



North Central Regional
Extension Publication 214

Rental Agreements For Farm Machinery, Equipment and Buildings

One means of using resources in agriculture more efficiently is through rental of farm machinery, equipment and buildings by the owner to a tenant. The owner receives a return from resources which might otherwise lie idle or be underutilized. The tenant or renter can use these resources without making a large fixed investment.

Although both parties can benefit from rental of farm equipment and facilities, they must agree on the amount of the rental payment, use and care of the property and time and method of lease termination.

This publication will examine the major considerations in developing farm rental agreements for machinery, equipment and buildings from both the owner's and renter's points of view. Three different approaches to determining a cash rental rate will be discussed. For a discussion of share rental agreements in which owner and renter divide the crops or livestock produced see North Central Regional Extension Publication 105, "Crop Share or Crop Share-Cash Rental Arrangements for Your Farm."

Part I-The Renter's View

Evaluating the usefulness of a machine or building from a potential renter's point of view tells us something about how much the renter can afford to pay for its services. The renter must consider the expected added net benefits to be received from renting the machine, building or equipment. This represents the maximum rental amount which a renter would wish to pay, or the upper end of a logical bargaining range. Part V of this publication will examine a procedure to budget added costs and returns from a rental agreement. A renter should consider several key factors before entering into a rental agreement:

Size-Are the buildings and equipment of large enough capacity for profitable livestock production, considering the renter's labor and feed supplies? Is the machinery item large enough to complete the job in the time available? Or is the storage facility large enough for the quantity of grain or forage to be stored? Or is it too large to be utilized efficiently, or to match the renter's other equipment?

Condition-is the machine, building or equipment in usable condition? Will major repairs be needed? Who will pay for repairs and maintenance? Will operating costs be unusually high? Poor feed storage may result in high spoilage, or valuable time may be lost due to equipment breakdown.

Obsolescence - Does the machine or facility reflect current technology? Can replacement parts be easily obtained? Extra labor, management and supervision may be required when using obsolete equipment.

Use-Does the building, equipment or machine fit the

renter's current needs? Is the lease term short enough so that it does not restrict the operator's future production plans, but long enough to provide for foreseeable needs?

Location- Facilities located away from the renter's base of operations are less valuable to the renter because of the higher transportation and labor costs as well as greater inconvenience involved. Security risks are greater if livestock, machinery or stored crops are located where they cannot be observed regularly.

Convenience-Is the operation of equipment simple and efficient? Can grain or livestock be unloaded and loaded easily? Does machinery contain features which increase operator safety or comfort?

Alternatives - Could the same services or facilities be obtained elsewhere? At what cost? If the owner is offering a service which is difficult to obtain in the area a higher rental rate will likely result.

Part II-The Owner's View

The owner is primarily interested in recovering the ownership costs for a particular farm building or machine, as well as any operating costs not paid directly by the renter. In addition, owners may consider proper care and maintenance of their property to be important. Providing well-maintained and up to-date facilities may also help attract and keep a good renter.

Unless the owner expects to receive sufficient rent from a farm building or piece of equipment to pay any added costs which result from its use by the renter, no economic benefit would come from leasing it. These **variable** costs could include use related repair and maintenance costs, utilities expense and additional wear and tear.

Most of the owner's other costs will remain the same regardless of how much the asset is used, if at all. These costs are usually called **ownership** or **fixed** costs, and include depreciation due to age, interest (return on investment), property taxes, insurance and certain repair and maintenance costs not related to use. Because these costs occur whether the asset is rented or not, any rental amount in excess of variable costs is a net gain to the owner, even if it is not enough to cover total ownership costs.

Some owners may want to base rental rates on their **cash** costs. Besides operating and repair costs these usually include property taxes, insurance and financing costs. If the rental rate is high enough to pay all cash costs then there will be no net drain on the owner's cash flow. It should be pointed out, however, that if a building or piece of machinery has been financed over a term considerably shorter than the asset's useful life it may not be possible to

obtain a cash rent sufficient to cover the full principal and interest payments. On the other hand, once the asset has been "paid for," rental income may exceed actual cash outflows.

