The Numbers Coach

FARM FINANCIALS WORKBOOK

COMPEER FINANCIAL

FARM FINANCIALS WORKBOOK

BALANCE SHEET

What is a balance sheet?

Components of a balance sheet.

Create your own balance sheet.

Questions for my Compeer Team ______________________________

PRO TIP

A balance sheet provides a full financial picture of your farm. An annual update is important because it:

- Provides insight into where your business stands at a point in time
- Serves as a communication tool with others in the business
- Allows your lender to understand your current situation

Having a balance sheet will help you become a better financial manager.

Call your financial officer today if you need help with your balance sheet.

What is a balance sheet?

A BALANCE SHEET PROVIDES A FULL FINANCIAL PICTURE OF YOUR FARM.

An annual update is important because it:

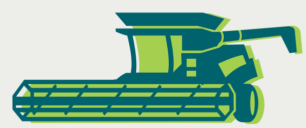
- Provides insight into where your business stands at a point in time
- Serves as a communication tool with others in the business
- Allows your lender to understand your current situation

What goes into a balance sheet?

In short, a balance sheet is a snapshot in time of all assets and liabilities.

CURRENT

Items that will be sold or turned into cash in the next 12 months (asset) or a bill that will require payment within 12 months (liability).



INTERMEDIATE

Items that aren't normally sold during the year, including breeding livestock, machinery, vehicles, retirement accounts and cash value of life insurance (asset) or a loan with a maturity date between 1 and 10 years (liability).

LONG-TERM

Real estate and improvements, including land, buildings, and grain systems, for assets and loans with maturity dates greater than 10 years for liability.

Components of a balance sheet

A **balance sheet** is a snapshot of your financial situation. It describes what is owned, what is owed and the relationship between the two at one moment in time.

Room for improvement?

If your numbers aren't as good as you'd like them to be after taking a closer look at the ratios below, there are options to consider:

- **Net Worth** is changed by after-tax earnings, gifts, asset appreciation and inheritance. Focus on earnings to increase net worth.
- **Because Ownership Equity** is a ratio, you can control it by the same items as Net Worth, but it can be affected by selling an asset to reduce debt. Typically, selling a non-income-producing asset will help your overall financial position.
- **If earnings from the farm are not sufficient** to make all payments and cover living expenses, your working capital will decrease as you borrow funds to make the payments. Consider building working capital by selling capital items, like unused machinery, to generate cash.

BALANCE SHEET *continued*

COMPEER FINANCIAL

STATEMENT OF: ☐ Individual ☐ Partnership ☐ Corporation ☐ Trust

List all assets at fair market value. List all debts to wh… owed, interest rates, and payments. Attach additional sheets if more space is required.

Month / Day / Year | Month / Day / Year

1. CURRENT ASSETS (Account No.)	CURRENT VALUE	5. CURRENT LIABILITIES (Due in less than 1 year)	AMOUNT(S) OWED
Checking		Accounts Payable	
Savings		Accrued Int. (Current Liab.)	
Bank Name		Accrued Int. (I.T. Liab.)	
Accounts Receivable SCH. 1		Accrued Int. (L.T. Liab.)	
Marketable Securities SCH. 2		Rental(s)/Lease(s)	
Livestock & Commodities SCH. 3A & B — Describe / No. Units / Unit Value		Income Tax & Social Security	
		RE Taxes & Property Taxes	
		CCC Loans/Accounts	
		Operating Loans — Lender / Due Date / Rate	
Investments in Growing Crops SCH. 4		Other Current Liabilities	
Supplies on Hand SCH. 5		Credit Cards	
		Prin. Portion IT Liabilities due in 12 months (from below)	
Current Assets Total from SCH. 1-5		Prin. Portion LT Liabilities due in 12 months (from below)	
1. TOTAL CURRENT ASSETS		5. Total Current Liabilities	
2. Intermediate Assets(Not normally sold during yr.)		6. Intermediate Liabilities(Due in 1-10 yrs.)	
Breeding Livestock / Number / Unit Value		Lender / Collateral / Due Date / Rate / Principal Due in 12 Mo	
Personal Vehicles			
Trucks			
Machinery and Equip. SCH. 6			
Cash Value of Life Insurance			
Securities-Not readily marketable			
Retirement accounts		Intermediate Liabilities from SCH.8	
		Subtract Prin. Due in 12 Months	
2. TOTAL INTERMEDIATE ASSETS		6. Total Intermediate Liabilities	
3. Long Term Assets (Real Estate & Improvements)		7. Long Term Liabilities (due in more than 10 yrs.)	
# of Acres / Original Cost / Improve Cost Since Purch. / Year Acquired		Lender / Collateral / Due Date / Rate / Principal Due in 12 Mo	
Farm Credit Stock			
Other Real Estate		Other real es… debt	
		Long Term Liabilities … SCH. 9	
Long Term Assets from SCH. 7		Subtract prin. Due in 12 mo…	
3. TOTAL LONG TERM ASSETS		7. Total Long Term Liabi…	
4. TOTAL ASSETS (1 + 2+ 3)		8. TOTAL LIABILITIES (5+…)	
Lease Obligations: Amt. Due in 12 Mos. / Total Unpaid Balance — Lessors: $ $		9. Net Worth (4-8)	

ADDITIONAL INFORMATION — PLE…SE EXPLAIN ANY "…" …NSWERS

- Are there any judgements of record against you? ☐Yes ☐No
- Have you been a debtor in bankruptcy in the last 10 years? ☐Yes ☐No
- Are you a party to a lawsuit? ☐Yes ☐No
- Are any of your taxes delinquent or under dispute? ☐Yes ☐No
- Are you obligated as a cosigner or guarantor on any other obligations? ☐Yes ☐No
- Does anyone else own an interest in the property listed on the balance sheet? ☐Yes ☐No

SIGNATURES AND AUTHORIZATIONS

By signing below, we certify that this information together, with any accompanying schedule(s), is a true and correct and complete statement o… financial condition as of the date indicated and that our financial condit… s not materially changed. We understand that it is a federal crime punishable by fine or imprisonment, or both to knowingly make any false statem… n this application as applicable under the provisions of Title 18, United S… de, Section 1014. We consent to any credit investigations necessary to act on or verify the supplied information and acknowledge that we may b… ed to provide additional information. PHOTOCOPIES OF THIS AUTHOR… ION MAY BE PRESENTED TO AND RELIED UPON AS OUR AUTHORIZATION TO RELEASE INFORMATION TO FARM CREDIT SE… CES (PCA, FLBA, OR ACA, as applicable). Lender, its agents, successors a… gns may report our names and information regarding this loan and all our past and future loans to credit reporting agencies.

