased in 1996 by nearly 21 percent, relative to the previous year, but increased slightly in 1997 (1 percent) and a bit more in 1998 (7 percent). In spite of the 1997 and 1998 increases, acres planted to oats in 1998 in the Big Sioux Aquifer study area were approximately 53 percent lower than the 1991-95 average. Acres planted to barley in the study area also increased in 1998, after having declined in both 1996 and 1997; however, the 1998 acreage was 69 percent below the 1991-95 average. At the State level, acres planted to oats in 1998 were 20 percent higher than in 1995, but 43 percent below the 1991-95 average. Barley acreage in 1998 for the State as a whole was 36 percent below 1995 acreage and nearly 69 percent below the 1991-95 average. U.S. 1998 planted acres of oats and barley were roughly 35 and 17 percent, respectively,

below 1991-95 averages. Oats and barley acreages in South Dakota were down by 24 and 30 percent, respectively, in 1999 (compared to 1998); for the entire U.S., 1999 oats acreage was down by 5 percent and barley acreage was down by 17 percent (NASS, preliminary data).

Flax, an important crop in eastern South Dakota in the 1950s, had diminished to relative insignificance by the early 1990s. We can see in Table 6 that recorded flax acreage in the seven-county study area disappeared in 1996 and did not reappear in 1997 or 1998. Flax acreage in the entire State of South Dakota declined in 1996 and recovered some in 1997, but was 33 percent below the 1991-95 average in 1997 and 1998. After declining in 1996, U.S. flax acreage increased in 1997 and 1998--to a level 56 percent higher than the 1991-95 average. However, there were only 336,000 acres of flax in the entire U.S. in 1998. Flax acreage did increase by 33 percent in South Dakota in 1999, from 15,000 acres in 1998 to 20,000 acres in 1999 (NASS, preliminary data). Nationwide, the acreage increase in 1999 (over 1998) was 1.5 percent (NASS, preliminary data).

In summary, the principal changes in crop plantings since passage of the 1996 Farm Bill have been an increase in soybeans and corn and decreases (relative to 1991-95 averages) in wheat and other small grains (oats and barley). The aggregate picture is certainly not one of increased crop system diversity.

Views of the Focus Groups

Farmer and plant scientist focus groups were asked for their opinions about future crop systems. Specifically, they were asked how the flexibility features of the 1996

FAIR Act have changed, or may change, their crop systems--including the conservation aspects of those systems.

The crop systems of farmers participating in the focus groups are described in Table 7. Group I in each county (Codington and Moody) was intended to represent somewhat smaller farms as measured by acres crop-farmed, and Group II was to represent somewhat larger farms. However, after farmers were identified (in cooperation with County Cooperative Extension Agents) and invited to participate in particular focus groups, we found that some farmed more crop acres and some farmed less than we expected. Therefore, there was some overlap in the ranges of acres cropped by farmers in Groups I and II within each county.

In Codington County, the most prevalent cropping system was a corn, soybeans, and wheat rotation. Three farmers had a fourth crop in their rotation, alfalfa. One farmer in Group II had a very diverse system of oats, sunflowers, alfalfa, corn, soybeans, and wheat.

The corn-soybean rotation was predominant in Moody County. Six of the seven focus group farms had this rotation. One of the smaller farms was more diverse--with a rotation of oats, alfalfa, corn, and soybeans.

Anticipated changes

Focus group participants were asked in a background information questionnaire whether they had made changes in their crop rotations since inception of the 1996 farm bill. Four of the five farmers in Codington County Group I reported some changes (Table 7). The four farmers indicated the following changes: more row crops in the rotation; took barley out of rotation; took barley and flax out of the rotation; and more consistent

and use acres in a more manageable way. In Codington County's Group II, two of the five farmers indicated the following changes: plant more wheat and corn due to the flexibility; and plant less wheat and more corn and soybeans.

Only one of the five farmers in Moody County's Group I indicated a change in rotation since "Freedom to Farm" was introduced. That farmer reported movement to a 50-50 rotation of corn and soybeans. This farmer had always planted just corn and soybeans; however, the previous base acre provisions and planting restrictions had precluded a 50-50 rotation. In Moody County's Group II, neither of the two farmers reported a change in crop rotation.

Farmers were asked in the focus group discussions: "Do you think that the planting flexibility features of the 1996 farm bill are likely to make any significant and lasting alterations in the crop system patterns that existed in this county as of the mid-1990s?" The general consensus of the focus groups in both counties was that there would be a move towards more corn and soybeans, particularly due to the profitability of the two-crop rotation. A corn-soybean rotation for most, particularly in Moody County, is considered (by farmers) to be more profitable than other, more diverse rotations. Also, expensive equipment has helped induce many farmers to switch to just corn and soybeans; the more narrow the rotation, the less equipment is needed.

Group I farmers in Codington County indicated that there could be more year-to-year fluctuations in the crops planted, due to the "decoupling" of support payments. Some of the farmers mentioned that they would possibly plant more small grains, in part due to the white mold and cyst nematode problem; they felt that could also help reduce weed problems. One farmer indicated that wheat was his best net income crop. Other

focus group participants mentioned that the scab disease in wheat may cause farmers to switch to just a corn and soybean rotation or to find a different variety of wheat. Farmers in Group I also mentioned that specialty crops may find their way into rotations. Alfalfa and hay also were mentioned as crops that may enter rotations due the "Freedom to Farm" flexibility provisions. Some felt that value-added industries will be particularly helpful for alfalfa and soybeans. One farmer also indicated the possibility of including rye in the rotation.

Some farmers in Codington County's Group II indicated that they are planting more whole quarter-sections of land to just one crop. Some farmers indicated that they will plant more corn. Livestock owners will continue planting corn with soybeans. Market prices (sometimes locked in even before planting) will dictate what will be planted, some farmers felt. Some farmers thought that it is good to have wheat in the rotation, particularly if the price goes up. Others noted that they are seeing less wheat all the time, partly due to diseases. Some indicated they will plant more wheat if new varieties of disease-resistant seed become available. As in Group I, Group II farmers mentioned that some alfalfa may enter crop rotations. Farmers in both Codington County groups indicated that more soybeans have been planted due to the recent wet years; some farmers felt that soybeans will decrease in the county if drier weather patterns return.

