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## Farmland Leasing in South Dakota

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# *Farmland leasing in South Dakota*



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## To the reader:

Agricultural land leasing is a very important component of resource control in South Dakota's agricultural economy. This bulletin reports major findings from the 1986 South Dakota Farmland Rental Market Survey completed by 1,155 landlords and renters.

Information is reported on (1) characteristics of rental market participants, (2) detailed provisions of cash leases and share leases, (3) formality, stability, and complexity of leases, and (4) respondents' overall perception of their leasing arrangements. The economic performance of dominant leasing practices in different regions of South Dakota is also presented.

The survey findings provide a comprehensive and statistically valid benchmark study of agricultural land leasing in South Dakota. This is the most comprehensive statewide study of South Dakota farmland rental markets conducted since 1951 and is the first statewide study completed by renters and landlords. This report should be of particular interest to farmland renters and landlords, loan officers, realtors and appraisers, agricultural

researchers, and others interested in farmland rental market developments.

This report contains South Dakota findings from a joint study of South Dakota and Nebraska farmland markets, funded by a USDA Economic Research Service grant and by the agricultural experiment stations of South Dakota and Nebraska. A similar research report, *Farmland leasing in Nebraska*, was prepared by Michael Lundeen and Bruce Johnson of the University of Nebraska. These reports are closely related, making it easier for interested readers to compare farmland rental market characteristics in both states.

We wish to thank all respondents who completed the South Dakota Farmland Rental Market Survey. We wish also to thank the reviewers for their constructive comments: Ardelle Lundeen, Thomas Dobbs, and Burton Pfleuger of the Economics Department, SDSU; Bruce Johnson from the Agricultural Economics Department at the University of Nebraska-Lincoln, and Mary Brashier, Agricultural Communications, SDSU.

Sincerely,

Larry Janssen and Scott Peterson

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# *Farmland leasing in South Dakota*

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Scott R. Peterson  
and  
Dr. Larry L. Janssen\*

## **Summary, conclusions, and implications**

Farmland leasing is a very important component of resource control in South Dakota's agricultural economy. In 1982, 36% of South Dakota's agricultural land and 68% of the state's farm and ranch operators were involved in leasing (USDC, South Dakota 1984).

The 1986 South Dakota Farmland Rental Survey was sent to a random sample of 4,110 landlords and renters leasing agricultural land in the state. A total of 1,155 landlords and renters completed the questionnaire; when compiled, the survey showed (1) characteristics of rental market participants, (2) detailed provisions of cash leases and share leases, (3) formality, stability, and complexity of leases, and (4) respondents' overall perception of their leasing arrangements. These data were also used to examine the economic performance of the dominant leasing practices in different regions of South Dakota.

The survey findings provide a comprehensive and statistically valid benchmark study of agricultural land leasing in South Dakota.

## **Summary, respondent and general leasing characteristics**

The principal findings and implications from the study of respondent characteristics and general leasing characteristics follow.

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\*Scott Peterson is Research Assistant and Larry Janssen is Associate Professor, Economics Department, South Dakota State University. Research results reported in this bulletin are based, in part, on Peterson's master's thesis and a completion report, *Agricultural land leasing and rental market characteristics: A case study of South Dakota and Nebraska*, prepared by Janssen and agricultural economists at the University of Nebraska. Funding for this project was from a USDA Economic Research Service grant and from project H-115 of the South Dakota Agricultural Experiment Station.

1. The rental market for agricultural land is still predominantly local in nature, with 95% of farm operators and 55% of landlords residing in the same county or a county adjacent to their leased land. However, absentee land ownership is also common, with nearly one third of landlords residing in another state. If absentee ownership increases in the future, there will likely be greater use of professional farm management services and a greater trend to cash leases and more formal leasing arrangements.
2. Farm rental income for most landlords was a modest proportion of total household income, while most farm operators were highly dependent on net farm income. This suggests landlords and renters may not experience or perceive changing economic conditions in the same manner or to the same degree.
3. Respondents' age varied by tenure status. Full tenants were usually the youngest group, while nonoperator landlords were often near or past retirement age. Between these extremes were partowner operators and fullowner operator landlords. This age continuum by tenure status illustrates the importance of the farmland rental market in transferring control of agricultural production from aging farm operators/landlords to younger farm operators.
4. Most landlords managed their own leases; 15% reported leases managed fully or in part by someone else. Most outside managers (77%) were relatives of the landowner, suggesting the importance of family relationships in land ownership and control.
5. Most women respondents (84%) were nonoperator landlords, and a majority were over 65 years of age. Women were 40% of



nonoperator landlord respondents and only 10% of farm operator respondents. Women landlords were much more likely than male landlords to have someone else manage their farm leases.

6. The majority of leased acreages involved a contract between unrelated individuals. However, a majority of renters (56%) and about 36% of landlords reported one or more leases with family members or relatives. Lease terms between family members did not significantly differ from lease terms between unrelated individuals, except that fewer written leases occurred between family members.
7. Multiple leasing by farm operators (leasing land from more than one landlord) was the rule rather than the exception. Also, a majority of farm operators with multiple leases used a combination of cash leases and share leases. Thus, today's renter often uses a sophisticated process of land resource control via farmland rental. The renter's risks of losing any one parcel are reduced. Multiple leasing also suggests that renters may have more knowledge of and experience with farmland rental agreements than many landlords.
8. Despite the degree of landlord absentee ownership and multiple leasing among renters, most leasing agreements tend to be comparatively informal (verbal, year-to-year agreements). This suggests that patterns and terms of typical leasing agreements are well established within localities. In many cases, there may be little incentive for more formal agreements, especially if both parties reside in the same locality.
9. Most respondents reported considerable satisfaction with their leasing agreements, and most landlords and renters were reasonably certain of continuing their existing leases. These favorable perceptions and the low incidence of changes in lease provisions suggest slow but deliberate adaptation by farmland rental market participants and institutions to changes in economic or agricultural conditions.

### **Summary, share leases and cash leases**

The principal findings from the study of share leases and cash leases are:

1. Cropshare leases were the most common (40% of total leases), followed by cash leases for cropland or hayland (35%) and cash leases for pasture or rangeland (25%). Approximately 65% of acres leased by respondents were cropland or hayland, and 60% of these acres were share leased.

2. Almost all cropshare agreements were one of the following tenant-landlord shares of output: 2/3-1/3 share, 3/5-2/5 share, 1/2-1/2 share, or 3/4-1/4 share. The dominant share agreement varied by region and crops grown. Statewide, about 60% of cropshare leases involved a 2/3 tenant's share of the crop. This share lease is dominant in most regions of the state, except for corn and soybean tracts in eastern South Dakota. The 3/5-2/5 share lease and 1/2-1/2 share lease are generally found in several counties of east-central and southeast South Dakota.
3. Most (75%) cropshare lease respondents reported the landlord and tenant sharing expenses for one or more variable inputs. Only 6% reported all variable input expenses shared. In almost all cropshare leases, shared inputs were shared in the same proportion as crop output was shared. Fertilizer was the most commonly shared input expense, followed by insecticide or herbicide expenses. Input costs were more likely to be shared on leased tracts where corn or soybeans were grown and the tenant's share was 1/2 or 3/5 of crop output.
4. Cash leases are more important than share leases for hay. Almost all hay share leases involve a 1/2, 3/5, or 2/3 tenant's share of output. Input expenses are shared on less than one third of hay share leases.
5. From an economic efficiency viewpoint, the output and input shares in a cropshare lease should reflect the relative contributions of the renter and landlord. Crop enterprise budgets, used to estimate the renter's and landlord's relative cost contributions for typical cropshare leases in different regions of South Dakota, show that, overall, the dominant output and input shares reported in the survey reflect a reasonable degree of economic efficiency. In most cases, participation in the 1986 federal farm program improved the relative cost contribution of renter and landlord in relation to their output shares. This suggests the share rental market for cropland in South Dakota has adjusted to the growing importance of federal farm programs in the mid-1980s.
6. Cash rental rates per acre varied substantially by region and land use. For example, average 1986 cropland cash rents varied from about \$11 per acre in western South Dakota to \$52-60 per acre in Clay, Union, and Lincoln counties of southeast South Dakota. Within each region, the average per-acre cash rent is highest for cropland, followed by alfalfa hayland, native hayland, and native pasture. Reported rent-to-land value ratios, however, did not significantly vary by region.



7. Average cash rents declined from 1985 to 1986 for cropland, hayland, and rangeland in almost all regions of the state. However, cash rental rates from 1985 to 1986 were actually changed in less than one fourth of the cash leases. This suggests that cash rental rates are flexible over time, but are not adjusted on specific leases until major changes are deemed necessary by the rental parties.
8. Except for changes in annual cash rental rates, the incidence of change in the details of cash and share agreements is low. Moreover, the average lease has been in effect for more than a decade, which further suggests relative stability in leasing terms.

## Conclusions

Farmland rental markets in South Dakota appear to be functioning in a reasonably efficient and equitable manner. Returns to share leases and cash leases indicate farmland rental markets are reasonably efficient in adjusting to geographic differences within the state and to federal farm program changes.

Regional differences in crop output shares and in the array of inputs shared reflect geographic differences in cropping patterns, yield risk, and cultural practices. Landlords and renters usually negotiate leases with an acceptable degree of economic efficiency and equity.

A possible weakness in most farmland leases is the absence of formal provisions allowing renters to recover costs of long-term improvements. This weakness may become more important in future years if the relative importance of absentee landownership increases.

Overall, farmland rental markets in South Dakota appear stable and responsive to the needs and characteristics of participants. The sources of stability include the long-term duration of most rental agreements and the local nature of leasing markets. Also, technological change in South Dakota cropland and rangeland agriculture has been gradual over time so that farmland rental market arrangements are able to adjust. At the same time, incremental changes occur in response to major changes in economic conditions.

Consequently, agricultural land leasing remains an effective means of production control for farm operators and ownership control for landlords.

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## Introduction

Farmland leasing is a widely used method for transferring use rights of farmland. In the U.S., agricultural land leasing has been widely practiced since colonial days, increasing in importance

following the Civil War. In 1978, more than two million agricultural land leases were reported (Lewis 1980).

## Importance of farmland leasing

The proportion of U.S. farmland leased since 1930 has been in the range of 35-45% every year (USDC 1984). In South Dakota, the proportion of farmland rented has fluctuated considerably. In 1930, rented acres comprised about 59% of South Dakota's land in farms. The percentage of rented acres rose to 70% by 1940 and then steadily decreased to about 37% in 1969 and 36% in 1982 (Peterson 1987, p.3). Approximately 68% of South Dakota's farm operators are involved in farmland leasing (USDC, South Dakota 1984).

Changes in production methods have increased the efficient scale of operation in agriculture. As a result, farm operators have expanded the size of their operating units, using farmland leasing as a primary method for expansion. Leasing is recognized as an effective (and often permanent) means of acquiring control of the land base necessary for an economically viable operating unit.

The effects of structural changes in the agricultural economy include changes in leasing patterns, rental markets, and the roles of market participants. Fifty years ago, four out of every 10 farmers leased all of the land they farmed. By 1982, only one eighth of farmers were full tenants (USDC 1984).

Most leased farmland is rented by partowner operators, who frequently rent from several different landlords. In South Dakota, 75% of leased acres were rented by partowner operators in 1982 (USDC, South Dakota 1984). Partowner operators farm more acres, individually and in the aggregate, than either fullowner or full tenant operators (Janssen 1983).

