

NORTH CENTRAL FARM MANAGEMENT EXTENSION COMMITTEE



Crop Share Rental Arrangements For Your Farm

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Crop Share Rental Arrangements For Your Farm

Cropland rental arrangements vary widely across localities and farming areas. This publication's purpose is to help operators (lessee) and landowners (lessor) make sound decisions and develop equitable crop-share arrangements. Crop-share arrangements refer to a method of leasing crop land where the production (crop) is shared between the landowner and the operator. Other income items, such as government payments and crop residue, are also often shared as are some of the production expenses. The specific terms – the crop share percentage and which expenses are shared – will vary considerably across geographical regions and should be negotiated between the two parties. The first section of this publication addresses the relative advantages and disadvantages of crop-share leases. Part II of this publication addresses basic principles important for a crop-share lease, while Part III of this publication addresses specific methods and concerns with the development of equitable crop-share lease arrangements. Buildings, pasture, and other cropland are often involved when leasing cropland. How to deal with these parts of the operation is discussed in Part IV of this publication. Part V of this publication discusses the importance of developing a written agreement. A sample lease form is included at the end of this publication.

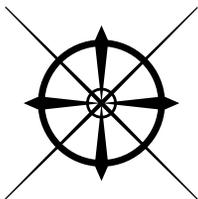




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PART I

Advantages and Disadvantages Of Crop Share Arrangements

Landowners and operators can choose from several types of rental arrangements. In addition to crop share, the lease agreement can be a crop-share/cash, straight cash, or flexible cash arrangement. In addition to leasing, a landowner may hire custom operators to do the field work or “direct operate” by hiring labor to operate the owner’s machinery.

Advantages of Crop-Share Arrangements

- Compared to cash rents, less operating capital may be “tied up” by the operator due to the landowner sharing costs.
- Management may be shared between an experienced landowner and operator, resulting in more effective decisions.
- Sales of crops may be timed for tax management. Likewise, purchased inputs may be timed to shift expenses for tax purposes.
- Risks due to low yields or prices, as well as profits from high yields or prices, are shared between the two parties.
- A crop-share lease, where the landowner is recognized as providing “material participation” through their involvement in crop production and marketing, has the following tax related benefits:
 - Allows for the pre-death qualified use or “equity intent” test requirement for special-use valuation for federal estate tax purposes.

- Allows the landowner to build Social Security base as the income is subject to self-employment tax.
- Allows the landowner to take advantage of special tax provisions, such as Section 179, for expensing investments in capital investments increasing tax management options.

Disadvantages of Crop-Share Arrangements

- Landowner’s income will be variable because of yield and price variation and changes in shared production-input costs. This may be a particularly important concern for landowners in retirement.
- Accounting for shared expenses must be maintained.
- The landowner must make marketing decisions, except for nonmaterial participation crop-share leases.
- The need for operator and landowner to discuss annual cropping practices and to make joint management decisions is greater.
- Increased paperwork and record-keeping associated with participation in government programs and crop insurance is required.
- As prices or technology change, the lease should be reviewed to determine if changes need to be made as to what is equitable. Sharing arrangements may need to be changed.
- A “material participation” crop-share lease may reduce Social Security benefits in retirement.¹

¹ Crop-share rental income is excluded from self-employment income unless the landowner “materially participates” in the production of agricultural products or production management. Material participation is necessary to build a Social Security base and may be necessary if special use valuation is to be used for federal estate tax purposes. However, material participation may cause Social Security payments to be reduced for persons eligible for Social Security payments.



PART II

Establishing a Crop-Share Arrangement

Farming is a business involving the combination of land, machinery/equipment, labor, management, and other inputs to produce crops. Different parties own or contribute each of these inputs. Payment for the inputs should be proportional to the value contributed toward production. Market-based payment to each party is the basic concept for developing an equitable crop-share lease. An equitable lease should be developed following some basic rules or principles:

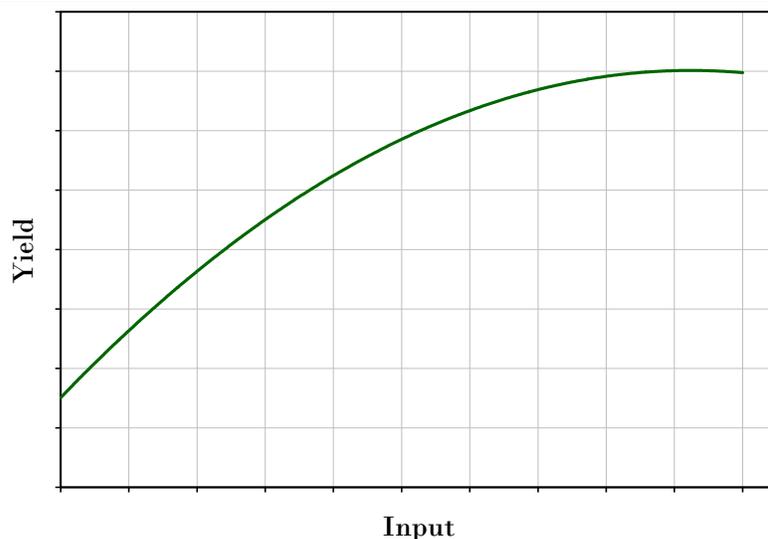
1. Variable expenses that increase yields should be shared in the same percentage as the crop is shared.
2. Share arrangements should be adjusted to reflect the effect new technologies have on relative costs contributed by both parties.
3. The landowner and operator should share total returns in the same proportion as they contribute resources.
4. Operators should be compensated at the termination of the lease for the undepreciated balance of long-term investments they have made.
5. Good, open, and honest communication should be maintained between the landowner and operator.

Principle 1 – Yield-Increasing Inputs

Variable expenses that increase yields should be shared in the same percentage as the crop is shared. While all inputs may technically qualify as “yield-increasing inputs,” the

inputs this principle refers to are those for which yield increases as more of the input is applied up to some point where there is no longer a yield response as depicted in Figure 1. The classic input that fits this description is fertilizer, but other inputs may also exhibit similar characteristics (for example, irrigation water/pumping expense, seed, insecticides/fungicides).

Figure 1. Relationship Between Yield and Input Use



Sharing the cost of yield-increasing inputs in the same percentage as the crop encourages the parties to use the optimal amount of the input so as to maximize net returns to the total business operation. Table 1 illustrates this principle with a fertilizer example.