Group I farmers in Moody County indicated that there has been a move from continuous corn (where it existed) to a 50-50 corn and soybean rotation. "Freedom to Farm's" flexibility feature, farmers commented, would help break the cycle of too many corn acres caused by corn base provisions. Some farmers mentioned that wheat would be a good crop to grow to help break up the corn-soybean rotation, particularly to break the

pest cycles that are beginning to appear in soybeans. However, they said that currently there is no market for wheat in the area. Hay and/or small grains other than wheat, farmers felt, also may find their way into rotations in the area. One farmer felt that specialty crops could find their way into local farming systems. Canola is one specialty crop that was mentioned as a possibility, provided there is a market. Changes in guidelines for a particular chemical may bring some oat acres back into farmers' rotations. Previously, farmers reportedly had to wait 26 months after the application of the chemical to plant small grains. Now, it was said, farmers can plant small grains 16 to 18 months after the chemical has been applied to a field.

Farmers in Moody County's Group II, like those in Group I, felt that the flexibility of the 1996 Farm Bill was good--"you don't have to plant as much corn". The farmers felt that there are more corn and soybean acres now, particularly with chemicals making it easier to plant corn and soybeans. They also indicated that there would be little change in corn and soybeans rotations unless a specialty crop would come in. If customers in other countries want a particular crop--such as Japanese customers' demand for a certain kind of soybean for tofu--that could make a difference. Group II farmers felt, like those in Group I, that more continuous corn systems would change to corn-soybean systems. The farmers commented on the amount of durum wheat acres in the 1980s, indicating that it is difficult to plant wheat now since the closest market is Watertown, SD.

The plant scientist focus group was concerned about the cyst nematode problem in soybeans. One scientist felt that farmers will need to be more diverse and guided into more than a two-crop rotation, in order to break the pest cycle; he felt that "management does not include just two crops". However, some scientists felt that new seed varieties,

such as Round-up Ready soybeans and Bt corn, are going to encourage farmers to continue with the narrow rotation of corn and soybeans. One scientist commented "a lot of it is convenience and time ... corn and soybeans are easier".

Farmers in both counties, as well as plant scientists, commented on the cost of equipment. Expensive equipment induces farmers to narrow their rotations; the more crops planted, the more pieces of equipment are needed.

Constraints to more alfalfa

Plant scientists and farmers in both Codington County and Moody County commented on the possibility of including alfalfa in more rotations. There have been high prices for alfalfa in recent years, and an alfalfa plant in Granite Falls, Minnesota may create some additional regional demand for alfalfa.

Farmers and plant scientists felt that the main reasons alfalfa is not included in crop rotations on more acreage are the added expense of equipment needed and the time required to put up hay. One plant scientist commented that farmers "have a hard time convincing their banker they can afford an $80,000 [large-square] baler".

Storage and handling also are concerns for farmers. Small and large square bales need to be sheltered, or they take on moisture. Many farmers do not have storage buildings available. Also, handling of bales can be quite tedious without special equipment, such as a fork and accumulator. Farmers and plant scientists also acknowledged that putting up alfalfa is very time-consuming, and the window of time to put up hay sometimes can be very limited. Farmers are at the mercy of the weather; therefore, there is need for options to allow hay to be put up under wetter conditions.

Until recently, insurance was not available for alfalfa hay. There are a few companies that now provide insurance coverage for alfalfa hay. However, policies that are available have a number of restrictions.

Marketing hay can be time-consuming. Farmers must find buyers for hay or get the hay to markets. There was also concern among farmers about whether the high prices of recent years would continue.

Other constraints to diversity

Farmers and plant scientists in the focus groups felt that chemicals have made it easy to deal with just a few crops, such as corn and soybeans. Decisions about which crops to plant involve considerations not only of profits, but also of time and convenience. Costs of equipment and repairs have contributed to the decisions to narrow rotations. Due in part to the costs of equipment, farmers have had to increase their farm sizes in order to spread equipment costs over more acres. This growth in farm size, in turn, limits farmers' ability to give adequate management attention to several different crops.

Labor constraints were noted by farmers and plant scientists. The increasing number and scope of off-farm activities available to rural youth compete with farming activities for children's time. Also, few town children are available for, or interested in, farm work. Thus, labor availability is another factor that helps drive farmers to narrow their crop rotations.

Implications of Crop and Revenue Insurance

The "market-orientation" of the 1996 farm bill implies that farmers need to take managerial responsibility for more of the risk inherent in agriculture than they have previously. How they choose to manage that risk could have impacts on crop system diversity.

All farmers in the focus groups indicated that they had generally carried multi-peril crop insurance (MPCI) during the 1990s (Table 7). Some had carried only hail insurance on portions of their crop acres. One of the focus group farmers in Codington County and three in Moody County had been using Crop Revenue Coverage (CRC), a form of revenue insurance.

One question posed in the focus groups was: "Do you think the 1996 farm bill's combination of decoupled support payments and relatively low loan rates is likely to cause farmers in this area to change their risk management strategies with respect to use of MPCI?" Responses were mixed. One farmer in Codington County Group I said "the way it is set up right now, I'm staying". He continued by saying that he would work with "prevented planting" along with CRC--prevented planting of wheat and come back with soybeans on "ghost acres". "Prevented planting" occurs when the farmer has been prevented from planting a crop, due to unfavorable weather conditions, up to the final planting date as specified in the insurance policy (FCIC, 1994). The "ghost acres" are those that were intended, for example, for wheat (a crop that would normally be planted earlier). However, if weather conditions are not favorable for planting wheat, the farmer proceeds to plant a crop like soybeans on the land originally intended for wheat. Another farmer in Group I of Codington County felt that there will be a decrease in the use of

MPCI because it is going to be less and less attractive as years go by, especially if the "ghost acre" provisions are taken out. One farmer in Group I felt that MPCI has been getting used more in recent years.

Codington County farmers in Group II also expressed concerns about the possibility of "ghost acres" being eliminated. One farmer felt there is a need for insurance coverage on alfalfa. (Shortly after the focus group interviews, we were informed that some insurance companies had begun to cover alfalfa, but there were some restrictions in the coverage.) Some farmers in Group II felt that MPCI is good and thought changes were needed, particularly for proven yields. There was some frustration about how complicated MPCI is and about "the government continuously changing the rules".