Nonoperator landlords, including retired farmers and investors without farm backgrounds, have been an increasing component of the U.S. farmland rental market. In 1978, nonoperator landlords rented out 87% of all privately owned agricultural land leased in the U.S. (Baron 1983). Most landlords (85%) and renters (80%) are individuals or family businesses. Farm operators and retired farmers constitute 41% of individual landlords. Most individual landlords (90%) lease to only one renter (Wunderlich 1983).

The farm sector experienced considerable financial stress during the early 1980s. To alleviate problems caused by high interest rates, low crop prices, falling land values, and strained cash flows, many operators opted for leasing farmland rather than borrowing money to purchase land.

Compared to mortgaged ownership, leasing usually allows farmers to lower their financial risk and increase management flexibility. It preserves operators' equity capital for financing farm operations.

The prospects of continued financial upheaval and uncertainty in the agricultural economy may cause



farmers to continue to replace debt capital with leased capital in the future (Penson and Duncan 1981).

Because farmland leasing is widespread, it is important to understand its impact on the organization, distribution, and efficient use of resources and distribution of returns in production agriculture. Yet comparatively little data, especially about share leasing, are available to show the characteristics of farmland rental markets in most states.\* In South Dakota, no statewide study of the farmland rental market has been conducted since 1951 (Hurlburt 1954).

## Farmland leasing study

For these reasons a two-state study of agricultural land leasing was designed to comprehensively survey agricultural land leasing and farmland rental markets in South Dakota and Nebraska in 1986. The study is considered a pilot project for a possible nationwide study of farmland leasing. The project's objectives were to investigate the role of land leasing in production agriculture and to investigate the performance of farmland rental markets. A questionnaire, used in both states, was sent to landlords and renters.

Following a literature review section and discussion of survey procedures, this bulletin contains selected findings of the 1986 South Dakota Farmland Rental Survey and analysis of the leasing arrangements reported.

## Review of farmland leasing literature

Farmland leasing has an impact on the efficient use of resources. Writers from Adam Smith in 1776 to the present have argued that leasing of farmland presents complications that can lead to less than optimum use of resources.

The sources of inefficiency are usually identified by these writers as 1) the uncertainty of tenure associated with short-term leases, and 2) the variable cost nature of share lease payments (Schickele 1941; Heady 1947; Johnson 1950). The uncertainty of tenure associated with short term leases discourages use of inputs and cultivation practices that pay returns over more than one growing season. However, short-term leases provide incentives to cultivate efficiently, if tenants wish to renew their leases.

In share leases the tenant must pay the landlord a portion of all increases in production. This can reduce the intensity of inputs, compared to those made by a cash renter or owner operator, unless

these inputs are shared in the same proportion as output (Johnson 1950; Heady 1952; Hurlburt 1954). Because cash rentals are a fixed cost in the short run, farm operators with a cash lease will apply inputs as intensively as owner operators.

Modifications may alleviate some of the problems with farmland leases. Key modifications include 1) sharing of input costs by tenant and landlord in the same proportion as output is shared, 2) sharing the output of all crops in the same proportion, and 3) including a guarantee to allow the tenant to recover any residual from unexpired resources at lease end (Heady 1952; Hurlburt 1954 and 1962). Share leases could be modified to meet the first two incentive conditions. Long-term cash leases could meet all incentive conditions, provided cash rental rates equal the rate that land contributes to earnings.

Despite the suggestions for lease modifications, empirical studies in the 1950s (Hurlburt 1954) revealed that most leases lacked the suggested improvements. Although output of all crops was frequently shared in the same proportion, many share leases did not share input costs. Only fertilizer costs were shared with any frequency.

More recent leasing studies suggest that efficient resource acquisition and utilization can be obtained from leasing or from land ownership (Cheung 1968 and 1969). Empirical evidence has not been able to resolve which method of land acquisition is more efficient. However, analysis of risks faced by farm operators provides insight into why share leases continue to outnumber cash lease agreements (Reid 1976; Stiglitz 1974).

Share leases have always been the dominant form of farmland leasing throughout the United States, and the rental share varies by region and cropping pattern (Reid 1979). A review of farmland rental practices in the U.S. in 1978 (Weisberger 1979) shows that 2/3-1/3 tenant-landlord share rental agreements are the most common.

The 1/2-1/2 lease is the second most typical, occurring most frequently in the Cornbelt. Landlords typically share more input costs with these leases than with the 2/3-1/3 share lease. Some 3/4-1/4 share leases exist in the high-risk wheat regions of western North Dakota and South Dakota, and some 3/5-2/5 leases exist in transitional Cornbelt regions.

Cash rentals are more common when the operator has a relatively steady income or faces less risk from weather hazards. Use of cash agreements increased in some states during the 1970s, because of increasing net returns to grain production and the growing number of landlords without farm backgrounds (Scott 1983). During this time, share or share-cash agreements decreased from 61% to 53% of leased U.S. farmland, while cash leases increased from 35.5% to 42% of leased acres (Baron 1983). During the 1980s, as crop and land prices dropped, many leases reverted to share arrangements (Scott 1985).

Because of the immobility of land, rental markets tend to be local in nature. Johnson (1972) conducted

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\*Most published data on farmland leasing is concerned with cash rental payments and acres leased. The U.S. Department of Agriculture reports statewide annual cash rentals of whole farms, cropland, and pasture in South Dakota and selected other states. Information on amount of farmland leased in each state is available in U.S. Census of Agriculture reports.



a study of separate farmland rental markets in Illinois and Michigan. Although low-key, informal markets existed in both areas, the types and terms of agreements varied between states.

Very little detailed information on leasing terms and practices or characteristics of farmland rental market participants is available for South Dakota. The last statewide survey of the farmland rental market in South Dakota was in 1951, and production agriculture has changed significantly since that time. Periodic reports on farmland rental rates in different regions of South Dakota have been published by SDSU extension and research personnel (Madsen and Janssen 1985 is one example).

## Farmland rental market survey procedures

Data for the analysis of the farmland rental market in South Dakota were obtained from a survey of landlords and renters. The questionnaire was designed to address both landlord and renter roles in the market to allow for more complete analysis. A comparable survey of renters and landlords has not been attempted in most previous studies in other states.

The sample for the survey was obtained from the Agricultural Stabilization and Conservation Service (ASCS) producer mailing list. This list contains the names and addresses of farm operators and landlords who have cropland base acres and/or have been participants in federal farm programs in recent years. The South Dakota producers list contained 100,141 entries, organized by county in which the person's farmland was located.

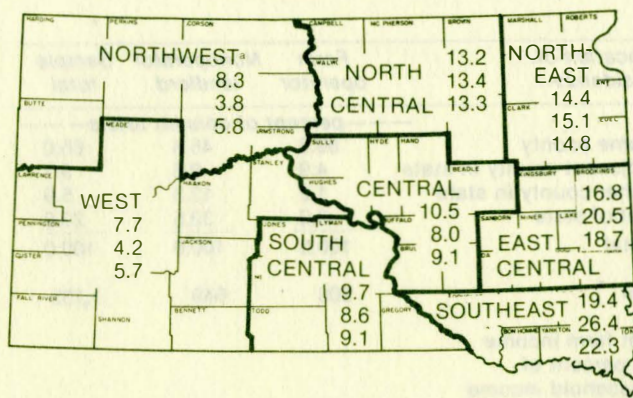
An initial random sample from each county was drawn from the producers list. The sampling rate was 5% in all counties east of the Missouri River and 8% in all counties west of the Missouri River (Fig 1). The higher sampling rate for West River counties compensated for the lower number of landowners and farm operators in those counties. The initial sample list consisted of 5,583 names.

The sample list from each county was then sent to county ASCS offices where the ASCS staff identified those names that were nonoperator landlords or farm operators renting land to or from others. Farm operators not renting land or individuals (other than landlords) no longer involved in farming were dropped from the sample mailing list.

The survey questionnaires were mailed to 4,110 renters and landlords in Spring 1986, with a follow-up survey of non-respondents mailed 3 weeks later. The total response rate to the survey was about 35%. The rate of return for usable questionnaires was 28%, or 1,155 returned questionnaires. A questionnaire was considered usable if the respondent completed the general information sections on farmland leasing and on personal characteristics (see Appendix 1 for a copy of the survey questionnaire).

An 8% sample of non-respondents to both mailings was surveyed by telephone to test for bias in the group of survey respondents. Nonrespondent

Fig 1. Operator status of respondents to the 1986 South Dakota Farmland Rental Survey by region.



<sup>a</sup>Key: Top—percent of 506 farm operator respondents from this region.  
Middle—percent of 649 landlord respondents from this region.  
Bottom—percent of total number of respondents (1155) from this region.

Landlord refers to nonoperator landlords. Farm operator may be a tenant, partowner operator landlord, or fullowner operator landlord.

SOURCE: 1986 South Dakota Farmland Rental Survey.

survey findings indicated both groups had similar characteristics.

The information collected from the survey was grouped into five categories: characteristics of rental market participants; nature of cash and share lease agreements; formality, stability, and complexity of leasing arrangements; respondent perception of leasing arrangements; and economic evaluation of typical leasing agreements.

## Characteristics of farmland rental market participants

### Location

The local nature of farmland rental markets is seen in the relationship of respondents' residences to their rented land. Sixty-five percent of survey respondents live in the same county in which their rented land is located. Almost all farm operators (90%) and 46% of landlords live in the same county as their rented land (Table 1). Approximately 15% of respondents rented land in two or more South Dakota counties.

Although the rental market is local in nature, a fairly high proportion of respondents (20%) reported living in another state. Almost one third of nonoperator landlords reported living out-of-state, and another 22% live in a different county in South Dakota. Less than 4% of farm operators reported living out-of-state; most of them lived in counties bordering South Dakota.



**Table 1. Operator status of respondents by residential location and distribution of net farm income as a percent of total household income, South Dakota, 1986.**

Location of residence	Farm operator	Nonoperator landlord	Sample total
---percent of column totals---			
Same county	89.9	45.6	65.0
Adjacent county in state	4.9	9.6	9.1
Other county in state	1.2	12.3	5.9
Out-of-state	3.9	32.5	20.0
Total	100.0	100.0	100.0
N =	506	649	1,155
Net farm income as percent of household income			
0-29%	35.6	70.2	54.3
30-49%	14.3	16.9	15.7
50-79%	13.0	9.1	10.9
80-100%	37.1	3.8	19.1
Totals	100.0	100.0	100.0
N =	477	561	1,038
Not reporting	29	88	117

<sup>a</sup>Relationship between residence of farm operator and landlords:  $X^2 = 252.7$ ,  $P \leq 0.001$ ,  $DF = 3$ .

<sup>b</sup>Relationship between farm income dependence of operators and landlords:  $X^2 = 212.0$ ,  $P \leq 0.001$ ,  $DF = 3$ .

Source: 1986 South Dakota Farmland Rental Survey.

The percentage of respondents from each region of the state corresponds closely to percentage of farm population in that region, as reflected in Census of Agriculture data (Fig 1). More than half of South Dakota farm operator respondents (51%) lease and operate farmland in the three eastern regions of the state. Only 16% of farm operator respondents are in the two western regions. Nonoperator landlord respondents were also concentrated in the eastern regions of South Dakota. These numbers reflect the smaller size of ownership tracts and production units in the eastern areas of the state.

### Land tenure

Respondents were classified as belonging to one of five land tenure categories, based on the nature of their participation in the market as landowners, landlords, or renters. Many respondents assumed all of these roles.

