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	<p style="text-align: center;">ANALYZING YOUR LANDLEASE AGREEMENT?</p>	
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ANALYZING YOUR LANDLEASE AGREEMENT?

By

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INTRODUCTION

According to the 1982 Census of Agriculture, 41 percent of the acreage in Washington farms is leased [7]¹ While leasing is commonly used by Washington farmers to finance control of land, it occurs in many different forms. Generally, cash leases are more common in western Washington and in the irrigated areas of central and eastern Washington. Crop-share leases tend to be more popular in the dryland areas of eastern Washington. There is also substantial variation in the terms of both crop-share and cash leases within each of these regions.

The widespread practice of leasing land, coupled with the lack of standardized terms, and recent wide swings in the price of land and nonland inputs and in commodity prices, suggests that many farmers will find the task of negotiating lease terms an important and complex problem.

This publication discusses the basic principles and procedures that are widely recognized as instrumental to the development of appropriate farmland lease terms. The discussion includes both crop-share and cash leases. Examples and worksheets are used to illustrate the use of key concepts.²

PRELIMINARY CONSIDERATIONS

Most landowners and lessees want a lease agreement that is economically sound and equitable to both parties. Consequently, a desirable lease is designed with two objectives in mind: (1) obtaining optimum economic efficiency in the use of resources, and (2) equity in allocating returns between the landowner and lessee.

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¹ Bracketed numbers refer to references listed at the end of the publication.

² The worksheets are also available as LOTUS 1-2-3 templates (IBM-PC). Contact the Bulletin Office, Cooperative Extension, WSU, Pullman, WA 99164-5912 for additional information.

A lease is defined to achieve optimum economic efficiency if there is an equal economic incentive to adopt the same enterprises and production practices under a lease agreement as in an owner-operator situation. An example of a lease that leads to an economically inefficient production practice is one which requires the lessee to buy all the fertilizer but entitles the lessee to only two-thirds of the crop production. Clearly, this arrangement results in an economic incentive for the lessee to apply less fertilizer than in an owner-operator situation. It follows that relative to the owner-operator, combined landowner-lessee profits from fertilizer use are reduced under this arrangement.

For purposes of this publication, an equitable lease is defined as one that compensates the landowner and lessee according to their contribution of resources to the business. If, for example, the landowner contributes one-third of the inputs and the lessee two-thirds, then equity considerations would suggest that income should be shared in the same proportion. Equity is highly dependent on the appropriate valuation of input contributions.

Generally, there is a mutual desire by the landowner and lessee to do what is fair in negotiating a landlease agreement. Often this means determining what is customary for the surrounding area. However, customary rental practices may not accurately reflect the contribution of resources made by the landowner and lessee. This follows from the considerable variation often found between farms in land productivity, land value, production technology, and in labor, management, and operating capital contributions by the landowner and lessee. Thus, even though both parties may want a fair lease, use of customary rates may result in an unconscious transfer of income from one party to the other. The best way of resolving this potential problem is for the landowner and lessee to periodically determine their respective contributions and adjust the lease agreement accordingly.

A 1980 survey of 235 Whitman County farmers who leased land found that 48 percent had lease terms based on customary practices and another 25 percent had terms specified by the landowner. Only 14 percent had lease terms that were based on relative contributions of the landowner and lessee [4].

Before discussing the determination of equitable lease terms, it should be noted that regardless of the approach taken, lease terms will be determined within the limits established by the local land rental market. If the landowner offers a rental rate that is above the market rates on nearby and comparable land, the owner will have difficulty in finding an interested lessee. On the other hand, a lessee unwilling to pay the market rate will not find a willing landowner. Consequently, the rent must fall within the bounds of the local market.

Furthermore, equity as defined in this publication may not be a major concern in some cases. A lease may be intentionally designed so that it does not reward participants in relation to contributions so as to permit the transfer of income from one party to the other. This may

occur, for example, when parents are trying to help a son get started in farming. The use of a lease to transfer income will not be included in the discussion to follow.

