

## To Lease or Not to Lease.

Read the following article and answer the following questions regarding the financial considerations of leasing versus buying farm tractors.

### Questions

#### Financial Comparison: Leasing vs. Owning

1. According to the comparison in Table 1, is it cheaper to lease or own a tractor if it is only used for 500 hours per year?
2. How does increasing the annual hours of use from 500 to 800 affect the hourly cost of a leased tractor?
3. What are the specific costs that a "leasee" (the person leasing the tractor) is responsible for under a "dry hire" agreement?

#### Advantages and Disadvantages of Leasing

4. What are the primary advantages of choosing to lease a tractor rather than buying one?
5. What is considered the main disadvantage of leasing a tractor?

#### Leasing Considerations for Contractors

6. Why is leasing particularly attractive for contractors clocking high usage (e.g., 2000 hours a year)?
7. What variables do leasing companies use to determine their quotes?



**TO LEASE**



**OR NOT  
TO LEASE**

It pays to crunch the numbers and weigh up your options before deciding to buy or lease your tractor, **Kerry Dwyer** writes.

I recently wrote about the costs of buying and running farm tractors, but we can also look at leasing as an alternative to buying because there is no capital outlay required. That means the impact of interest rates, devaluation, depreciation and some repairs and maintenance is carried by the owner (the leasor) rather than the lessee.

For a farm tractor of 140hp, with a front-end-loader, I found a fairly tight range of quotes for tractor leasing, with some variety as to any additional costs. Some covered service costs and some didn't. All were on a dry hire basis, meaning the lessee paid all fuel, oil and driver costs. And all were based on a set number of tractor hours; running over that number incurs additional cost but under that does not reduce the lease cost.

Leasing is an attractive option if you don't have sufficient capital to buy a new tractor, as a 140hp FEL tractor is going to cost about \$200,000 to buy new. For some contractors who are clocking up 2000 hours a year it looks to be a very

good option because there is a large replacement cost with that number of hours.

In my article on owning tractors (*Country-Wide February 2023*) I worked on the basis of a 140hp FEL tractor for general farm use, doing 500 hours a year. That it is bought new with half the funding coming from sale of the previous tractor and that a cost of driver is included in the total running cost. The figure I came to was \$172/hour running cost, which is variable depending on all the financing, labour, fuel use, etc, however it gives a basis that you can work out the figures for your situation.

**IF YOU ARE IN THE BUSINESS OF LEASING TRACTORS OUT, THE RELEVANT FIGURES NEEDED ARE:**

- ▶ Original value of the tractor
- ▶ Likely value at the end of a lease period
- ▶ Depreciation rate on the tractor

▶ Interest to be charged against the original value

▶ Any major risks to the integrity of the tractor e.g. destruction.

I am not an expert on tractors so cannot compute these figures, but the people in the industry do. The standard leasing model is based on the tractor doing enough hours to make sense of the annual depreciation i.e. a \$200,000 tractor depreciated at 13%p.a. incurs a cost of \$26,000/year if it sits still. If it does 500 hours/year that is a cost of \$52/hour whereas that reduces to \$32/hour if it does 800 hours/year.

Leasing a tractor to run for 500 hours/year is no cheaper than owning one, on the basis used in my previous article. The comparison is shown in Table 1.

Tractor leasing is based on an agreed number of hours used, with a monthly payment on that basis. Using the figures above, if the tractor was used for 800 hours/yr the total cost reduces to about \$150/hour, because the monthly lease cost is spread over more hours of use.

**Table 1** Owning vs leasing tractors based on 500 hours/year

	Own tractor cost/hour	Leasing tractor cost/hour
<b>PURCHASE PRICE</b> for a 140hp tractor	\$210,000	
<b>INTEREST</b> On half the purchase price 8% p.a	\$17	
<b>DEPRECIATION</b> 13% p.a.	\$55	
<b>LEASE COST</b>		\$80
<b>DRIVER COST</b> \$40/hr	\$40	\$40
<b>SERVICING</b> \$30,000 per 5000hrs	\$6	\$6
<b>TYRES</b> 4 sets per 5000hrs	\$3	
<b>MAINTENANCE</b>	\$1	\$1
<b>DIESEL</b> 20litres/hr @ \$2.10/litre	\$42	\$42
<b>INSURANCE</b>	\$8	\$8
<b>TOTAL</b>	<b>\$172</b>	<b>\$177</b>

**THE ADVANTAGES OF LEASING TRACTORS ARE:**

- ▶ No capital outlay required
- ▶ The lease cost is all tax deductible
- ▶ No replacement cost when finished with that tractor, go rent another
- ▶ Access to new tractors with new technology and efficiency.

The main disadvantage is that it has to be used for enough hours to make sense of the depreciation factor incurred by the owner you are leasing it from. 🚫

Kerry Dwyer is a North Otago farm consultant and farmer.

## Answers

### Financial Comparison: Leasing vs. Owning

1. According to the comparison in Table 1, is it cheaper to lease or own a tractor if it is only used for 500 hours per year?

*It is slightly cheaper to own the tractor. Based on a 500-hour/year usage, the total cost for owning is \$172/hour, while the cost for leasing is \$177/hour.*

2. How does increasing the annual hours of use from 500 to 800 affect the hourly cost of a leased tractor?

*Increasing the usage to 800 hours per year reduces the total cost to approximately \$150/hour. This is because the monthly lease cost is spread over a greater number of operational hours.*

3. What are the specific costs that a "leasee" (the person leasing the tractor) is responsible for under a "dry hire" agreement?

*Under a dry hire basis, the leasee is responsible for all fuel, oil, and driver costs.*

### Advantages and Disadvantages of Leasing

4. What are the primary advantages of choosing to lease a tractor rather than buying one?

*The advantages include:*

- *No capital outlay is required upfront.*
- *The lease cost is fully tax deductible.*
- *There is no replacement cost at the end of the term; the user can simply rent another.*
- *It provides constant access to new technology and improved efficiency.*

5. What is considered the main disadvantage of leasing a tractor?

*The main disadvantage is that the tractor must be used for enough hours to justify the depreciation factor incurred by the owner. If a tractor sits still, a \$200,000 unit depreciating at 13% p.a. still incurs a cost of \$26,000 per year.*

### Leasing Considerations for Contractors

6. Why is leasing particularly attractive for contractors clocking high usage (e.g., 2000 hours a year)?

*Leasing is a very good option for high-usage operators because it avoids the large replacement costs associated with the rapid wear and depreciation that occurs at that level of use.*

7. What variables do leasing companies use to determine their quotes?

*Companies base their leasing models on:*

- *The original value of the tractor.*
- *The depreciation rate and likely value at the end of the lease period.*
- *An agreed number of tractor hours; exceeding this number typically results in additional costs.*