The tenure classifications were: 1) nonoperator landlord, who rents out all owned farmland and does not operate a farm; 2) fullowner operator landlord, who rents out some owned farmland and operates the rest; 3) partowner operator landlord, who farms some owned land, rents out farmland, and rents in farmland; 4) partowner operator, who owns farmland and rents in additional land; and 5) tenant, who owns no farmland and rents all land farmed. Fullowner operator landlords and

partowner operator landlords are sometimes combined as farm operator landlords. Respondents in all tenure classes except nonoperator landlords are farm operators.

Nonoperator landlords and partowner operators are the dominant land tenure groups. Nearly 56% of respondents are nonoperator landlords and 26% are partowner operators. Full tenants are only 8% of survey respondents, while farm operator landlords are about 10% of total respondents (Table 2).

### Dependence on farm related income

Income from farming operations is a larger proportion of total income for farm families in South Dakota than for farm households nationally. The primary reasons for this are a higher incidence of full-time commercial farming combined with less opportunities for off-farm employment for the farm operator or spouse.

Nearly 37% of farm operator respondents reported receiving at least 80% of net household income from farming operations (including renting out land), and another 13% of farm operator respondents received at least 50% of net household income from this source (Table 1). However, the picture is quite different for nonoperator landlords. Only 13% of landlord respondents indicated receiving at least half of their incomes from farm sources, while 70% of landlords received less than 30% of total household income from farm related sources.

**Table 2. Age of respondents by tenure class and sex, South Dakota, 1986.**

Tenure class <sup>a</sup>	N	---Age of respondent (years)---					65 and over	Total and tenure class
		< 35	35-44	45-54	55-64	2.3		
---Percent of those responding---								
Tenant	86	58.2	19.8	9.3	10.5	2.3	7.7	
Partowner operator	284	18.4	27.6	24.2	23.1	6.8	26.4	
Partowner operator landlord	59	5.1	10.2	27.1	37.3	20.3	5.3	
Fullowner operator landlord	54	3.7	18.5	11.1	33.3	33.3	4.9	
Nonoperator landlord	619	2.3	8.1	12.9	22.3	54.4	55.7	
Total	1112	11.1	14.8	16.3	22.9	35.0	100.0	
---Age of respondent by sex---								
Sex <sup>b</sup>								
Male	817	14.1	17.1	17.4	23.3	28.2	73.7	
Female	292	2.7	8.2	13.4	21.9	53.8	26.3	
Totals	1109	11.1	14.8	16.3	22.9	34.9	100.0	

<sup>a</sup>Relationship between respondent age group and tenure class  $X^2 = 489.2$ ,  $p \leq 0.001$ ,  $DF = 16$ .

<sup>b</sup>Relationship between age and sex of respondent  $X^2 = 79.2$ ,  $p \leq 0.001$ ,  $DF = 4$ .

Source: 1986 South Dakota Farmland Rental Survey.



Landlords leasing farmland to family members (children or in-laws) were much more reliant on farm-related income than other individual landlords. Forty percent of landlords leasing farmland to family members received 50% or more of net household income from farm sources compared to less than 12% of other landlords (Peterson 1987).

Landlord/tenant differences in reliance on farm related income illustrates a potential for problems, given the uncertainty of the agricultural economic environment. If farm sector incomes decline, the household incomes of most nonoperator landlords would apparently not be affected as much as farm operators, even though rental incomes would likely decrease.

A second implication concerns risk and uncertainty. Regardless of lease arrangements, renters' household incomes are typically more vulnerable to farm income declines than landlords'. This may exacerbate any stress in landlord-renter relations if, for example, renters seek to minimize their farmland rental payments or switch to a different type of lease.

### Respondents' age and sex

Examination of landlord and renter ages provides some insight into their reasons for renting farmland. Younger respondents are more likely to rent in farmland while older respondents are more likely to own and rent out farmland (Table 2).

Most (78%) full tenant respondents are less than 45 years of age, while nearly 75% of partowner operators are between 35 and 64 years of age. It appears that younger tenants are usually attempting to get started in farming, while partowners have farm expansion as their primary motivation for renting farmland.

Most landlord respondents are 55 years of age or older. Two thirds of fullowner operator landlords and nearly 77% of nonoperator landlords are 55 years of age or older. Landlords leasing to family members were generally older than landlords leasing farmland to unrelated individuals. These age distributions suggest fullowner operator landlords may be reducing the size of their operations as they look forward to retirement. The ages of nonoperator landlords indicate that many are retired; and some may be retired farmers.

Over one fourth (26.3%) of respondents were women, and a majority of female respondents were 65 years of age or older compared to about 28% of male respondents. Nearly half (48.6%) of the men reported their ages as less than 55 years, compared to only one fourth (24.6%) of the women respondents (Table 2). Most of the women respondents (84%) are nonoperator landlords, while 55% of male respondents are farm operators.

Respondents' age, sex, and land tenure status were interrelated. Most farm operator respondents (90%) were men while 40% of nonoperator landlord respondents were women. Women landlords, on average, are older than male landlords, and the

median age of nonoperator landlords is above 65 years compared to about 48 years for farm operators.

## Farmland leasing distribution

### By land tenure

Respondents leased an average of 701 acres and had an average of 2.5 leases (Table 3). Partowner operators and partowner operator landlords (31% of respondents) had, on average, more than three leases and leased more than 1,000 acres. Nonoperator landlords were 56% of respondents but averaged fewer leases per respondent (2.1) and less than half as many acres (462).

**Table 3. Tenure classes of respondents, average number of acres leased, and leases per respondent, South Dakota, 1986.**

Tenure class	Number of respondents		Average number of acres leased	Average number of leases per respondent
	Number	Percent		
Tenant	89	7.7	764	2.7
Partowner operator	301	26.1	1046	3.2
Partowner operator landlord	62	5.4	1656	3.7
Fullowner operator landlord	54	4.7	439	2.0
Non-operator landlord	649	56.2	462	2.1
All respondents	1155	100.0	701	2.5

Source: 1986 South Dakota Farmland Rental Survey.

### By relationship between landlord and renter

Rental market participants typically lease farmland to or from unrelated individuals. Nearly 68% of landlords and 70% of renters reported one or more leases with unrelated individual(s). Almost half of farmland rented in (47%) was leased from unrelated individuals, while two thirds (67%) of farmland rented out by landlords was to unrelated individuals (Tables 4 and 5).

Nevertheless, many rental market participants lease farmland to or from family members or relatives. A majority of renters (56%) and about 36% of landlords reported one or more leases with family members or relatives. Respondent renters and landlords each reported about 29% of leased farmland acres were leases with family members or relatives.

Comparatively few renters reported leasing agricultural land from federal, tribal, or state



**Table 4. Distribution of renters, leases, and acres rented out by type of landlord, South Dakota, 1986.**

Type of landlord	Renters <sup>a</sup>		Percent of total leases <sup>b</sup>	Percent of total acres leased <sup>c</sup>	Average number of acres leased <sup>d</sup>
	Number	Percent			
Parents or in-laws	152	36.1	16.3	17.1	460
Other relatives	135	32.1	16.9	11.9	360
Unrelated individuals	296	70.3	54.1	46.7	644
Financial institutions	10	2.4	1.0	0.8	317
State government	16	3.8	1.8	3.0	765
Tribal government	26	6.2	4.1	12.4	1946
Federal government	12	2.8	1.1	4.8	1635
Other	13	3.1	4.7	3.3	1042
Totals		156.8	100.0	100.0	970

<sup>a</sup>421 of 452 renters completed responses to landlord questions, but many had more than one lease, so column totals to more than 421 and percent is greater than 100.

<sup>b</sup>Percentage of total leases (1,087) by type of landlord.

<sup>c</sup>Percentage of total leased acres (408,400) by type of landlord.

<sup>d</sup>Average number of acres rented in per renter by type of landlord.

Source: 1986 South Dakota Farmland Rental Survey.

**Table 5. Distribution of landlords, leases, and acres rented in by type of renter, South Dakota, 1986.**

Type of renter	Landlords <sup>a</sup>		Percent of total leases <sup>b</sup>	Percent of total acres leased <sup>c</sup>	Average number of acres leased <sup>d</sup>
	Number	Percent			
Children or in-laws	90	13.8	9.6	13.8	460
Other relatives	135	20.8	15.1	15.3	339
Unrelated individuals	439	67.5	70.7	67.3	459
Non-family partnership/corporation	16	2.4	1.9	2.2	405
Other	23	3.5	2.7	1.4	185
Totals		108.0	100.0	100.0	460

<sup>a</sup>650 landlords completed responses to renter questions, but some had more than one lease, so column totals exceed 650, and percent of landlords is more than 100.

<sup>b</sup>Percentage of total leases (1,016) by type of renter.

<sup>c</sup>Percentage of leased acres (299,400) by type of renter.

<sup>d</sup>Average number of acres rented out per landlord by type of renter.

Source: 1986 South Dakota Farmland Rental Survey.

government agencies. However, the average number of acres leased per renter from these sources is much greater than the average from individuals. Most of the government agency leases are of rangeland in western or central South Dakota and involve larger acreages than most cropland leases. About 20% of agricultural land acres leased by renters and 31% of leased rangeland acres were public lands or tribal trust lands (Table 4).

Very few renters (1.0%) reported leasing farmland from financial institutions, and very few landlords (1.9%) reported leasing farmland to nonfamily partnerships or nonfamily corporations.

## Management of leases

In addition to renters and landlords, there is a third group of participants in farmland rental markets. Members of this group include relatives of landowners, estate executors, and professional farm managers who assist landlords with lease management. Most landlord respondents managed their own leases, but 15% of them reported their leases were managed fully or in part by someone other than the landowner. Most of the nonowner managers (77%) were relatives of the landowner, suggesting that familial relationships are a vital aspect of the leasing market although most leases are with nonrelatives. Professional farm managers were involved in managing the leases of 2.5% of landlord respondents.

Women landlords were more likely than men to have someone else manage their leases. Twenty-five percent of female landlords and 10% of male landlord respondents reported third-party (outside) management of their leases. The greater use of outside lease management by women may be more related to age than sex, since a majority of women landlord respondents are over 65 years of age.

Landlords living in another state were more likely than resident landlords to report third-party management of their leases. Nearly 28% of out-of-state landlords and only 10% of South Dakota landlord respondents reported their leases were managed by a third party.

## Nature of farmland leases

The 1,155 respondents to the South Dakota Farmland Rental Market Survey, including both landlords and renters, reported information on 2,945 agricultural land leases covering a total of 790,800 acres.

Cropshare leases were the most common (nearly 40% of total leases), while 35% of leases were cash leases for cropland or hayland (Table 6). Approximately 65% of acres leased by respondents were cropland or hayland; 60% of cropland/hayland acres were share leased (where the landlord receives a specified proportion of the crop/hay output).

Nearly 25% of leases and 35% of acres leased were for permanent pasture or rangeland. Almost all



**Table 6. Distribution of leases and average acres per lease by type of lease, South Dakota, 1986.**

Type of lease	Leases <sup>a</sup>		Acres leased	
	Number	Percent	Number	Percent
Cash <sup>b</sup>	1,033	35.1	354	26.2
Cropshare <sup>b</sup>	1,175	39.9	414	39.1
Pasture <sup>b</sup>	717	24.3	647	33.6
Livestock share	20	0.7	454	1.1
Totals	2,945	100.0		100.0

<sup>a</sup>Total number of leases reported by all 1,155 respondents.

<sup>b</sup>Cash leases include cash crop or cash hay leases; share leases include cropshare or hay share leases; pasture leases are cash leases for grazing land.

Source: 1986 South Dakota Farmland Rental Survey.

of the leased pasture/rangeland involved a cash payment per acre or per animal unit month (AUM). Very few rangeland leases were reported as livestock share leases.

