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Cash Leasing of Cropland in Nebraska

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This NebGuide discusses the advantages and disadvantages of cash leasing cropland. It also provides guidelines for setting a fair cash rental rate.

Each year, more than 4 million acres of Nebraska cropland are leased under a cash lease arrangement. A cash lease involves the landowner conveying use of the cropland and associated management responsibilities to the tenant operator in exchange for a negotiated amount of cash. The cash payment is usually made in two installments, half at the beginning of the crop season and half at the end.

Under a typical cash lease, the tenant operator receives all the crop income (including farm commodity program payments), pays all the crop expenses, and makes all crop management decisions. The landowner is responsible for the property taxes on the land and facilities included with the land (buildings, irrigation equipment), although (s)he may not be responsible for insuring or replacing these facilities if they are no longer serviceable.

The use of cash leasing cropland varies across Nebraska; however, its popularity has increased in recent years as both landowners and tenant operators have opted for cash leasing over crop share leasing. Approximately 40 percent of the cropland leases and leased acreage in Nebraska were estimated to be cash rented in 1996.

Advantages of Cash Leasing

There are distinct advantages for both the landowner and the tenant operator who choose cash leasing.

The landowner:

- receives a specific dollar income protected during the contract period from low yields or commodity prices. Income is basically guaranteed for the contract period as long as the tenant remains financially solvent;
- is free from the management responsibilities of the actual farming operation. For those eligible for social security, they will not be materially participating and so will not risk the possible loss of social security benefits;
- has no dollar investment tied up in production costs during the year;
- has a straight forward lease with less chance for misunderstandings than might occur with other lease arrangements; and,
- has no need for concern over the accurate division of crops and expenses.

The tenant operator:

- typically has managerial freedom to operate the property most efficiently with other land operated;
- receives full benefit from his/her management skills employed on the property;
- has the potential to achieve higher dollar returns than possible under crop share leasing, because (s)he is assuming more of the risk. Should yields or commodity prices exceed anticipated levels, the economic windfall belongs to the tenant operator;
- receives all the federal farm commodity program payments for the parcel which may include some unexpected payments. This advantage may have a limited life, since the commodity programs are scheduled to terminate in the year 2002; and,
- does not need to divide crops or income from sale of crops or document expenses for the landowner.

Disadvantages of Cash Leasing

Cash leasing also can have profound disadvantages for the parties involved, particularly when compared with the conventional crop-share lease. For example, year-to-year changes in prices are automatically reflected in a crop-share arrangement but require negotiated changes under a fixed cash rental arrangement. However, if the parties can discuss and agree on the specific details, many of the disadvantages can be eliminated.

The landowner:

- usually forgoes some economic benefit in return for accepting less risk. Particularly in years when yields or crop prices exceed anticipated levels, the cash rent levels tend to be low relative to returns possible under other lease alternatives. In addition, farm commodity program payments are directed to the tenant operator rather than to the landowner;

- may have tenants who do not maintain the property. The greater managerial freedom offered tenant operators with a cash lease may reduce incentives to farm with a long-term perspective;
- may reduce tenant incentives to improve the productivity and value of a property by using improved farming practices. Tenants sometimes see such improvements bid away from them by landowners merely raising the cash rents in future years to reflect improved productivity.

The tenant operator:

- bears the full risk of poor crop yields and/or low crop prices;
- may find the owner reluctant to provide needed farm improvements. For example, certain improvements in soil or water conservation practices may not directly increase the owner's return under a cash lease, and therefore be considered unnecessary;
- may experience local "bidding wars" for cash leases which can lead to paying excessive rent; and,
- can see productivity improvements made in one year only bid away by the landowner wanting higher cash rental rates the next.

