



Farmland Rent Considerations

How Much is Too Much for Your Farm?

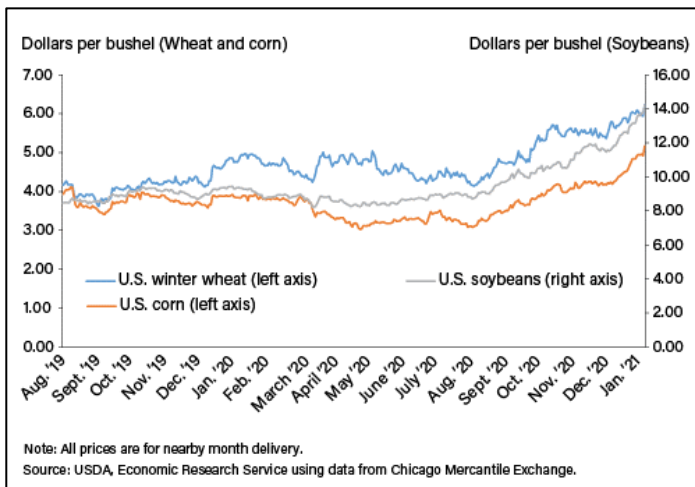
By Jonathan LaPorte, Bruce MacKellar, and Dennis Pennington, MSU Extension

Updated 11/07/2023

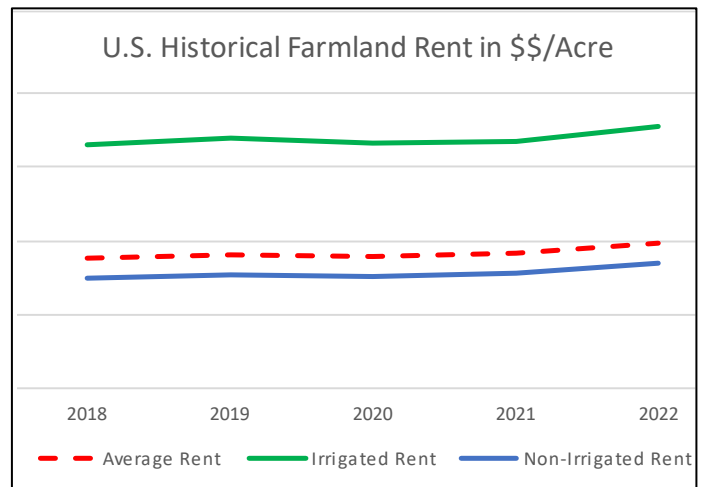
This factsheet is intended to help both landowners and producers work towards negotiating a reasonable rental value for farmland. Covered in this publication is information on common starting points for determining value, factors affecting farmland value, tips for negotiations, how to find average county rent values, and types of lease agreements.

Common starting points for determining value

A common starting point for establishing farmland rent values is to look at prices on commodity futures markets. Historically, farmland values have been correlated with commodity prices and perceived farm profits. As prices received go up, farmland values trend upward and rents paid increase. At the same time, as those same commodity prices fall, farmland rent values tend to remain steady (see *USDA charts on Grain Futures and U.S. Farmland Rent*). Farm economists consider use of longer term lease agreements to be one reason for a lack of downward movement with markets.



U.S. Grain Futures Prices Aug 2019- Jan 2021 (USDA ERS)



U.S. Farmland Rent 2018-2022 (USDA NASS)

Land rent is not the only production cost that follows commodity prices. As prices received go up, other farm input costs (such as fertilizer, chemicals, fuel) tend to follow a similar trend. When commodity prices shift downward, the value or costs of farm inputs react similar to rent values. The major difference is that farm input costs will eventually trend downward, but at a significantly slower pace. For example, during the high demand for ethanol in 2012/2013, corn reached a record value of \$6.89 per bushel. In July of 2013, corn prices fell to \$4.46 per bushel following a decline in ethanol demand. Corn prices continued downward toward pre-ethanol levels while fertilizer prices took an additional 18 months to decline on a similar trend. This makes understanding impacts that rental prices have on cost of production vital to a farm's overall success.