For the most profitable production, fertilizer will be added until the marginal cost of the last input used (MIC) equals or is just less than the marginal return or value of the marginal product (VMP). As illustrated in Table 1, an owner-operator will apply 160 lbs of fertilizer to achieve a 178-bushel yield, since at that point the added crop value of \$12.00 (3 bu × \$4.00/bu) is still greater than the added \$8.00 cost (20 lbs × \$0.40/lb) of the fertilizer.

With a 50-50 share arrangement, the operator and landowner also will find the most profitable use to be 160 lbs of fertilizer since



the \$8.00 fertilizer cost also will be shared 50-50. Thus, the \$4.00 of added cost to each party will be less than the \$6.00 added return for the operator or landowner.

If the operator is required to pay all of the fertilizer cost but receives only 50 percent of the crop, the most profitable use of fertilizer is 140 lbs (see Table 1). From an economic standpoint, failure to share yield-increasing inputs in the same proportion as yields are shared tends to reduce total yield and resultant income to one or both parties. On the other hand, if the operator receives 50 percent of the crop and does not pay any of the fertilizer cost (an unlikely situation); the most profitable use of fertilizer is 200 lbs (see Table 1). Note that the total return over fertilizer costs at either 140 or 200 lbs (\$644 and \$640, respectively) is less than when the optimal 160 lbs is applied (\$648).

In contrast, the failure to share non-yield-increasing variable expenses is less likely to affect earnings. For example, failure to share the cost of fuel for tillage or harvest operations likely will not cause the operator

to avoid performing these operations. Thus, if the landowner and operator wish to adjust variable contributions so as to operate on a certain percentage basis, inputs that are not directly yield-related should be used to make the needed adjustments.

Because yield-increasing inputs are shared in the same percentage as the crop, the cost of these inputs does not directly factor into the determination of the equitable crop shares. That is, the percentage yield-increasing inputs are shared in is calculated based upon the relative contribution of other inputs (see Principle 3). Put another way, the equitable shares are calculated values rather than pre-determined values. However, because many leases are based upon what has traditionally been done in a region, this subtle difference is often overlooked. For example, it might be common to believe that “we share fertilizer 50-50 and thus we share the crop 50-50” rather than the more appropriate way of thinking about this “because we share the crop 50-50, fertilizer should be shared 50-50 as well so that both parties have economic incentives for optimal fertilizer use.”

Table 1. Effect of Fertilizer Cost-share Arrangement on Most Profitable Level of Fertilizer Use²

Fertilizer (lb/ac)	Yield (bu)	Income (\$/ac)	Return over fertilizer	VMP [†] (\$4.00/bu)	MIC [‡] (\$0.40/lb)	Income (I) and cost (C) position of operator			
						100% (I) 100% (C)	50% (I) 100% (C)	50% (I) 0% (C)	50% (I) 50% (C)
0	70	\$280	\$280	---	---	\$280	\$140	\$140	\$140
20	93	\$372	\$364	\$92	\$8	\$364	\$178	\$186	\$182
40	113	\$452	\$436	\$80	\$8	\$436	\$210	\$226	\$218
60	130	\$520	\$496	\$68	\$8	\$496	\$236	\$260	\$248
80	144	\$576	\$544	\$56	\$8	\$544	\$256	\$288	\$272
100	156	\$624	\$584	\$48	\$8	\$584	\$272	\$312	\$292
120	168	\$672	\$624	\$48	\$8	\$624	\$288	\$336	\$312
140	175	\$700	\$644	\$28	\$8	\$644	\$294	\$350	\$322
160	178	\$712	\$648	\$12	\$8	\$648	\$292	\$356	\$324
180	179	\$716	\$644	\$4	\$8	\$644	\$286	\$358	\$322
200	180	\$720	\$640	\$4	\$8	\$640	\$280	\$360	\$320

[†] VMP = Value of Marginal Product

[‡] MIC = Marginal Input Cost

² An owner-operator (or cash rent operator) would optimally apply 160 lbs of fertilizer, a operator receiving 50% of the income but paying 100% of the fertilizer would apply 140 lbs of fertilizer (under apply), a operator receiving 50% of the income and paying none of the fertilizer would apply 200 lbs of fertilizer (over apply), and a operator sharing fertilizer in the same percentage as the crop (50%) would apply the optimal 160 lbs.



Principle 2 – Technology

Share arrangements should be adjusted to reflect the effect new technologies have on costs and returns. Substitution occurs when one input can be used to replace another input. For example, chemical weed control may replace cultivation when reduced or no-till practices are adopted. If such substitution occurs, a determination must be made concerning whether the landowner or operator will pay for the chemicals. The answer to this question depends on the type of inputs involved.

- **Yield-increasing inputs.** The landowner and operator should share these inputs in the same percentage as the crop is shared.
- **True substitution inputs.** The party responsible for the item in the original lease should pay these inputs.
- **Inputs that are both yield-increasing and substitution.** The lease needs to address this situation.

If inputs associated with the new technology are not yield-increasing inputs, the party that should provide this input is not dictated. However, the important point is that the party who makes the contribution should be compensated accordingly, and this might require altering past agreements. In other words, there is nothing inherently wrong with a landowner sharing herbicide expenses that substitute for cultivation; however, they need to be compensated accordingly when this is done. Likely this means modifying the terms of the lease if the expense was the operator's responsibility prior to the adoption of this new technology. Another input that is increasingly generating questions as to whether or not it should be shared is the cost of seed, specifically corn seed. Given that the cost of corn seed is often "bundled" such that it includes various traits related to herbicides and insecticides,

sharing or not sharing this cost can have implications for other inputs. As with herbicides, it is not as important as to whether or not seed cost is shared as it is that both parties are compensated according to what they contribute and that signals are in place that encourage optimal production. In some cases, operators may be reluctant to invest in technologies that have a longer payback period than the length of the lease term. In these cases, landowners and operators may agree to modify the terms of their original lease, either changing the crop share percentages or the length of the lease. What is important is that the landowner and operator communicate so both parties understand the impact the new technology has on their relative contributions.