Determining a Parcel's Cash Rental Value

The general level of cash rental rates depends on expected crop prices and production costs, government farm program provisions, and the availability of and competition for rental land in the community. Differences in cash rents among individual tracts will be influenced by the productivity, size, location, accessibility and configuration of the parcel, government farm program yields, base levels and production restrictions, facilities included (buildings, irrigation equipment), and the relationship between landowner and tenant including length of lease.

Projected Income

The fundamental factor determining a parcel's rental value is its ability to generate income. An estimate of the expected net income from a parcel can be determined from the expected yield, commodity prices, farm program payments, and purchased input costs including equipment costs. Expected revenue and purchased input costs should be projected for the entire lease period. Subtracting the cash rent leaves the amount the operator would have left for payment of the operator's labor, management, capital including borrowed funds, and overhead. The operator must then decide whether the expected return is attractive enough to accept the rent. Alternatively, a value can be placed on the operator's labor, management, capital, and overhead and the rental value calculated as a residual. This approach is discussed further below. First, however, we will consider some sources of information that can be helpful in evaluating rental rates and in identifying adjustments taking place in the market.

Going Rate of Cash Rent in the Area

Gathering current cash rental rates in your area provides an indication of the current market. Local farmers, real estate professionals, and agricultural loan officers in the community can usually provide some insight into the range of rental rates in the area.

Cash rental rates for different types of cropland by district are updated each year in the *Nebraska Farm Estate Market Developments,* EC 809, available from your local Cooperative Extension Office. Both the ranges and the adjustments over time provide guidelines for setting and adjusting cash rental rates to reflect area market conditions. Unfortunately updates typically become available after the current rental agreement is to be determined, but can be helpful in checking to see if adjustments already made were consistent with the market.

Land Values and Rents

Since both land values and cash rental rates reflect a parcel's ability to generate income, a general pattern of gross rents to value tends to hold for each type of cropland within a given area. Rent-to-value ratios vary over time but provide a basis to assess land values supported by rental rates when comparing a series of years.

There may be a temptation to estimate a cash rental rate by multiplying the land value times the gross rent-to-value ratio. However, the causal relationship is in the other direction, i.e., the cash rental rate divided by the gross rent-to-value ratio provides an appraised value of the land based upon the cash rental income. A further complicating factor is the gross rent-to-value ratio would be expected to change with interest and inflation rates. However, a gross rent-to-value ratio could still be useful to see if the cash rent to land value relationship has reflected changes in the market. Also a gross rent-to-value ratio could be used in estimating an approximate cash rent that would be consistent with a recent sale price as long as the sale price is representative of the ability of the land to produce income.

Comparable Crop-Share Rents

Crop-share leases are common in most cropland areas. The calculated crop-share rent can be helpful in arriving at a cash rent. A crop-share lease places additional risk with the landowner than a cash lease, however, and therefore would be expected to provide a higher return to the landowner. Also, the common share arrangement in the area may not be a fair arrangement for a particular parcel. Higher-than-average productivity land, for example, should have a larger landowner share. The landowner share should also be higher where the landowner furnishes items such as the irrigation pipe or pivot. See *Crop Share Leasing Patterns in Nebraska,* NebGuide 1355 for the share arrangements typical in the various areas of the state.

The landowner's crop-share net of shared costs is the rent in a crop-share and can be used in estimating a cash rent. This method is particularly useful when a crop-share arrangement is being converted to a cash lease. The historical crop-share rent can be adjusted downward to a cash rent that is deemed appropriate by both parties to account for the shifting of risk away from the owner to the tenant operator.

Even without historical precedent for establishing crop-share returns, market participants can construct realistic estimates of returns under crop-share leasing given typical yield and commodity price estimates as well as typical landowner/tenant shares and costs of shared inputs.