Signature | Signature | Date Signed

LOAN ENTITY	ASSN.#	B.O. NO.	CIF NO.	LOAN NO.	LN. OFF. NO.	CUSTOMER SHORT NAME	BALANCE SHEET

Current Assets are cash or anything you can convert to cash within the normal operating cycle of your business (usually one year).
Examples:
- Cash and savings
- Marketable securities
- Stored grain and feed
- Market livestock
- Investment in growing crop and prepaid expenses
- Accounts receivable

Current Liabilities include all unpaid bills and obligations due within the next 12 months.
Examples:
- Accrued interest
- Accounts payable
- Income and real estate taxes
- Operating loans
- Credit card debt
- Principal portion of term debt due in the next 12 months

Intermediate Assets are those that take more than a year to use up or turn to cash.
Examples:
- Breeding livestock
- Machinery
- Retirement accounts
- Non-marketable securities
- Cash value of life insurance

Intermediate Liabilities are debts that will be paid off within 10 years.
Examples:
- Machinery loans
- Life insurance loans
- Car loans
- Student loans

Long-Term Assets are typically land and building investments that are held long term. Also may include longer term contract receivables such as the sale of a farm on contract.

Long-Term Liabilities are typically loans on land and buildings financed for a term longer than 10 years (any debts with terms of repayment longer than 10 years).

Net worth is your total assets (TA) - total liabilities (TL). This tells you how much cash you would have if you sold all of your assets and paid off all of your debts.

Now you can create your own balance sheet.

Use the balance sheet on the next page or follow the link below to download a digital balance sheet.

Downloadable Balance Sheet Template

Compeer clients can easily access an online balance sheet by logging into their **MyCompeer Portal.**

- Input information directly into the balance sheet.
- Review past balance sheets.
- Allow your tax professional access to review and update your balance sheet.

Talk to your financial officer about getting signed up today!

PRO TIP

Remember, these financial statements will help you better manage your operation, but the information they provide is only as good as the information you put into them. If they are incomplete or inaccurate, they won't be as helpful.

STATEMENT OF:		☐ Individual ☐ Partnership	☐ Corporation ☐ Trust	
List all assets at fair market value. List all debts to who owed, interest rates, and payments. Attach additional sheets if more space is required.			Month / Day / Year	Month / Day / Year

1. CURRENT ASSETS	Account No.	CURRENT VALUE	
Checking			
Savings			
Bank Name			
Accounts Receivable SCH. 1			
Marketable Securities SCH. 2			
Livestock & Commodities SCH. 3A & B			

Describe	No. Units	Unit Value		

Investments in Growing Crops SCH. 4		
Supplies on Hand SCH. 5		
Current Assets Total from SCH. 1-5		
1. TOTAL CURRENT ASSETS		

5. CURRENT LIABILITIES (Due in less than 1 year)	AMOUNT(S) OWED	
Accounts Payable		
Accrued Int. (Current Liab.)		
Accrued Int. (I.T. Liab.)		
Accrued Int. (L.T. Liab.)		
Rental(s)/Lease(s)		
Income Tax & Social Security		
RE Taxes & Property Taxes		
CCC Loans/Accounts		
Operating Loans		

Lender	Due Date	Rate		

Other Current Liabilities		
Credit Cards		
Prin. Portion IT Liabilities due in 12 months (from below)		
Prin. Portion LT Liabilities due in 12 months (from below)		
5. Total Current Liabilities		

2. Intermediate Assets(Not normally sold during yr.)

Breeding Livestock	Number	Unit Value		

Personal Vehicles		
Trucks		
Machinery and Equip. SCH. 6		
Cash Value of Life Insurance		
Securities-Not readily marketable		
Retirement accounts		
2. TOTAL INTERMEDIATE ASSETS		

6. Intermediate Liabilities(Due in 1-10 yrs.)

Lender	Collateral	Due Date	Rate	Principal Due in 12 Mo		

Intermediate Liabilities from SCH.8			
Subtract Prin. Due in 12 Months			
6. Total Intermediate Liabilities			

3. Long Term Assets (Real Estate & Improvements)

# of Acres	Original Cost	Improve Cost Since Purch.	Year Acquired		

Farm Credit Stock		
Other Real Estate		
Long Term Assets from SCH. 7		
3. TOTAL LONG TERM ASSETS		
4. TOTAL ASSETS (1 + 2+ 3)		

7. Long Term Liabilities (due in more than 10 yrs.)

Lender	Collateral	Due Date	Rate	Principal Due in 12 Mo		

Other real estate debt			
Long Term Liabilities from SCH. 9			
Subtract prin. Due in 12 months			
7. Total Long Term Liabilities			
8. TOTAL LIABILITIES (5+6+7)			
9. Net Worth (4-8)			

Lease Obligations:	Amt. Due in 12 Mos.	Total Unpaid Balance
Lessors:	$	$

ADDITIONAL INFORMATION

			PLEASE EXPLAIN ANY "YES" ANSWERS
Are there any judgements of record against you?	☐ Yes	☐ No	
Have you been a debtor in bankruptcy in the last 10 years?	☐ Yes	☐ No	
Are you a party to a lawsuit?	☐ Yes	☐ No	
Are any of your taxes delinquent or under dispute?	☐ Yes	☐ No	
Are you obligated as a cosigner or guarantor on any other obligations?	☐ Yes	☐ No	
Does anyone else own an interest in the property listed on the balance sheet?	☐ Yes	☐ No	