Principle 3 – Equitable Shares

The landowner and operator should share total returns in the same proportion as they contribute resources. This is the basic definition of an equitable crop share lease. Thus, if a landowner contributes 50 percent of total resources and the operator 50 percent, then a 50-50 sharing of the income and any yield-increasing inputs is equitable. Similarly, if the landowner's contribution is one-third of total resources, then an equitable arrangement would be 67-33 percent for the operator and landowner, respectively. The income to be shared is that related to the production of crops and thus would include crop sales, government payments, and forage/residue (either grazed or harvested). It would not typically include income associated with the land that is independent of the crop production unless the operator made contributions to generating this income. For example, income from mineral or wind rights would not be shared since the operator generally has no expenses associated with this income.³ All inputs should be valued, including management and risk. However, it is important to recognize that valuing

³ While the operator typically would not be entitled to a share of royalty or lease income associated with mineral or wind rights, they would have claim to a share of income paid for damages to crops incurred in the process of exploration or development.

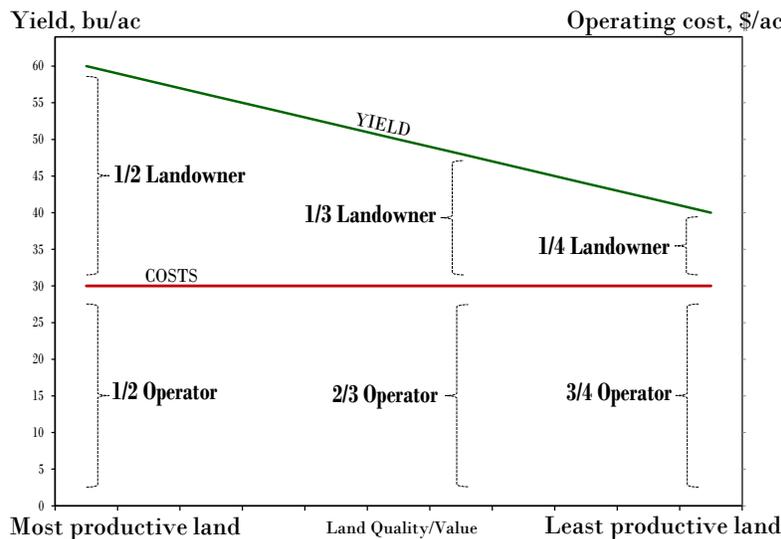


management and risk is somewhat difficult because both parties are providing these inputs, and quantifying them can be difficult. From a practical standpoint, these inputs are often ignored and then returns are classified as “returns to management and risk.” For high-priced, productive land, the landowner’s share of the crop should be increased because the operator’s primary costs (machinery and labor) tend to be similar on either high-priced, productive land or low-priced, less-productive land (see Figure 2). For example, if the operator’s operating expense represents two-thirds of the total expense on less-productive

the landowner’s contribution, may vary more than the operating costs (that is, the operator’s contribution).

Historically, crop-share leasing has been influenced strongly by customary arrangements in the area. Similarly, customary share arrangements change little over time, even though the relative values of land, machinery and labor have changed markedly. As agriculture changes, whether it is due to increasing commodity prices, rising input costs, or new technologies, it is increasingly important to review crop share arrangements

Figure 2. Effects of Land Quality and Farm Costs on Crop-share Rental Arrangements



land with the expected yield equal to 45 bushels, the operator’s share of the crop would be 30 bushels. On more productive land, the operator’s expenses may represent only 50 percent of the total expense. Therefore, if the expected yield is 60 bushels, the operator’s share of the crop still will be 30 bushels. But, the proportionate share of the crop would decrease to 50 percent. Likewise, if the land is of relatively low quality, operators might still receive 30 bushels as compensation for their inputs, but this might represent 75 percent of the total yield. While Figure 2 is a simplified example, it shows that the value of land, hence

to determine what is equitable as what has been done historically may not be appropriate in the future. Thus, it is important that the landowner and operator establish their contributions according to the current value of the resources they contribute rather than on the basis of historical arrangements in the area.

Note: Equitable crop share percentages are calculated entirely based on contributions of the two parties (the respective shares of annual costs) and thus crop income and income associated with government payments or crop insurance indemnity payments do not explicitly enter into the equation

(income only implicitly comes into play through the value of land).

Principle 4 – Compensation For Unused Investments

Operators should be compensated at the termination of the lease for the undepreciated balance of long-term investments. Some inputs will have a useful life of more than one year (for example, alfalfa seed, lime, tiling, and underground pipe) and thus it is recommended that the party who will control the particular investment at the termination of the lease should make the contribution of



that asset and be compensated accordingly. For example, the landowner usually pays for lime applied to cropland because the value lasts for several years. However, there are instances when an operator might pay for this input, or share in the cost of the input, even though the lease may be terminated prior to the input being “used up.” In this case, the lease should stipulate how the operator will be compensated for any unused portion of the input at lease termination. For example, if the operator pays for the lime application, the lease should provide for a method of calculating the payment to the operator for the unused portion of the lime if the lease is terminated before the total value of the lime is recovered. It is critical that when an operator pays for an input that has a useful life of more than one year the method of compensation for remaining value at lease termination be spelled out in a written lease. What is important is that landowners and operators work together closely and openly concerning issues related to things such as conservation and soil fertility where the benefits of inputs often extend multiple years.

Principle 5 – Communication

Communication should be maintained between the landowner and operator. If the lease does not follow the first four leasing principles, the farming operation may not be functioning at maximum economic efficiency. This may result in one party gaining at the expense of the other. However, strict adherence to these four principles will not achieve an equitable lease agreement if excellent communication does not exist between the operator and landowner. Therefore, securing a good operator and making necessary adjustments to the lease agreement by the landowner so as to make it an attractive business operation may well be the key to the landowner maximizing profits. In turn, the operator needs to have a lease agreement that provides for an excellent working relationship with the landowner,

and thus allows for the use of all the farm’s resources to achieve maximum economic returns.

Part of good communication is making sure both parties know and understand their responsibilities. In addition to potential legal ramifications, another reason why having a written lease is highly recommended is that it provides an additional form of communication. It initiates discussion about important lease parameters and helps clarify plans. To summarize, following the first four principles are important for developing an equitable lease arrangement, but without good communication between both parties, the lease likely will not be sustainable in the long run.

Leases between family members often have terms that are not equitable from an economic standpoint, but are used to help a younger generation get started in farming. For example, parents who rent their land to a son or daughter might be “entitled to” 50 percent of the crop from an equitable standpoint, but choose to take only 40 percent so their son or daughter can get established. In cases such as this, spelling out what is equitable and what is actually being done in a written lease is still advised as this helps all parties, potentially including non-farming siblings and spouses, better understand both the lease arrangement and farming economics in general.

