### Farm Management

**AGRICULTURAL** 

# **MU** Guide

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### **Customary Farm Rental Arrangements**

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Landowners and tenants can choose from several different types of rental arrangements. They can choose cash, crop-share, livestock-share, or flexible-cash arrangements. The landowner also has the option of hiring custom operators for the field work or operating directly with hired labor. This guide focuses on development of an equitable crop-share lease.

How do two parties develop a crop-share rental agreement? The easiest way is to follow rental agreements currently being used in the community. Most crop-share leases in a community or a geographic area are based on similar rental agreements. Some customary leases are ½–½, ½–⅓, and ¾–¼. A ½–½ crop-share arrangement apportions two-thirds of the crop to the tenant and one-third to the landowner.

For a crop-share lease to be equitable to both the landowner and the tenant, input costs should be shared in proportion to the value of product received by each party. If the landowner is to receive one-third of the crop in a ½-½ agreement, then the landowner should contribute one-third of the production costs to raise that crop. See MU publication G 424, *Missouri Crop-Share Leasing Patterns*, for common ways of dividing production activities and expenses for regions and crops in Missouri.

## Determining how to split output and production expenses

There are two methods of determining the type of customary crop-share rental arrangement. If a ½–½ split of production is desired, then input costs should be shared equally. Alternatively, the tenant and the landowner can compute the proportion of production each should receive based on the amount each contributes to production input cost expectations.

Table 1 is an example of an equitable ½–½ crop-share lease agreement for soybeans. Line 1 indicates the agricultural value of the farmland, which is used in the calculation of taxes (line 16) and an inflation adjusted interest expense (line 17). An agricultural value of land is used instead of a market value because the agricul-

tural value represents the productive capacity of the land, while the market value adds a speculative component that is observed only with a land sale. University of Missouri Outreach and Extension supports an annual land values survey that can be used to help in determining the agricultural value of land. Your local extension center can provide this information. Lines 2 and 3 are estimates of yield per acre and price per unit of soybeans. Line 4 is expected revenue per acre from producing soybeans (line  $2 \times \text{line } 3$ ). This value is \$245 per acre and is of use in determining whether the activity will generate economic profits.

Lines 5 through 19 are examples of costs that might be incurred in soybean production. Column A lists the total costs of production for each specific cropping activity associated with producing one acre of soybeans. Column B represents the percentage paid by the landowner. For instance, line 5 is labor, which for this example is paid totally by the tenant (indicated by 0% in column B). However, line 6 indicates that the cost of seed is shared equally between the landowner and the tenant (each party is responsible for 50% of the cost). Multiplying columns A and B equals the final column, "Landowner's costs." Adding lines 5 through 18 gives total production costs (C) and total landowner costs (D). The landowner's share of production expenses is computed by dividing (D) by (C). In this example the result is 52 percent ( $\$120.50 \div \$232.00$ ). Splitting of production expenses in this example would result in the sharing of production about  $\frac{1}{2}-\frac{1}{2}$ .

Suppose, in this example, the tenant and the landowner agree to a \% -\% split of the soybean production. To reach this arrangement, the landowner could contribute only land expenses (lines 16 and 17). In this example, the landowner would contribute \$74 (\$8.00 plus \$66.00) or about 30 percent of total costs. This contribution is close to one-third (33.3%) of total costs. However, the tenant and landowner may want to consider a 70–30 split of output for an economically equitable crop-share arrangement.

Generally, landowners supply land, and tenants supply capital and management. Therefore, column B

Table 1. Example worksheet for developing a fair lease for a specific crop.

EXAMPLE	Crop: Soybeans		
Production per acre and land value			
Estimated agricultural value of land per acre	\$1100		
2. Estimated yield per acre	35 bushels		
3. Estimated price per unit	\$7.00		
4. Estimated gross income per acre (line 2 $\times$ line 3)	\$245.00		
	Per-acre cost of production	Percentage of costs paid by landowner	Landowner's costs
	(A)	(B)	$(A \times B)$
Major resource contribution per acre	1		
5. Labor	\$11.00	0%	\$0.00
6. Seed	\$16.00	50%	\$8.00
7. Chemicals: materials	\$32.50	50%	\$16.25
8. Chemicals: application	\$7.00	50%	\$3.50
9. Fertilizer: materials	\$8.00	50%	\$4.00
10. Fertilizer: application	\$7.00	50%	\$3.50
11. Machinery fuel and oil <sup>2</sup>	\$8.00	0%	\$0.00
12. Machinery and equipment repairs <sup>2</sup>	\$3.00	0%	\$0.00
13. Harvest	\$22.50	50%	\$11.25
14. Hauling	\$3.50	0%	\$0.00
15. Drying	\$0.00	0%	\$0.00
16. Real estate taxes and insurance <sup>1</sup>	\$8.00	100%	\$8.00
17. Interest on land (6% of line 1) <sup>1</sup>	\$66.00	100%	\$66.00
18. Depreciation and interest on machinery <sup>2</sup>	\$29.00	0%	\$0.00
19. Management <sup>2</sup>	\$10.50	0%	\$0.00
Total costs (add lines 5 through 18)	<b>(C)</b> \$232.00	Total landowner costs	<b>(D)</b> \$120.50
Landowner	's percentage share of to	otal contribution (D ÷ C) —	<b>52</b> %

<sup>&</sup>lt;sup>1</sup> Landowner usually pays all costs.

will usually show 100 percent for land taxes and insurance and for interest on land and 0 percent for machinery depreciation and insurance, repairs, fuel for machinery, and management. However, if both the tenant and landowner own a part of the land, or if the landowner owns machinery that the tenant uses, these percentages may need to be adjusted to reflect their contributions.