Most owners and renters want to agree on a "fair" or "going" rental rate. However, a common rental rate for a particular building or piece of equipment does not always exist. In many areas there is no widespread market for specialized livestock buildings. The fixed location of existing structures often narrows the "market" to one or two prospective renters. The factors surrounding each individual case and the bargaining position of each of the parties involved will determine the final rental rate.

When selecting or negotiating with a potential tenant, characteristics such as reliability, experience, honesty, financial condition, availability, possession of skills and equipment for making repairs or improvements and likely longevity should be considered. A lower rental charge may be acceptable in exchange for strong performance in these other areas.

Part III-Estimating The Owner's Costs

Estimating the total of the owner's costs for the item rented can provide a starting point for negotiating a rental rate. Worksheet 1 can be used to help estimate these costs.

Most ownership costs can be tied to the current value of a facility or piece of machinery. If the investment has not yet been made or was made very recently the new cost can be used. If the asset qualified for an investment tax credit this amount should be subtracted to determine the owner's net investment cost.

Current Value

The best estimate of the current value of machinery, buildings or equipment is the price which could be realized from selling on an open market. However, some items are not sold commonly enough to have an established market price.

Original purchase cost is not a very good estimate of the current value of machinery, buildings and equipment unless they are only a few years old. Current value is often less than the original value due to depreciation and obsolescence. However, increases in building and equipment costs over time affect the value of existing assets as well as new ones. Estimating current value as a fraction of today's replacement cost adjusts for both depreciation and inflation since the asset was new. Replacement cost refers to the cost of a new implement or facility which is of similar size as the one in question, performs a similar service and is technologically comparable.

Decide on a reasonable useful life for the asset. Table 1

provides some useful guidelines. These guidelines should be adjusted for unusually heavy or light utilization. The current value of a structure or piece of equipment can be quickly estimated by multiplying its replacement cost by the fraction of its useful life remaining. For example, a livestock shed which has an estimated useful life of 20 years and which is now eight years old would have an estimated current value equal to 60 percent of its replacement cost (twelve years remaining divided by twenty). If the lease period is more than one year in length, use the average age of the property during the expected period.

If the property is in particularly good or poor condition for its age, or functionally obsolete, adjust the remaining life up or down to reflect this. Unusually complex or expensive facilities should be valued by a professional appraiser or dealer, particularly if a long term rental agreement is being negotiated.

Some facilities have very specialized uses or are attached to a fixed location. This often reduces their market value and rentability. A realistic estimate of current value should take this into account.

Depreciation

The percent annual depreciation for equipment or facilities depends on the chosen useful life. For example, items with a 20-year life depreciate at a rate of five percent annually. Remember that you are estimating loss of value due to use and obsolescence, not depreciation for income tax purposes. The full investment cost of many items can be depreciated on the tax return at a much faster rate than their useful value declines.

Interest

If the item or facility being rented is financed through a lender then the actual interest rate being paid can be used. Otherwise an average intermediate term borrowing rate over the past several years can be used to estimate an opportunity cost rate of return.

Insurance and Taxes

Table 1 gives some guidelines for estimating the annual cost of insurance and property taxes as percent of current value, for several types of farm assets. In some states some personal property items may not be subject to property tax. Check your own property tax rates and insurance coverage rates for accuracy.

Inflation

Part of the ownership costs of farm assets is often offset by increases in value due to inflation. To allow for this subtract the current rate of inflation in the economy (or an expected average rate over the life of the rental

agreement) from the total percent of current value used to estimate depreciation, interest, taxes and insurance, as shown on the worksheet. This makes the estimated opportunity cost more comparable to that which could be earned on a financial investment, which may earn a higher cash return but has no appreciation potential.

Repairs and Maintenance

Unlike most other ownership costs, repair and maintenance costs usually increase as a machine, building or other structure ages. Repair costs can be estimated as a percent of new replacement value, to allow for changes in the costs of parts and labor. **Table 1** shows some suggested percentages for estimating repair costs for various types of rental items. For older or well-used items use the high end of the ranges shown.