SIGNATURES AND AUTHORIZATIONS

By signing below, we certify that this information together, with any accompanying schedule(s), is a true and correct and complete statement of our financial condition as of the date indicated and that our financial condition has not materially changed. We understand that it is a federal crime punishable by fine or imprisonment, or both to knowingly make any false statements in this application as applicable under the provisions of Title 18, United State code, Section 1014. We consent to any credit investigations necessary to act on or verify the supplied information and acknowledge that we may be asked to provide additional information. PHOTOCOPIES OF THIS AUTHORIZATION MAY BE PRESENTED TO AND RELIED UPON AS OUR AUTHORIZATION TO RELEASE INFORMATION TO FARM CREDIT SERVICES (PCA, FLBA, OR ACA, as applicable). Lender, its agents, successors and assigns may report our names and information regarding this loan and all our past and future loans to credit reporting agencies.

Signature ____________________ Signature ____________________ Date Signed ____________________

LOAN ENTITY	ASSN.#	B.O. NO.	CIF NO.	LOAN NO.	LN. OFF. NO.	CUSTOMER SHORT NAME	BALANCE SHEET

INCOME STATEMENT

What is an income statement?

What is the difference between a balance sheet and an income statement?

What are the components of a balance sheet?

Create your own income statement.

Questions for my Compeer Team ____________________

PRO TIP

Check with your accountant or recordkeeping system if you have one. Your income statement may only be a call, email or click of a few buttons away.

What is an income statement?

An **income statement** shows revenue and expenses for a period of time, typically one year. The income statement can help determine an operation's expansion potential, evaluate the profitability of an enterprise and assist in loan repayment analysis.

What is the difference between a balance sheet and an income statement?

There are many pieces that go into managing a successful farm operation. The information gathered in a **balance sheet** will help inform the **income statement** to determine how profitable an operation is.

Balance Sheet

Typically completed at the end of the year, a balance sheet shows a farm's assets and liabilities, how an operation puts their assets to work and how they are financed.

- It shows what an operation owns (assets) and owes (liabilities), as well as long-term investments.
- It indicates how effectively debts and assets are being used to generate revenue that gets carried into the income statement.

Income Statement

An income statement shows revenue and expenses for a period of time, typically one year. The income statement can help determine an operation's expansion potential, evaluate the profitability of an enterprise and assist in loan repayment analysis.

- It shows the financial health of a farm and whether or not an operation is profitable.
- It helps monitor revenue and expenses closely so an operation can grow revenue while controlling costs.

Differences

A balance sheet reports assets, liabilities and equity while an income statement reports revenue and expenses that determine a profit or loss.

Components of an income statement

Gross Farm Income: The sum of all receipts from the sale of crops, livestock and farm-related goods and services, as well as any direct payments from the government.

Accrual Adjustments: Accrual adjustments help show an operation's actual profitability per crop year by accounting for changes in short-term accounts like inventory, market livestock and prepaid expenses. For example, accruals will take into account fluctuations in income and expenses from fertilizer purchased in one year but used in the next or delaying the receipt of a grain check until January for tax purposes. Accrual income statements allow for that grain inventory to be included as income in the year it was produced, not sold.

Depreciation: While not a cash expense you'll see in your bank account, depreciation is a real cost of your operation. You'll need to account for depreciation on your machinery, vehicles, buildings and improvements. Eventually, all of these assets will need to be replaced to keep your farm operating. Unlike on tax returns, depreciation on the income statement is a set percentage of the asset.

Capital Adjustments: Capital adjustments account for any purchases or sales made outside of the day-to-day operating revenue and expenses. If equipment or land was bought or sold, record the total change in your capital here.

Net Farm Income: The bottom line number — did the farm operation make money last year? Positive earnings are used for living expenses, disbursements to owners or are reinvested back into the operation for future growth.

Fiscal Year 20XX	Annual Total
Cash Farm Income	
Corn	33,600
Milk	256,000
Cull stock	18,480
Misc. livestock	3,840
Govt. payments	3,000
Gross Farm Income	**$314,920**
Cash Farm Expense	
Seed	8,820
Fertility	20,250
Weed & pest treatments	5,265
Crop insurance	3,510
Custom hire – crops	5,625
Feed	79,987
Breeding	3,200
Veterinary	9,596
Supplies	19,992
Marketing	5,600
Fuels & oil	6,000
Repairs	10,000
Custom hire – other	6,020
Labor	15,000
Land taxes	4,000
Farm insurance	2,000
Utilities	7,200
Professional services	3,000
Interest on loans	26,628
Total Cash Farm Expenses	**$241,693**
Net Cash Farm Income	**$73,227**
Accrual Adjustments	
Crops and feed	1,156
Market livestock	-
Accounts receivable	(3,000)
Hedging accounts	-
Other current assets	-
Prepaid exp. & supply	(1,000)
Growing crops	-
Accounts payable	-
Accrued interest	400
Total Inventory Change	**$(2,444)**
Net Operating Profit	**$70,783**
Depreciation	
Machinery	17,200
Titled vehicles	1,500
Bldgs & improvements	4,000
Total Depreciation	**$22,700**
Capital Adjustments	**$2,000**
Net Farm Income	**$50,083**

*Income statement adapted from *Fearless Farm Finances*, 2nd ed. Padgham, Case and Dietmann.

Now create your own income statement.

Typically, income statements are prepared by an accountant. This could be in the form of a tax return, FBFM financial packet or another form.

If you are using a financial record keeping system like QuickBooks, your system may be able to pull an income statement for you.

If you are starting from scratch, you'll need

1. All expenses from the last year
2. All income from the last year
3. Depreciation amounts (not the tax version, the useful life version)
4. Non-typical capital expenses

PRO TIP

If the operating rate increases or expenses rise faster than income, look for ways to reduce costs such as releasing unprofitable rented acres or increasing income by focusing on marketing opportunities.

CASH FLOW

What is cash flow?