As part of the communication process landowners and operators should strive to understand the goals and objectives of the other party and work to develop the lease agreement accordingly. Changing goals and objectives of either landowner or operator might require that the lease be re-examined and re-written to meet the new conditions. For example, as land passes from one generation to another it should not automatically be assumed that the objectives of the new landowner(s) are exactly the same as those of the previous landowner(s).



PART III

Developing An Equitable Crop-Share Lease Arrangement

The next step is to apply the principles in determining an equitable crop-share arrangement for the operation, whether it is for a single crop, separate parcel, or whole farm. Such an approach must separately consider each of the following possible components where applicable: 1) cropland rented on shares, 2) cropland rented for cash, 3) pasture, 4) service buildings, and 5) the house. The cropland lease can be developed regardless of improvements and pasture. Although improvements and pasture are usually cash-rented, the land and investments may be considered when developing the crop-share lease.

The Crop Budget Approach

To identify the individual contributions of the landowner and operator, an individual crop budget or whole-farm budget reflecting multiple crops is required. This approach can be used when establishing a new lease arrangement or testing existing arrangements.

The worksheet provides information for establishing an equitable crop-share arrangement. This worksheet can be used for either a single crop or for an average of a crop rotation. The average of a crop rotation will be an average for the farm unit of all crops in the rotation for as many years as required to complete the rotation. Likewise, contributions can be entered as either an average per acre or as a total for the field/farm. It is generally recommended to base the inputs on the typical crop rotation rather than an individual crop because the terms of most lease arrangements are the same for all crops produced. The underlying principle of the worksheet is that both parties share in the total returns in the same proportion as their contributions (Principle #3 above).⁴

The worksheet helps determine input expenses and an equitable division of the crop(s) between the landowner and operator. It can be used to analyze any particular situation in either of two ways:

- **Contribution approach.** The percentage contribution of each party excluding yield-increasing inputs is determined. The parties then share crops and other crop-related income and “yield-increasing inputs” (see Principle 1 above) in the same percentage.
- **Desired-share approach.** The parties specify a given percentage share basis, and they adjust their contributions to fit this percentage.

The major task with either approach is to establish reasonable values and annual charges for the various contributions. The following discussion outlines this valuation process, illustrated in the worksheet.

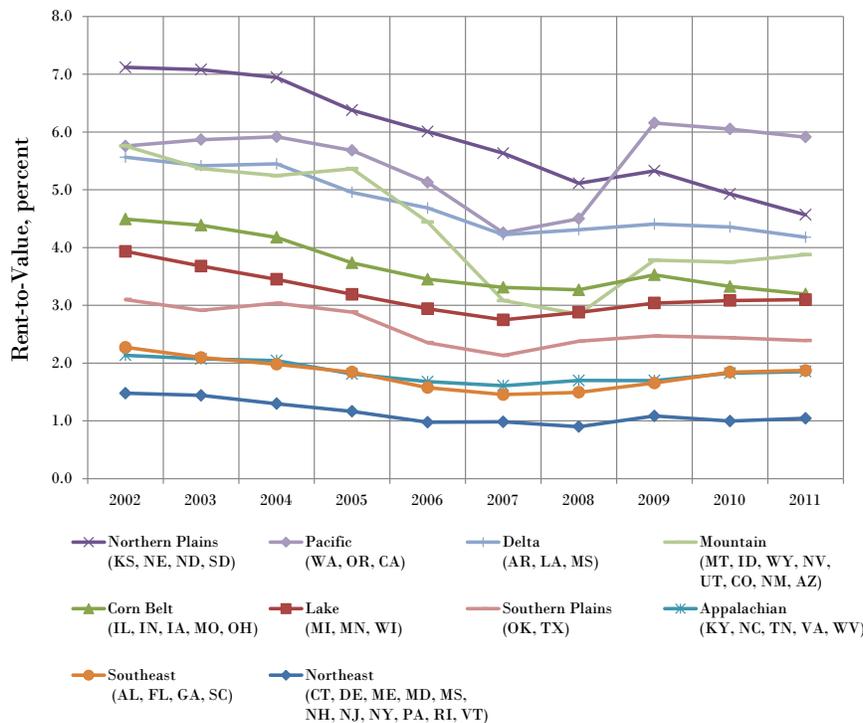
Land: Land is valued at its current fair-market value for agricultural purposes. The influence of location near cities and other nonagricultural influences on value should be ignored. That is, the value of land as it relates to its productivity in crop production is all that should be included as this is what is offered to the operator as rent. Specifically, capital gains on land and/or non-ag value are benefits to land ownership, but the operator does not share these benefits and thus the landowner should not receive credit for this contribution in a crop share lease.

Interest on land: The land value multiplied by an opportunity interest rate is a method of estimating the annual land charge. A practical starting point for negotiating the return to land is the rent-to-value ratio in the region (cash rent divided by market value), as this reflects the “opportunity cost” of not renting the land on a cash basis. Figure 3 reports the rent-to-value ratios for average cropland in the various regions in the U.S. as reported by

⁴ Government payments and other income (for example, stover, straw, grazing) should be shared in the same proportion as the crops.



Figure 3. Cropland Rent-to-Value Ratios by Region, 2002-2011



USDA NASS. It can be seen that the rent-to-value ratios vary considerably from region to region. Additionally, it can be seen that the ratios have been trending down in some regions (Northern Plains, Delta, and Southern Plains regions) and thus using a longer term historical average value may not be appropriate.

Cash rent on land: Simply using cash rents in the area is another method of identifying the landowner’s contribution. That is, what the land could be cash rented for reflects the opportunity cost of not renting it on a crop share basis and thus this is a good proxy for the annual contribution. If this approach is used, then land value and interest on land are simply replaced with a cash rental rate. However, it is important to recognize that average cash rents reported for a region may not reflect the “going rate” for newly rented ground for several reasons. Local averages may include land rented between family members that are not reflective of actual market conditions. Additionally, averages include long-term rental arrangements that may not have been updated for years and thus do not reflect current economic conditions.

Real estate taxes: The actual taxes due annually is another contribution of the landowner. However, it is important that this value is not counted twice because taxes are often already included in cash rental rates and/or interest on land values used. For example, if the cash rental rate is used, this effectively reflects a gross return to the land and thus including rent and real estate taxes would be double counting. In this case, real estate taxes should not be included as an additional contribution.

