Farm Business Management

Capital purchases 201

By Allen Edwards Edwards Family Farm

November 2, 2013

What are Capital purchases?



What is a Capital Purchase?

- Durable expected useful life of 2 years or more (usually much more)
- Expensive Costs more than \$ 250 and often thousands of dollars

Why make Capital purchases?

Which are you?

And investor



A working farmer



A working farmer buys capital items to make the work of farming more efficient, not make money from investing money.

Why make capital purchases?

- 1. Profit
- 2. Profit
- 3. Profit



Save labor, or extend growing season





Increase price, or better use farm/ranch resources





Buy basic resources



Are we ready to go shopping?



Don't spend without a Plan

What does a professional farmer/rancher need to make capital purchases?

- A plan on what the farm needs to buy
- A source of money
- A capital budget

What to buy

- Look at your operations plan what is limiting your profit?
 - Production bottlenecks
 - Processing bottlenecks
 - Marketing bottlenecks
 - Management?

What to Buy

- Don't think about the object, think function
 - A tractor is the object cultivation is the function
 - A hoop house is the object increasing market (through season extension) is the function
 - A portable electric fence is the object better use of forage is the function

Before you buy, first Look for low cost or no cost ways of serving the function





Then, look at the true cost of a purchase





And, understand how the purchase affects your overall farm/ranch system

Tractor cultivation



Wheel hoe



The Money

- 1. What are your sources of money?
 - 1. Farm profit
 - 2. Savings
 - 3. borrowing
- 2. Have you covered other uses of money?
 - 1. Operating funds
 - 2. Reserve funds
 - 3. Prior debt service
 - 4. Family expenses (drawing)

Do you know how much money can you afford to loose?



How much money can you risk?

- Farm profit have you covered
 - Operating expenses
 - Capital replacement
 - Market cycles and production problems
- Saved money
 - Do you have non-farm uses for this money?
- Borrowed money
 - How big a loan can you pay back without the added income you expect from the purchase.

What about Cash Flow?

- Make sure you have operations cash when you need it.
- You will need a Cash Flow Budget

What do I do Now?

what should you buy?



How can we evaluate a good vs bad purchase?

- Simple Payback period
 - The full cost of the purchase
 - Divided by the annual change in profit

What do we need for the analysis?

- Full cost of the purchase
- Change in profit from the purchase
 - Change in operating costs
 - Change in sales
 - Scenario analysis
 - If you are analyzing a new product, include an analysis using a wholesale or commodity price!

What is a good payback period?

- For a startup farm or a startup enterprise –
 Roger's Rule: one year or less
- For a farm or enterprise with 2 5 year history
 no longer than the operating history
- For established farms probably no more than 5 years
- No longer than the life of the item
- Short is better, especially in risky markets

One Example: a BCS tractor/mower

Cost of the purchase

\$5,800

Labor savings (weed & brush cutting)

- 175 hrs/yr @ \$15/hr

\$2,625/yr

Annual operating cost

- \$250

Total annual savings

\$2,375

Payback period

@2.44 years

 Note, this does not account for the value of the tractor for tillage and cutting hay.

Comparing Options

BCS tractor/mower

- Purchase cost \$5,800
- Labor savings/yr \$2,375
- Payback period <u>@2.44 yrs</u>
- Useful life 15 years

Kubota tractor/mower

- Purchase cost \$25,000
- Labor savings/yr \$2,500
- Payback period <u>10 yrs</u>
- Useful life 25 years

Comparing opportunities

Hoop house

- Purchase cost \$10,000
- Profit increase \$5,000/yr
 - Season extension
- Payback period <u>2 years</u>
- Useful life 5 to 10 years

Tractor/cultivator

- Purchase cost \$25,000
- Cost savings \$5,000/yr
 - Tillage & planting
- Payback period <u>5 years</u>
- Useful life 25 years

Capital Purchase Budget

- Capital purchase funds available
- Payback calculations for possible purchases
- Rank purchases by payback periods
- Try analyzing how sets of purchases might affect profit.

That wasn't hard, was it?



Capital Purchases Recap

- Don't start buying without a plan
- Don't spend more than you can risk loosing
- Look for low cost ways of serving the function
- Look at how the purchase affects the whole operation
- Calculate and compare payback periods, but look at the useful life of the purchase.
- Develop a capital purchase plan and budget

And now I hope you are happy farmers