CROP-SHARE LEASE

It would be easy to allocate returns according to relative contributions if all contributions by both parties were in cash. However, sizable contributions occur in the form of land, machinery, labor, and management--inputs that do not necessarily carry explicit monetary values. Problems are often encountered in placing a value on these inputs. Moreover, values expressed by the landowner and lessee may differ substantially.

Two methods are suggested for establishing an equitable crop-share lease [6]:

1. Fixed Contributions Approach.

With this approach, the percent of total fixed contributions made by the landowner and lessee is determined and then crop receipts and variable costs are shared according to the same percentage. Fixed contributions refer to costs associated with resources already owned or controlled by the landowner and lessee (for example, land, machinery, buildings, labor, and management). Variable costs are outlays for inputs to be purchased by either party and which vary depending on type and size of crop enterprise (for example, seed, fertilizer, pesticides, custom work, insurance, etc.).

2. Fixed and Variable Contributions Approach.

This approach requires that the landowner and lessee determine the percent combined fixed and non-shared variable contribution each makes and split receipts and shared variable costs according to that same percentage.

Similar calculations are used for both methods and either can yield an equitable lease. The first method implies that all variable expenses are shared in the same proportion as fixed contributions. The second approach requires additional calculations, but does not require sharing of all variable expenses.

The following example and worksheets illustrate the use of both methods.

Example

The rented tract includes 640 acres of recrop (20 inches of annual rainfall) ground. The rotation is 50 percent winter wheat and 50 percent dry peas. There are no buildings on the rented ground. The prospective lessee contributes all of the machinery and labor. Management responsibilities rest solely with the lessee. The lessee is farming 460 acres of land he owns.

Fixed Contributions Approach

This approach assumes that the proportion of total annual fixed expenses attributable to the landowner and lessee is the basis on which variable costs and crop receipts are shared. Fixed expenses are associated with resources already owned by the two parties and which will not vary with the cropping pattern used on the leased property. In the example, fixed expenses include: (1) interest on the investment in land and machinery, (2) operator and full-time hired labor, (3) depreciation, repairs, insurance, and taxes on machinery, (4) real estate taxes, and (5) management. Once the percent contribution made by each party has been determined, all variable expenses and receipts should be split according to the same percentages.

As indicated in Worksheet I, the land has been valued at \$1,600 per acre, a total of \$1,024,000 for the 640-acre tract. This value is based strictly on the land's agricultural value. Since the land is being valued to determine rent for agricultural use, any value attributable to nonagricultural uses should not be considered. Furthermore, where the landowner is concerned with alternative uses for the capital tied up in the land, the land's value should be adjusted downward to reflect selling costs and taxation of capital gains, if any. This adjustment is necessary to insure that the resulting value is the amount of capital that could be invested in an alternative use if the land were liquidated.

The next choice the landowner must make is the return on the land investment needed to justify renting the land. As noted, the example landowner has chosen a rate of 4 percent. This rate was selected after noting the return to land from farming (not including capital gains or losses) that has been realized historically and adjusting that return to reflect the current economic environment. Also, the owner feels that a total return (return from farming plus capital gains) of about 10 percent is needed for the land investment to compete with similar risk alternative investments. This 10 percent was reduced by an expected 6 percent average annual capital gains, leaving a net of 4 percent to be realized from rent. Multiplication of 4 percent times the total investment of \$1,024,000 gives the landowner's desired return of \$40,960, which is entered in the landowner's column on the Worksheet (line 1).