In Moody County, Group I farmers felt there is a need for more insurance for higher-risk crops. One farmer used MPCI on corn and CRC on soybeans. Another indicated that he did not use hail insurance before, because he was more diversified; now that he is more specialized, there is more need for insurance. One farmer commented "we're still in this business to make money". Therefore, he felt farmers need to carry insurance, as well as use marketing tools. Some farmers felt that "the 65 percent level of coverage is too low". Like farmers in Codington County, some felt that the rules for proving yields needed change. One farmer commented that he needed to know the loopholes of insurance to make it worthwhile.

One of the farmers in Moody County Group II indicated that he uses MPCI for the "bottom half" and hail insurance for the "top half" of his crops. MPCI provided (at the time) coverage for up to 75 percent of farmers' proven yields (the "bottom half").

Therefore, some farmers buy additional insurance to protect the "top half", or the difference between the proven yield and the percent covered by MPCI.

Responses to a focus group question on farmers' use of futures market and other forward contracting tools indicated that farmers are increasingly realizing the importance of using various risk management tools. Tools farmers are currently using include futures, options, MPCI, and hail insurance. Since inception of the 1996 farm bill, some farmers have also begun using crop revenue insurance. However, unless these tools are applicable to--and used by farmers for--crops other than the major cash crops like corn, soybeans, and wheat, they are not likely to lead to increased crop system diversity.

Implications of Environmental Quality Provisions

The 1996 farm bill continued an emphasis on conservation and other environmental provisions that was present in the 1985 and 1990 bills. A central feature of the 1996 legislation is the Environmental Quality Incentives Program (EQIP). However, only one farmer in the focus groups indicated that he was participating in EQIP, as of late-1997 (Table 7). This farmer, in Codington County, was using water diversion, small dams, grass waterways, and rotation grazing.

Two farmers in Moody County indicated that they had participated in the former Integrated Crop Management (ICM) program. One of those farmers also had participated in the former Water Quality Incentives Program (WQIP).

One of the questions posed to focus groups was: "Do you think that concerns about soil erosion, water quality, and other environmental matters are likely to cause changes in the mix of crops grown in this area over the next 10 years?" Group I farmers in Codington County felt that filter strips are good. One farmer indicated that he "will

farm to keep the land quality there so we can make a living off the land". However, another felt that with the farm benefits disappearing, there may be few incentives to preserve wetlands. Continuing with that line of reasoning, one farmer said "I don't think there's one person that won't put a plow in the ground and drain that water hole if the government doesn't pay for that hole". In Codington County's Group II, one participant said that farmers planting more row crops may turn to no-till because of erosion and moisture loss associated with row crops. Another farmer indicated that he might add small grains and alfalfa to his rotation.

In Moody County, Group I farmers also noted that filter strips are good for the environment. The one farmer in this group with an irrigation system had concerns about the regulations on "chemigating"--applying chemicals through the irrigation system. A farmer in Group II commented that if farmers "do a good job with the soil [by using soil-conserving measures], it [the soil] will return a profit".

Focus group farmers also were asked: "Do you think that USDA environmental programs like WQIP, ICM, and EQIP have had--or are likely to have--much impact on the mix of crops grown in this area?" Farmers in both Codington and Moody Counties felt that the environmental programs probably would not have much impact on the mix of crops grown. However, they thought that there probably would be greater scrutiny of the chemicals used.

One farmer in Codington County's Group II said "most farmers are conscious [of the environment]; they take care of the land to stay in business". Another farmer added that "most of the farmers are taking care of it [the environment] already by leaving buffer strips and waterways". Also, one of the Codington County farmers felt that some of the

rules do not pertain well to that area; e.g., "shade trees for catfish were designed for Alabama".

In Moody County, farmers in Group II thought that environmental programs in the current Federal farm bill probably would affect tillage practices, but would not change the type of crops grown. Like some of the other groups, these farmers felt that if they do a good job with the soil, the land will return a profit.

Conclusions

Flexibility provisions of the "Freedom to Farm" bill have led to some changes in crops grown in the eastern South Dakota area we studied, but the changes generally do not involve more diversity. Farmers in Codington County indicated that there are likely to be more corn and soybean acres and fewer small grain acres planted in that county. Many farmers in Moody County were moving toward a 50-50 corn and soybean rotation, if they had not already been there. Some farmers also indicated that they are planting more whole quarter sections of land to one crop.

Some of the farmers in Moody County indicated that they probably would grow wheat again; however, they said there currently is no local market for wheat. Alfalfa hay is another crop some farmers would consider for their rotations, but there have been a number of inhibiting factors--such as the need for access to another line of equipment and the lack (at least until recently) of insurance coverage for hay.

Plant scientists noted that new seed varieties, such as Bt corn and Round-up Ready soybeans, have encouraged narrow rotations. Also, chemicals have made it easier to plant just corn and soybeans. However, some farmers may be forced to make changes in their crop systems due to diseases showing up in soybeans and wheat. The

profitability of corn and soybeans (and sometimes wheat) relative to other crops, new seed genetics, chemical inputs, and the expense of equipment make the prospects look poor for more crop system diversity in the years ahead. While the 1996 farm bill may be "flexible" and "market-oriented", its features do not do much to actively encourage diverse crop systems.

For most focus group farmers, the general consensus was that "getting rid of the base acres is a good thing . . . makes it more simple". Farmers are able to plant any crops and still receive their support payments.

Some focus group farmers felt that the philosophy of "moving into the world market is good, especially with the growth in the Pacific Rim countries". One farmer said that the current farm program allows people to "weed themselves out"--marginal farmers will have to make drastic changes to continue farming.

More negative views about the current direction of Federal farm programs were expressed by a few. An older farmer in Codington County said (in late 1997) "history will probably repeat itself--we may see low prices similar to the 1930s". He went on to add "you can't have high loan rates and freedom to farm--can't have both". Another concern expressed was that with no set-aside acres, there needs to be a large volume of agricultural exports. Also, some farmers fear that large companies will control the markets.