Analyzing cash flow and profitability.

Components of cash flow.

Create your own cash flow document.

Questions for my Compeer Team ______________________________

PRO TIP

Updating the cash flow statement frequently helps you gain valuable insight into your operation. Back-check for variances between what was projected (ProForma) versus what actually happened (statement of cash flow). Were the differences caused by internal or external forces?

What is cash flow?

HOW FINDING YOUR FLOW CAN HELP

A farm operation should generate enough positive **cash flow** from operations to pay all of its operating expenses and have enough cash left to replace some capital equipment, make loan payments and pay the farm owner something back for his or her investment in the farm. Ultimately, positive cash flow is what will keep you farming for years to come.

An annual cash flow projection is a very useful tool for a farm. You plot out on a month-by-month basis when cash income will be received and when cash expenses will need to be paid. The projection will help you anticipate in which months your cash inflow will not meet your needs. Most importantly, you will be able to plan ahead to cover the cash shortfalls without tapping credit cards or leaving unpaid bills, and possibly wrecking your credit score.

A cash flow projection is a prediction of all of the cash that is likely to flow into and out of the farm operation in the month, quarter or year ahead.

Cash flow knowledge check

Draw a line from one area of the cash flow statement to match with the locations on a cash flow, matching definitions with the word.

Cash flow negative, profitable	Cash income
Cash flow positive, not profitable	Cash expense
Milk sales	Projections for cash flow
Repairs	Long-term concerns
Pro-forma cash flow	Short-term concerns

Analyze cash flow and profitability.

Analyzing CASH FLOW

Breaking out the farm's cash flow will tell you if the farm operation paid its own way or was subsidized by other sources of cash such as off-farm income, proceeds from new loans or with sales of capital assets such as equipment or breeding livestock.

To analyze cash flow, we break it out into three distinct categories:

CASH FLOW FROM OPERATIONS

Cash flow from operations includes all of the dollars that flow in and out of the farm in normal, day-to-day activities. It includes cash generated from the sale of milk, fed cattle, grain, vegetables and other products. Cash might also be generated from government payments and custom work. Cash flows out as you pay for seed, feed, fertilizer, fuel and other operating expenses.

- We want cash flow from operations to be positive every year.

CASH FLOW FROM INVESTING ACTIVITIES

Cash flow from investing activities refers to capital investments in the farm, not the dividends you received from investments in mutual funds. Cash inflow in this category generally comes from sales of machinery, breeding livestock or land. Cash flows out to pay for purchases of these capital investments.

- Cash flow from investing activities — whether positive or negative — can offer clues to other aspects of farm management.

CASH FLOW FROM FINANCING ACTIVITIES

Cash flow from financing activities considers funds provided by ag lenders as well as funds made available by the farm owner. Cash inflow comes from new loans and from off-farm income. Off-farm income is included because it's money that could be tapped by the farm if needed. Cash flows out to make principal and interest payments on loans and to provide for cash withdrawals by the farm owner.

- It's helpful to look for patterns in cash flow from financing activities. For example: Are loan payments being made on time? Are principal balances being paid down faster than new loans are being taken out? Is the owner able to take a regular cash draw out of the farm, or is he or she putting more money into the farm?

Several key financial components used to calculate profitability include...

- ANNUAL BALANCE SHEET
- INCOME STATEMENT (aka Profit & Loss)
- TOTAL FARM ASSETS
- FARM OWNER'S EQUITY
- NET FARM INCOME

These numbers can be used to calculate:

RATE OF RETURN ON ASSETS

RATE OF RETURN ON EQUITY

PROFITABILITY

An operation is legitimately profitable if:

- Rate of return on assets is higher than the interest rate being paid on farm loans.
- Rate of return on equity is higher than the rate of return on assets.

Profitability tells us if the farm is a wise investment. The net value of the operation's production each year is enough to justify whether or not to tie up the owner's equity or taking on debt to finance farm assets.

CASH FLOW

Adequate cash flow covers:

- All operating expenses
- Family living costs
- Income tax and Social Security payments
- Loan payments
- Replacing equipment
- Cash left to put into reserves

Cash flow doesn't tell us if the farm is a good investment — only if it can sustain itself.

Cash flow and profitability need to be evaluated separately. An operation needs both to survive and thrive from one generation to the next.

Components of cash flow.

Beginning Cash Balance: At the beginning of the time covered in the cash flow statement, the sum of all cash available to the farm: checking, savings, money market funds and hedging accounts.

Cash Inflows: Total amount of cash farm income; do not make any accrual adjustments.

Cash Outflows: Total amount of cash operating expenses paid.

Net Cash from Operations: The total of your cash generated by operations. Net Cash from Operations = Gross Farm Income - Cash Paid Out for Operating Expenses

Cash From Investing: Purchases and sales of capital assets. Sales of capital assets will result in additional cash for your operation while purchases will result in less cash for your operation. Examples: machinery, land or breeding livestock.

Cash Flow from Financing: Financing activities include any money borrowed and paid back from a lender, investor, credit cards or owner's personal investment. When you borrow money, it will be listed as a cash gain as the money is coming into the operation. When you pay your interest and principal, those payments will show here as a cash loss. Here you'll also include any off-farm income and any draws you took for family living expenses.

Net Change in Cash: Simply put, this shows exactly how your year went in terms of cash, not taking any cash you had before the term started into account.

Surplus or Deficit (Ending Cash Balance): This is your final cash figure including your beginning cash balance.