In addition to the land, machinery owned by the lessee is a fixed investment expense. To estimate the annual contribution made by the machinery, the lessee must determine the capital investment in machinery and the desired return on that investment. As suggested with land, the approach to valuing the machinery is an estimate of the net liquidation value. The example lessee has estimated his machinery complement would be worth \$250,000 on today's market, net of selling costs, depreciation recapture, and recapture of investment tax credit. However, the machinery will be used on both leased and owned ground, so it is unfair to allocate the entire investment to the leased ground. The lessee is farming 1,100 acres of leased and owned ground and therefore, allocates $640 \text{ leased acres} / 1,100 \text{ acres} \times \$250,000 = \$145,455$ to the leased property. After considering alternative uses

WORKSHEET I

THE FIXED CONTRIBUTION'S APPROACH
TO ESTABLISHING CROP-SHARE LEASE TERMS

Expense Item	Total Value	Interest Rate	Estimated Annual Cost		
			Total Both Parties	Land-Owner's Share	Lessee's Share
			\$	\$	\$
I. Fixed Expenses					
A. Fixed Investment Expenses:					
1. Land (64 acres @ \$1,600)	1,024,00	.04	40,960	40,960	-
2. Farm buildings					
3. Machinery ((\$250,000 x 640/1,100)	145,455	.13	18,909	-	18,909
4. Total Section A	XXX	XXX	59,869	40,960	18,909
B. Fixed Operating Expenses:					
5. Labor					
a. Operator			3,840	-	3,840
b. Unpaid family					
c. Landowner					
d. Hired			8,727	-	8,727
6. Depreciation					
a. Buildings					
b. Machinery & equipment			14,545	-	14,545
7. Repairs					
a. Buildings					
b. Machinery & Equipment			4,950	-	4,950
8. Real estate taxes			3,744	3,744	-
9. Building insurance					
10. Machinery insurance & taxes			7,000	-	7,000
11. Management			9,240	-	9,240
12. Total Section B			52,046	3,744	48,302
13. Total Section I (4 + 12)			111,915 (a)	44,704 (b)	67,211 (c)
Percent contributed by:					
			Landowner (\$44,704 13b) \$111,915 13a) = 40%		
			Lessee (\$67,211 13c) \$111,915 13a) = 60%		

for this capital and the average interest rate he is paying on machinery loans, the lessee chooses 13 percent as the desired return on the machinery investment. Multiplication of 13 percent times the \$145,455 investment results in an interest cost of \$18,909, which is entered in the lessee's column.

The lessee is responsible for providing all of the labor used to farm the leased ground. It is estimated the lessee will contribute 480 hours ($= .75 \text{ hr.} \times 640 \text{ acres}$) of his own time at a desired wage of \$8.00 per hour, a total cost of \$3,840. Hired labor for the 1,100 acre unit will cost \$15,000 per year. Since 58 percent ($= 640/1,100$) of the 1,100 acres is leased, that proportion (\$8,727) of the total hired labor cost is allocated to the leased property and entered in the lessee's column.

Depreciation, repairs, insurance, and property taxes on machinery are also costs that are incurred by the lessee. Outlays for these items were estimated using the lessee's records and allocating 58 percent ($= 640/1,100$) of the total cost to the leased ground. Real estate taxes (\$3,744) are the responsibility of the landowner and are, therefore, entered in the landowner's column.

Management of the leased property is done entirely by the lessee. The value of this contribution was estimated by examining the market for professional farm management services. The market rate was found to be 7 percent of gross receipts. Under the yield and price assumptions adopted by the lessee, gross receipts per rotation acre are \$206.25, resulting in a management charge of \$9,240 ($= \$206.25 \times .07 \times 640 \text{ acres}$) for the leased tract.

The value of the annual combined landowner-lessee contributions is estimated to be \$111,915. Of that total, \$44,704 or 40 percent is contributed by the landowner and \$67,211 or 60 percent is contributed by the lessee. Thus, the landowner should pay 40 percent of all variable costs and receive 40 percent of the crop production. Similarly, the lessee should pay 60 percent of all variable costs and receive 60 percent of the crop production.

Sharing in all variable costs may result in added recordkeeping for both parties and complicate management. For these reasons, most crop-share agreements in Washington do not have cost sharing for all variable inputs. Instead, sharing is typically limited to fertilizer and crop insurance and occasionally chemicals and seed. When sharing of all variable costs is not desired, an equitable lease agreement may be developed by using the fixed and variable contributions approach.