A relatively high percentage of respondents (43%) had a combination of cropshare, cash crop/hay, and pasture leases (Table 7). A majority of farm operator respondents (53%) had a combination of lease types, compared to only 35% of nonoperator landlords. Almost 65% of respondents reported one or more cropshare leases; half of these respondents also reported one or more cash leases for crop, hay, or pasture land. A majority (51%) of respondents reported cash leasing cropland or hayland, and over three fifths of these respondents also reported cropshare or pasture leases. Most of the nearly 37% of respondents reporting one or more pasture leases also reported crop/hay cash leases or crop/hay share leases.

**Table 7. Distribution of leasing combinations by number of respondents and average number of acres per leasing combination, South Dakota 1986.**

Leasing combination	Respondents		Average (mean) number of acres		
	Number	Percent	Cash	Share	Pasture
Cash only	225	19.5	374	—	—
Cropshare only	377	32.6	—	339	—
Pasture only	52	4.5	—	—	1589
Cash and share	121	10.5	315	591	—
Cash and pasture	122	10.6	436	—	704
Share and pasture	132	11.4	—	395	460
Cash, share, and pasture	118	10.2	264	500	368
Totals	1147	99.3			

Percentage figures based on total of 1,155 responses. Eight respondents only reported livestock share leases.

Source: 1986 South Dakota Farmland Rental Survey.

## Share leases

Sixty-five percent of respondent renters and landlords (748 of 1,155 respondents) were involved in share leasing. Most (90%) of these respondents had share leases for crops, and about 22% reported hay share leases. Landlords share lease an average of 311 acres, while renters share lease an average of 550 acres (Janssen and Peterson 1986b).

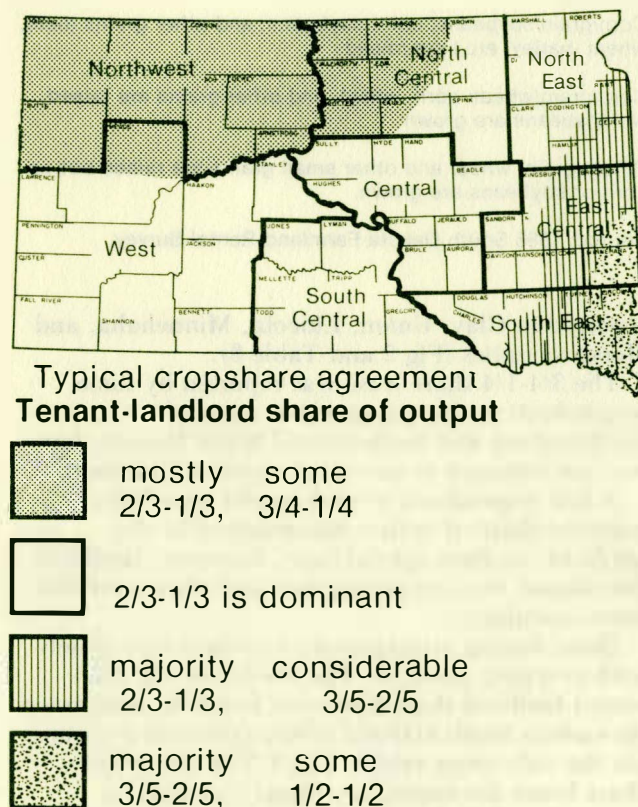
## Crop output shares

The survey revealed four common cropshare arrangements in South Dakota: 2/3-1/3 tenant-landlord output shares, 3/5-2/5 shares, 1/2-1/2 shares, and 3/4-1/4 shares. The dominant output share varied by region and cropping pattern (Fig 2 and Table 8).

Statewide, the most frequently used share arrangement (60% of share leases) was a 2/3 tenant share of the crop. The 2/3-1/3 tenant-landlord share lease is the dominant share lease in western, south-central, central, north-central, and most of northeastern South Dakota. This leasing arrangement was reported by 71% to 87% of cropshare lease respondents in these regions.

A 3/5-2/5 tenant-landlord share lease was reported by about 24% of respondents and was most frequently used in east-central and southeast South Dakota. Most of the 1/2-1/2 share agreements were

**Fig 2. South Dakota cropland share rental terms and regions, 1986.**





**Table 8. Tenants' share of crop output by state, region, and cropping pattern. South Dakota. 1986.**

Item	Number of responses	Tenant's share of crop output				
		< 50%	50%	60%	67%	70-75%
		-----Percent of responses-----				
State	628	2.4	9.6	24.2	60.3	3.5
<b>Region<sup>a</sup></b>						
Southeast	170	4	13	44	39	—
East-Central	130	1	8	53	37	1
Northeast	97	1	8	7	83	1
North-Central	75	1	11	1	71	10
Central	45	5	7	—	84	4
South-Central	56	2	9	—	87	2
West	32	6	10	—	84	—
Northwest	23	4	—	—	74	22
<b>Cropping Pattern<sup>b,c</sup></b>						
Corn/soybeans	104	2	20	60	18	—
Corn/grain/soybeans	161	1	9	45	44	1
Corn/grain/wheat	175	3	6	7	82	2
Wheat/grain	129	2	6	—	81	11

<sup>a</sup>See Figure 1 for map and description of these regions.

<sup>b</sup>Cropping patterns for combinations of major crops raised on the rented tract. Only major cropping patterns are included in this table.

<sup>c</sup>Fifty-nine of 629 share lease respondents reported other cropping pattern combinations and are not included in the cropping pattern section of this table, but are included in the state and regional sections of this table.

Corn/soybeans: corn and soybeans are the only major crops raised.

Corn/grain/soybeans: corn, soybeans, and other grains (oats, wheat, barley, etc.) are raised.

Corn/grain/wheat: corn, wheat, and other grains are raised. No soybeans are grown.

Wheat/grain: wheat and other small grains are raised but no corn or soybeans are grown.

Source: 1986 South Dakota Farmland Rental Survey.

reported in Clay, Union, Lincoln, Minnehaha, and Moody counties (Fig 2 and Table 8).

The 3/4-1/4 share lease was reported by some respondents in the spring wheat areas of northwestern and north-central South Dakota, but was not common in any other region of the state.

A few respondents in each region reported a majority share of output was received by the landlord. In these special cases, however, landlords also shared most input expenses and often provided some machinery.

Share leasing arrangements correlate very closely with cropping patterns. The 3/5-2/5 or 1/2-1/2 tenant-landlord share leases are found on most tracts (in eastern South Dakota) where corn and soybeans are the only crops raised. The 3/5 or 2/3 tenant share leases are commonly found on tracts (in eastern South Dakota) where soybeans, corn, and

other grains are rotated. A 2/3-1/3 tenant-landlord share lease is reported by over 80% of respondents listing wheat as a major crop on their rented land (Table 8). In almost all cases, all dryland crops raised on the same leased land were shared in the same proportion.

### Sharing of crop input expenses

Most (75%) cropshare lease respondents reported the landlord and renter sharing expenses for one or more variable inputs, but only 6% reported all variable input expenses shared. The number and type of input expenses shared varied greatly by region, cropping pattern, and output share proportion. If an input expense was shared, it was almost always (96% of reports) shared in the same proportion as output was shared.

Fertilizer expenses were the most commonly shared input expense, followed by the sharing of herbicide and insecticide outlays (Table 9). Fertilizer expenses were shared by 88% of respondents

**Table 9. Percentage of respondents reporting shared inputs on cropshare leases, by output share and cropping pattern, South Dakota, 1986.**

Item	Selected Inputs <sup>a</sup>							
	Seed	Fert	Herb	Insect	Chem	Harv	Dry	
		-----Percent of respondents reporting input expense is shared-----						
State N = 630	12	73	54	46	26	6	30	
<b>Output share<sup>b</sup></b>								
50-50 N = 60	67	88	85	78	48	37	52	
60-40 N = 152	6	88	71	62	28	2	35	
67-33 N = 379	6	67	45	35	24	4	27	
<b>Cropping pattern<sup>c</sup></b>								
Corn/soybeans N = 104	27	89	70	65	27	4	43	
Corn/grain/soybeans N = 161	9	87	68	55	31	8	34	
Corn/grain/wheat N = 175	8	78	52	42	30	6	39	
Wheat/grain N = 129	11	42	29	25	20	5	8	

<sup>a</sup>Selected inputs are seed, fertilizer, herbicide, insecticide, chemical application, harvesting, and drying expenses.

<sup>b</sup>Tenant-landlord share of crop output.

<sup>c</sup>Table 8 for description of cropping patterns.

Source: 1986 South Dakota Farmland Rental Survey



reporting a 1/2-1/2 share lease or 3/5-2/5 share lease in eastern South Dakota and 67% of respondents reporting a 2/3-1/3 share lease throughout South Dakota. Most respondents raising corn or soybeans shared fertilizer expenses.

Herbicide and insecticide expenses were shared in a majority of crop share leases (55% - 71%) in eastern South Dakota and in most cases on rented farmland where corn and soybeans were raised. Herbicide and insecticide expenses were shared in most 1/2-1/2 share leases and more than three fifths of 3/5-2/5 tenant-landlord share leases.

The incidence of sharing fertilizer, insecticide, or herbicide expenses decreased sharply in the central and western regions of South Dakota where wheat and other small grains are the dominant crops.

Chemical application costs were shared in 48% of 1/2-1/2 share leases and 20% - 31% of other share leases. Grain drying expenses were reported as shared by one third or more respondents raising corn in all regions east of the Missouri River.

Seed costs were shared in 67% of 1/2-1/2 share leases, 27% of share leases involving corn and soybeans, and less than one fifth of other crop share leases. Harvesting expenses were seldom shared, except in 1/2-1/2 share leases.

Input costs were more frequently shared on leased tracts where corn and/or soybeans are grown and the tenant's share is 1/2 or 3/5 of the crop output. By contrast, crop share leases for wheat and small grains (usually 2/3-1/3 tenant-landlord share) include few shared input costs. For these leases, fertilizer expense is more frequently shared (41%) than are expenses for other inputs.

Selected variable-input expenses (fertilizer, herbicide, insecticide, and chemical applications) are shared more frequently than most other inputs and are closely related to expected yield levels. Consequently, landlords and tenants have considerable interest in appropriate input application levels so that output levels are maintained.

Input cost sharing patterns and landlord's output share are closely related. For example, 75% of respondents with 1/2-1/2 share leases reported that the landlord shared fertilizer, herbicide, and insecticide expenses. Chemical application expenses were also shared in 37% of these leases. By comparison, 77% of respondents with 3/4-1/4 share leases reported no cost sharing on any inputs (Table 10). The most diverse pattern of cost sharing occurred in 2/3-1/3 share leases, with greater likelihood of more input cost sharing on tracts where corn is raised.

In general, leases for crops with higher per-acre production costs and raised on more productive farmland are more likely to include landlord sharing of variable input expenses.

#### Hay share leases

Share leases for hay are important in South Dakota, but are not as common as cash leases. Almost all hay share leases were one of three tenant-landlord share arrangements: 1/2-1/2 shares, 3/5-2/5 shares, or 2/3-1/3 shares (Table 11).