Some Moody County farmers said they do not want to see many future government programs helping support very large farms. They wanted the emphasis to be on small- to moderate-sized farms. Farms with 800 to 1,500 acres were considered "moderate-sized" (in Moody County).

At the time of this writing, nearly two years after the focus group interviews, there are powerful pressures from many quarters to significantly re-write the FAIR Act. A number of proposals call for higher loan rates and some involve raising the per farm limits on support payments. Most of the proposals do not address the supply management issues that will inevitably arise if attempts are made to maintain loan rates above world market levels. Proposals to raise loan rates very likely would reward and reinforce the specialization trends that have been underway for a long time, thereby undermining even the rather weak incentives in "Freedom to Farm" to diversify crop systems. The major policy conclusion of our study is that any significant movement toward greater crop system diversity in the Western Corn Belt and Northern Great Plains may require even stronger incentives for farmers, perhaps in the form of some kind of "stewardship" or "green" payments.

References

Dumke, Linda M. An Economic Examination of Potential Effects of the 1996 Farm Bill on Crop System Diversity. M.S. Thesis in Economics. South Dakota State University, Brookings, SD, 1999.

Dumke, Linda M., and Thomas L. Dobbs. Historical Evolution of Crop Systems in Eastern South Dakota: Economic Influences. Economics Research Report 99-2. South Dakota State University, Brookings, SD, July 1999.

Economic Research Service (ERS). Agricultural Outlook. Special Supplement: Provisions of the 1996 Farm Bill. Washington, D.C.: U.S. Department of Agriculture, April 1996.

Farm Service Agency (FSA). Production Flexibility Contracts and Marketing Assistance Loans: Fact Sheet. Washington, D.C.: U.S. Department of Agriculture, December 1996.

Federal Crop Insurance Corporation (FCIC). Crop Insurance Protection: 1994 Guide. Washington, D.C.: U.S. Department of Agriculture, 1994.

Johnston, Warren E., and Lyle P. Schertz. What Farm Managers Told Us about the 1996 Farm Act: Part 2. Choices 13, No. 2 (1998): 21-25.

Karmen, Bradley. Grains and Oilseeds Outlook for 1998: Acreage Shifts and Shifting Demand. Agricultural Outlook Forum '98 Proceedings. Washington, D.C.: U.S. Department of Agriculture, February 24, 1998: 192-204.

Lin, William, Bob Skinner, Scott Sanford, and Daniel G. De La Torre Ugarte. The Impacts of Planting Flexibility under the 1996 Farm Act on Major U.S. Field Crops. Selected Paper presented at the American Agricultural Economics Association Annual Meeting, Nashville, TN, August 1999.

National Agricultural Statistics Service. Census of Agriculture. Washington, D.C.: U.S. Department of Agriculture, 1992 and 1997.

National Agricultural Statistics Service, U.S. Department of Agriculture. Data on planted acres of crops located on the Internet at www.usda.gov/nass/.

Schertz, Lyle P., and Warren E. Johnston. Managing Farm Resources in the Era of the 1996 Farm Act. Staff Paper No. AGES 9711. Marketing and Trade Economics Division, Economic Research Service, U.S. Department of Agriculture, December 1997.