Land development: The average dollars spent annually for lime, conservation practices, and other land improvements should be used. Similar to real estate taxes, it is important that this value is not counted twice if these land development costs are already included in cash rental rates. That is, if the cash rental rate used reflects landowners land development/conservation costs, they should not be included separately.

Crop machinery: The value of machinery should be the average value of a good line of machinery necessary to farm in the area. The value should not be the cost of a new line of machinery. Likewise, the value should not be the actual cost to the operator (just as land should not be the original cost to the landowner) because the operator may have a very large investment of machinery spread over a few acres. In turn, the operator may have old, serviceable machinery that has a low value. Average machinery values can typically be obtained from local Extension educators in agriculture or state Extension services.

Machinery depreciation: Market depreciation for machinery typically averages 8 to 12 percent of average value annually



when considering an average line of machinery (individual pieces of equipment can be considerably higher or lower, but this is a reasonable average for a total machinery line).

Machinery repairs, taxes, and insurance: Farm records indicate annual repairs are 5 to 8 percent of the original machinery value. The annual charge for taxes and insurance should be from 0.25 to 1 percent of the machinery value.

Machinery interest: Interest on machinery is included to reflect the capital tied up in machinery as opposed to actual interest paid on machinery loans. It can be calculated as the current interest rate on machinery or operating loans multiplied by the average machinery value.

Custom rates: Harvesting, hauling, spreading fertilizer, and other operations are often custom-hired. These charges can be entered directly in the worksheet.

Note: If custom hiring is done, the crop machinery investment should be reduced, as less machinery investment is needed when custom work is part of the operation.

Irrigation equipment: The value of irrigation equipment (for example, well, pump and gearhead, motor, and center pivot/gated pipe) is similar to machinery in that the annual contributions are depreciation, interest, repairs, taxes and insurance. The average value will vary tremendously based on type of system, age, depth of well, etc. Because it is often difficult to estimate the value of older equipment, a replacement value can be used with useful life, interest, and repairs based off that value.

Irrigation equipment depreciation: Market depreciation for irrigation equipment as a percentage will depend on the remaining useful life of the equipment. New equipment that might have a 20-30 year useful life should be depreciated at 4 to 5 percent annually, whereas, older equipment with a lower value and fewer years remaining will have a higher

percent depreciation (for example, 10-year remaining life will have 10 percent annual depreciation).

Irrigation equipment repairs, taxes, and insurance: Because of the wide variability in irrigation equipment (type of system and age), good rules of thumb do not exist as to what to expect for repairs, so these values should be based on farm records where possible. Alternatively, estimates for irrigation repairs can be obtained from local Extension educators or state Extension services. The annual charge for taxes and insurance should be from 0.25 to 1 percent of the investment.

Irrigation equipment interest: The current interest costs on the average irrigation equipment value (usually one-half the original value) should be used.

Labor: Labor can be contributed solely by the operator or by both the operator and landowner. (Caution should be used to not form a partnership when considering contribution of labor and management by the landowner. That is, if specific amounts of labor are to be contributed by the operator and landowner to handle the farm's crop production, a partnership agreement may have been formed rather than a lease agreement between the landowner and operator.) Each party is given credit by placing a value on labor contributed to the business.

Placing a value on labor is a bargaining process between the parties entering the leasing arrangement. A guide for estimating the value of labor is the going wage rate paid to farm employees within the community. Most farm operators are certainly worth more than the value of an average employee because of their management, but management is valued separately from labor.

Note: Average custom rates for field operations (for example, tillage, planting, and harvesting) can be used to estimate the annual charges for machinery and labor. However, there may be some additional labor not captured in this for crop scouting, marketing, etc.



Management: Management is an important contribution to a successful leasing agreement. The function of management may or may not be shared. Experienced landowners may make substantial contributions to the management of the farm business. Inexperienced or absentee landowners may contribute nothing to management. Two alternatives for quantifying management are:

- A possible guide is 1 to 2.5 percent of the average capital managed in the business. The average capital managed is equal to the market value of the land and value of machinery and irrigation equipment.
- Professional farm managers commonly charge 5 to 10 percent of adjusted gross receipts (in the case of crop production, gross receipts equal total crop receipts).

Either procedure will provide an estimated value for management. However, a value equal to 1 to 2.5 percent of average capital managed is a more stable figure than a percentage of gross receipts because prices and yields for commodities vary greatly from year to year. Because the value of management and the relative contributions of the two parties can vary considerably, how this input is valued in the contributions approach is largely a result of bargaining between the landowner and operator. Some operators provide much of the management for their landowner(s) without requiring direct compensation as this gives them a competitive advantage in leasing the land.

Approach 1 – Contributions Approach

With this approach, the percentage contribution of each party is calculated for inputs not shared and those shared in some pre-determined proportion. Parties then share “yield-increasing inputs” (see Principle 1) and income (crops, government payments, and other income) in the same calculated percentage.

In the example worksheet (average costs per acre for corn-soybean rotation), the equitable crop-share percentage based on the non-shared input contributions of the landowner and operator would be 53.3-46.7%, with all operating expenses not listed shared on the same basis.⁴ The resultant crop-share percentage derived with this worksheet will seldom exactly equal a customary share arrangement percentage such as 33-67, 40-60, or 50-50; however, assuming the market is operating efficiently, it typically should be reasonably close. As such, the landowner and operator may negotiate annual-use charges for the various contributions that they believe are appropriate for their situation. The negotiation process provides a means of arriving at a charge for each contribution that is acceptable to both parties. However, intelligent bargaining can only occur if the contributions of each party are known.

Approach 2 – Desired-Share Approach

With this approach, the parties specify a given percentage share basis (say, 50-50) and then adjust the contributions to fit this percentage.

On the worksheet, lines 22 through 25 are used to add items previously shared (lines 17 through 28 that are blank) to increase or decrease the contributions of the landowner and operator as the means of achieving the specific share arrangement. As an example, the landowner and operator may desire a 50-50 crop-share percentage arrangement. In this example, the landowner is “entitled to” 53.3% of the crop (paying 53.3% of any of the yield-increasing inputs) based on the contributions approach. Thus, if a 50-50 percentage is desired, the operator will need to increase their contribution effectively decreasing the landowner’s contribution in order for a 50-50 split to be equitable.