Fixed and Variable Contributions

With this approach, the initial step is to identify the fixed contributions made by each party in the same manner as described for the fixed contributions method. Next, each party should estimate costs for the variable inputs that will not be shared. Finally, the percent of total fixed and non-shared variable input contributions made by each party is calculated. Crop production and the remaining (shared) variable inputs are shared according to these percentages.

WORKSHEET II

THE FIXED AND VARIABLE CONTRIBUTION'S APPROACH
TO ESTABLISHING CROP-SHARE LEASE TERMS

	Total Both Parties	Land-Owner's Share	Lessee's Share
	\$	\$	\$
I. Fixed Investment Expenses (Worksheet I, Line 13)	<u>111,915</u>	<u>44,704</u>	<u>67,211</u>
II. Variable Expenses (unshared only)			
1. Fertilizer	<u>8,928</u>	<u>-</u>	<u>8,928</u>
2. Seed	<u>8,415</u>	<u>-</u>	<u>8,415</u>
3. Fuel & lubricants	<u>5,562</u>	<u>-</u>	<u>5,562</u>
4. Pesticides	<u>1,363</u>	<u>-</u>	<u>1,363</u>
5. Crop insurance	<u>1,315</u>	<u>-</u>	<u>1,315</u>
6. Machine work hired			
7. Interest on operating capital			
8. _____			
9. _____			
10. _____			
11. _____			
12. Total Section I + Section II	<u>137,498 (a)</u>	<u>44,704 (b)</u>	<u>92,794 (c)</u>

Percent contributed by:

Landowner (\$44,704 12b) \$137,498 12a) = 33%

Lessee (\$92,794 12c) \$137,498 12a) = 67%

An analysis of the example appears in Worksheet II. Before completing the worksheet, the lessee and the landowner have agreed that seed, fuel and lubricants, pesticides, custom machine work, and interest on these outlays will be the lessee's responsibility. Both parties will share in fertilizer and crop insurance costs.

Worksheet II starts by carrying forward the fixed investment expenses already summarized on Worksheet I, line 13. The lessee must now estimate the costs he will incur for the non-shared variable inputs and place those estimates in the total and lessee columns. Since the landowner will not be paying for all of any variable inputs, no expenses are entered in the landowner's column.

As indicated on line 12, total fixed and non-shared variable expenses for the leased ground are \$137,498, of which \$44,704 is contributed by the landowner and \$92,794 by the lessee. These contributions represent 33 percent and 67 percent of combined costs for the landowner and lessee, respectively. Based on this analysis, an equitable lease would split crop production and shared variable expenses (fertilizer and crop insurance) in the same 33 percent--67 percent manner. Such a lease would also be economically efficient with respect to fertilizer use, since for both parties the share of the increased production from fertilizer use is the same as the share of fertilizer costs.

CASH LEASE

In the event it is decided to cash rent, there are at least three methods which may be used to establish the rent [3]: (1) market, (2) landowner's cost or desired return, and (3) lessee's residual income or ability to pay. A brief discussion of these approaches, illustrated with an example analysis, appears below.

Market Approach

This approach rests on a knowledge of the "going rate" in the local land rental market. The market rate reflects the supply of and demand for typical rental properties in the area. While it may serve as a useful reference point, the market will rarely take into account factors that may be unique to a particular property. Examples of such factors include the quality of land, improvements, length of lease, timing of lease payments, management capability of lessee, cropping program, and lessee management capability. Often it is difficult to obtain information on rental rates and to reach agreement on what adjustments should be made. For these reasons, the other two approaches are often more attractive and scientific methods of rent determination.