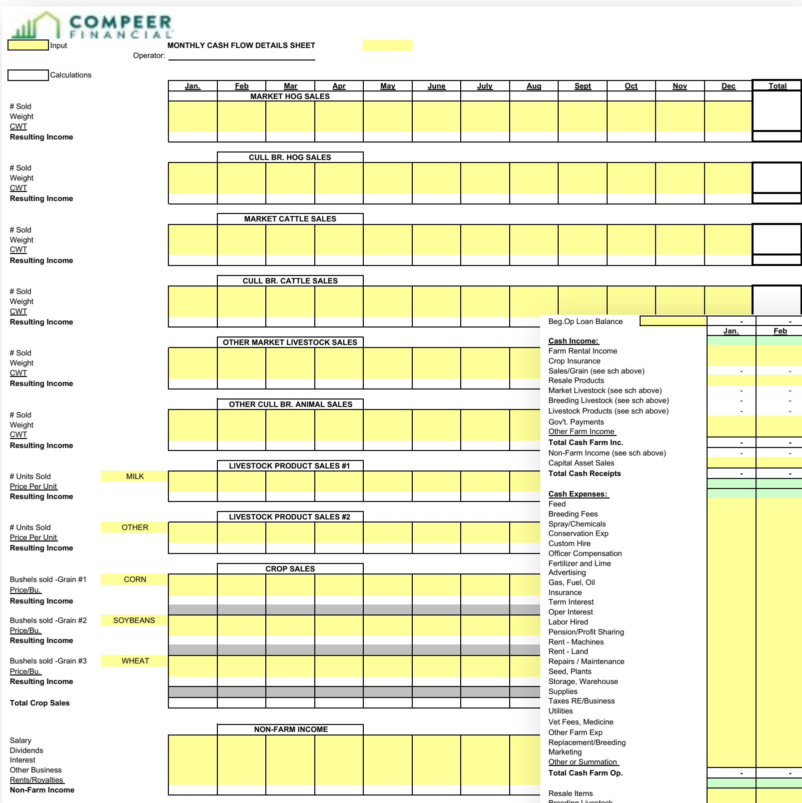
Fiscal Year 20XX	Annual Total
Beginning Cash Balance	**$5,000**
Cash Inflows	
Corn	33,600
Milk	256,000
Cull stock	
Cull cows	18,480
Misc. livestock	
Bull calves	3,840
Govt. payments	3,000
Operations Inflows	**$314,920**
Cash Outflows	
Seed	8,820
Fertility	20,250
Weed & pest treatments	5,265
Crop insurance	3,510
Custom hire – crops	5,625
Feed	79,987
Breeding	3,200
Veterinary	9,596
Supplies	19,992
Marketing	
Checkoff	2,160
Milk hauling	2,880
Other marketing	560
Fuels & oil	6,000
Repairs	10,000
Custom hire – other	6,020
Labor	15,000
Land taxes	4,000
Farm insurance	2,000
Utilities	7,200
Certification feeds	3,000
Income taxes	6,000
Operations Outflows	**$221,065**
Net Cash from Operations	**$93,855**
Cash from Investing	
Capital purchases	(20,000)
Capital Sales	22,000
Net Cash Flow Investing	**$2,000**
Cash Flow from Financing	
Operating loan payments	(11,372)
Machinery loan payments	(63,686)
Off-farm wages	20,000
Living/draw	(36,000)
Net Cash Flow from Financing	**$(91,058)**
Net Change in Cash	**$4,797**
Surplus or Deficit (Ending Cash Balance)	**$9,797**

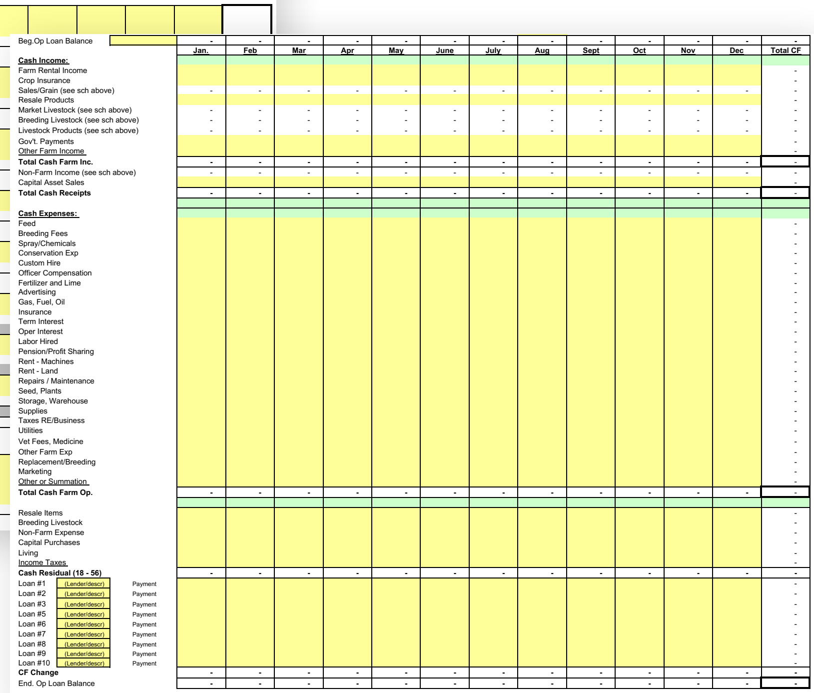
*Income statement adapted from *Fearless Farm Finances*, 2nd ed. Padgham, Case and Dietmann.

Create your own cash flow.

Below are images of what the cash flow document can look like. Create your own electronic cash flow statement using is a link below:

Cash Flow Projection Template





COMPEER FINANCIAL

COST OF PRODUCTION

What is cost of production?

Cost of production basics.

Cost of production narrative.

Questions for my Compeer Team ______________________________

PRO TIP

If your farm produces multiple products, you'll want to develop a separate cost of production for each enterprise.

What is cost of production?

Knowing your farm's **cost of production** comes with multiple advantages. You'll be able to use these numbers to:

What is cost of production?

Cost of production is the amount of money (input) required to produce product (output) on your farm.

- Create a foundation for a solid marketing plan
- Purchase the right level of insurance coverage
- Identify opportunities to grow your business
- Determine where you may be able to make cost adjustments
- Predict how your business will respond to specific changes
- Develop your breakeven analysis
- Benchmark your farm's production efficiency year over year
- Have meaningful conversations with your lender and other team members about the upcoming year on your farm

Cost of production basics

To find the **cost of production** on your farm, you will need two sets of information variable costs and fixed costs.