In the example worksheet, both parties initially shared the cost of fertilizer, herbicides and insecticides/fungicides since lines 9-11 are



blank. Assuming the desired crop share is 50-50, if one, or a combination of these inputs, totaled approximately \$15.50 per acre, then the operator could pay the total cost of those inputs and the resulting crop share percentage would be a 50-50 split (line 27). However, if none of these inputs are exactly equal to \$15.50, the operator can simply “pay” the landowner \$15.50 per acre and this effectively changes the initial contributions of 53.3-46.7 (line 21) to 50-50 (line 27). If that were done in this example, the landowner would receive \$15.50 per acre from the operator and be responsible for paying 50 percent of all shared inputs (fertilizer, herbicides, insecticides/fungicides) and would receive 50 percent of the income. Likewise, the operator would pay 50 percent of shared expenses plus the \$15.50 per acre to the landowner and would thus be entitled to 50 percent of the income. In other words, lines 22-25 simply provide a way for the two parties to “balance” the contributions to achieve a desired split if the value on line 21 varies from what they want for some reason. While this “cash transfer” approach can work to balance the contributions to achieve a desired share, it is not needed if the two parties are willing to change their arrangement to whatever is deemed equitable. However, from a practical standpoint it is also unlikely that landowners and operators will deviate too far from percentages historically accepted in a region. For example, it is doubtful we will see a lot of 53.3-46.7% arrangements in an area that has historically had 50-50 arrangements even though that is what possibly should be done from an equitable standpoint.

The “desired-share approach” may violate the principle that yield-increasing inputs, such as fertilizer, should be shared in the same percentage as the crop. Consequently, this approach should be used on a limited basis.

PART IV

Establishing Rents For Other Cropland, Pasture, And Buildings

Other cropland: See NCFMEC–01, Fixed and Flexible Cash Rental Arrangements For Your Farm.

Pasture: See NCFMEC–03, Pasture Rental Arrangements For Your Farm. The per-acre, per-head, or total rent for pasture should be entered as part of the crop share/cash lease, along with the stocking rate and any other restrictions.

Service buildings: Service buildings may be divided into two classes: useful and non-useful buildings. The non-useful buildings should not be included in the lease. An example would be old grain bins that are in disrepair and thus useless to the operator.

Useful buildings contribute to the farm operation through grain, hay, or machinery storage or livestock production. The rental value should give the landowner a return on the building’s investment. The return should be based on the following ownership costs: depreciation, interest, repairs, taxes, and insurance. Table 2 can be used to determine the rental value for each useful building. See NCR–214, Rental Agreements for Farm Machinery, Equipment, and Buildings.

Table 2. Service Building Annual Rental Rate

Item	Annual charge
Type of building	
Investment	\$ _____
Depreciation	_____ yrs \$ _____
Interest	_____ % \$ _____
Repairs	_____ % \$ _____
Taxes	_____ % \$ _____
Insurance	_____ % \$ _____
Total rental value	\$ _____

For additional references, see the North Central Farm Management Extension Committee Website at: <http://AgLease101.org/>

Crop(s):	Corn and soybeans
Acres:	Approximately 156 tillable acres
Farm:	NE 1/4 of Brown Place
Comment:	Average costs/acre for c-sb rotation (share fertilizer, chemicals, and crop insurance)

Line	Value ^a	Annual Rate	Annual cost ^a	Contributor cost ^a		
				Landlord	Tenant	
1. Land ^b	\$0	×	4.00%	\$0.00		
1a. Real-estate tax		×	0.50%	\$0.00		
1b. Land maintenance		×	0.00%	\$0.00		
1c. Cash rent (in lieu of lines 1-1c)				\$225.00	\$225.00	
2. Crop machinery	\$250					
2a. Depreciation		×	9.00%	\$22.50		\$22.50
2b. Interest		×	7.00%	\$17.50		\$17.50
2c. Repairs		×	6.00%	\$15.00		\$15.00
2d. Taxes and insurance		×	0.50%	\$1.25		\$1.25
2e. Custom rates (in lieu of lines 2a-2d)						
3. Irrigation equipment	\$0					
3a. Depreciation		×	5.00%	\$0.00		
3b. Interest		×	7.00%	\$0.00		
3c. Repairs		×	1.00%	\$0.00		
3d. Taxes and insurance		×	0.50%	\$0.00		
4. Labor (hours and \$/hour)	2.00	×	\$15.00	\$30.00		\$30.00
5. Management	\$5,000	×	1.00%	\$50.00	\$20.00	\$30.00
6. Seed				\$75.00		\$75.00
7. Fertilizer						
8. Herbicides						
9. Insecticides/fungicides						
10. Crop insurance						
11. Fuel and oil				\$18.00		\$18.00
12. Irrigation pumping expense						
13. Custom machinery hire						
14. Drying						
15. Hauling						
16. Other <u>Miscellaneous</u>				\$10.00	\$2.50	\$7.50
17. Other _____						
18. TOTAL SPECIFIED COSTS (lines 1 through 17)				\$464.25	\$247.50	\$216.75
19. Percent of Specified Costs (percent of total costs to each party)				100.0%	53.3%	46.7%

Enter charges only for non-yield increasing items (those inputs not shared in the same percentage as the crop).

Adjustments to Reach Desired Share

20.	Cash transfer between parties to achieve desired split	<i>Add items previously shared or include a cash transfer between parties to obtain desired shares.</i>	\$0.00	-\$15.50	\$15.50
21.					
22.					
23.					
24.	ADJUSTED TOTAL (lines 19 + lines 20 through 23)		\$464.25	\$232.00	\$232.25
25.	Percent Crop Share Desired (percent of total costs to each party)		100.0%	50.0%	50.0%

^a Value and annual cost can either be total for farm/field or average per acre.

^b Land contribution should be either land value × interest rate or cash rent.

Crop(s): _____

Acres: _____

Farm: _____

Comment: _____

Line	Value ^a	Annual Rate	Annual cost ^a	Contributor cost ^a	
				Landlord	Tenant
1.	Land ^b	×			
1a.	Real-estate tax	×			
1b.	Land maintenance	×			
1c.	Cash rent (in lieu of lines 1-1c)				
2.	Crop machinery				
2a.	Depreciation	×			
2b.	Interest	×			
2c.	Repairs	×			
2d.	Taxes and insurance	×			
2e.	Custom rates (in lieu of lines 2a-2d)				
3.	Irrigation equipment				
3a.	Depreciation	×			
3b.	Interest	×			
3c.	Repairs	×			
3d.	Taxes and insurance	×			
4.	Labor (hours and \$/hour)	×			
5.	Management	×			
6.	Seed				
7.	Fertilizer				
8.	Herbicides				
9.	Insecticides/fungicides				
10.	Crop insurance				
11.	Fuel and oil				
12.	Irrigation pumping expense				
13.	Custom machinery hire				
14.	Drying				
15.	Hauling				
16.	Other _____				
17.	Other _____				
18.	TOTAL SPECIFIED COSTS (lines 1 through 17)				
19.	Percent of Specified Costs (percent of total costs to each party)				

Enter charges only for non-yield increasing items (those inputs not shared in the same percentage as the crop).

