



Irrigation Aspects of Land Lease Agreements

MICHIGAN STATE
UNIVERSITY
EXTENSION
PURDUE
UNIVERSITY

Irrigation Fact Sheet #6
January 2008
Update January 2009

Author
Lyndon Kelley,
Extension Irrigation
Educator, MSU
Extension/Purdue
Extension
269/467-5511
kelleyl@msu.edu

Reviewer
Dr. Steven Miller
Visiting Specialist, MSU

Lease agreement considerations for irrigated land.

There are several considerations that you may need to be included in lease agreement for irrigated land.

Land rent pricing

Establishment of irrigated rental value is relatively straight forward when all of the irrigation equipment and water supply is the landowners. Average current rent value is available from State and Federal Agricultural Statistic Services or your Agricultural Economics Department from your States Extension service. Talking to neighbors that rent irrigated land is one of the best ways to get a feel for irrigated rental value. Land rent auction can also be used to establish rent value but a solid structure for the process is necessary.

Calculating the amount to raise the rent if the landowner invests in the well and other permanent land improvements is a common question. In most situations the landowner wants to get more for the investment in the well then annual estimated cost of the investment in the well (DIRTI formula). Calculation of the annual cost of ownership of an investment is often represented by the DIRTI (Depreciation, Interest, Repairs, Taxes, and Insurance) formula which spreads the actual cost of ownership of an equipment investment over its usable lifespan or investment period. A standard procedure is outlined on page 7 of MSU Extension Bulletin E-2131, "Custom Work Rates in Michigan". This formula will provide you with the annual cost of the original investment in equipment and improvements.

A raise in rent values greater than just recovering the investment in the water well is justified since the well allows a greater net profit with lower risk then dry land farming. The additional profit above the cost of the addition of irrigation is often split between landlord and lessee.

Average dry land and irrigated rent values can be used along with the rent surveys and other rent data from the area to create a base value which we can then adjust. To gain perspective on the potential increase in profit we often calculate the estimated cost of the irrigation investment (DIRTI formula) and add it to the dry land rent value to create the low end rent value. The high end rent value can be estimated by looking at the total irrigation investment cost, subtracting the portion of the irrigation investment annual cost that the landowner did not provide, from the irrigated land rent value.

Even when the lessee provides all off the irrigation equipment and the water supply, rent value should be expected to be higher than local dry land rent prices. Land rent prices for irrigated ground are often higher than the cost of installing irrigation spread over a seven or ten year schedule. In most situations the additional profit for establishing irrigation on rental property is evident or the lessee would not be seeking to proceed. This opportunity cost for irrigation may be as small as 10% of the rent value or as great as 200% added to local dry land rent values. The prevalence of high dollar irrigated specialty crops are a major factor in the variability.

There are several issues that impact rental value of irrigated land that are more common: The term of the contract, time value of when the annual payment is received,

who covers lime costs, irrigation equipment maintenance issues and insurance coverage for the well.

- Sub-lease options
- Irrigation insurance cost
- Irrigation equipment annual maintenance cost
- Major irrigation catastrophe repair cost responsibility

General rental practices consideration such as: timing of payment, lime cost and responsibility need to be considered. See bulletin NCR 148 "Irrigation Crop-share and Cash Rental Arrangements for Your Farm."

Liability of impact on neighboring home wells and environment

As a permanent improvement to the land the irrigation well is owned by landowner and the liability of its potential impact on neighboring home wells is the responsibility of the landlord. The liability of its potential impact to neighboring home wells is a relatively small risk that can be managed by the rental agreement. These situations are uncommon but since the well belongs to the landowner the responsibility of the well also belongs to the landowner. The rental agreement can assign the responsibility of cost to improving neighbor well to the lessee if needed. Statements in rental agreements may require the lessee to manage the irrigation to prevent negative impact to neighboring wells, with the option to make improvements to neighboring wells to solve problem if they arise.

Michigan 2006 legislation required all large volume water users to meet an environmental protection standard of no resource impact. Rent agreements for irrigated land may define who is responsible for upholding the environmental protection standard and the responsibility of any potential liability.