VARIABLE COSTS

A variable cost is directly related to the product you are producing and is usually fairly easy to identify. These costs change with the amount of production you are producing.

- For example, your seed costs are variable. The cost of seed will change based on if you're trying to plant 100 acres of corn or 1,000 acres of corn. It will also change based on the type and quality of seed you're purchasing this year.

FIXED COSTS

A fixed cost, or overhead, is a cost to your business that would exist no matter how many units you do or do not produce. These costs are items you'd pay even if you decided not to do any fieldwork or raise any livestock at all.

Many fixed costs are covered in what is called the "**DIRTI 5**"

D = Depreciation
I = Interest
R = Repairs
T = Taxes
I = Insurance

Here you also have to account for

- Land (cash rent or principal/interest payments)
- Machinery and equipment
- Family living costs

Fixed costs can be a bit tricky to accurately account for, especially if your farm has multiple enterprises.

Cost of production considerations

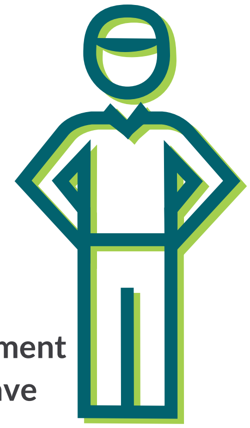
There are multiple ways to consider your **cost of production**: whole farm, a per unit basis or a per enterprise basis.

Consider how many ways you'd like to determine your own cost of production:

- ☐ Whole farm
- ☐ Per field
- ☐ Per type of crop
- ☐ Per acre
- ☐ Per head
- ☐ Per cwt.
- ☐ Per lb.
- ☐ Others ___________________________

What will each of these pieces of information tell you about your operation?

Case Study: Cost of production



This is Dave. Dave has a cash crop farm and wants to know the cost of production on a brand-new rented field he planted corn in this year.

Dave set time on his calendar to work on financial management today. What are the first pieces of financial information Dave should try to find to determine his cost of production?

- [ ] Expenses for inputs (variable) costs. This includes items like seed, fertilizer and hired help.

  Yes! Understanding input costs is the first step in determining cost of production.

- [ ] Last three years' worth of balance sheets.

  Shoot. Balance sheets are important, but not a component of your cost of production calculation.

Dave located all of his variable costs. What's the next big category of information Dave needs to find?

- [ ] Benchmarking data; how are other farms similar to his doing?

  Sorry. Comparing your operation to others can have some benefits and improve your operating practices. However, benchmark data isn't needed for cost of production.

- [ ] Fixed costs or overhead. This includes items like rent paid for a piece of land and the DIRTI5: Depreciation, Interest, Repairs, Taxes and Insurance.

  Right! Overhead costs are an important part of the equation.

COST OF PRODUCTION *continued*

Dave also grows soybeans and corn on other fields he owns. What can he do to isolate the costs for just one particular field?

- ☐ Break down costs and use depreciation tables, numbers from his lender, financial statements and ratios of what was used on the field.

  Yes! There are many puzzle pieces you can put together to create a realistic picture of what your costs are, even for individual fields.

- ☐ It's complicated. Dave can ask for some help in the form of his Compeer Financial team member or reference the **Margin Manager** tool to keep moving.

  You got it! It's complicated, but you can always ask for some help to make sure you're on the right track.

Now that Dave knows his cost of production for this one rented field, how can he apply this to his financial management on the farm?

- ☐ Spend like crazy to make sure this piece of land yields the most expensive corn produced for three counties.

  Creating expensive corn isn't usually the goal. Let's take another look.

- ☐ Determine if the cost of production is reasonable. Next year, he may decide to plant something else, modify his variable costs or decide not to rent that land.

  Perfect! The more you know, the better your financial management will be.

Congratulations, Dave!

BREAKEVEN

What is breakeven?

Steps to create your breakeven price.

FIND YOUR BREAKEVEN PRICE.

Knowing your farm's **breakeven price** is crucial for all types of operations. Crop, livestock, dairy, specialty or diversified operations will all benefit from this financial analysis.

In order to calculate your breakeven on a single product you produce, you'll need a few pieces of information. If your farm produces multiple products, you'll want to develop a separate breakeven for each product. Use our **Margin Manager** to be able to see how different costs can impact your breakeven number and use that to improve your farm financial management.

Questions for my Compeer Team ____

PRO TIP

Consider what your breakeven price will mean for you.

Will you be able to better market your products? When and how will you use this information? Having a plan now will help you make decisions based on the numbers.

What is breakeven?

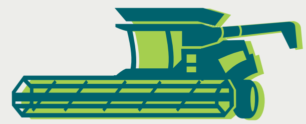
What are the operating expenses?

You've learned about operating expenses in previous chapters, but be sure to include:

- Taxes
- Insurance
- Interest
- Crop insurance
- Cash rent
- Labor
- All other input costs

What is a BREAKEVEN PRICE?

The breakeven price is the amount you need to recoup for your product in order for you to cover all operational costs and inputs.



Depreciation

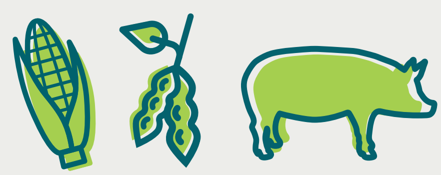
Be sure depreciation has been taken into account on your expense list. While you might not be out the cash today, that's where you're accounting for wear and tear on your assets. Someday, you'll need to replace or repair them.

Off-Farm Income

Gather your annual off-farm income amount. You'll add this in as it often offsets some of your family living draw.

Family Living Draw

Also known as Cost of Family Living, this is the amount of money the farm contributes to pay for non-farm family-related expenses.



How much are you planning to produce?

1. Number of producing units (head of livestock or number of acres)
2. Realistic yield (bushels or cwt. for example)

Steps to create your breakeven price

This example shows how to develop your **breakeven price** using a cash crop example. The same method can be used for anything you produce — from milk to livestock.