A more satisfactory method may be to keep a record of actual repair and maintenance costs incurred by the owner during the lease period. Some renters may be able to reduce repair costs by providing some or all of the necessary labor. For some long term rental agreements the renter may pay all repair and maintenance costs in exchange for a lower rental charge. The agreement should specify who is responsible for replacement of major parts and equipment items.

Other Operating Costs

Other operating costs such as water, fuel and oil, electricity or gas should be borne by the renter, either directly or indirectly through the overall rental charge. The most accurate method is to actually measure consumption of fuel or other energy, perhaps through a separate meter.

The total of all ownership and operating costs can be used to estimate a rental charge for the whole year or portion of the year. If a structure or piece of equipment is rented for less than a full year or peak season the annual ownership cost estimates should be reduced proportionately. Or the total can be divided by a typical annual production level to estimate a charge per unit of production or use. Keep in mind that many structures may not attract sufficient rent to pay for all ownership and operating costs, due to their fixed location or a low demand for their services.

Part IV-Rental Charges Based on Commercial Rates

In some cases the same service being offered by the owner may be available from a commercial source at an established price. An example is storage for grain. A tenant may not be willing to pay more for grain storage than the rate at which it can be obtained at a local elevator, unless convenience is a factor. In fact, on-farm storage rates tend to be below commercial rates because the

renter must assume the risk of loss, perform the labor and management functions, and use loading and unloading facilities which may be less convenient. Nevertheless commercial rates serve as an unbiased reference which presumably reflect current costs, and supply and demand conditions.

Local elevators can be a reference source for grain drying and storage costs. Commercial truckers' rates can serve as a guide for hauling charges. Property rental agents can help determine an appropriate rental rate for a farm home or other building.

Rental rates for farm machinery can be based on adjusted commercial custom hire charges, which reflect all ownership and operating costs, as well as a margin for risk and profit. Commercial custom rates should be reduced by the value of all labor, fuel, lubrication and other maintenance costs provided by the renter. If the rental agreement is for an implement for which the tenant provides the tractor, the custom rate should have the rental value of the tractor deducted from it as well. The advantage of using commercial custom rates as a guide to rental charges is that they presumably reflect average per unit costs at an efficient level of use.

Part V-Added Value to Renter

The renter must budget out the added costs and returns which will be incurred as a result of renting the building, equipment, or machine as well as any costs saved or income given up. Often the ownership costs or cash financing charges saved by not having to own the asset will more than justify the rental rate being asked, particularly where the volume of use is very low or the asset is needed only temporarily.

Worksheet 2 can help analyze the added value to the renter from renting a particular item. It uses a **partial budgeting** procedure, which can be used to analyze many contemplated changes in a farm business. **Added income** is the amount which could be received from selling products which could not be sold otherwise, or would be sold at a different price. If gross income will be the same regardless of whether or not the item will be rented then this section can be omitted.

Reduced costs are operating costs depreciation, interest or other costs which will not have to be paid if the item is rented. Costs which would not be affected by the decision to rent do not need to be considered.

Reduced income could be from sales which would no longer take place if the item were rented, such as income received from selling grain at harvest instead of storing it. **Added costs** could be additional operating costs or labor which would have to be paid as a result of renting the item.

Summing added income and reduced costs and subtracting

reduced income and added costs gives an estimate of the added value the renter would receive from renting the equipment, building or machinery. This is the maximum rent which the renter could pay and still earn at least as high a net return as would be earned by not renting. Be sure that all income and cost estimates are based on the same unit of production and time period.

Consider the situation of having a need for more grain storage. The decision is one of analyzing the expected added benefits from storing grain at harvest and receiving a potentially higher price later in the marketing year. Suppose that the price of corn at harvest is \$2.40 per bushel. However, there is an 80 percent chance that the price will increase by \$.75 per bushel eight months after harvest. The expected gain (\$.75 x .80) is \$.60 per bushel. Along with this expected gain of \$.60 per bushel go the additional costs of storing the grain, including interest, drying, shrink, aeration and handling costs. If other costs amount to \$.40 per bushel there is 20 cents remaining to pay for the rental of storage facilities. The actual income available to pay rental charges may vary greatly from year to year as selling prices and other costs change.