Adjustments to Reach Desired Share

20.		<i>Add items previously shared or include a cash transfer between parties to obtain desired shares.</i>			
21.					
22.					
23.					
24.	ADJUSTED TOTAL (lines 19 + lines 20 through 23)				
25.	Percent Crop Share Desired (percent of total costs to each party)				

^a Value and annual cost can either be total for farm/field or average per acre.
^b Land contribution should be either land value × interest rate or cash rent.



PART V

Putting The Agreement In Writing

A copy of a crop-share cash lease agreement form is included in this publication. Some of the advantages of a written agreement are:

- It encourages a detailed statement of the agreement that assures a better understanding by both parties.
- It serves as a reminder of the terms originally agreed upon.
- It provides a valuable guide for the heirs if either the operator or landowner dies. The agreement should be carefully reviewed each year to ensure the terms of the agreement are still applicable and desirable.
- It serves as documentation for tax purposes.

Every lease should include certain items. These are the full legal names of the parties involved, an accurate description of the property being rented, the beginning and ending dates of the agreement, the amount of rent to be paid, a statement of how and when the rent is to be paid, and the signatures of the parties involved.

These minimal provisions alone, however, fail to meet all the requirements of a good lease. These provisions provide no guidance on how the land is to be used, nor do they outline possible problem areas and solutions. No indication of the rights and responsibilities of either party are provided.

A good lease should clearly identify the property being rented. If the landowner wishes to reserve the use of certain improvements on the land, these reservations should be stated clearly in the lease.

Absent a statutory or constitutional limitation, the duration of the lease can be any length of time agreed upon by the parties. Most leases are for at least one full year. Operators sometimes request leases for more than one year, particularly if they must invest more capital in equipment or improvements needed on the farm being rented.

In general, most transactions involving real estate require a contract in writing to be enforceable. In most states, oral leases for not more than a year are enforceable. Because specific legal terms surrounding crop land leasing vary from state to state, landowners and operators are encouraged to check with their local Extension service or a knowledgeable lawyer as to the specific laws for their state.

Landowners, as well as operators, should enter long-term leases only after very careful consideration. It should be remembered that the lease is a contract – a contract that “marries” the parties to undesirable and desirable provisions alike. Often, it is better to include a provision for compensation for unexhausted improvements made by the operator rather than to have a long-term lease that fixes terms for an extended time period. A lease supplement can be used that shows the type of improvement, the operator’s initial investment, and the useful life or annual rate of depreciation to be used to calculate the remaining value when the lease ends.

The sample lease contained in this bulletin provides for most concerns of both the operator and landowner. However, it is important to remember that one of the functions of a written lease is to anticipate possible developments and to state how to handle such problems if they actually do develop. Thus, landowners and operators may need to modify the sample lease to fit their specific situations.

(based on publication NCFMEC-02, Revised 2011)

For additional information see NCFMEC-02 (Crop Share Rental Arrangements For Your Farm).

This lease entered into this _____ day of _____, 20____, between

_____, owner, of _____

Address

_____, spouse, of _____

Address

hereafter known as “the owner,” and

_____, operator, of _____

Address

_____, spouse, of _____

Address

hereafter known as “the operator.”

I. Property Description

The landowner hereby leases to the operator, to occupy and use for agricultural and related purposes, the following described property:

_____ consisting of approximately _____

acres situated in _____ County (Counties), _____ (State) with all improvements thereon

except as follows: _____

II. General Terms of Lease

A. Time period covered. The provisions of this agreement shall be in effect commencing on the _____ day of _____, 20____ and ending on the _____ day of _____, 20____.

B. Amendments and alterations. Amendments and alterations to this lease shall be in writing and shall be signed by both the landowner and operator.

C. No partnership intended. It is particularly understood and agreed that this lease shall not be deemed to be, nor intended to give rise to, a partnership relation.

D. Transfer of property. If the landowner should sell or otherwise transfer title to the farm, such action will be done subject to the provisions of this lease.

E. Right of entry. The landowner, as well as agents and employees of the landowner, reserve the right to enter the farm at any reasonable time to: a) consult with the operator; b) make repairs, improvements, and inspections; and c) (after notice of termination of the lease is given) do tillage, seeding, fertilizing, and any other customary seasonal work, none of which is to interfere with the operator in carrying out regular farm operations.

F. No right to sublease. The landowner does not convey to the operator the right to lease or sublet any part of the farm or to assign the lease to any person or persons whomsoever.

G. Binding on heirs. The provisions of this lease shall be binding upon the heirs, executors, administrators, and successors of both landowner and operator in like manner as upon the original parties, except as provided by mutual written agreement.

H. Landowner's lien for rent and performance. The landowner's lien provided by law on crops grown or growing shall be the security for the rent herein specified and for the faithful performance of the terms of the lease. If the operator fails to pay the rent due or fails to keep the agreements of this lease, all costs and attorney fees of the landowner in enforcing collection or performance shall be added to and become a part of the obligations payable by the operator hereunder.

I. Additional provisions: _____

III. Land Use

A. General provisions. The land described in Section I will be farmed according to best management practices in the region. Crops to be planted and harvested will be agreed upon in advance by the landowner and operator. Specific restrictions as to how the land is to be farmed are the following:

B. Pasture Restrictions. The pasture stocking rate shall not exceed:

PASTURE IDENTIFICATION	ANIMAL UNITS/ACRE [†]
_____	_____
_____	_____
_____	_____

[†] 1,000-pound mature cow is equivalent to one animal unit

Other restrictions related to pasture, grazing crops, and crop residues are:

C. Government programs. The extent of participation in government programs will be discussed and decided by both parties. The course of action agreed upon should be placed in writing and be signed by both parties. A copy of the course of action so agreed upon shall be made available to each party.