To contact an expert in your area, visit msue.anr.msu.edu/experts or call 888-MSUE4MI (888-678-3464)



It is important to remember that land rent prices vary tremendously not only from state to state, but also from county to county. In Michigan, the higher productivity soils that are irrigated or tile drained offer opportunities for specialty crops (such as sugar beets and vegetables) and tend to command a higher price. Other factors such as field size, access, soil type, soil fertility, previous cropping history, fencerows, telephone poles, wet spots, and proximity to their farm operation all impact the price that farmers are willing and able to pay for land rent. Looking at data like this will give you a place to start but may not reflect the true value of the farmland.

One place that both landowners and producers like to use as a starting point is the USDA's National Agriculture Statistics Service (NASS). It reports information based on surveys sent to and returned by producers across the nation. The same database contains county level data, which would more accurately reflect rental rates in your area. Michigan is diverse from north to south, with land rent in southern Michigan often much higher than in the Upper Peninsula.

It's important to keep in mind that while those surveys are a helpful starting point, they should not be used as the final determination of rent. As outlined previously, there are a lot of differences that exist from one field to another. These differences can be significant in determining the value of land. For example, individual fields can vary on soil type and field quality, making the potential yield and productivity a significant factor in determining value. Quality land with good fertility, well-spaced tile or an irrigation system, a good Farm Service Agency base (high number of base acres for government programs) are all plus factors toward stronger rental rates. Those fields that are capable of producing a higher yield often warrant a higher land rent payment. Exactly how high needs to be reasonable for both the landowner and producer.

The definition of reasonable is often helped by understanding efforts made to increase or maintain productivity. In many cases, farmers will make improvements to the land including installation of tile drainage, removing fencerows and installing irrigation systems. All of these improvements lead to higher long-term yields, which tend to help support higher land rental rates. However, during times of lower commodity prices, you can expect that money invested in these improvements by farm producers will be reduced.

Landowners that are looking to maintain current rental rates and yields that supply them may want to consider taking on these investments. Historically, landowners that have not made efforts to assist in maintaining farmland or invest in improvements generally receive lower rental rates. On average, rental rates received on these farms are 25 to 30 percent lower than other properties in the same area. This presents an opportunity to discuss what improvements are needed and how they will be implemented to maintain yields and profitability for both parties. Having good communication between the landowner and the farmer-tenant is one an important first step in establishing a win-win farmland rental agreement.

Another consideration on reasonable land rent is what producers can afford to pay. To assist in comparing the impact of land rent payments against the farm's net farm income, MSU Extension offers a land rent calculator. By inputting estimated income and expenses, a producer can determine whether the land rent being paid is reasonable or if a discussion, or even a possible re-negotiation, of the land rent agreement should take place.

If a discussion with the landowner is needed, producers can use the calculator to discuss rental values as well as the challenges and potential impacts to the farm's production and profitability. This tool is available MSU Extension's Farm Management website: www.canr.msu.edu/resources/land-rent-calculator

MSU Extension Land Rent Calculator												
			Crop 1			Crop 2			Crop 3			
INCOME												
Gross Revenue												
Cash Price	(\$/Acre)		50.00			50.00			50.00			
Expected Yield	(Bushels/Tons/Cwt)		0			0			0			
Area	(Acres)											
Total Gross Revenue			\$		\$	\$		\$	\$		\$	
EXPENSE												
Variable & Fixed Costs												
Land												
Irrigation												
Crop Chemicals												
Crop Insurance												
Crop Supplies												
Repairs & Maintenance												
Pre- & Post-harvest												
Fuel & Electric Costs												
Operator Overhead Costs												
Total Direct Expense												
Profitability (Before Land Rent)												
Net Return			Per Acre	Total Acres	Per Acre	Total Acres	Per Acre	Total Acres	Per Acre	Total Acres		
Before Land Rent			\$20.00	\$200.00	\$20.00	\$200.00	\$20.00	\$200.00	\$20.00	\$200.00		
Break-Even			Per Acre	Total Acres	Per Acre	Total Acres	Per Acre	Total Acres	Per Acre	Total Acres		
Break-even (50% tile)			\$20.00	\$200.00	\$20.00	\$200.00	\$20.00	\$200.00	\$20.00	\$200.00		
Break-even (50% tile, 50% tile)			\$20.00	\$200.00	\$20.00	\$200.00	\$20.00	\$200.00	\$20.00	\$200.00		
Break-even (100% tile)			\$20.00	\$200.00	\$20.00	\$200.00	\$20.00	\$200.00	\$20.00	\$200.00		
Efficiency			Per Acre	Total Acres	Per Acre	Total Acres	Per Acre	Total Acres	Per Acre	Total Acres		
Net Return (Before Land)			\$20.00	\$200.00	\$20.00	\$200.00	\$20.00	\$200.00	\$20.00	\$200.00		
Net Return (Before Land)			10-10%		10-10%		10-10%		10-10%			
Net Return (Before Land)			20-20%		20-20%		20-20%		20-20%			
Net Return (Before Land)			30-30%		30-30%		30-30%		30-30%			
Net Return (Before Land)			40-40%		40-40%		40-40%		40-40%			
Farm Production & Financial Performance												