Substantial differences in output shares occur by region and by type of hay raised. The 2/3-1/3 hay

Table 10. Landlord input cost sharing patterns in share leases by output share and cropping pattern, South Dakota, 1986.<sup>a</sup>

	Number of leases	None	Input cost sharing pattern			
			Fertilizer only	Two of three: fertilizer, herbicide, insecticide	Fertilizer, herbicide, insecticide	Fertilizer, herbicide, insecticide, application
	percent of share leases reported					
State	602	24.9	18.6	14.6	21.8	20.1
<b>Output share<sup>b</sup></b>						
50-50	60	10	3	12	38	37
60-40	152	12	14	15	35	24
67-33	368	30	23	16	15	16
75-25	22	77	14	0	0	9
<b>Cropping pattern<sup>c</sup></b>						
Corn/soybeans	102	11	15	14	39	21
Corn/grain/soybeans	157	12	19	15	28	26
Corn/grain/wheat	167	20	27	14	20	19
Wheat/grain	118	54	14	14	4	14

<sup>a</sup>Input cost sharing patterns are various combinations of fertilizer, herbicide, insecticide, and chemical application cost sharing by landlord. Other inputs (seed, harvesting, and drying) expenses are not examined in this table.

<sup>b</sup>Tenant-landlord share of crop output.

<sup>c</sup>See Table 8 for description of cropping patterns.

Source: 1986 South Dakota Farmland Rental Survey.



**Table 11. Selected characteristics of hay share leases, South Dakota, 1986.**

	Number of responses <sup>a</sup>	Tenant's share of output		
		50%	60%	67%
South Dakota	162	82	19	61
		—number of responses—		
		—percent of row total—		
South Dakota	162	50.6	11.7	37.7
<b>By region:</b>				
Northwest and Western	35	37.1	14.3	48.6
South-Central and Central	46	67.4	2.2	30.4
North-Central and Northeast	27	37.0	3.7	59.3
East-Central and Southeast	54	51.9	22.2	25.9
<b>By Type of hay</b>				
Alfalfa	96	49.0	15.6	35.4
Other tame hay	25	60.0	—	40.0
Native hay	41	48.7	9.8	41.5
		—percent of respondent by—		
		—tenant's share of hay—		
<b>Landlord shares expense for:</b>				
Any	Any	50%	60%	67%
Seed	18.1	22.0	10.5	11.5
Fertilizer	32.5	46.3	26.3	18.0
Baling	17.5	30.5	5.3	6.0
Hauling	27.7	32.9	5.3	29.5

<sup>a</sup>Number of respondents reporting one or more hay share leases where tenants share of hay is 50%, 60%, or 67%. Does not include four respondents (2.4% of those with hay share leases) reporting other hay shares.

Source: 1986 South Dakota Farmland Rental Survey.

share lease is more common in the northern and western regions of the state, while the 1/2-1/2 hay share lease is more common in the southern and eastern regions of South Dakota. The 3/5-2/5 hay share lease was reported by only 11.7% of hay share respondents and is more frequently found for alfalfa leases in southeast and east-central South Dakota.

Fertilizer expense was shared more frequently than other hay input expenses, but only 32.5% of hay share respondents shared fertilizer expenses. Approximately 28% of these respondents shared hauling expenses, while 18% shared baling expenses and seed expenses. Shared input expenses were more likely to occur in an 1/2-1/2 hay share lease.

### Cash leases

Three fifths of respondent landlords and 75% of farmland renters were involved in one or more cash leases for crops, hay, or pasture. Almost 65% of 770 respondents with cash leases also reported cropshare or hay share leases.

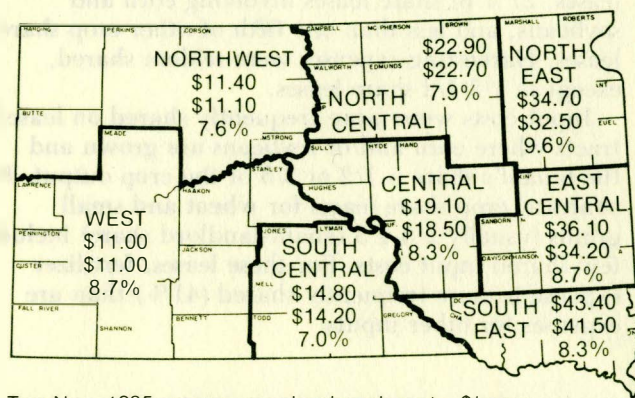
Cash rental payments per acre are quite variable within each region and highly variable among

regions in South Dakota. Within each region, the average (mean) annual cash rent is highest for cropland, followed by alfalfa hayland, native hayland, and native pasture (Fig 3 and Table 12). For each land use, average annual cash rents are highest in southeast and east-central South Dakota. Cash rents are lowest in the western region of the state (Janssen and Peterson 1986a).

### Cash rental rates in 1985 and 1986

Average cash rents per acre declined from 1985 to 1986 in all but the western region of South Dakota. Annual percentage declines in cropland cash rents varied from 1-3% in the north-central, central, and

**Fig 3. Cropland cash rents by region of South Dakota, 1985-1986.**



Top No.: 1985 average cropland cash rent—\$/acre  
 Middle No.: 1986 average cropland cash rent—\$/acre  
 Bottom No.: 1986 rent-to-value ratio—%

**Table 12. Average (mean) cash rent for alfalfa, native hay, and pasture, by region of South Dakota, 1985 and 1986.<sup>a</sup>**

Region	Alfalfa rent per acre		Native hay rent per acre		Native pasture rent per acre	
	1985	1986	1985	1986	1985	1986
	\$	\$	\$	\$	\$	\$
Southeast	35.40	35.00	18.50	17.70	18.50	17.80
East-Central	30.70	30.00	18.20	18.00	16.50	15.90
Northeast	31.80	27.80	17.50	16.60	14.70	13.60
North-Central	18.20	17.60	12.00	11.80	11.70	11.30
Central	17.50	17.00	14.10	13.30	11.90	11.20
South-Central	12.00	11.70	10.20	9.90	8.40	7.50
West	13.20	13.20	*	*	5.50	5.50
Northwest	10.40	10.20	6.20	5.90	4.70	4.60

\*Insufficient number of reports.

<sup>a</sup>Based on respondents reporting alfalfa, native hay, or native pasture cash rental rates in 1985 and 1986. Rental rates are rounded to the nearest 10 cents. This includes 110 reports on alfalfa, 107 reports for native hay, and 440 reports for native pasture.

Source: 1986 South Dakota Farmland Rental Survey.



northwest regions to a 5-7% decline in the eastern regions of South Dakota. Annual percentage declines in average hayland cash rents varied from 2-6% in most regions of the state and up to 12% in the northeast region. Declines in cash rent reflect the financial stress (reduced earnings and expectation of continued low earnings) affecting South Dakota agriculture during the reporting period.

Cash rents per acre vary substantially by region and land use. For example, 1986 average annual cropland cash rental payments varied from about \$11 per acre in western South Dakota to \$22.70 per acre in north-central South Dakota, \$32.50 per acre in northeast South Dakota, and \$41.50 per acre in southeast South Dakota (Fig 3). Average cropland cash rents were \$52-60 per acre in Clay, Union, and Lincoln counties.

Cash rental rates per acre for alfalfa are considerably higher than cash rents for native hay and pasture in all regions of South Dakota. The dollar amount and percentage difference is greatest in eastern regions of the state where the yield differential is also greatest. Alfalfa, native hay, and native pasture rental rates per acre in northwest and western South Dakota are about one third of average rental rates in southeast South Dakota (Table 12).

#### Pasture leases

Leased pasture tracts usually require added time for checking livestock, maintaining and repairing fences, and fertilizing pastures. Rental rates are affected by agreements on which party (renter or landlord) performs specific tasks. More than 89% of respondents indicated the renter is solely responsible for checking livestock and providing salt and minerals. The remainder indicated the landlord or both parties perform these tasks (Table 13).

Nearly five of every eight respondents indicated the landlord pays for all or some of the fencing materials, but only one of every four landlords provides all or some of the labor for maintaining fences. Landlords living in the same or adjacent

**Table 13. Non-price characteristics of pasture leases by landlord and tenant responsibilities, South Dakota, 1986.**

Responsibility	Number of leases	Responsibility of		
		tenant	landlord	both
		—percent—		
Checking livestock	407	89.7	3.9	6.4
Salt and minerals	398	94.2	3.5	2.3
Fencing materials	408	38.2	56.1	5.6
Fencing labor	407	76.2	16.2	7.6
Livestock damage/ liability insurance	380	87.1	7.4	5.5
Fertilizer cost	291	78.6	13.8	7.9

<sup>a</sup>Respondents to the pasture/rangeland leasing section answered questions only applicable to their lease, so number of responses to each question is less than the total number (441) of pasture lease respondents.

Source: 1986 South Dakota Farmland Rental Survey.

county to their leased pasture tracts were much more likely to pay for fencing materials than "absentee" landlords.

Nearly two thirds of respondents reported their leased pasture tract to be periodically fertilized. In most (79%) cases, the renter pays for all of the fertilizer.

## Formality, stability, and complexity of leasing arrangements

Farmland leases are legally binding contracts that create obligations for renters and landlords. Leases range from flexible and informal (verbal agreements renewable each year) to highly formal, written agreements. In this survey, nearly 62% of leases were oral agreements between the landlord and renter. Most cropshare leases and cash pasture leases were oral, year-to-year agreements, while only half of cash crop/hay leases were oral agreements (Table 14). Approximately two thirds of each type of lease were annual, renewable leases. Only 7% of respondents indicated that any of their leases had

**Table 14. Selected characteristics of cropshare, cash cropland, and pasture leases, South Dakota, 1986.**

Characteristic	Cropshare	Cash	Pasture
Average number of acres	282	273	416
Average length in years	13.1	10.3	11.3
Number of respondents	699	579	441
	—percent of respondents <sup>a</sup> —		
Oral lease	70.5	50.9	61.9
Written lease	29.5	49.1	38.1
Annual lease	68.0	63.9	66.9
Multi-year lease	32.0	36.1	33.1
	—percent of respondents reporting changes <sup>a</sup> —		
Changes in —past 5 years <sup>b</sup> :			
Land ownership	6.0	6.1	6.5
Different tenant	13.8	18.4	19.0
Lease has changed from—			
Cash to share rent	4.2	n.a.	n.a.
Share to cash rent	n.a.	17.9	n.a.

<sup>a</sup>The percent of respondents in each section is based on the number of respondents by type of lease that answered each question. Approximately 5-7% of respondents did not answer questions about oral/written leases and annual/multi-year leases. Approximately 8% of respondents did not answer questions about changes in leasing arrangements.

<sup>b</sup>Respondents were asked the following question: "During the past five years (or the time you have leased this tract, if shorter) has:

- land ownership changed?
- there been a different tenant?
- the lease changed from share to cash rent?
- the lease changed from cash to share rent?

n.a. = Not applicable.

Source: 1986 South Dakota Farmland Rental Survey.



changed in the past 5 years: (1) from an oral agreement to a written lease, or (2) from a written lease to an oral agreement.

A significantly higher proportion of leases (cash or share) between unrelated individuals are written, compared to the proportion of written leases between family members or relatives. Overall, leasing arrangements between family members are less formal than leasing agreements between unrelated individuals, but few differences exist in actual lease terms (Peterson 1987, pp. 54-66).

### Stability and flexibility of leasing agreements

Considerable stability in most leasing arrangements can be inferred from the average duration of existing leases. Even though most leases were annual contracts, the typical lease has been in existence for 11 to 13 years. This indicates that landlord and renter relationships tend to solidify over time, which makes it much easier to renew annual leases on favorable terms for both parties.

Stability of lease arrangements may be affected when a different landowner or renter takes over. However, respondents reported that during the past 5 years land ownership had changed on only 6% of rented tracts. Less than 20% reported a different renter.

Another major potential change in lease agreements is converting a cash lease to a share lease or vice versa. About 4% of cropshare lease respondents reported that their leases had switched from cash in the past 5 years, and about 18% of cash crop/hay respondents had switched from a cropshare lease during the past 5 years (Table 14). The switch in lease type (cash or share) occurs most often when there is also a change in either the landlord or the renter.