Permanent improvements

The addition of irrigation to farmland often requires investment in permanent improvements to the land. The landowner may make these improvements upfront and recoup their investment over time in higher land rent charges. If landowners are not willing to pay for the permanent improvements to the land needed for irrigation, the lessee may advance the cost of the permanent improvements and recover his investment over the period of the contract in the form of a small increase in land rent values. Many lease agreements for irrigated land provide no upfront cost to the landowner but transfer value of permanent improvement paid by the lessee to the landlord over the period of 5 to 10 years. Shorter time frames provide a higher value return to landowner.

A repayment schedule may be included in the agreement for the recovery of investment dollars not recouped if early termination of the agreement is required. An annual cost of permanent improvements to the land needed for irrigation can be found by amortizing the dollar investment over the period of the contract at the current interest rate. The annual cost may be added to the dry land rent rate plus an additional opportunity cost representing the added income opportunity with irrigation to compensate landowner for permanent improvements to the land needed for irrigation.

The annual cost of permanent improvements made by lessee should be viewed as additional income above lease rate by landowners. Wells are always the property of the landowner of the land they are constructed on but many of the other items associated with the irrigation system may be recoverable or moved by the lessee at the end of the agreement. For this reason it is important to list the land improvements in their entirety and include the handling of the item at the termination of the agreement. If the improvement left by the lessee are all but the pivot or distribution system the landowner has a clean separation at the end of the agreement period if needed, with less potential problem locating another lessee to irrigate the farm allowing the landowner to recoup the investment in land improvements.

Permanent land improvement associated with the addition of irrigation to the property would often include:

- land clearing cost
- well casing
- pump/motor
- electrical panel
- back-flow preventer
- z-pipe
- field risers
- pivot pads or anchors

Sub-leasing

One major issue that needs to be considered in the negotiations of adding irrigation is the ability for the lessee to sublet the property. As high dollar specialty crop become more common in the area opportunity to rent irrigated land for a single production year for nearly double the local irrigated rent rate become a reality. Annual sub-renting could leave land owners with an unfamiliar face to deal with if neighbor water well issue arises. Addressing sub-leasing issue in writing can avoid grief and confusion in the future.

Examples how sub-leasing may be addressed in a lease run the gambit:

- lessee has no restriction
- sub-leasing value above rent value is split
- sub-leasing must be approved in writing by landowner
- sub-leasing not allowed

Insurance coverage

Establish responsibility for insurance coverage for the well, other permanent irrigation related improvements along with insurance coverage for the pivots and other non-permanent irrigation related equipment is an issue to be resolve before the insurance is needed. The local farm insurance provider in the area can help you evaluate the irrigation related options available. Many irrigation dealers can also direct you toward specialized irrigation insurance coverage.

Other associated irrigation related costs

Several associated irrigation related costs need to be addressed by the contract.

Often is the responsibility of the lessee

- annual irrigation maintenance cost
- cost of insuring the pivot or distribution system
- major catastrophes on the pivot or distribution system.

Often responsibility of the landowner

- insurance of permanent land improvements below ground pipe/wire and well
- repair of permanent land improvements below ground pipe/wire and well.

Option to purchase the farm in future

Because of the large long term investment in land when irrigation is established, purchase options are sometime included in irrigation land leases to help the lessee protect his long term investment in improvements and equipment.

Several options exist:

- “First right of refusal” option allows the lessee to purchase the land at the highest offer received. The term “first right of refusal” refers to the lessee having the right to purchase the property if sold in the contract period. The sale to another party can only proceed if the lessee having the “first right of refusal” refuses to purchase the property. First right of refusal options may reduce the potential sale value of a property by removing one of the most motivated and common buyer of property, the lessee, from the bidding process.
- “Equal opportunity to buy” is the lease agreement statement that assures the lessee that they have the option to be involved in the future sale offering of the property being leased.
- Repayment requirements of the unrecouped portion of the permanent land improvements made by the lessee if contract is prematurely terminated is often view as a form of security from farm land being sold out from their ability to lease. A schedule of repayment is constructed by amortizing the dollar investment over the period of the contract at the current interest rate. The resulting chart allows the landowner to find the agreed upon fee for early termination of the contract. Contract needs to have provisions for early termination upon one of agreed list if situations happen. These may include death of one of the parties, sale of farm or dissolving of the farm business.

Seek professional help

A lawyer that works with land rental could advise you how to add these sections to your lease agreement