Total Revenue per Acre: To find revenue per acre, you'll need to know your estimated yield, cash price per bushel and the amount of any government payments for those acres.

Total Direct Expense per Acre: Direct expenses are those costs you incurred because of the product you produced. They often include crop insurance, labor, fertilizer, seed, storage, trucking and many more unique expenses to your operation. You'll add all these expenses up and divide them by the number of acres.

Total Capital Expense per Acre: The total cost of your owned and rented capital (land, rent, real estate taxes and machinery costs) attributed to those acres.

Net Family Living Expenses: Family living expenses are costs incurred by you and your family unrelated to the farm. You'll also add in any off-farm income that can offset the farm's obligation to cover family living costs.

Breakeven Price per Bushel: The amount of income each bushel will need to generate in order for your income to offset your costs.

		CORN	SOYBEANS
SAMPLE		**20XX**	**20XX**
ACRES		**700**	**500**
Revenue Estimate per Acre		**Expected Yield**	**Expected Yield**
YIELD Bushel/Acre		200	60
Cash Price $/Bushel	$	3.60	8.50
Crop Revenue/Acre	$	720.00	510.00
Govt Payment (Avg./Acres)	$	0.00	0.00
Total Revenue per Acre	$	**720.00**	**510.00**
Expense Estimate per Acre			
Chemicals	$	36.00	47.00
Crop Insurance	$	18.00	20.00
Custom Hire	$	17.00	13.00
Labor Hired & Employee Benefits	$	15.00	15.00
Fertilizer & Lime	$	115.00	22.00
Gas/Fuel/Oil	$	26.00	18.00
Insurance	$	10.00	7.00
Operating Interest	$	16.00	10.00
Repairs/Maintenance	$	31.00	16.00
Seed/Plants	$	113.00	57.00
Storage/Drying/Warehouse	$	23.00	2.00
Supplies	$	0.00	0.00
Trucking/Freight	$	12.00	8.00
Utilities	$	7.00	4.00
Other Expense	$	12.00	8.00
Other Expense	$	0.00	0.00
Total Direct Expenses/Acre	$	**451.00**	**247.00**
Land Cost (P&I+Rent+RE Taxes)	$	235.00	235.00
Machinery Cost (P&I+Lease)	$	45.00	45.00
Total Capital Expenses/Acre	$	**280.00**	**280.00**
Family Living Expense	$	30,000.00	30,000.00
Non-Farm Income & Wages	$	30,000.00	30,000.00
Net Family Living Expenses	$	**0.00**	**0.00**
Total Expense per Acre	$	**731.00**	**527.00**
Breakeven Price per Bushel	$	**3.66**	**8.78**

Tools to help you determine your breakeven

Compeer knows that tracking your profitability in this ever-changing market is more important than ever. We created two tools, the Grain Margin Manager and the Dairy Margin Manager, to help you manage risk on your farm. These easy-to-use programs help you to input accurate numbers to know when you will break even.

Grain Margin Manager features:

- Cash land calculator - Helps you to determine the value of your land on a per acre basis.
- Machinery calculator - Input various fields including loan and lease payments and determine the cost of your machinery on a per acre basis.
- Whole farm budget - Determine your projected income and expenses.
- Grain marketing & insurance - Track and plan grain sales.

Dairy Margin Manager features:

- Whole farm budget – Customize future projections and determine projected income expenses.
- Projected cash flow summary – Allows producers to do scenario analysis to make cash flow projections for the future and estimate breakevens for the coming year.
- Profit margin per cow – Understand projected milk profits per cow based on total production sold per cow at various milk price levels.
- Debt payment analysis – Helps to determine current debt payment requirements and obligations.

To access the Margin Manager, go to the following links.
Grain Margin Manager: www.compeer.com/Grain-Margin-Manager
Dairy Margin Manager: www.compeer.com/Dairy-Margin-Manager

Fill out the appropriate fields and you will receive a download to save to your computer.

KEY RATIOS

What are key ratios?

Understanding key ratios.

Questions for my Compeer Team

PRO TIP

There are many ratios that can be used to analyze all the financial data you've compiled. We've highlighted a few key ratios you'll want to know. But there are many more ways to slice and dice this information. Don't rely on just a couple data points to get a full financial picture

What are key ratios?

Now that you've done the work of creating your three key financial statements (**balance sheet**, **income statement and cash flow**) and you've determined your cost of production, you're ready to put all this data to work for you and your farm.

Ratios are calculations based on your financial data that allow you to determine the financial health of your farm. Determining these ratios will allow you to use benchmark data to compare your farm year over year or compare to other similar operations.

- **Current Ratio** = Total Current Farm Assets/Total Current Farm Liabilities
- **Equity-to-Assets-Ratio** = Farm Net Worth/Total Farm Assets
- **Operating Profit Margin** = Net Cash Farm Income/Gross Farm Income
- **Capital Debt Repayment** is your farm's ability to meet its debt obligation.

Understanding key ratios: Current Ratio

Current Ratio = Total Current Farm Assets/Total Current Farm Liabilities

Using our example from the Balance Sheet chapter,

Current Ratio = $442,500/320,450 = 1.38

Example Total Current Farm Assets: $442,500
Example Total Current Farm Liabilities: $320,450

This shows that your current assets would cover your current liabilities 1.38 times over.

- Your current ratio should be more than 1. There are times during the farming cycle where this may not be true, so it is important to remember that a single balance sheet alone is just a snapshot in time and not indicative of a long-term trend.
- If your ratio is less than 1, it means you wouldn't have enough cash from your current assets to cover all of your bills and loan payments due this year. For many farmers, having a current ratio of 2 or more is a comfortable number to target.

Calculate your Current Ratio

__________	÷	__________	=	__________
Current Farm Assets	÷	Current Farm Liabilities	=	Current Ratio

What does your Current Ratio tell you about your liquidity? Do you want to make any changes?

