

# MU Guide

## Missouri Crop-Share Leasing Patterns

Joe Parcell and Ray Massey, Department of Agricultural Economics  
David Reinbott, Farm Management Specialist, Southeast Region

The trend in production agriculture is toward larger farms. Producers expand their base of operations by purchasing or renting additional land. Producers may prefer to rent rather than purchase land because of a lack of capital, a need to preserve capital for other uses, a shortage of land for sale in the area, or a perception that renting land is more profitable than owning it. The three most common types of farm lease agreements in Missouri are cash, flexible cash and crop-share. For more information about these types of rental arrangements, see MU publication G 426, *Farm Lease Agreement*.

This guide focuses on one specific rental agreement, the crop-share lease. This guide uses producer survey information to determine how tenants and landowners share the costs of production under 50-50 and  $\frac{2}{3}$ - $\frac{1}{3}$  lease agreements. A  $\frac{2}{3}$ - $\frac{1}{3}$  crop-share arrangement apportions two-thirds of the crop to the tenant and one-third to the landowner.

A crop-share lease agreement between a landowner and tenant defines how they will share the crop as compensation for their respective contributions in land, labor and capital. Crop-sharing normally involves grain crops such as small grains, corn, milo and soybeans. However, crop-sharing also occurs in the production of cotton, hay and rice. Landowners' share of the crop depends on the value of their contribution toward production of the crop. Landowners, at a minimum, contribute land. Similarly, tenants' share of the crop depends on the value of their contribution, which is, at a minimum, machinery and labor. However, each crop-share leasing arrangement is unique, reflecting the specific contribution made by each party and the negotiating strength of each party. A key point of negotiating between tenants and landowners is the division of crop inputs.

This guide is based on a 1999 University of Missouri Crop-Share Rental Arrangement Survey. The survey was administered statewide, and responses were received on more than 300 crop-share rental agreements (120 respondents). The values reported here are state and regional averages; an individual county or area may

**Table 1. Characteristics of Missouri tenants responding to crop-share lease survey.**

Characteristic	Units	Average	Most common
Acres farmed	acres	1,349	n/a
Acres cash rented	acres	254	n/a
Acres crop-share rented	acres	758	n/a
Landowners rented from	number	6	n/a
How many years renting	years	12	10
Terms of lease last discussed	years	5	1
Use a written lease	percent	35%	n/a
How often is lease renewed	years	2	1
Use conventional tillage	percent	70%	n/a

differ in how a crop-share arrangement is specified. Furthermore, every crop-share agreement is unique to the parties who negotiated the agreement. The information provided in this guide should be used only as a reference in formulating an agreement between tenant and landowner.

### Summary of respondents

Table 1 provides general summary statistics describing respondents to the crop-share survey. The producers reported that 56 percent of the acres they farmed were crop-shared, and 19 percent were cash rented. The average tenant rented from six landowners through either a crop-share or cash rental arrangement. The average tenancy of the crop-share agreement was 12 years. Most respondents indicated that the lease was renewed annually, but only 35 percent of respondents indicated the use of a written lease in their crop-share arrangements. Given the legal questions of liability in case of injury or if one party breaches the contract, a written contract is strongly recommended. See your local University

**Table 2. Reported tenant's share of output in crop-share leasing by University of Missouri Outreach and Extension region and by cropping practice.**

Extension region/Crop	Tenant's share of output				
	50%	60%	67% (2/3)	75%	Other
Percent distribution					
<b>Statewide</b>	38	3	51	2	6
<b>Extension region</b>					
Northwest	100				
Northeast	57		43		
West central	53	5	31		11
Central	77	1	19	3	
East central			100		
Southwest	23		77		
South central			Insufficient responses		
Southeast	10	3	75	2	10
<b>Crop</b>					
Corn	45	4	46	1	4
Cotton			100		
Hay	57		36		7
Rice			65	14	21
Soybean	41	2	53	1	3
Wheat	25	4	67		4

Outreach and Extension center for more information. On average, the terms of the crop-share agreements reported by respondents to the survey had been in force for five years. This indicates that once a crop-share agreement is decided upon, the agreement typically lasts for several years. Possibly the tenant and landowner realize the transaction costs associated with negotiating terms of the agreement more often.

### Output shares for cropland, cotton, rice and hay

Table 2 lists the share of output tenants received by University of Missouri Outreach and Extension region (see Figure 1) and crop type. The other column refers to respondents who did not indicate a 50 percent, 67 percent or 75 percent output share. The amount of output received by the tenant should be in proportion to inputs contributed and risks assumed. There is considerable variation in the type of sharing of output across the state. In the northwest district, all tenants indicated a 50-50 crop-share agreement. However, in the southeast and southwest districts, the typical agreement was  $\frac{2}{3}$ - $\frac{1}{3}$ . Generally, corn crop-share rental agreements are either 50-50 or  $\frac{2}{3}$ - $\frac{1}{3}$ . For cotton, rice and wheat,  $\frac{2}{3}$ - $\frac{1}{3}$  was typical; for hay, 50-50. Soybean crop-share agreements are equally divided between 50-50 and  $\frac{2}{3}$ - $\frac{1}{3}$ .