Figure 1. Big Sioux River and Study Area

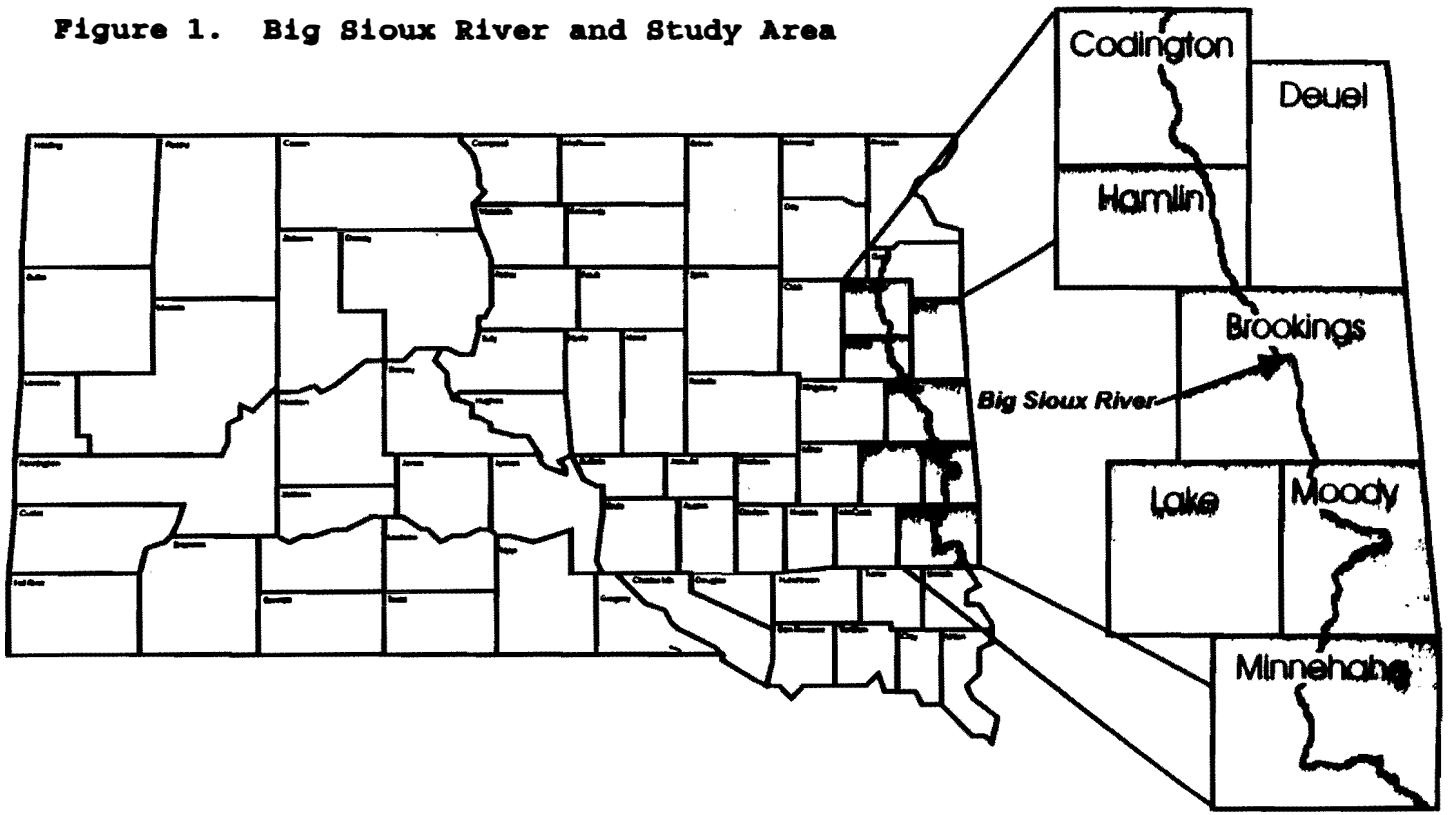
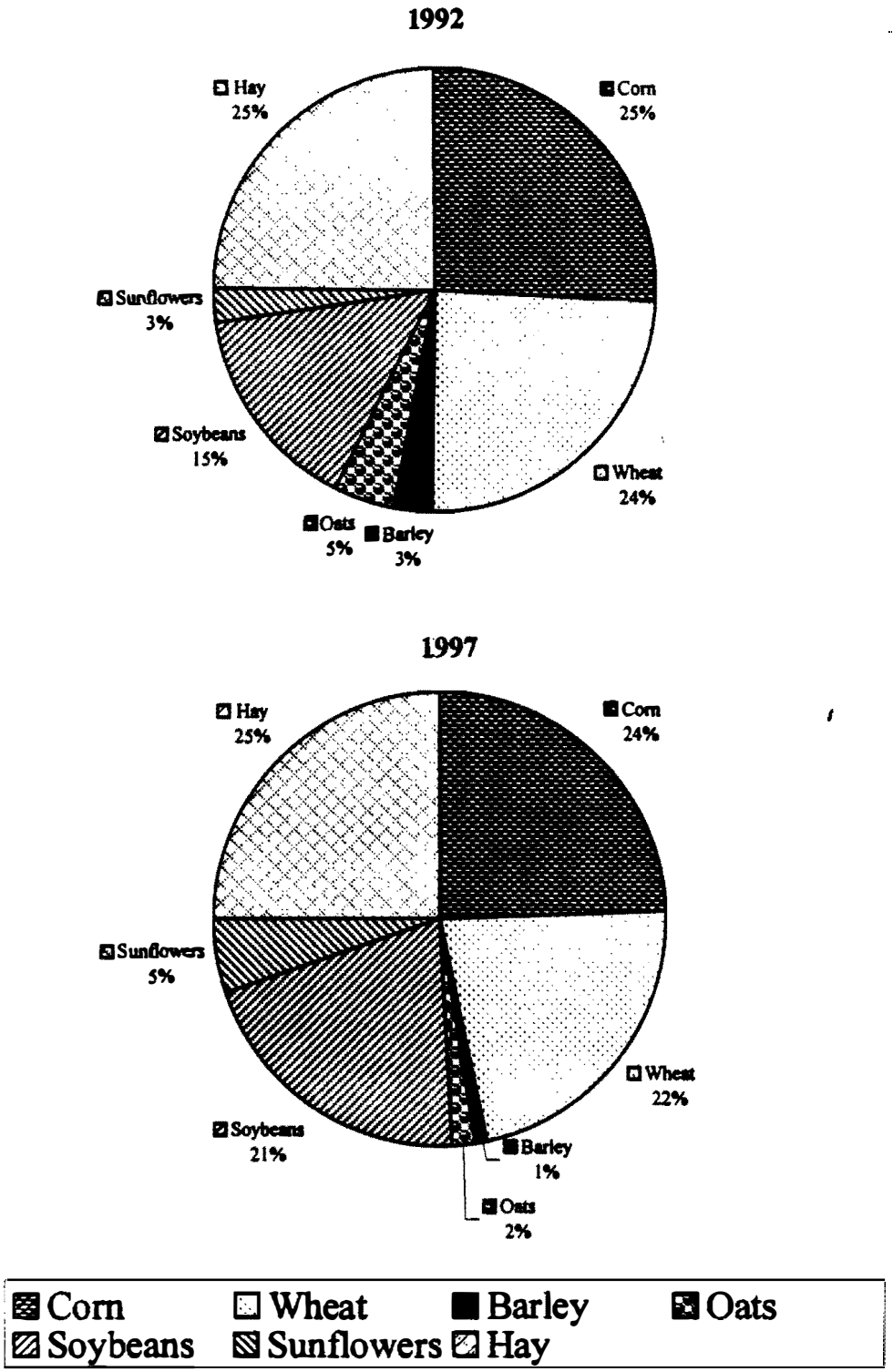
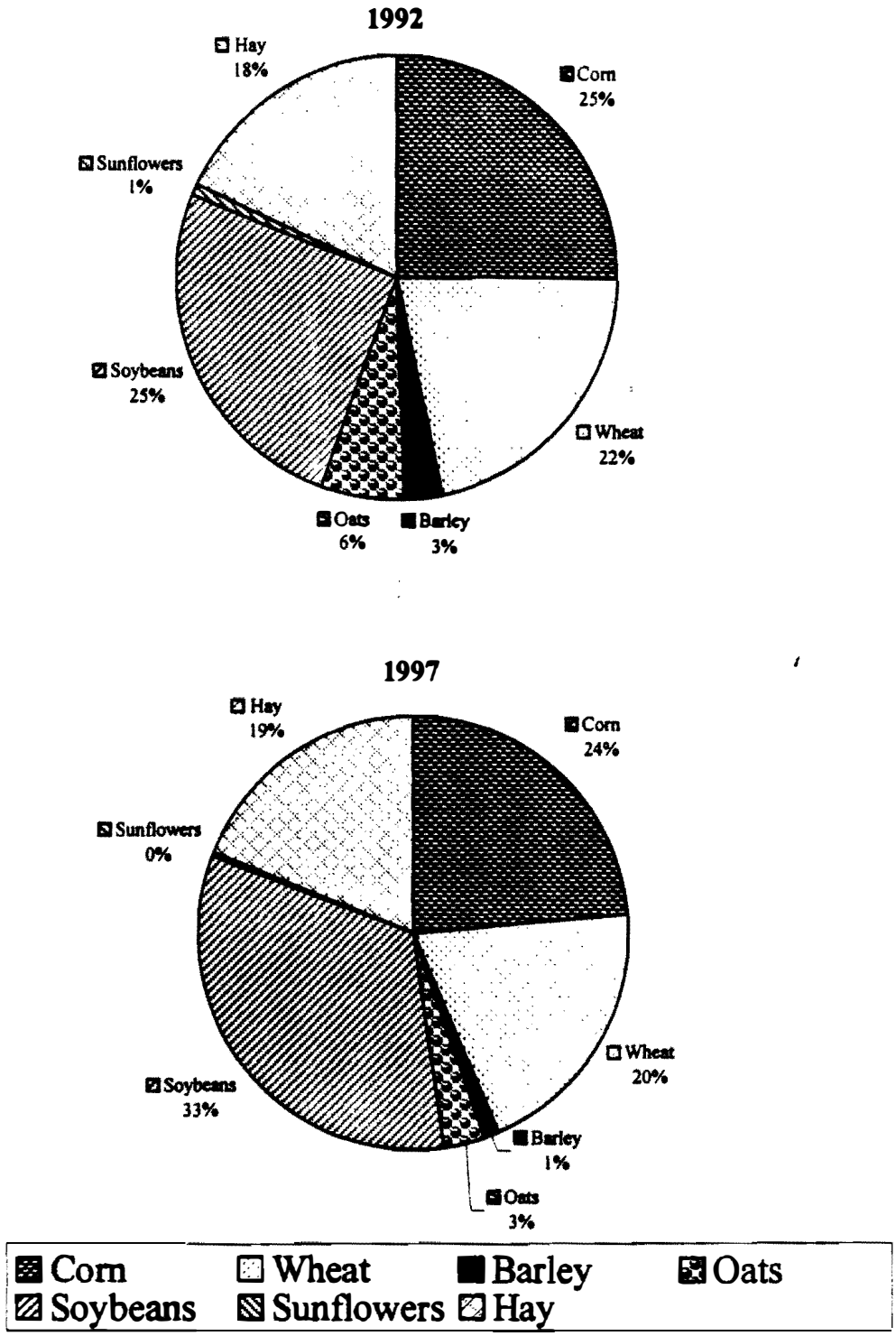