Cropshare leases have built-in changes in net returns to landlords and renters as yields, prices, and input costs change over time. Perhaps this is one reason why few share lease respondents (1-5%) reported any changes during the past 5 years in the output/input shares or in the number and types of input expenses shared.

Average cash rents, based on responses to this survey, declined from 1985 to 1986 in almost all regions of South Dakota. However, only 21.5% of respondents with cash crop/hay leases reported decreases in cash rental rates from 1985 to 1986; 2.2% reported increased cash rents and 76.3% reported no change (Table 15). Cash rental rate declines were concentrated on corn and soybean tracts in eastern South Dakota. It appears that cash rental payments are flexible over time, but are often not adjusted on specific cash leases until major rate changes are necessary.

Table 15. Change in cash cropland rental prices in South Dakota from 1985 to 1986.

	----- Respondents indicating <sup>a</sup> -----			Average rate change \$	Average percentage change in rate <sup>b</sup>
	Number	Rate decrease percent	No change or increase		
State	353	21.5	78.5	-5.43	-11.5
<b>Regions<sup>c</sup></b>					
Northwest, Western and South-Central	52	7.7	92.3	-4.62	-31.3
Central and North-Central	94	16.0	84.0	-2.06	-6.1
Northeast, Southeast and East-Central	208	27.9	72.1	-6.87	-14.1
<b>Cropping Pattern<sup>d</sup></b>					
Corn/soybeans	44	36.4	63.6	-6.75	-11.4
Corn/grain/soybeans	70	27.1	72.9	-7.91	-16.4
Corn/grain/wheat	143	18.2	81.8	-5.10	-14.6
Wheat/grain	56	12.5	87.5	-0.74	-5.3
<b>Tenure Class</b>					
Tenant	28	32.5	67.5	-9.33	-17.8
Partowner operator	126	12.7	87.3	-4.48	-11.3
Farm operator landlord <sup>d</sup>	42	28.6	71.4	-6.54	-14.7
Nonoperator landlord	153	25.3	74.7	-4.75	-9.5

<sup>a</sup>Eight of the 353 respondents reporting 1985 and 1986 cash rental ratio indicated a rate increase, 269 reported no change in rental rate, and 76 respondents reported a decrease in cash rental rates.

<sup>b</sup>Average rate change is reported only for respondents indicating a change in cash rental rates from 1985 to 1986. Average percentage change in rental rate is reported for these same respondents and equals:  
 $(1986 \text{ rental rate} - 1985 \text{ rental rate}) / 1985 \text{ rental rate}$ .

<sup>c</sup>See Figure 3 for location of each region and Table 8 for description of cropping patterns.

<sup>d</sup>Partowner operator landlord and fullowner operator landlord.

Source: 1986 South Dakota Farmland Rental Survey.



## Complexity of leasing arrangements

A majority of respondents (58%) were involved in more than one lease agreement, and 43% reported combinations of cropshare, cash crop/hay and pasture leases (Tables 7 and 16).

Multiple leases and combinations of lease types were the predominant leasing pattern of South Dakota farm operators. Nearly 72% of farm operators reported more than one lease and 32% reported four or more leases. In contrast, a majority of nonoperator landlords reported only one lease agreement and less than 7% reported four or more leases. However, 73% of farm operators and 73% of nonoperator landlords reporting multiple leases also reported combinations of share, cash, or pasture leases.

**Table 16. Average number and distribution of leases by farm operator, landlord, and total respondents, South Dakota, 1986.**

	<i>Farm operator</i>	<i>Nonoperator only</i>	<i>Total</i>
<i>Average number of leases</i>	3.1	2.1	2.5
<i>Number of leases per respondent</i>	— percent of respondents —		
1	27.7	53.3	42.2
2	23.1	30.3	27.1
3	16.9	9.5	12.7
4-5	20.9	4.4	11.6
6-10	10.6	1.5	5.5
11 or more	0.8	1.0	0.9
Total	100.0	100.0	100.0
N =	498	641	1139

Source: 1986 South Dakota Farmland Rental Survey.

Thus, farm operator respondents and landlords with multiple leases are apparently quite familiar with the various leasing alternatives in their locality and, presumably, can make informed decisions about the relative benefits and disadvantages of each type.

## Respondents' overall perception of leasing arrangements

Given the stability in the farmland leasing market suggested above, it is not surprising that most South Dakota respondents have a favorable perception of their leases. Nearly 64% of farm operator respondents and 67% of landlord respondents reported their leases to be "good" or "excellent" (Table 17). Renters leasing farmland from family members or other relatives reported a higher level of satisfaction with the fairness of their leases than those leasing from unrelated individuals or from institutions.

Landlords' satisfaction with their leases is related to their perception of ease in securing acceptable tenants. Those landlords who found it easy to secure acceptable tenants (79% of landlord respondents) were more likely than other landlords to report their leases as "good" or "excellent". Still, almost half of those who found it difficult to find acceptable tenants report their leases to be "good" or "excellent".

Over half of the renter respondents are "reasonably certain" and another 28% of renters are "very certain" that they will be able to continue leasing their most important tract over the next 5 years. Only 17.8% of respondent renters are "uncertain" or "very uncertain" (Table 17).

**Table 17. Number and percentage of responses to three subjective questions regarding leasing arrangements by question and operator status, South Dakota, 1986.**

1. From the standpoint of fairness, how would you classify your leasing arrangements?		<i>Poor</i>	<i>Fair</i>	<i>Adequate</i>	<i>Good</i>	<i>Excellent</i>
	<i>Number</i>	—Percent—				
Farm operator	480	2.7	10.4	23.1	37.5	26.3
Landlord only	616	0.8	11.8	20.0	43.0	24.4
All respondents	1096	1.6	11.2	21.4	40.6	25.2
2. How would you evaluate the opportunity for continuing to lease your most important tract for the next five years?		<i>Very uncertain</i>	<i>Uncertain</i>	<i>Reasonably certain</i>	<i>Very certain</i>	
	<i>Number</i>	—Percent—				
Renters only	426	6.5	11.3	53.6	28.6	
3. Securing acceptable tenants is?		<i>Quite difficult</i>	<i>Somewhat difficult</i>	<i>Generally easy</i>	<i>Very easy</i>	
	<i>Number</i>	—Percent—				
Landlords only	612	5.1	15.8	49.2	29.9	

Source: 1986 South Dakota Farmland Rental Survey.



# Economic evaluation of farmland leasing arrangements

## Cash leases

Cash leases are widely used in leasing South Dakota crop, hay, and pasture land and are popular with many landlords and renters for several reasons. Cash rents are easy to calculate and dollar amounts of payments (returns) are known in advance. Compared with share leasing, cash renters have greater managerial freedom in crop selection, input allocation, and timeliness of field operations. However, with cash leases, the renter also assumes all of the production risks.

Landlords may prefer cash rental agreements because they will know their income in advance and they are not responsible for many farm management decisions. Cash rental landlords do, however, assume the risk that their renters will be unable to make their rental payments (unless all of the payment is in advance), and they do not share in benefits from high production years. Retired landlords may also prefer cash leasing to avoid "materially participating" in the farm business, thereby endangering some of their social security benefits.

Cash rental payments are closely related to the level of and changes in farmland market values. Market values of agricultural land are fundamentally derived from current net returns and expected changes in net returns to farmland. Cash rental payments minus property taxes and landlord maintenance expenses represent a close approximation of current net returns to farmland.

Changes in cash rental rates from 1985 to 1986 suggest a responsive cash rental market within a framework of apparent stability and long-term duration of most leasing arrangements.

Although wide variation in cash rental rates exists in different regions of South Dakota, the associated rent-to-value ratios for cropland were similar across the state. This relative consistency of rent-to-value ratios (which represent a return to land) suggests a well functioning capital market for South Dakota agricultural land. Cash rental rates in relation to farmland values maintained a consistent spatial pattern in a specific time period, even though farmland rental and purchase markets are local in nature.

## Share leases

Share rental agreements provide a mechanism for sharing risks in agricultural production between landlords and renters. From the landlords' perspective, share leases require their involvement in crop production decisions which permit them to more effectively protect soil fertility and reduce soil erosion. Taking a crop share as payment adds risk to the amount of return received by landlords but also permits them to share benefits from above average yields and superior renter management. Another source of risk for some landlords (especially absentee

or elderly landlords) is the verification of yields on which their share rental payments are based.

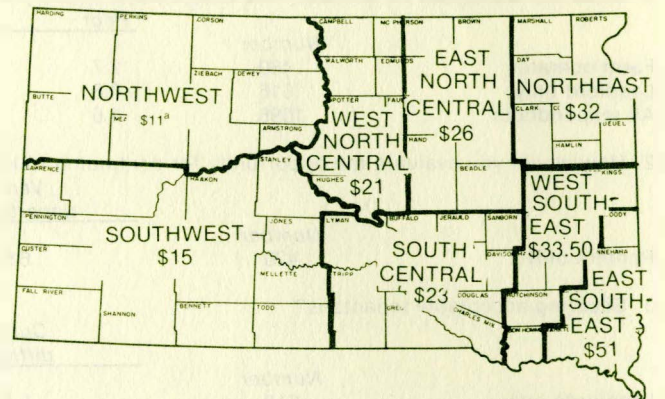
For renters, share rental arrangements are a method for sharing crop production risks associated with yield variations. Since the rental payment is directly related to the amount produced, the risk of lower yields (and income) is shared with the landlord, but so also is the benefit of extra production (and potential profits) in favorable years. The sharing of selected input costs, as most share leases provide, and the lack of a cash rental payment for land reduce the renter's cash-flow requirements. Shared management decisions, however, can reduce operator flexibility and independence in selecting crop production and marketing practices.

From an economic standpoint, the outputs and inputs shared under a share lease should reflect the relative contributions of the landlord and renter. These contributions include not only purchased input costs, but also the actual and implicit costs of labor and other specialized inputs (land, machinery, improvements) contributed by each party. If these conditions are met and the renter and landlord negotiate the same output shares for all competing crops, then cropshare leases meet short-run economic efficiency conditions and equitable distribution of receipts and costs (Heady 1952).

It is often difficult to identify and measure many of the costs, but over time typical output shares become accepted as fair and equitable within localities and regions (Hurlburt 1954). Only significant alterations of farming practices and crops grown will lead to changes in output shares within a region or locality.

The 1986 South Dakota survey revealed regional variations in dominant output shares for crops, suggesting that typical output shares in various regions reflect differences in the relative contributions of landlords and tenants. Thus, a "relative contributions" approach was used to analyze item-by-item a series of representative crop enterprise budgets for different regions (see Figure 4 for farm economic regions and Table 18 for a sample crop budget). This approach can be used by

Fig 4. Farm economic regions of South Dakota.



<sup>a</sup>1986 average cash rental rate per acre of cropland is shown for each region and is obtained from the 1986 South Dakota Farmland Rental Survey.



**Table 18. Sample crop enterprise budget for South Dakota—East-Southeast Region, 95-bushel corn, 60-40 tenant-landlord share, 1986.**

Item	Dollar contribution		Total
	Tenant	Landlord	
1. Land charge	0.00	51.00	51.00
2. Depreciation/insurance	18.75	0.00	18.75
3. Repairs	11.98	0.00	11.98
4. Interest oper. cap.	1.69	0.63	2.32
5. Interest on tractor/equip.	11.42	0.00	11.42
6. Labor	9.35	0.00	9.35
7. Fertilizer	12.30	8.20	20.50
8. Seed	11.17	0.00	11.17
9. Insecticide	6.10	4.07	10.17
10. Herbicide	9.45	6.30	15.75
11. Fuel and lubrication	5.90	0.00	5.90
12. Drying	9.12	6.08	15.20
13. Crop overhead	4.70	0.00	4.70
14. Management contribution	7.12	2.38	9.50
15. Total	119.05	78.66	197.71
16. Landowner's % share		39.80	
17. Tenant's % share	60.20		

Source: Costs estimated using the South Dakota Crop Budget Generator.

landlords and renters to examine the economic efficiency of their particular leasing arrangements. It can also be modified to examine the impacts of alternative federal commodity program terms on cropshare leases.