Landowner's Cost Approach

This approach is based on the premise that the landowner will want sufficient rent to cover the costs of owning the property. The major

WORKSHEET III

THE LANDOWNER'S COST APPROACH TO CASH
RENT DETERMINATION

Expense Item	Total Value \$	Interest Rate %	Estimated Annual Cost \$
A. Fixed Investment Expenses			
1. Land (64 acres @ \$1,600)	1,024,000	.04	40,690
2. Buildings, fences, etc.	_____	_____	_____
3. Equipment	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. Total Section A	XXX	XXX	40,960
B. Fixed Operating Expenses:			
7. Labor (landowner only).....			_____
8. Depreciation			
a. Building, fences, etc			_____
b. Equipment			_____
c. _____			_____
d. _____			_____
9. Repairs			
a. Buildings, fences, etc			_____
b. Equipment			_____
c. _____			_____
d. _____			_____
10. Property Taxes.....			3,744
11. Insurance.....			_____
12. _____			_____
13. _____			_____
14. Total Section B.....			3,744
C. Total Costs			
1. Entire Tract (A6 + B14).....			44,704
2. Per Acre (\$44,704 C1) 640 acres rented).....			69.85

hurdle to overcome with this method is figuring the appropriate return on the landowner's investment. This requires specifying: (1) the land's market value, and (2) the rate of return used to calculate the cost or desired return.

The cost approach is illustrated in Worksheet III for the 640-acre tract of land considered earlier. The previous discussion (see page 6) about procedures for estimating the landowner's return on investment and other ownership costs applies and will not be repeated. As indicated, the landowner would like to charge about \$70 per acre cash rent. If that much rent is received, all the landowner's expenses will be covered and a return of 4 percent on the \$1,600 land value will be realized. Of course, capital gains (losses) realized via land value appreciation (depreciation) will be earned (lost), in addition to the cash rent.

Lessee's Residual Income Approach

This approach takes the lessee's point of view in determining the appropriate cash rent. The lessee is concerned about the money that will be available to pay rent after all non-land expenses have been covered. Thus, in using the residual income approach, the lessee will want to estimate the out-of-pocket variable expenses, depreciation on machinery, interest on investment in machinery, and a return to lessee labor and management. These costs should then be subtracted from crop receipts to determine the amount of money available for making rent payments.

The example lease problem is analyzed using the residual income approach in Worksheet IV. As indicated, the lessee has \$24,157 available for rent payments, which converts to \$38 per acre. Under the adopted assumptions, this is the most the lessee will be willing to pay. If more than \$38 is paid, the lessee must accept a lower return on the capital invested in machinery, or less for labor and management, or fail to fully cover depreciation charges.

The Bargaining Process

More than one of the above approaches can be used to negotiate a rental payment that is acceptable to both the landowner and lessee. As the example analysis indicates, differences between the two parties can be expected. The landowner will be more interested in the cost approach and the lessee will want to use the residual income approach. And it is unlikely that both approaches will result in the same rate. Thus, it will be necessary to enter into a bargaining process where some compromises will have to be made.

It is suggested that each party independently conduct their own analysis and then meet to identify and discuss areas of agreement and differences. Bargaining can be equitable and effective only if each party knows what his contributions are worth, the value of the other party's contribution, and local leasing practices.

WORKSHEET IV

THE LESSEE'S RESIDUAL INCOME APPROACH
TO CASH RENT DETERMINATION

A. Gross Receipts from Rented Property					
Crop	Acres	Yield	Total Prod'n.	Price per Unit	Gross Receipts
				\$	\$
1. Wheat	320	70 bu	22,400	3.75	84,000
2. Peas	320	1,500 lbs	480,000	0.10	48,000
3. _____	_____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____	_____
5. Govt. Pay.	_____	XXX	XXX	XXX	_____
6. Total Receipts.....					<u>132,000</u>
B. Lessee Expenses					
1. Variable Expenses					
	Crop	Acres	Variable Cost per Acre*	Total Variable Cost	
			\$	\$	
a.	Wheat	320	100	32,000	
b.	Peas	320	70	22,400	
c.	_____	_____	_____	_____	
d.	_____	_____	_____	_____	
e.	Total Variable Expenses, All Crops				<u>54,400</u>
2. Fixed Expenses					
					\$
a.	Depreciation on machinery (\$25,000 x 640/1,100)				<u>14,545</u>
b.	Interest on machinery investment (.13 x 250,000 x 640/1,100)				<u>18,909</u>
c.	Taxes and insurance on machinery				<u>7,000</u>
d.	Lessee labor (480 hrs x \$8.00 per hr.)				<u>3,840</u>
e.	Lessee management (\$132,000 ????? x 7%)				<u>9,240</u>
f.	_____				_____
g.	_____				_____
h.	Total Fixed Expenses				<u>53,443</u>
3.	Total Variable and Fixed Expenses (1e + 2h)				<u>107,843</u>
C. Residual Income					
					\$
1.	Entire Tract (A6 - B3)				<u>24,157</u>
2.	Per Acre (\$24,157 C1) 640 acres rented)				<u>37.75</u>