Figure 2. Proportions of Cropland in Major Crops, South Dakota



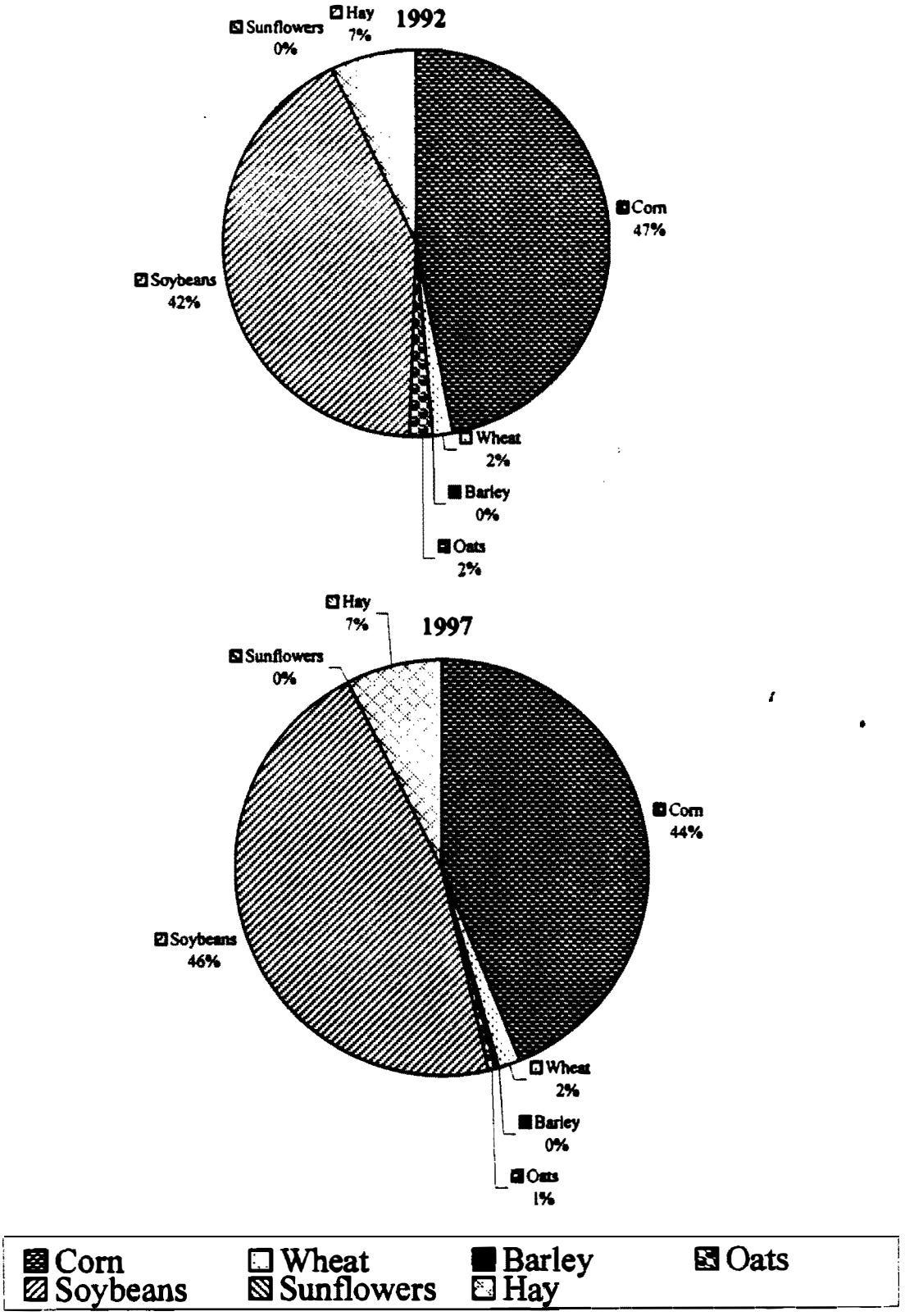
Source: Agricultural Censuses for 1992 and 1997