For example, assume (1) a 60-40 tenant/landowner crop-share pattern for dryland cropland in northeastern Nebraska, (2) expected farm program payments and projected yields and

Residual Returns to Land Worksheet

		Example	*Your Situation*
1.	Cropland Acres	160 ac.	____ ac.
2.	Crop Revenues:		
	Crop — Acres x Yield x $/unit =	TOTAL	
	Corn — 80 x 130 x 2.30	$ 23,920	
	SB — 80 x 40 x 6.00	$ 19,200	
3.	Other Receipts (Govt. Payments, etc.)	$ 2,000	$____
4.	Total Estimated Revenue (Lines 2 + 3)	$ 45,120	$____
5.	Operating Cost:		
	Crop — Acres x $/ac =Total operating cost		
	Corn — 80 x 135 = 10,800		
	SB — 80 x 90 = 7,200		
	TOTAL Operating Costs	$ 18,000	$____
6.	Depreciation on tenant-provided Machinery [1] $/ac 22 x acres 160	$ 3,520	$____
7.	Interest on Machinery Investment [1] $/ac 18 x acres 160	$ 2,880	$____
8.	Tenant Operator Labor [1] Hrs/ac 10 x acres 160 x $/hr 10	$ 1,600	$____
9.	Tenant Operator Management [2]	$ 3,609	$____
10.	Tenant Operator Overhead Charge [3]	$ 940	$____
11.	Total Nonland Expenses (Lines 5 through 10)	$ 30,549	$____
	Analysis Results:		
12.	Maximum Residual Return to Land (Line 4 less Line 11)	$ 14,751	$____
13.	Maximum Residual Return Per Acre (Line 12 ÷ Line 1)	$ 91 /ac.	$____/ac.

[1]Based on budgeted production costs summary from *Nebraska Crop Budgets* EC872.
[2]Assuming 8 percent of total estimated revenues.
[3]Assuming 5 percent of total operating costs.

prices give an average dollar revenue of $260 per acre, and (3) shared input costs for fertilizer and crop chemicals total $40 per acre. In this situation, the crop-share rent for the landowner would be $88 per acre ($260 × .4 = $104 minus expenses of $16 ($40 × .4)). However, there is some transfer of risk from landowner to tenant with a cash rent. For example, if this crop-share rent were adjusted downward 10 percent for the lower risk for the land owner associated with cash leasing, then the estimated cash rent would be $79 per acre (90 percent of $88).

As already mentioned, a potential pitfall in using a crop-share rent to estimate a cash rent is the crop-share arrangement may not be fair, i.e. the crop-share is not equal to the cost-share. An alternative that was already mentioned is to calculate the revenue that remains after all nonland costs are covered, i.e. determine the residual return to land.

The Residual Return to Land Approach

A residual return-to-land approach is based on the premise that the return to land is what is left after all other input costs have been paid. Since land is the “most fixed” or permanent resource in the agricultural production process, it is, as economists say, the “residual claimant.”

Using this approach to arrive at a cash rental rate involves identifying all of the nonland inputs involved in the production process and assigning appropriate costs to each. Both the landowner and tenant operator may work up such estimates, either independently or together. The key is to come to mutually-agreeable accounting of all nonland input costs, as well as anticipated revenues, so that an appropriate cash rent can be determined. See *Nebraska Crop Budgets*, EC872, for budgeted costs of production.

A worksheet is provided on the previous page to list anticipated revenues and the nonland input costs. Subtracting the latter from the former will result in a land residual that should be the maximum per-acre rent paid given the assumptions made.

For example, based on the 160-acre parcel illustrated in the worksheet, expected yields and crop prices combined with government commodity payments is $45,120. Total nonland expenses are estimated at $30,549 and include interest and depreciation charges on machinery investment; operator labor, management and overhead charges; and other operating costs. Thus, there is an estimated residual to land of $91 per acre, which would be the maximum rent payment that should be made under the given assumptions.