MSU Extension Land Rent Calculator

What does the future hold for land rent? Farmers will want to hold onto the land they farm as long as possible. It is hard to make a living if you don't have any land to farm. Market prices will also continue to be a driving factor in discussions on establishing rental values. If markets are trending downward, farmers will need to re-negotiate with landowners about their rent and type of rental agreement being used. Especially to consider periods of

To contact an expert in your area, visit msue.anr.msu.edu/experts or call 888-MSUE4MI (888-678-3464)



lower net farm income where additional risk exists to farms as they look to move their businesses forward. Farmers may want to share some of that risk with landowners by shifting to a different type of lease agreement. Especially if a new agreement allows rental prices to reflect when crop prices are good, but adjust rental values when prices are down. Negotiation and identifying which type of agreement to use involves both landowner and producer understanding each other's needs as it relates to renting farmland. Communication is key to a successful "win-win" agreement.

Tips for negotiating farmland rent

Negotiating farmland rental rates can be challenging. Generally, landowners and farmers-tenants want to be fair with each other and don't want to be taken advantage of. Landowners need to cover the costs associated with owning land, such as a mortgage payment, insurance and taxes. Farmer-tenants need land in order to grow a crop and generate income. Most landowners and farmers alike want an easy way to determine fair rent prices. However, if market prices become volatile it can complicate the situation. When prices and yields are good, farmers can afford to pay more for rent but, when commodity price recede, like they have recently, their ability to make higher rent commitments are eroded. Michigan State University Extension has resources for landowners and farmers in determining how to set rental rates, like the *landlord checklist* (www.canr.msu.edu/farm_management/land-energy-leasing-contracts).



Negotiating farmland rental rates can be challenging

What factors affect the value?

There are a number of factors that affect the value of land for rent and lease purposes including productive capacity of the field, accessibility and local farmer competition for land. Below is a list of ten items to consider when evaluating the amount that should or could be charged for cash rent:

1. Nutrient content of soil – do you have a recent soil test?
2. Crop productive index – from USDA NRCS soil survey tells how productive the soil is compared to other soil types
3. Cropping history – what has been planted on the field during the last 10 years? What are the base acres and yields are as reported to the USDA Farm Service Agency?
4. Crop production level (yields) – can you document what actual yields have been over the last 10 years?
5. Herbicide application history – this can affect future crop rotation
6. Drainage tile – in good working condition? What spacing? What type? When was it installed? Do you have a map of the lines and outlets?
7. Surface drainage – do you have grass waterways? Are they in good repair? Are there any washouts?
8. Irrigation – in good working condition? Is it low or mid elevation? Who is responsible for energy costs?
9. Field size – How many tillable acres? Small fields (less than 40 acres) are generally discounted
10. Access/obstructions – telephone poles, stone piles, narrow drive, buildings, near school, fences, on busy road or rural area?
11. Proximity to wildlife cover – Do you have potential deer or other wildlife damage?

Not all of this information is easy to obtain. However, there are resources available to help you begin to identify factors about your farm, including *Computing a Cropland Cash Rental Rate* (www.extension.iastate.edu/Publications/FM1801.pdf) from Iowa State University.