* Includes fertilizer, pesticides, seed, fuel, power, lubricants, machinery and equipment repairs, crop insurance, hired labor, custom work, and interest on operating capital.

Flexible Cash Rent

Increased fluctuation in crop prices in recent years has stimulated interest in varying or flexing the cash rent. The lessee is concerned that a sharp drop in prices will make it difficult to meet a fixed rent payment. Similarly, landowners are likely to think it is unfair for the lessee to gain full benefit from an unexpected sharp increase in prices.

Methods of Flexing

There are several methods of varying cash rent; however, the most common involve: (1) flexing according to commodity price changes only, and (2) flexing with variation in both commodity price and yield [2]. Three common variations of the price only approach are outlined below.

1. Base Rent Multiplied by Ratio of Current Year's Price to Base Price.

With this approach, it is necessary for the landowner and lessee to agree at the beginning of the lease period on a base rent (as discussed earlier) and a base price. They might, for example, agree that the base rent will be \$60 per acre and the base price for wheat is \$3.75 per bushel.

Accordingly, if the "current year's price" (for example, the average daily closing price at elevator "X" during the period August 1 to October 1) is \$4.00 per bushel, the calculation is:

$$\begin{aligned} \text{Adjusted rent} &= \\ \$60 \text{ (base rent)} &\times \frac{\$4.00 \text{ (current year's price)}}{\$3.75 \text{ (base price)}} \\ &= \$64 \end{aligned}$$

2. Base Rent with Adjustments for Prices Outside a Predetermined Range.

This method requires that the landowner and lessee agree on a base rent that applies as long as the current year's price stays within a predetermined range. For example, the base rent might be \$60 per acre, provided wheat prices fall within a \$3.50 - \$4.00 range. However, the rent would increase or decrease by \$5 per acre for each 25¢ per bushel variation in wheat prices outside of the price range. Thus, if the current year's price turned out to be \$4.25, the adjusted cash rent would be \$60 + \$5, or \$65. A decrease in the current year's price to \$3.25 would result in a cash rent of \$60 - \$5, or \$55.

3. Rent Based On Value of Fixed Volume of Crop.

If this approach is used, the landowner and lessee agree that the rent will be equivalent to a fixed quantity of production times

the current market price. An example agreement would be the cash rent shall be equal to the value of 16 bushels of wheat based on the average daily closing price at elevator "X" during the period August 1 to October 1. Thus, if the average price is \$3.75 per bushel, the rent is 16 bushels x \$3.75 = \$60 per acre. Of course, a higher wheat price increases the rent and a lower price reduces the rent.