This maximum calculated rent payment of $91 per acre is the expected return to land and could be used to determine a crop-share that would be fair: the revenue per acre is $45,120/160 acres = $282 per acre. $91 divided by the revenue per acre is $91/$282 = 0.32, indicating about 1/3 of the crop revenue should go to the landowner. If the rent is to be paid as a cash rent, the risk of not realizing the expectations that year are all shifted to the tenant and hence the landowner should be willing to accept something less than $91 per acre as a cash rent. See below under **Negotiating A Rental Rate** for a discussion of adjusting rents annually or periodically based upon expected returns.

Negotiating a Rental Rate

Negotiating a cash rental rate can be an uncomfortable task for both the landowner and tenant. The landowner may be interested in a relatively stable rental income from year to year. For example, the landowner may prefer upward adjustments when the outlook is favorable and otherwise have no change rather than changing the rate up or down each year based on the outlook for that year. The reality is, however, that extended periods of depressed crop incomes have occurred in the past and are likely to occur in the future. Hence, some downward adjustments in rents may be needed as well. In any case, it is possible in a longer-term relationship to keep track of the rent relative to the income generated by the parcel and periodically adjust the rent only when, for example, at least a 10 percent adjustment is indicated. Alternatively, the rental rate could be set annually based upon expected costs, prices and farm program payments for that year. This may result in substantial annual swings. Also, preseason expectations are not often realized and, hence, making annual adjustments in rent may not reflect rental value any better over time than periodic adjustments. Agreeing on when and how to adjust rents is probably more important than how often they are adjusted.

An approach that some landowner's have used to determine a rental rate is to offer the land on a bid basis. Generally it would be expected that an auction would realize the maximum possible rent. However, it is possible the tenant who bids the maximum may not follow production practices deemed desirable by the landowner. Also, other tenants may not be attracted to a bid process because they expect it will result in an excessive rent.

Finally a note on long-term cash leases. Crop rental relationships in Nebraska are typically long-term even when the land is rented on an annual basis. Logically the party that seeks a longer term lease will have to sacrifice for that opportunity–for the tenant, pay a higher rent or for the landowner, accept a lower rent. If both parties happen to prefer a three-year lease, for example, the rental rate should be based on their best assessment of projected revenue and costs for the next three years.

Whatever the method or methods used to arrive at a reasonable cash rent, the final negotiated rent may reflect a number of issues and provisions pertaining to the specific rental arrangement itself. For example, the tenant operator may be willing to provide some additional services which represent a partial payment-in-kind. If so, the final rental rate may be closer to the lower end of the negotiation range. Conversely, both the owner and tenant operator may see spirited competition for rental land which would lead towards a negotiated rate closer to the high end of the range.

An alternative to frequent renegotiation of the cash rent is to negotiate a base cash rent with adjustment according to the revenue generated during the year. This arrangements is commonly called a flexible cash lease. See Extension Circular EC 829, "*Flexible Cash Leasing in Nebraska*" for further discussion of this alternative.

Keys to Successful Cash Leasing

Several factors contribute to successful cash leasing for the parties involved.

- Given the dollar value of the asset involved and the complexity of today's economy and technology, written agreements, with details spelled out, should be considered. Even leases between family members can lead to misunderstanding and ill will if details are not specified in writing. However, care must be taken to protect your rights in the written lease. Consult a lawyer!
  In addition to the cash rental rate, a number of other considerations are also important and should be spelled out in writing. Among these are: timing of payments, provisions for renegotiating rates, resource management and maintenance questions, provisions for subleasing (such as for winter stock grazing), and termination procedures including arrangements for compensation to the tenant for long-term investments, lime for example, that are still providing benefits at the termination of the relationship.
- Perhaps most importantly, the key to successful cash leasing in today's world is good communication on the part of both the landowner and the tenant operator. This means that goals and expectations should be stated clearly, building towards consensus of a common set of objectives for the land resource and its use. Given the legal and environmental aspects as well as the economic considerations, a smooth (and frequent) flow of communication is vital. It also may be helpful to agree on a mechanism to adjust the rent or to set when the rent would be reviewed.

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