Figure 3. Proportions of Cropland in Major Crops, Codington County



Source: Agricultural Censuses for 1992 and 1997

Figure 4. Proportions of Cropland in Major Crops, Moody County



Source: Agricultural Censuses for 1992 and 1997

Table 1. Planted Acres in the 1990s: Corn

County or region	91-95 acres	95 acres	96 acres	% change (95-96)	% change (91-95 ave-96)	97 acres	% change (96-97)	% change (95-97)	% change (91-95 ave-97)	98 acres	% change (97-98)	% change (95-98)	% change (91-95 ave-98)
Codington	63900	59000	71000	20.34%	11.11%	62000	-12.68%	5.08%	-2.97%	61000	-1.61%	3.39%	-4.54%
Hamlin		76000	77000	1.32%		77000	0.00%	1.32%		82000	6.49%	7.89%	
Deuel		57500	70000	21.74%		73000	4.29%	26.96%		68000	-6.85%	18.26%	
Brookings		99000	106000	7.07%		115000	8.49%	16.16%		120000	4.35%	21.21%	
Lake		83500	110000	31.74%		100000	-9.09%	19.76%		112000	12.00%	34.13%	
Moody	106900	97500	115000	17.95%	7.58%	100000	-13.04%	2.56%	-6.45%	108000	8.00%	10.77%	1.03%
Minnehaha		142000	175000	23.24%		156000	-10.86%	9.86%		164000	5.13%	15.49%	
7-County Region	717900	614500	724000	17.82%	0.85%	683000	-5.66%	11.15%	-4.86%	715000	4.69%	16.35%	-0.40%
South Dakota	3500000	2800000	4000000	42.86%	14.29%	3800000	-5.00%	35.71%	8.57%	3900000	2.63%	39.29%	11.43%
United States	75784600	71245000	79507000	11.60%	4.91%	80227000	0.91%	12.61%	5.86%	80187000	-0.05%	12.55%	5.81%

Source: National Agricultural Statistics Service (NASS) data

Table 2. Planted Acres in the 1990s: Soybeans

County or region	91-95 acres	95 acres	96 acres	% change (95-96)	% change (91-95 ave-96)	97 acres	% change (96-97)	% change (95-97)	% change (91-95 ave-97)	98 acres	% change (97-98)	% change (95-98)	% change (91-95 ave-98)
Codington	63280	70000	81000	15.71%	28.00%	93000	14.81%	32.86%	46.97%	90000	-3.23%	28.57%	42.23%
Hamlin		73000	77000	5.48%		93000	20.78%	27.40%		86000	-7.53%	17.81%	
Deuel		84000	85000	1.19%		81000	-4.71%	-3.57%		77000	-4.94%	-8.33%	
Brookings		106000	103000	-2.83%		123000	19.42%	16.04%		127000	3.25%	19.81%	
Lake		97000	100000	3.09%		110000	10.00%	13.40%		112000	1.82%	15.46%	
Moody	95220	102000	104000	1.96%	9.22%	100000	-3.85%	-1.96%	5.02%	101500	1.50%	-0.49%	6.60%
Minnehaha		131000	137000	4.58%		149000	8.76%	13.74%		143000	-4.03%	9.16%	
7-County Region	596780	663000	687000	3.62%	15.12%	749000	9.02%	12.97%	25.51%	736500	-1.67%	11.09%	23.41%
South Dakota	2266000	2550000	2700000	5.88%	19.15%	3500000	29.63%	37.25%	54.46%	3450000	-1.43%	35.29%	52.25%
United States	60548000	62575000	64205000	2.60%	6.04%	70850000	10.35%	13.22%	17.01%	72375000	2.15%	15.66%	19.53%

Source: National Agricultural Statistics Service (NASS) data

Table 3. Planted Acres in the 1990s: Wheat

County or region	91-95 acres	95 acres	96 acres	% change (95-96)	% change (91-95 ave-96)	97 acres	% change (96-97)	% change (95-97)	% change (91-95 ave-97)	98 acres	% change (97-98)	% change (95-98)	% change (91-95 ave-98)
Codington	53260	47500	47000	-1.05%	-11.75%	50000	6.38%	5.26%	-6.12%	42000	-16.00%	-11.58%	-21.14%
Hamlin		12500	23000	84.00%		29000	26.09%	132.00%		20000	-31.03%	60.00%	
Deuel		10100	19000	88.12%		24000	26.32%	137.62%		18000	-25.00%	78.22%	
Brookings		8300	15000	80.72%		23000	53.33%	177.11%		17500	-23.91%	110.84%	
Lake		500	5000	900.00%		5000	0.00%	900.00%		3000	-40.00%	500.00%	
Moody	3080	1000	2500	150.00%	-18.83%	3500	40.00%	250.00%	13.64%	3000	-14.29%	200.00%	-2.60%
Minnehaha		700	2500	257.14%		4500	80.00%	542.86%		1500	-66.67%	114.29%	
7-County Region	127880	80600	114000	41.44%	-10.85%	142800	25.26%	77.17%	11.67%	105000	-26.47%	30.27%	-17.89%
South Dakota	3626600	2883000	4325000	50.02%	19.26%	4020000	-7.05%	39.44%	10.85%	3475000	-13.56%	20.53%	-4.18%
United States	70758800	69132000	75621000	9.39%	6.87%	70989000	-6.13%	2.69%	0.33%	65871000	-7.21%	-4.72%	-6.91%