To contact an expert in your area, visit msue.anr.msu.edu/experts or call 888-MSUE4MI (888-678-3464)



How to look up land rental rates for your county

The USDA National Agriculture Statistics Service has county level data for cash rental values. These values are based on survey results, so are not intended to serve as a “price floor” for rent negotiation. Your field’s individual factors and county location may mean USDA’s average is not a perfect fit for your farmland, but it can be a good place to start. It can also be helpful to see what rental rates in neighboring counties are and consider differences in agricultural being produced in those locations. The data can be accessed on the *USDA NASS website* (quickstats.nass.usda.gov/).

Michigan State University Extension prepares an annual report of USDA’s survey results specific to Michigan farms. The report provides 10 years-worth of average rental values to assist landowners and farm producers in understanding local trends. To access the report, visit: www.canr.msu.edu/resources/usda-farmland-cash-rental-rates

Another resource is the Michigan Farmland Values and Rental Rates Survey. This is an annual survey conducted by Michigan State University that asks producers to share the rent values being paid on their farm. Based on the responses within a specific area, a “district average” for both land values and rents paid is collected. The most recent survey report, as well as past surveys, can be found here: *Michigan Farmland Values and Rental Rates Survey* - www.canr.msu.edu/telfarm/land-value-reports/

Return on Investment Method

Another method of determining rental rates uses return on investment. Anyone would expect to receive a return on their investment. Land is no different. It might be simpler for the landowner to use this method to get a ballpark price to use when negotiating with a tenant (farmer). This doesn’t take soil productivity and land improvements into account, but it can be a place to start. To use this method, you simply determine an estimate of the desired return from the land; determine a fair annual return rate, then multiply. Some people use the 20 year U.S. Treasury Bond rate that can be accessed at the *U.S. Treasury Department Resource Center* (www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yield) On December 1, 2022, the 20-year yield rate was 3.85 percent.

Land value (\$/acre)	\$3,000	\$6,000
Rate of Return	3-4 percent	3-4 percent
Rental Rate (\$/acre)	\$90-120	\$180-240

Impressions vs. reality

Land rent should be based on real numbers, not coffee shop talk. Land rent prices are highly variable and depend on many factors. Just because a neighbor has one field renting at a high price doesn’t mean that all land is worth the same value. Make sure you do your homework.

The basic rule is that over time a cropping system put in place must generate a net revenue above cash costs and land costs. Many farms are now looking at total land cost across all acres and using that calculation to determine cash rents that can be paid and the land values that the farm can support if land is being purchased. The bottom line is as a farm income decreases, farmers will have to carefully evaluate their cost of production and may have to renegotiate land rents that are affordable to them.

If re-negotiation is needed, there are different types of agreements that allow some flexibility in pricing land rent.

To contact an expert in your area, visit msue.anr.msu.edu/experts or call 888-MSUE4MI (888-678-3464)



Farmland rental agreements and arrangements

Over the years, producers have rented farmland to each other, also known as “swapping ground,” for a wide variety of reasons using a wide range of different types of arrangements. The type of agreement usually has a lot to do with how involved a landowner wants to be in the crop production activities on their land. Some landowners don’t want any production or market risk or to be involved in making production decisions. Some want to own part of the crop. Some might want to be able to market their share of the crop. There is great flexibility in agreements based on what fits the landowner needs and the tenant needs. Here is a basic summary of farmland rental agreements.

Cash rent

The most popular and most frequently used farmland rental arrangement is fixed cash rent agreement. The landowner receives a predetermined fee to be paid by the tenant regardless of crop price or yield. The landowner is not usually involved in making any of the management decisions nor pays for any of the inputs. Normally these agreements are ongoing for multiple years based on a simple written agreement. A cash rent arrangement could be as short as one growing season in length which then requires renewal each year. Every cash rent agreement can have different terms and conditions depending on the situation but needs to establish the rental rate, payment schedule, length of agreement (beginning and ending date), and any crop or other restrictions. Putting agreements into a document that both landowner and renter sign is always the recommended practice. This option is good for landowners who want to eliminate uncertainty and risk, which a set, flat rate provides. Additional resources on cash rent:

Cash Rent Short Form: www.extension.iastate.edu/agdm/wholefarm/pdf/c2-16.pdf

Cash Farm Lease: aglease101.org/wp-content/uploads/2020/10/NCFMEC-01A.pdf

Rental Issues Renters Checklist:

https://www.canr.msu.edu/farm_management/uploads/files/Rental%20Issues%20Landlord%20Checklist.pdf

Landlord Rental Worksheet: www.canr.msu.edu/farm_management/uploads/files/1_Rental_Landlord_wks.pdf

Crop share

Crop share is considered a flexible farmland rental agreement where landowner and tenant split the income from crops being grown on the farm in a pre-established ratio or percentage. A common share agreement would be 25 percent to landowner and 75 percent to tenant of the harvested grain crop when the landowner does not share in any production costs. In some cases, a 1/3 to the landowner and 2/3 to the tenant agreement is used but in this case the landowner would be expected to pay for 1/3 of the seed, fertilizer and chemicals cost for producing the crops. With input and overhead costs increasing over the past 10 years tenants can no longer afford the historical shares where 1/3 to the landowner with 2/3 going to the tenant with no cost share. This is different from the fixed cash rent agreement in that the price paid to the landowner is based on income, not a fixed amount. The dollar amount will be impacted by crop yields and prices. When yields and prices are up – rent amount will be up and vice versa. Additional resources on crop share:

North Central Farm Management Extension Committee - aglease101.org/wp-content/uploads/2020/10/NCFMEC-02.pdf

Crop Share Cash Farm Lease (Illinois) - farmdoc.illinois.edu/publications/crop-share-lease-form-pdf

To contact an expert in your area, visit msue.anr.msu.edu/experts or call 888-MSUE4MI (888-678-3464)



Flex rent/Cash plus bonus

A flex rent agreement is a way to share the risks and rewards of a crop production system. Often the formula can promise a base cash rent price, which is often paid in advance, with a possible bonus at harvest, which is based on the gross value (yield times price) of the crop flex rent. Flex rent landlords may receive much higher rents, possibly better than some of the highest cash rents in the area. In the case of a revenue disaster, the tenant, are only obligated to pay the base cash rate. This option tends to see more popularity in years when commodity prices are increasing to much higher than expected levels. The use of this type of agreement provided the landowner with large bonus payments. The comfort level of accepting risk impacts the flex rent decision, as some landlords prefer guaranteed, set cash rent. Additional resources on flex rent/cash plus bonus:

Cash Rent With Bonus Leasing Agreement (Iowa State):
www.extension.iastate.edu/agdm/wholefarm/pdf/c2-12.pdf

Flexible Farm Lease Agreements Guide (Iowa State):
www.extension.iastate.edu/agdm/wholefarm/pdf/c2-21.pdf

Fixed bushel rent

As an alternative to the share crop arrangement is a fixed bushel agreement with landlords. The rent payment is a set number of bushels of grain per acre to the landlord. (For example, a corn rent might be 40 bushels of corn per acre) The bushel rent is delivered to the local elevator in the landlord's name, which means the landowner has the opportunity and responsibility to market the grain. When the corn sales price is high, rental income to the landowner increases, while in lower price years the rental income goes down. The marketing ability of the landowner could significantly affect his income. The tenant and landowner will need to establish a schedule of the crops to be grown and the bushels that will be considered as the rental payment for each of these crops. In this agreement, the landowner does not have production risk, but does have marketing risk.

Multiple choice flex leases

Some flex agreements offer a fixed price per bushel multiplied by the average corn yield for that field. This relieves the landowner of marketing and production risk and ties the rent price to the productive capacity of each field, which is good for the tenant.

Example: \$1 times average yield of 150 bushels per acre on corn. This calculation produces cash rent of \$150 per acre.

MSU is an affirmative-action, equal-opportunity employer, committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status. Issued in furtherance of MSU Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Quentin Tyler, Director, MSU Extension, East Lansing, MI 48824. This information is for educational purposes only. Reference to commercial products or trade names does not imply endorsement by MSU Extension or bias against those not mentioned.

To contact an expert in your area, visit msue.anr.msu.edu/experts or call 888-MSUE4MI (888-678-3464)