### Input share arrangements

Economic evaluation of a crop-share agreement would suggest that variable inputs that increase produc-



**Figure 1. University of Missouri Outreach and Extension regions.**

tion should be split in proportion to the output received. For example, in a 50-50 crop-share agreement in which insecticide is required to reduce an expected pest problem that endangers the crop, the tenant and landowner would split the insecticide costs 50-50. This is because both the landowner and tenant could increase revenue through exterminating insects. However, in reality such an arrangement depends on how the tenant and landowner specify the crop-share contract. Table 3 summarizes the tenant's share of inputs contributed for 50 percent or 67 percent (two-thirds) of output received.

**Table 3. Reported sharing of crop inputs under crop-share leasing by type of land and output shares, Missouri, 1998.**

Type of land and Output share/input share	Government payment	Seed	Lime	Fertilizer		Herbicide		Insecticide		Harvest	Crop hauling	Crop consulting	Irrigation	
				Material	Application	Material	Application	Material	Application				Energy	Repairs
Percentage of respondents reporting														
<b>Overall</b>														
<b>50-50</b>														
Tenant pays 50%*	94	100	100	99	70	96	56	98	71	65	71	47	94	64
Tenant pays different than 50%	6				2		1			3				19
Tenant pays 100%				1	28	4	43	2	29	32	29	53	6	19
<b>67-33 (2/3-1/3)</b>														
Tenant pays 67%	97	1	72	86	24	8	5	15	2	6	17		20	21
Tenant pays different than 67%	3		18					1		3	2			
Tenant pays 100%		99	10	14	76	92	95	84	98	91	81	100	80	79
<b>Dryland</b>														
<b>50-50</b>														
Tenant pays 50%	94	100	100	99	71	99	58	99	70	69	69	38	n/a	n/a
Tenant pays different than 50%	6				2		1						n/a	n/a
Tenant pays 100%				1	27	1	41	1	30	31	31	62	n/a	n/a
<b>67-33 (2/3-1/3)</b>														
Tenant pays 67%	95	1	71	75	37	15	11	20	4	6	23		n/a	n/a
Tenant pays different than 67%	5		21										n/a	n/a
Tenant pays 100%		99	8	25	63	85	89	80	96	94	77	100	n/a	n/a
<b>Irrigated</b>														
<b>50-50</b>														
Tenant pays 50%	94	100	100	100	65	76	41	94	76	41	82	69	94	64
Tenant pays different than 50%	6									18				19
Tenant pays 100%					35	24	59	6	24	41	18	31	6	19
<b>67-33 (2/3-1/3)</b>														
Tenant pays 67%	100		73	96	14	1		12		5	12		20	21
Tenant pays different than 67%			17			1		1		6	4			
Tenant pays 100%		100	10	4	86	98	100	87	100	89	84	100	80	79

Note: For example, 100% of survey responses indicated tenants paid 50% of seed costs, and 98% of survey responses indicated tenants paid 50% of the cost of insecticide materials.

Crop-share agreements for both dryland and irrigated farming are listed. The table shows the percentage of survey respondents whose contribution of inputs was either the same as, or different from, their share of the output. Government payments are generally split in the same proportion as output received.

In general, for the 50-50 crop-share agreement, contributions of inputs are shared in the same proportion as output. Nearly 30 percent of the respondents indicated they paid all costs for fertilizer, herbicide and insecticide application. This is probably due to the tenant having the machinery necessary to apply the inputs and not having to pay a custom applicator. For

most 50-50 crop-share agreements, harvest costs are split equally. Generally, crop-share agreements for dryland and irrigated land are similar. Irrigation costs are typically shared in proportion to output share received.

For the 67-33 (2/3-1/3) crop-share agreement, contributions of inputs are paid primarily by the tenant more often than for the 50-50 agreement. However, fertilizer and lime costs are typically paid in the same proportion as output received. This is because fertilizer and lime could be considered long-term investments in the land that is owned by the landowner. Only marginal differences between input contributions were observed between dryland and irrigated land types.

## Land improvements

Nearly 80 percent of the respondents indicated the landowner paid all of the costs of land improvement. Another 14 percent of respondents indicated that land improvement costs were split, and 7 percent indicated the tenant paid for land improvements. Because there is a long-term benefit to the land, it was not surprising that

the landowner generally covered the costs of land improvement. There is little value to the tenant for paying land improvement costs only to have the landowner rent to a different tenant the following year. However, an average 12-year tenancy of the land (Table 1) indicates long-term expectations by both tenant and landowner.

### For further information

- G 404 *Farm Land Values*
- G 426 *Farm Lease Agreement*
- G 427 *1997 Cash Rental Rates in Missouri*
- G 428 *Customary Farm Rental Agreements*

**Extension Publications**  
**1-800-292-0969**