When variation in both price and yield can be expected and the landowner and lessee wish to share the risk associated with that variation, the cash rent can be flexed according to changes in yield and/or commodity price. To implement this approach, both parties must agree on a base rent that will apply for a given yield and price. They may, for example, agree that the rent will be \$60 per acre if the wheat price is \$3.75 per bushel and the yield is 70 bushels. Next, they must agree on a method of determining the actual market price and actual yield. This should be spelled out in detail and included in the lease agreement. If the actual price and yield are \$3.50 and 60 bushels, respectively, the adjusted rent is calculated as follows:

$$\begin{aligned} \text{Adjusted rent} &= \$60 \text{ (base rent)} \times \frac{\$3.50 \text{ actual price}}{\$3.75 \text{ base price}} \times \frac{60 \text{ bu. actual yield}}{70 \text{ bu. base yield}} \\ &= \$48 \end{aligned}$$

GET YOUR LEASE AGREEMENT IN WRITING

Once agreement has been reached on rental terms, it is a good idea to get them in writing. According to a 1980 survey of 245 Whitman county farmers with crop-share and cash leases, about 40 percent did not have a written agreement [4]. While a written agreement doesn't guarantee a successful lease, it does offer several advantages [5]:

1. More thought is generally given to written agreements. Details of production practices and business procedures that might go unnoticed in an oral agreement are attended to. Both parties will generally study the agreement before signing it.
2. The privileges and responsibilities of each party are outlined in a well-written lease agreement.
3. A concise written agreement prevails through time. When any of the parties' memories gets fuzzy on a point, the written agreement clears up the matter and prevents a misunderstanding that could lead to a broken relationship. Furthermore, a written agreement prevents "selective recall syndrome," whereupon an individual "forgets" what was agreed to on issues that are to his disadvantage, but has excellent recall on those matters advantageous to his position.
4. The lessee's chances of securing a loan to operate on leased property are increased by a written lease agreement.

5. In case one of the parties should die or become mentally incapacitated, a written lease agreement provides a directive for those accepting the responsibilities for the "absent" party.
6. A written lease agreement serves as a reminder of the end of the lease term. It provides a mutually agreeable procedure for terminating or renewing the lease agreement.

It is suggested that in addition to the obvious items to include in a written lease, agreement should be formalized on the following issues:

1. Period of time the lease will be in effect.
2. Provisions for renewal of one-year leases.
3. A cancellation notice delivered at a mutually agreed upon time in advance if the lease contract is to be terminated.
4. A provision that outlines a method for compensating the lessee for such unused investments as summer fallow, fertilizer applied for next year's crop, fall plowing, etc.
5. Agreement should also be reached on how to handle capital improvements (for example, drainage tile, grassing-in of waterways, and building construction and maintenance). It is a good idea from the standpoint of maintaining long-run productivity of the land to have a lease agreement that encourages and rewards the lessee for making improvements that may last longer than the terms of the lease.
6. In situations where crop shares are not equal between crops or rental payments are tied to the cash value of some crops but not others, there may be disagreements between the landowner and lessee about the selection of enterprises. This potential for differences should be anticipated and a mechanism worked out so that the cropping program can be jointly determined.

APPENDIX

WORKSHEET I

THE FIXED CONTRIBUTION'S APPROACH
TO ESTABLISHING CROP-SHARE LEASE TERMS

Expense Item	Total Value	Interest Rate	Estimated Annual Cost		
			Total Both Parties	Land-Owner's Share	Lessee's Share
	\$	%	\$	\$	\$
I. Fixed Expenses					
A. Fixed Investment Expenses:					
1. Land	_____	_____	_____	_____	_____
2. Farm buildings	_____	_____	_____	_____	_____
3. Machinery	_____	_____	_____	_____	_____
4. Total Section A	_____	_____	_____	_____	_____
B. Fixed Operating Expenses:					
5. Labor					
a. Operator			_____	_____	_____
b. Unpaid family			_____	_____	_____
c. Landowner			_____	_____	_____
d. Hired			_____	_____	_____
6. Depreciation					
a. Buildings			_____	_____	_____
b. Machinery & equipment			_____	_____	_____
7. Repairs					
a. Buildings			_____	_____	_____
b. Machinery & Equipment			_____	_____	_____
8. Real estate taxes			_____	_____	_____
9. Building insurance			_____	_____	_____
10. Machinery insurance & taxes			_____	_____	_____
11. Management			_____	_____	_____
12. Total Section B			_____	_____	_____
13. Total Section I (4 + 12)			_____ (a)	_____ (b)	_____ (c)
Percent contributed by:					
Landowner (\$ _____ 13b) \$ _____ 13a) = ____%					
Lessee (\$ _____ 13c) \$ _____ 13a) = ____%					