Typical tenant/landlord output shares were assumed for each region and crop examined and for the various inputs shared. Shared input expenses varied by typical share lease arrangement for each crop in each region. Inputs not shared were assigned as appropriate to the tenant or landlord.

Key assumptions were used in constructing the crop budgets: (1) The typical per-acre cash rental rate represented the opportunity cost of the landlord's contribution of farmland and payment of property taxes. (2) A wage of \$5.50 per hour was assigned for the renter's labor. (3) A management charge was based on units of production. (Higher yields meant higher management costs; of the management charge, 75% was allocated to the renter and 25% to the landlord.) (4) Crop overhead expenses were estimated at 5% of total cash expenses and assigned to the renter.

From the above assumptions and from typical output and input share arrangements, the relative contributions approach could assess both short-run economic efficiency and equity for 12 major crop enterprise-output share arrangements across different regions of South Dakota for the 1986 crop year.

Overall, the dominant output and input shares reported in the survey reflect a reasonable degree of economic efficiency and equitable division of costs and receipts. Specifically, each party to a typical cropshare lease received an output share roughly equal to estimated contribution to fixed and variable costs (Table 19). Possible exceptions to this general conclusion are cropshare leases for winter wheat and

grain sorghum in southwest and south-central regions of South Dakota.

The closest relationship between output share and renter-landlord contribution occurred for 3/5-2/5 corn and soybean share leases in east southeast South Dakota and for 2/3-1/3 cropshare leases for oats and spring wheat in northeast South Dakota. In the east southeast region, the 1/2-1/2 cropshare budget provided a similar renter-landlord contribution (54% and 46%, respectively) for soybeans and corn. The 1/2-1/2 cropshare for corn and soybeans became popular in some counties of eastern South Dakota during the 1970s when farmland values and cash rents were rising more rapidly than other input costs. Recent declines in cash rents in eastern South Dakota make the 1/2-1/2 cropshare lease less attractive to renters unless major increases in crop prices occur.

The 2/3-1/3 share lease for corn and soybeans is found in the western fringe of the corn-soybean areas of South Dakota. Fertilizer and insecticide expenses are typically shared. In 1986, the tenant's estimated contribution is 68-72% of total production costs of corn and soybeans in the west southeast region (Table 19).

The 2/3-1/3 share lease is dominant for wheat, oats, barley, and grain sorghum in South Dakota. Fertilizer expense was reported shared for most of these leases in all regions. In 1986, typical output shares and estimated renter-landlord contribution were about equal (66%-34%) for spring wheat and oats in the northeast region. However, the renter's cost contribution was about 71% of total production costs for spring wheat and barley in the east north-central region and 75-76% of total production costs of winter wheat (fallow) in the southwest region and grain sorghum in the south-central region (Table 19). Output per acre and land prices were considerably lower in those regions than in the northeast region, while variable input and non-land fixed costs were not reduced as much. Since the renter pays all non-land costs except fertilizer expense, the renter's cost contribution was proportionally higher in those regions, compared to the renter's cost contribution in the northeast region.

### Federal farm program effects on landlord and renter contributions

The above examination of landlord and renter contributions for selected crop enterprises did not consider the possible impacts of federal commodity program provisions. Specifically, provisions for deficiency payments and farmland set-aside requirements may reduce the renter's contribution proportionally more than the landlord's. This may be particularly true if the renter is able to use "idled" machinery and labor at another location or in another productive use.

The potential effects of the 1986 federal farm programs on the relative shares of fixed and variable inputs contributed by landlords and renters were examined for commodity program crops in South



**Table 19. Equity/efficiency tests of typical cropshare lease arrangements, South Dakota, 1986, by region and crop enterprise.<sup>a</sup>**

South Dakota economic region and crop enterprise	Tenant/ landlord output shares	Estimated input contribution				Inputs shared <sup>b</sup>
		Tenant <sup>a</sup>		Landlord <sup>a</sup>		
		\$	%	\$	%	
<b>East-Southeast</b>						
Corn (95 bu)	1/2-1/2	107 <sup>c</sup>	54.1	91	45.9	a, b, c, d, e
Corn (95 bu)	3/5-2/5	119	60.2	79	39.8	b, c, d, e
Soybeans (35 bu)	1/2-1/2	81	54.3	68	45.7	a, b, c
Soybeans (35 bu)	3/5-2/5	88	58.7	62	41.3	b,c
<b>West-Southeast</b>						
Corn (75 bu)	2/3-1/3	122	72.1	47	27.9	b, c, d
Soybeans (25 bu)	2/3-1/3	83	68.4	38	31.6	b c
<b>Northeast</b>						
Spring wheat (40 bu)	2/3-1/3	76	66.3	39	33.7	b, c
Oats (65 bu)	2/3-1/3	78	66.4	39	33.6	b, c
<b>East North-Central</b>						
Spring wheat (30 bu)	2/3-1/3	77	71.5	31	28.9	b
Barley (50 bu)	2/3-1/3	76	71.1	31	28.9	b
<b>Southwest</b>						
Winter wheat (fallow) (35 bu)	2/3-1/3	86	75.3	28	24.7	b
<b>South-Central</b>						
Grain sorghum	2/3-1/3	98	75.9	31	24.1	b,d

<sup>a</sup>Costs estimated using South Dakota Crop Budget Generator, which has a databank of economic-engineering coefficients for specific crops in each economic region. Landlord contributions include share of variable costs, 25% of management charge, and estimated rental value of farmland. Tenant's contribution includes all machinery and labor costs. Interest on cash operating expenses is prorated between tenant and landlord.

<sup>b</sup>The letter codes represent inputs shared and used as follows: a = seed; b = fertilizer; c = insecticide; d = herbicide; e = grain drying.

<sup>c</sup>Costs based on 1986 average cash rents reported by survey respondents. See Figure 4 for map of economic regions and 1986 average cash rental rates.

Dakota. Crop enterprise budgets summarized in Table 19 were modified to incorporate farmland set-aside requirements. The estimated non-land costs of maintaining set-aside acres, assuming chemical weed control plus field cultivator and chisel tillage operations, was \$14.54 per acre. The critical non-land cost assumption for set-aside acres was to include only the fixed and variable costs of machinery operations directly involved in maintenance of set-aside acres. The landlords' relative contributions on set-aside acres varied from 61% to 81% of total costs and were greatest where the land contribution costs (estimated by per-acre cash rental payments) were highest and input costs were shared. The modified crop enterprise budgets incorporated the landlord and renter input cost on planted acres and set-aside acres weighted by the proportion of cropland planted and set-aside acres.

In general, a 20% set-aside requirement,

compared to no set-aside requirement, reduces (increases) the renter's (landlord's) input cost contribution by 2.5 to 3.3 percentage points. A uniform 35% set-aside requirement for wheat and feed grains, compared to no set-aside, reduces (increases) the renter's (landlord's) input cost contribution by 5.0 to 5.8 percentage points (compare data in Tables 19 and 20).

In most cases, participation in the federal farm program improved the relative cost contribution of renter and landlord in relation to the output share for each. That is, the relative cost contribution of renters and landlords was closer to their output shares by participation in the federal commodity program, compared to non-participation. This suggests that rental market shares for cropland in South Dakota have remained appropriate in the 1980s as the importance of and participation in federal farm programs increased.



**Table 20. Equity/efficiency tests of typical cropshare lease arrangements under 1986 federal commodity program provisions, South Dakota, by region and crop enterprise.<sup>a</sup>**

South Dakota economic region and crop enterprise	Percent set-aside acres <sup>b,c</sup>	Tenant/ landlord output shares	Estimated input contribution				
			Tenant		Landlord <sup>c</sup>		
			\$	%	\$	%	
East-Southeast							
Corn (95 bu)	20	1/2-1/2	88	51.4	83	48.6	
	35		74	48.8	78	51.2	
Corn (95 bu)	20	3/5-2/5	98	57.1	74	42.9	
	35		82	54.1	70	45.9	
West-Southeast							
Corn (75 bu)	20	2/3-1/3	100	69.1	45	30.9	
	35		84	66.2	43	33.8	
Northeast							
Spring wheat (40 bu)	25	2/3-1/3	61	61.1	37	38.3	
	35		54	59.7	37	40.5	
Oats (65 bu)	20	2/3-1/3	65	63.0	38	37.0	
	35		55	59.7	37	40.3	
East North-Central							
Spring wheat 30 bu)	25	2/3-1/3	61	67.5	30	32.5	
	35		55	65.5	29	34.5	
Barley (50 bu)	20	2/3-1/3	64	68.0	30	32.0	
	35		54	65.1	29	34.9	
South-Central							
Grain sorghum (55 bu)	20	2/3-1/3	81	73.4	29	26.6	
	35		69	70.1	28	29.1	

<sup>a</sup>See Tables 18 and 19 for discussion of crop budgets and assumptions about which inputs are shared, and costs on set-aside acres. Soybeans are not included because no set-aside is required. Winter wheat fallow budget also is not included because fallow is assumed to be included in set-aside. Thus, there is no charge in relative contributions of renters and landlords for these crops.

<sup>b</sup>Set-aside acreages equal 20% of program acres for feed grains and 25% of program acres for wheat under 1986 commodity programs (including a 2.5% paid land diversion). Thirty-five percent set-aside is a hypothetical case based on 1987 farm programs for some crops.

<sup>c</sup>Direct non-land cost of set-aside is \$14.54 per acre. These costs include herbicide, fuel and lubrication, machinery repair, labor, overhead interest, insurance, and depreciation expenses. Tenant assumes all nonland direct costs of set-aside except for landlord's share of herbicide expense.

<sup>d</sup>Farmland input contribution is based on 1986 average cash rents reported by respondents. This includes planted acres and set-aside acres.



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1986 SOUTH DAKOTA STATE UNIVERSITY FARMLAND LEASING SURVEY

Farmland leasing is an important part of today's production agriculture. Yet, it is often difficult for tenants and landlords to gain a clear understanding of leasing practices within their locality and the state. By completing this questionnaire, you will be helping to compile that market information for 1986.

This survey is being sent to a random sample of both tenants and landlords. Some questions may not apply to you, but please respond as completely as possible. Your answers will be kept confidential and used only in compiling total and average responses.

GENERAL INFORMATION

1. Are you a farm or ranch operator in South Dakota in 1986?
  - Yes
  - No
2. Are you a landowner leasing farmland to others in 1986?
  - Yes
  - No
3. How many acres of farmland, if any, do you:
  - a. own? \_\_\_\_\_ acres
  - b. lease to others? \_\_\_\_\_ acres
  - c. lease from others? \_\_\_\_\_ acres
  - d. farm yourself? \_\_\_\_\_ acres
4. In what county or counties is your leased land located?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
5. The number and total acres of all your leases by type are:
 

	Number	Acres
a. crop share	_____	_____
b. cash rent (crop or hay)	_____	_____
c. cash rent (pasture only)	_____	_____
d. livestock share	_____	_____
e. other _____	_____	_____
6. How many of your leases are:
  - a. written \_\_\_\_\_
  - b. oral \_\_\_\_\_
7. How many of your leases are:
  - a. annual? \_\_\_\_\_
  - b. multi-year? \_\_\_\_\_
8. Over the past five years, have any of your leases changed:
 

	Yes	No	If "Yes," Number
a. from written to verbal?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	_____
b. from verbal to written?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	_____
c. from annual to multi-year?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	_____
d. from multi-year to annual?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	_____

CROP SHARE LEASE SECTION

9. Are you a tenant or landlord in any CROP SHARE leases for cropland or hayland?
  - (1) Yes If "Yes," go to Question 10.
  - (2) No If "No," go to Question 21.