This section shows how to estimate the maximum rent the renter would be willing to pay. Part III shows how to estimate the minimum the owner would be willing to accept. The actual rent agreed on will probably fall somewhere between these two values depending on each person's bargaining position and the demand for and the supply of similar property in the area.

Part VI-Common Provisions in a Rental Agreement

Putting the terms of the rental agreement in writing has the following advantages:

1. It is evidence of a legally binding agreement.
2. It encourages a detailed discussion and statement of the agreement, which assures a better understanding by both parties.

3. It serves as a record of the terms originally agreed upon and accepted.
4. It provides a valuable guide for the heirs if either the owner or renter dies.
5. It serves as evidence of the business arrangement for income or estate tax purposes.

The following points need to be covered in a written lease in order for it to provide the advantages listed above:

1. Names, addresses and telephone numbers of persons entering into the lease agreement.
2. Description of the property, including type, size, location and condition.
3. Dates of beginning and ending of the agreement and signatures.
4. Termination procedure, including advance notice requirements.
5. Rental charges, including amount per time period (or per unit of use or production), time and place of payment, and penalties for non-payment.
6. Specific use to be made of the structure or equipment. Limitations on use might be stated, such as the maximum number of livestock to be housed or the maximum number of hours a tractor is to be used.
7. Responsibilities of both owner and renter, such as provision of insurance coverage, payment of operating repairs and capital repairs, provision for water, electricity and other utilities, inspections, rights of entry, assignment of rights and coverage of damages.
8. Arbitration procedure to settle differences between owner and renter.

The example lease contained in this bulletin covers these points. Unwanted provisions can be crossed out or omitted and other provisions added. One of the primary functions of a written agreement is to anticipate possible developments and problems and to state how to handle such problems if they actually develop.

Table 1. Guidelines for Estimating Annual Ownership Costs

	Useful life (years)	Taxes and Insurance (% of current value)	Repairs (% of replacement cost)
Livestock buildings	15-25	1-1.5	1-2
Livestock equipment	5-10	.5-1	4-5
Crop storage	15-20	1-1.5	1-2
Tractors	8-10	.5-1	2-3
Self-propelled combines	8-10	.5-1	4-6
Mowers, choppers	8-10	.5-1	4-6
Tillage tools	8-12	.5-1	3-4
Other machines	8-12	.5-1	2-3

WORKSHEET 1. ESTIMATING OWNER'S COSTS

A. DESCRIPTION

1. Type of machine, building or equipment _____

2. Size or capacity _____
3. Degree of labor intensity: high _____ medium _____ low _____
4. Condition: good _____ average _____ below average _____
5. Length of agreement _____

B. OWNERSHIP COSTS

1. Current replacement cost \$ _____
2. a) Total useful life (see Table 1) _____ yr.
 b) Average age during lease period _____ yr.
 c) Years of life remaining (a - b) _____ yr.
 (adjusted for condition)
3. Average value: replacement cost \times (remaining life/total life) \$ _____
 (line 1)
 (or use purchase cost or appraised value)
4. Depreciation (1 divided by remaining life) _____ %
5. Interest rate _____ %
6. Insurance and taxes rate (see Table 1) _____ %
7. Expected inflation rate _____ %
8. Total ownership cost percent (4 + 5 + 6-7) _____ %
9. Estimated annual ownership costs (3 \times 8) \$ _____

C. OTHER COSTS (if paid by owner)

1. Repairs _____ % (see Table 1) \times current replacement cost (B.1),
 or actual expenditures per year \$ _____
2. Utilities, fuel or other energy costs per year \$ _____
 - a) Consumption _____ \times rate \$ _____ = \$ _____
 - b) Consumption _____ \times rate \$ _____ = \$ _____

D. TOTAL

1. Total of owner's costs (B.9 + CA + C.2) \$ _____
2. Portion of year or of total annual use _____ %
3. Annual costs adjusted (1 \times 2) \$ _____
4. Normal annual use (head, acres, months, etc.) \$ _____

5. Owner's cost per unit (1/4) \$ _____

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