Source: National Agricultural Statistics Service (NASS) data

Table 4. Planted Acres in the 1990s: Oats

County or region	91-95 acres	95 acres	96 acres	% change (95-96)	% change (91-95 ave-96)	97 acres	% change (96-97)	% change (95-97)	% change (91-95 ave-97)	98 acres	% change (97-98)	% change (95-98)	% change (91-95 ave-98)
Codington	17140	10000	7000	-30.00%	-59.16%	8300	18.57%	-17.00%	-51.58%	9600	15.66%	-4.00%	-43.99%
Hamlin		6500	6500	0.00%		5500	-15.38%	-15.38%		5200	-5.45%	-20.00%	
Deuel		10000	6500	-35.00%		6000	-7.69%	-40.00%		7200	20.00%	-28.00%	
Brookings		10500	6500	-38.10%		6700	3.08%	-36.19%		7700	14.93%	-26.67%	
Lake		2000	3000	50.00%		2000	-33.33%	0.00%		2500	25.00%	25.00%	
Moody	5120	2000	2000	0.00%	-60.94%	2000	0.00%	0.00%	-60.94%	1900	-5.00%	-5.00%	-62.89%
Minnehaha		4500	4500	0.00%		6000	33.33%	33.33%		5000	-16.67%	11.11%	
7-County Region	83060	45500	36000	-20.88%	-56.66%	36500	1.39%	-19.78%	-56.06%	39100	7.12%	-14.07%	-52.93%
South Dakota	740000	350000	450000	28.57%	-39.19%	380000	-15.56%	8.57%	-48.65%	420000	10.53%	20.00%	-43.24%
United States	7501600	6336000	4661000	-26.44%	-37.87%	5169000	10.90%	-18.42%	-31.09%	4902000	-5.17%	-22.63%	-34.65%

Source: National Agricultural Statistics Service (NASS) data

Table 5. Planted Acres in the 1990s: Barley

County or region	91-95 acres	95 acres	96 acres	% change (95-96)	% change (91-95 ave-96)	97 acres	% change (96-97)	% change (95-97)	% change (91-95 ave-97)	98 acres	% change (97-98)	% change (95-98)	% change (91-95 ave-98)
Codington	9460	8000	5200	-35.00%	-45.03%	3600	-30.77%	-55.00%	-61.95%	4400	22.22%	-45.00%	-53.49%
Hamlin		0	0			0				0			
Deuel		1500	1300	-13.33%		0	-100.00%	-100.00%		300		-80.00%	
Brookings		1100	800	-27.27%		900	12.50%	-18.18%		900	0.00%	-18.18%	
Lake		0	0			0				0			
Moody	0	0	0			200				0	-100.00%		
Minnehaha		0	0			0				0			
7-County Region	18160	10600	7300	-31.13%	-59.80%	4700	-35.62%	-55.66%	-74.12%	5600	19.15%	-47.17%	-69.16%
South Dakota	368000	180000	160000	-11.11%	-56.52%	130000	-18.75%	-27.78%	-64.67%	115000	-11.54%	-36.11%	-68.75%
United States	7667400	6689000	7144000	6.80%	-6.83%	6910000	-3.28%	3.30%	-9.88%	6340000	-8.25%	-5.22%	-17.31%

Source: National Agricultural Statistics Service (NASS) data

Table 6. Planted Acres in the 1990s: Flax

County or region	91-95 acres	95 acres	96 acres	% change (95-96)	% change (91-95 ave-96)	97 acres	% change (96-97)	% change (95-97)	% change (91-95 ave-97)	98 acres	% change (97-98)	% change (95-98)	% change (91-95 ave-98)
Codington	460	600	0	-100.00%	-100.00%	0				0			
Hamlin		0	0			0				0			
Deuel		0	0			0				0			
Brookings		0	0			0				0			
Lake		0	0			0				0			
Moody	0	0	0			0				0			
Minnehaha		0	0			0				0			
7-County Region	860	600	0	-100.00%	-100.00%	0				0			
South Dakota	22400	22000	10000	-54.55%	-55.36%	15000	50.00%	-31.82%	-33.04%	15000	-	-31.82%	-33.04%
United States	215200	165000	96000	-41.82%	-55.39%	146000	52.08%	-11.52%	-32.16%	336000	130.14%	103.64%	56.13%

Source: National Agricultural Statistics Service (NASS) data

Table 7: Focus Group Profiles

County:	Codington	Codington	Moody	Moody
Group:	I	II	I	II
Farm Units Present:	5	5	5	2
Age Group (No.):				
20-30	0	0	0	0
30-40	1	2	2	0
40-50	4	3	2	2
50+	0	0	1	0
Type of Ownership (No.):				
Sole Proprietor	1	1	2	1
Husband/Wife	3	0	2	1
Father/Son(s)	1	2	0	0
Partnership	0	1	0	0
Family Corporation	0	1	1	0
Farm Size/Enterprise (Acres):				
Crop	1,000-1,600	500-3,000	258-1,086	1,005-1,040
Pasture	115-1,260	270-1,800	0-300	0-170
Proportion of Crop Acres (%):				
Acres owned	10-80	44-100	12-61	3-13
Acres rented	20-90	0-56	39-88	77-97
Rental Arrangements (No.):				
Crop-share	2	2	3	2
Cash rent	5	4	5	2

Table 7 continued

Table 7 continued: Focus Group Profiles

County:	Codington	Codington	Moody	Moody
Group:	I	II	I	II
Irrigation (No.):	0	0	1	0
Principal Crop Rotations:				
Corn, soybeans, spring whe winter wheat	1	0	0	0
Corn, soybeans, wheat	4	3	0	0
Corn, small grains, soybea sunflowers	0	1	0	0
Corn, soybeans	0	0	4	2
Corn, oats, alfalfa, corn, soybeans	0	0	1	0
Wheat, corn, soybeans, cor soybeans	0	1	0	0
Change of Crop Rotation (No.):				
More row crops	1	0	0	0
Previously barley in rotat	1	0	0	0
Quit oats and barley	1	0	0	0
More consistent and use ac in more manageable way	1	0	0	0
More wheat and corn	0	1	0	0
Less wheat, more corn and soybeans	0	1	0	0
Move to corn and soybeans	0	0	2	0

Table 7 continued

Table 7 continued: Focus Group Profiles

County:	Codington	Codington	Moody	Moody
Group:	I	II	I	II
Livestock Enterprises (No.):				
Beef	3	4	4	0
Dairy	4	4	2	1
Hogs	1	0	3	1
Sheep	0	1	0	0
Insurance (No.):				
Multi-peril	5	5	5	2
Hail	2	1	1	1
Crop Revenue Coverage	1	0	2	1
Changed Crop Insurance (No.):	1	1	1	0
Special Programs (No.):				
CRP	1	2	4	0
WQIP	0	0	2	0
ICM	0	0	3	0
EQIP	1	0	0	0