10. What are your:
  - a. number of crop share leases? \_\_\_\_\_
  - b. total cropland acres share leased? \_\_\_\_\_ acres
  - c. total hayland acres share leased? \_\_\_\_\_ acres
  - d. total irrigated acres share leased? \_\_\_\_\_ acres
  - e. total dryland acres share leased? \_\_\_\_\_ acres

Even though you may have more than one lease, please answer Questions 11 to 20 for just one crop share lease agreement — either your **MOST IMPORTANT OR MOST TYPICAL** crop share lease.

11. How many acres are under this lease agreement? \_\_\_\_\_
12. How many years have you leased these acres? \_\_\_\_\_
13. For this agreement, (check one for each question)
  - a. you are? (1) tenant  (2) landlord
  - b. the lease is? (1) oral  (2) written
  - c. the lease is? (1) annual  (2) multi-year

14. The tenant's share of the output is? (complete all that apply)
 

	Tenant's Share of Total
Cropland:	
a. dryland	_____
b. irrigated	_____
Hayland:	
c. alfalfa	_____
d. tame hay (brome)	_____
e. native hay	_____

15. Is there a cash payment in addition to this share rent?
  - (1) Yes If "Yes," go to Question 15a.
  - (2) No If "No," go to Question 16.
 a. How much is that added rent?
  - \$ \_\_\_\_\_ total
  - or
  - \$ \_\_\_\_\_ per acre

16. The major income-producing crop(s) grown on these acres is(are)? (check all that apply)
  - a. corn
  - b. soybeans
  - c. sorghum
  - d. wheat
  - e. oats
  - f. barley
  - g. other (specify) \_\_\_\_\_



17. For this lease, does the tenant have forage use (grazing on stocks or harvesting hay) after the grain is harvested?

- (1) Yes If "Yes," go to Question 17a.
- (2) No If "No," go to Question 18.

a. Does the tenant pay an additional fee?

- (1) Yes
- (2) No

18. Of any **CROP INPUT** costs that are shared, what are the tenant's and landlord's shares? (complete all that apply)

	Tenant's (Share of Total)	Landlord's
a. seed	_____	_____
b. fertilizer	_____	_____
c. herbicide	_____	_____
d. insecticide	_____	_____
e. application of chemicals	_____	_____
f. irrigation energy	_____	_____
g. harvesting	_____	_____
h. drying	_____	_____
i. other (specify)	_____	_____

19. Of any **HAY PRODUCTION INPUT** costs that are shared, what are the tenant's and landlord's shares? (complete all that apply)

	Tenant's (Share of Total)	Landlord's
a. seed	_____	_____
b. fertilizer	_____	_____
c. baling	_____	_____
d. hauling	_____	_____
e. other (specify)	_____	_____

20. During the last five years (or the time you have leased this tract, if shorter), has:

	Yes	No
a. land ownership changed?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>
b. there been a different tenant?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>
c. the share of inputs changed?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>
d. the number of shared inputs changed?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>
e. the lease changed from cash to share rent?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>
f. the landlord's crop share increased?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>
g. the landlord's crop share decreased?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>

**CASH LEASE SECTION**

21. Are you a tenant or landlord in any **CASH** lease agreements for cropland or hayland?

- (1) Yes If "Yes," go to Question 22.
- (2) No If "No," go to Question 31.

22. What are your:

- a. number of cash leases? \_\_\_\_\_
- b. total crop acres cash leased? \_\_\_\_\_ acres
- c. total hayland acres cash leased? \_\_\_\_\_ acres
- d. total irrigated acres cash leased? \_\_\_\_\_ acres
- e. total dryland acres cash leased? \_\_\_\_\_ acres

Even though you may have more than one lease, please answer Questions 23 to 30 for just one cash lease agreement — either your **MOST IMPORTANT OR MOST TYPICAL** cash lease.

23. How many acres under this lease agreement? \_\_\_\_\_

24. How many years have you leased these acres? \_\_\_\_\_

25. For this agreement, (check one for each question)

- a. you are? (1) tenant  (2) landlord
- b. the lease is? (1) oral  (2) written
- c. the lease is? (1) annual  (2) multi-year

26. What were/are the 1985 and 1986 per acre cash rent and your estimate of the 1986 per acre market value of this leased land?

Crop Type	Cash Rent		Estimated Market Value
	1985	1986	
a. irrigated crops/ grains	\$ _____	\$ _____	\$ _____
b. dryland crops/ grains	_____	_____	_____
c. alfalfa	_____	_____	_____
d. tame hay (brome)	_____	_____	_____
e. native hay	_____	_____	_____

27. The **major** income-producing crop(s) grown on these acres is(are)? (check all that apply)

- a. corn
- b. soybeans
- c. sorghum
- d. wheat
- e. oats
- f. barley
- g. other (specify) \_\_\_\_\_

28. Payments on this cash lease are made? (check one)

- (1) annually
- (2) twice yearly
- (3) quarterly
- (4) other

29. Are there lease provisions that vary the amount of cash rent due to changes in yields or prices?

- (1) Yes If "Yes," go to Question 29a.
- (2) No If "No," go to Question 30.

a. Is rent adjusted for changes in: (check one)

- (1) yields?
- (2) prices?
- (3) both?



30. During the last five years (or the time you have leased this tract, if shorter), has:

	Yes	No
a. land ownership changed?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>
b. there been a different tenant?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>
c. the lease changed from share to cash rent?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>

**PASTURE/RANGE LEASE SECTION**

31. Are you a tenant or landlord in any leases for permanent **PASTURE or RANGE?**

- (1) Yes If "Yes," go to Question 32.
- (2) No If "No," go to Question 43.

32. What are your total:

- a. number of pasture/range leases? \_\_\_\_\_
- b. acres pasture/range leased? \_\_\_\_\_ acres

Even though you may have more than one lease, please answers Questions 33 to 42 for just one pasture/range lease agreement — either your **MOST IMPORTANT OR MOST TYPICAL** pasture/range lease.

33. How many acres under this agreement? \_\_\_\_\_

34. How many years have you leased these acres? \_\_\_\_\_

35. For this agreement, (check one for each question)

- a. you are? (1) tenant  (2) landlord
- b. the lease is? (1) oral  (2) written
- c. the lease is? (1) annual  (2) multi-year

36. The rental price for this tract in 1985 and 1986 was/is:

	1985	1986
a. per acre	\$ _____	\$ _____
or		
b. per animal unit month	_____	_____

37. What is the 1986 stocking rate? \_\_\_\_\_ acres per animal unit

38. What is the usual grazing season length in months? \_\_\_\_\_

39. You are leasing this pasture/range from or to: (check one)

- (1) individual, partnership, or corporation
- (2) government agency
- (3) tribal government
- (4) other (specify) \_\_\_\_\_

40. Which party is responsible for: (check all that apply)

	Tenant	Landlord	Both
a. checking livestock	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	(3) <input type="checkbox"/>
b. salt and minerals	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	(3) <input type="checkbox"/>
c. fencing materials	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	(3) <input type="checkbox"/>
d. fencing labor	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	(3) <input type="checkbox"/>
e. livestock damage liability insurance	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	(3) <input type="checkbox"/>
f. fertilizer cost	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>	(3) <input type="checkbox"/>
g. other (specify)			

41. The water source(s) is (are): (check all that apply)

- a. stream
- b. pond
- c. well
- d. rural water system
- e. other (explain) \_\_\_\_\_

42. During the last five years or the time you have leased this tract if shorter, has:

	Yes	No
a. land ownership changed?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>
b. there been a different tenant?	(1) <input type="checkbox"/>	(2) <input type="checkbox"/>

**GENERAL RENTAL MARKET AND RESPONDENT INFORMATION**

This last section contains three sets of questions, please answer only those that apply to you.

**IF YOU LEASE FROM OTHERS,** answer Questions 43 through 49. If not, go to Question 50.

43. Please indicate the number and total acres you lease from each of the following landlords.

	Number	Acres
a. Parents or in-laws	_____	_____
b. Other relative	_____	_____
c. Unrelated individual	_____	_____
d. Financial institution	_____	_____
e. State government	_____	_____
f. Tribal government	_____	_____
g. Federal government	_____	_____
h. Other	_____	_____

44. How did you typically first learn your leased land was available to rent? (check one)

- (1) From landowner directly.
- (2) From a relative.
- (3) From neighbor or other individual.
- (4) From newspaper or other media ad.
- (5) Other (explain) \_\_\_\_\_

45. At the time of your original agreement(s), were you aware of competition from others?

- (1) Yes
- (2) No

46. When you renew leases, are you usually in competition with others?

- (1) Yes
- (2) No

47. How would you evaluate the opportunity for continuing to lease your most important tract for the next five years? (circle one)

1	2	3	4
Very Uncertain	Uncertain	Reasonably Certain	Very Certain

48. Do you operate your farm business as: (check one)

- (1) an individual proprietorship?
- (2) a partnership?
- (3) a corporation?



49. Your annual gross receipts from farming average? (check one)

- (1) Less than \$39,999
- (2) \$40,000 to \$99,999
- (3) \$100,000 to \$249,999
- (4) \$250,000 or more

IF YOU LEASE TO OTHERS, answers Questions 50 through 52. If not, go to Question 53.

50. Please indicate the number and total acres you lease to each of the following tenants.

	Number	Acres
a. Son, daughter, or in-laws	_____	_____
b. Other relative	_____	_____
c. Unrelated individual	_____	_____
d. Non-family partnership	_____	_____
e. Non-family corporation	_____	_____
f. Other	_____	_____

51. Securing acceptable tenants is: (circle one)

- |                    |                       |                   |              |
|--------------------|-----------------------|-------------------|--------------|
| 1                  | 2                     | 3                 | 4            |
| Quite<br>Difficult | Somewhat<br>Difficult | Generally<br>Easy | Very<br>Easy |

52. Who handles the management of your leases? (check one or more)

- a. Myself
- b. Relative
- c. Estate executor
- d. Professional farm manager
- e. Other (specify) \_\_\_\_\_

Questions 53 through 58 are for ALL RESPONDENTS.

53. From the standpoint of fairness, how would you classify your leasing arrangement(s)? (circle one)

- |      |      |          |      |           |
|------|------|----------|------|-----------|
| 1    | 2    | 3        | 4    | 5         |
| Poor | Fair | Adequate | Good | Excellent |

54. On average, net income from crop and livestock production or farmland rental contributes what percentage of your total household income? (check one)

- (1) Less than 30%
- (2) 30% to 49%
- (3) 50% to 80%
- (4) More than 80%

55. Your age is? (check one)

- (1) Less than 25 years
- (2) 25 to 34 years
- (3) 35 to 44 years
- (4) 45 to 54 years
- (5) 55 to 64 years
- (6) 65 or more years

56. Your sex is?

- (1) Male
- (2) Female

57. Your residence is:

- a. \_\_\_\_\_ county
- b. \_\_\_\_\_ state

58. We thank you for completing this questionnaire. If you have any additional comments, please provide them below.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_