IV. Crop-Share Cash Rent and Related Provisions

A. Income will be shared according to the following:

Income source	Landowner (%)	Operator (%)
Crop production	_____ %	_____ %
Government payments [†]	_____ %	_____ %
Crop residue/forage	_____ %	_____ %
Hunting/lease income	_____ %	_____ %
Mineral/wind lease	_____ %	_____ %

[†] Includes all government payments (for example, Direct, Counter-cyclical, ACRE, SURE, Disaster, CSP) unless specified differently below.

Exceptions or specific provisions related to sharing of crop income are the following: _____

B. Contribution of production expenses will be according to the following:

Landowner contributions: _____

Operator contributions: _____

Shared expenses:[†] _____

[†]Split for shared expenses is _____% for landowner and _____% for operator, with the exception of the following: _____

If operator provides inputs that have a useful life beyond the term of the lease, how they will be compensated for any unused portion of the input at lease termination should be spelled out here.

2. Delivery of grain. The operator agrees to deliver the landowner's share of crops to the following location(s) at the time the crops are harvested: _____

Additional agreements related to grain hauling, storage, and marketing are: _____

3. Other terms of the lease not previously discussed: _____

V. Operation and Maintenance of Farm

To operate this farm efficiently and to maintain it in a high state of productivity, the parties agree as follows:

A. The operator agrees:

1. General maintenance. To provide the labor necessary to maintain the farm and its improvements during the rental period in as good condition as it was at the beginning. Normal wear and depreciation and damage from causes beyond the operator's control are exceptions.

2. Land use. Not to: a) plow pasture or meadowland, b) cut live trees for sale or personal use, or c) pasture new seedings of legumes and grasses in the year they are seeded without consent of the landowner. Other restrictions to be observed are as follows: _____

3. Insurance. Not to house automobiles, trucks, or tractors in barns, or otherwise violate restrictions in the landowner's insurance policies without written consent from the landowner. Restrictions to be observed are as follows: _____

4. Noxious weeds. To use diligence to prevent noxious weeds from going to seed on the farm. Treatment of the noxious weed infestation and cost thereof shall be handled as follows: _____

5. Addition of improvements. Not to: a) erect or permit to be erected on the farm any unremovable structure or building, b) incur any expense to the landowner for such purposes, or c) add electrical wiring, plumbing, or heating to any building without written consent of the landowner.

6. Conservation. Control soil erosion according to an approved conservation plan; keep in good repair all terraces, open ditches, inlets and outlets of tile drains; preserve all established watercourses or ditches including grassed waterways; and refrain from any operation or practice that will injure such structures.

7. Damages. When leaving the farm, to pay the landowner reasonable compensation for any damages to the farm for which the operator is responsible. Exceptions are any decrease in value due to ordinary wear and depreciation or damages outside the control of the operator.

8. Costs of operation. To pay all costs of operation except those specifically referred to in Section IV-B.

9. Repairs. Not to buy materials for maintenance and repairs in an amount in excess of \$ _____ within a single year without written consent of the landowner.

10. Recreational use. Use of the property for recreational purposes of any type (hunting, fishing, ATV, bird-watching, etc.) must be approved by the landowner in advance.

B. The landowner agrees:

1. Loss replacement. To replace or repair as promptly as possible the dwelling or any other building or equipment regularly used by the operator that may be destroyed or damaged by fire, flood, or other cause beyond the control of the operator or to make rental adjustments in lieu of replacements.

2. Materials for repairs. To furnish all material needed for normal maintenance and repairs.

3. Skilled labor. To furnish any skilled labor for tasks that the operator is unable to perform satisfactorily. Additional agreements regarding materials and labor are: _____

4. Reimbursement. To pay for materials purchased by the operator for purposes of repair and maintenance in an amount not to exceed \$ _____ in any one year, except as otherwise agreed upon. Reimbursement shall be made within _____ days after the operator submits the bill.

5. Removable improvements. To let the operator make minor improvements of a temporary or removable nature, which do not alter the condition or appearance of the farm, at the operator's expense. The landowner further agrees to let the operator remove such improvements even though they are legally fixtures at any time this lease is in effect or within _____ days thereafter, provided the operator leaves in good condition that part of the farm from which such improvements are removed. The operator shall have no right to compensation for improvements that are not removed except as mutually agreed.

6. Compensation for crop expenses. To reimburse the operator at the termination of this lease for field work done and for other crop costs incurred for crops to be harvested during the following year. Unless otherwise agreed, current custom rates for the operations involved will be used as a basis of settlement.

C. Both agree:

1. Not to obligate other party. Neither party hereto shall pledge the credit of the other party hereto for any purpose whatsoever without the consent of the other party. Neither party shall be responsible for debts or liabilities incurred, or for damages caused by the other party.

2. Mineral rights and wind/solar development. The landowner shall have the right to enter into agreements for the development of petroleum, wind, solar, or other resources on the property, and may also authorize third parties to enter the property to survey, construct, and/or operate the facilities reasonably necessary to develop those resources. The landowner agrees to reimburse the tenant for any actual damage suffered for crops destroyed by these activities and to release the tenant from obligation to continue farming this property when and if development of such resources interferes materially with the tenant's opportunity to make a satisfactory return.

3. Environmental issues. The operator shall conduct all operations on the property in a manner consistent with all applicable local, state, and federal environmental codes, regulations, and statutes and shall bear sole responsibility for any violations thereof. The operator shall be solely responsible for securing any permits or approvals necessary for his or her activities on the property. In the event of any legally-prohibited release of materials to the environment, the operator will indemnify the landowner for any costs of environmental cleanup and restoration as well as any penalties, fines, judgments or other amounts incurred by landowner as a result of such release.

VI. Arbitration of Differences

Any differences between the parties as to their several rights or obligations under this lease that are not settled by mutual agreement after thorough discussion, shall be submitted for arbitration to a committee of three disinterested persons, one selected by each party hereto and the third by the two thus selected. The committee's decision shall be accepted by both parties.

Executed in duplicate on the date first above written:

_____	_____
Operator	Owner
_____	_____
Operator's spouse	Owner's spouse

State of _____

County of _____

On this _____ day of _____, A.D. 20_____, before me, the undersigned, a Notary Public in said State, personally appeared _____, _____, _____, and _____ to me known to be the identical persons named in and who executed the foregoing instrument, and acknowledged that they executed the same as their voluntary act and deed.

Notary Public