What about lime, land improvement, and government payments? Though liming is a long-term (greater than one-year) benefit to land, tenants responding to a University of Missouri crop-share lease survey indicated that tenants and landowners often split liming costs in proportion to their division of the crop. Eighty percent of respondents to this survey indicated that the landowner paid for land improvements. Generally, the landowner is considered to benefit more than the tenant from long-term improvements to the land. More than 95 percent of respondents to this survey indicated that government payments are split in the same proportion as output is shared. This is because the law states that government farm program payments must be split in proportion to the crop-share agreement.

Table 2 is designed so that the tenant and the

landowner can work through a crop-share lease arrangement they may be considering. An "other income" category has been added (line 4). This might be used to account for income generated from baling fodder or grazing cattle on stalks after harvest. Lines 32 through 35 have been left blank for additional production expenses not listed elsewhere.

### Adjustments to the lease

Keep in mind that what is considered customary may not be applicable in all cases. Where land values are high, landowners may have input expenses (e.g., taxes and interest) that are higher than customary values. The same could hold true for tenants. A tenant may be able to place a higher than customary value on equipment costs and managerial skills. Farm rental arrangements should be made on a case-by-case basis using customary rates as a guide. What is considered normal for some leases should be worked through for other leases to be sure it is considered equitable for all parties involved. To obtain help in determining an equitable crop-share lease arrangement for your operation, contact your local University Outreach and Extension center.

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<sup>&</sup>lt;sup>2</sup> Tenant usually pays all costs.

Table 2. Equitable crop-share rental arrangement worksheet.

Crop:						
Pro	duction per acre and land value					
1.	Estimated agricultural value of land per acre	\$				
2.	Estimated yield per acre		bu/ton/cwt			
3.	Estimated price per unit	\$				
4.	Estimated other income	\$				
5.	5. Estimated gross income per acre [(line 2 $\times$ line 3) + line 4]	\$				
		Per-acre cost of production	Percentage of costs paid by landowner	Landowner's costs		
Maj	or resource contribution per acre	(A)	(B)	(A  imes B)		
6.	Labor	\$	%	\$		
7.	Seed	\$	%	\$		
8.	Herbicide: materials	\$	%	\$		
9.	Herbicide: application	\$	%	\$		
10.	Insecticide: materials	\$	%	\$		
11.	Insecticide: application	\$	%	\$		
12.	Fertilizer: materials	\$	%	\$		
13.	Fertilizer: application	\$	%	\$		
14.	Lime	\$	%	\$		
15.	Harvest	\$	%	\$		
16.	Drying	\$	%	\$		
17.	Hauling	\$	%	\$		
18.	Crop consulting	\$	%	\$		
19.	Fungicides	\$	%	\$		
20.	Defoliate	\$	%	\$		
21.	Growth regulators	\$	%	\$		
22.	Desiccants	\$	%	\$		
23.	Aerial application	\$	%	\$		
24.	Machinery fuel and oil <sup>2</sup>	\$	%	\$		
25.	Machinery and equipment repairs <sup>2</sup>	\$	%	\$		
26.	Real estate taxes and insurance <sup>1</sup>	\$	%	\$		
27.	Interest on land (6% of line 1) <sup>1</sup>	\$	%	\$		
28.	Depreciation and interest on machinery <sup>2</sup>	\$	%	\$		
29.	Irrigation: equipment	\$	%	\$		
30.	Irrigation: fuel and repairs	\$	%	\$		
31.	Management <sup>2</sup>	\$	%	\$		
32.		\$	%	\$		
33.		\$	%	\$		
34.		\$	%	\$		
35.		\$	%	\$		
Γota	al costs (add lines 6 through 35)	(C) \$	Total landowner costs	(D) \$		

Note: Use lines 32 through 35 for any additional costs.

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<sup>&</sup>lt;sup>1</sup> Landowner usually pays all costs.

<sup>&</sup>lt;sup>2</sup> Tenant usually pays all costs.

### A good crop-share lease . . .

- Identifies all parties involved and gives a legal description of the property or properties.
- Identifies the term of the lease, including beginning and ending dates.
- Results in both parties being paid, or sharing the crop, according to the value of their respective contributions.
- Identifies the contributions to be supplied by each party to the business agreement.
- Includes a detailed plan for sharing or paying cash
- production costs that increase production. For instance, the cost of treatment for corn borer should be split in proportion to production received because treating the crop for corn borer increases the revenue received by both parties through increased production.
- Specifies post-harvest delivery destinations or locations and rates for storage.
- Allows both parties to propose modifications and to be flexible.

#### For further information

G 404 Farm Land Values

G 424 Missouri Crop-Share Leasing Patterns

G 426 Farm Lease Agreement G 427 Cash Rental Rates in Missouri

NCR-105 Crop-share/Cash Rental Arrangements for Your Farm

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