WORKSHEET II

THE FIXED AND VARIABLE CONTRIBUTION'S APPROACH
TO ESTABLISHING CROP-SHARE LEASE TERMS

	Total Both Parties	Land-Owner's Share	Lessee's Share
	\$	\$	\$
I. Fixed Investment Expenses (Worksheet I, Line 13)	_____	_____	_____
II. Variable Expenses (unshared only)			
1. Fertilizer	_____	_____	_____
2. Seed	_____	_____	_____
3. Fuel & lubricants	_____	_____	_____
4. Pesticides	_____	_____	_____
5. Crop insurance	_____	_____	_____
6. Machine work hired	_____	_____	_____
7. Interest on operating capital	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
12. Total Section I + Section II	_____ (a)	_____ (b)	_____ (c)
Percent contributed by:			
Landowner (\$ _____ 12b) \$ _____ 12a) = ____%			
Lessee (\$ _____ 12c) \$ _____ 12a) = ____%			

WORKSHEET III

THE LANDOWNER'S COST APPROACH TO CASH
RENT DETERMINATION

Expense Item	Total Value \$	Interest Rate %	Estimated Annual Cost \$
A. Fixed Investment Expenses			
1. Land	_____	_____	_____
2. Buildings, fences, etc.	_____	_____	_____
3. Equipment	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
6. Total Section A	XXX	XXX	_____
B. Fixed Operating Expenses:			
7. Labor (landowner only).....			_____
8. Depreciation			
a. Building, fences, etc			_____
b. Equipment			_____
c. _____			_____
d. _____			_____
9. Repairs			
a. Buildings, fences, etc			_____
b. Equipment			_____
c. _____			_____
d. _____			_____
10. Property Taxes.....			_____
11. Insurance.....			_____
12. _____			_____
13. _____			_____
14. Total Section B.....			_____
C. Total Costs			
1. Entire Tract (A6 + B14).....			_____
2. Per Acre (\$ _____ C1) _____ acres rented).....			_____

WORKSHEET IV

THE LESSEE'S RESIDUAL INCOME APPROACH
TO CASH RENT DETERMINATION

A. Gross Receipts from Rented Property					
Crop	Acres	Yield	Total Prodn.	Price per Unit	Gross Receipts
				\$	\$
1. _____	_____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____	_____
5. Govt. Pay.	_____	XXX	XXX	XXX	_____
6. Total Receipts.....					_____
B. Lessee Expenses					
1. Variable Expenses					
	Crop	Acres	Variable Cost per Acre*	Total Variable Cost	
			\$	\$	
a.	_____	_____	_____	_____	_____
b.	_____	_____	_____	_____	_____
c.	_____	_____	_____	_____	_____
d.	_____	_____	_____	_____	_____
e.	Total Variable Expenses, All Crops				_____
2. Fixed Expenses					
					\$
a.	Depreciation on machinery				_____
b.	Interest on machinery investment				_____
c.	Taxes and insurance on machinery				_____
d.	Lessee labor				_____
e.	Lessee management				_____
f.	_____				_____
g.	_____				_____
h.	Total Fixed Expenses				_____
3. Total Variable and Fixed Expenses (1e + 2h)					
C. Residual Income					
					\$
1.	Entire Tract (A6 - B3)				_____
2.	Per Acre (\$ _____ C1) _____ acres rented)				_____

* Includes fertilizer, pesticides, seed, fuel, power, lubricants, machinery and equipment repairs, crop insurance, hired labor, custom work, and interest on operating capital.

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Use pesticides with care. Apply them only to plants, animals, or sites listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is violation of law to disregard label directions. If pesticides are spilled on skin or clothing, remove clothing and wash skin thoroughly. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

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