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Understanding key ratios: Equity-to-Assets-Ratio

Equity-to-Assets-Ratio = Farm Net Worth/Total Farm Assets

Using our example from the Balance Sheet chapter,

Equity-to-Asset-Ratio= 2,408,250/3,780,000 = 0.6371

Example Farm Total Farm Assets: $3,780,000

Example Farm Net Worth: $2,408,350

This shows you own 63.7% of all your farm's assets

- Over time, you'll typically see the Equity-to-Assets-Ratio go up as you gain more and more equity in your farm. If you were to purchase additional assets or plan an expansion, this number may go back down again until you are able to pay off more of that new debt.
- A general rule of thumb for an operation that is not currently expanding or contracting is to aim for an Equity-to-Assets-Ratio about equal to your age. For example, if you are 42, you want a 42% Equity-to-Assets-Ratio. There are some clear exceptions to this rule based on when you entered the business, when you took on the majority ownership and many other factors.

Calculate your Equity-to -Assets-Ratio

____________	÷	____________	=	____________
Total Farm Net Worth	÷	Total Farm Assets	=	Equity-to-Assets-Ratio

What does your Equity-to-Assets-Ratio tell you about your solvency? Do you want to make any changes?

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Understanding key ratios: Operating Profit Margin

Operating Profit Margin = Net Cash Farm Income/Gross Farm Income

Using our example from the Income Statement chapter,

Operating Profit Margin = 73,227/314,920 = 0.2325

Example Net Cash Farm Income: $73,227
Example Gross Farm Income: $314,920

This shows that 23 cents of every dollar of income is profit that can be used to pay term debt principal, cover living expenses or save.

- This number is especially helpful in managing your farm's day-to-day operating plan as you can easily play with your expense numbers to see how increasing or decreasing expenses will change how much of each dollar earned stays in your pocket.
- For example, if you're contemplating adding another part-time employee on the farm, you can add in their labor expense and see how it changes the amount of each dollar you get to keep in your pocket. Then you can determine if the new hired labor is an affordable and worthwhile expense.
- Some factors in your operating profit margin are not in your control. Unless you're contracting your prices and using risk management tools to ensure a floor price for commodities, your operating profit margin is vulnerable to price fluctuations and can easily change.

Calculate your Operating Profit Margin

_______________ ÷ _______________ = _______________

Net Cash Farm Income ÷ Gross Farm Income = Operating Profit Margin

What does your Operating Profit Margin tell you about your profitability? If you want to make changes, how will you do it?

Understanding key ratios: Capital Debt Repayment Capacity

Capital Debt Repayment Capacity =

(Net Farm Income + Depreciation +Term Interest + Non-Farm Income – Owner Draws – Income Tax)/
(Principal + Interest on Term Debt + Working Capital Deficiency + Capital Asset Replacement)

This calculation is done in two parts. First, we calculate:
= Net Farm Income + Depreciation + Term Interest + Non-Farm Income – Owner Draws – Income Tax
= 73,227 + 22,700 + 1,150 + 60,000 – 60,000 – 2,000 = 95,077

Next we calculate the second part:
= Principal + Interest on Term Debt + Working Capital Deficiency + Capital Asset Replacement
= 70,550 + 1,150 + 0 + 2,000 = 73,700

Finally, divide first calculation by second calculation:
= 95,077 / 73,700 = 1.290

This shows your Capital Debt Repayment Capacity is 129%.

- The Capital Debt Repayment Capacity is a key indicator we use at Compeer Financial in helping you manage your farm finances. Essentially, the CDRC is your farm's ability to meet its debt obligation.
- Each business operates with different abilities to service debt. This ratio provides insight into your ability to service your current debt level, and is a key indicator as to how well you are staged to take on any additional debt to grow your business.

COST OF FAMILY LIVING

What is cost of family living?

Develop an accurate cost of family living.

Questions for my Compeer Team

PRO TIP

Cost of family living is often hard to determine if you haven't been keeping separate checking accounts for farm and family expenses. So set up separate accounts as soon as possible.

What is the cost of family living?

Cost of family living is the amount of money it takes to support your family each year.

TRUE COSTS

It is common to underestimate the true cost of family living. But it is crucial to the financial success of both your family and your farm to be honest about what your family's needs are.

THE RIGHT TOOLS FOR THE JOB

Traditional family budgeting tools may not always be the best option for farm families. While the standard of living on farms has become more closely aligned with that of nonfarm families, the nature of cash flow on many farms makes budgeting more complicated.

COMMUNICATE PRIORITIES

The needs of the farm and the needs of the family and home may often compete for priority. Having open communication about the costs associated with managing a household and what the expectations are for any needed repairs or unexpected cost can save a lot of headaches down the road.

Develop an accurate cost of family living.

Just as your farm is unique, your family's needs and expectations for living standards will be specific to you. If you don't feel confident about understanding your family's annual spending, here are some tools to get you started.

Review your bank statements. While a tedious task, technology allows us to look back at our exact spending habits and see where every dime went. If you're making purchases via a third-party payment app like PayPal or Venmo, be sure to track those records. Using a lot of cash? You may want to opt for one of the other methods if you don't have good receipts. It can be extremely difficult to get an accurate number from memory.

Make sure you have separate bank accounts for farm expenses and personal/family expenses. If you don't already, open a free account to get started. Estimate what you think your cost of family living is for a month and put that amount in the family account each month. Use that account exclusively for family costs and don't use your farm account for anything that isn't farm based.

- After a few weeks, check in, have you spent what you thought you'd spend? Have you had to add more money to the account? You'll need a bit of time to get an accurate average, but after 3-6 months, you'll likely have a good feel for your cost of family living based on the spending in this family account.

Looking for a quick fix? The average family will spend $25,000 annually per adult in the household and an additional $10,000 per child. You'll want to adjust these figures if you have any large spends like daycare or college tuition.

What should you do about family expenses that are joined with farm expenses?

It is typical for family living costs to seem to be covered by the farm as a business expense: a home is rolled into the farm mortgage or a vehicle is classified as a farm truck. It is not always easy to catch these pieces and account for them properly.

How should you do it? The best choice is to estimate a percentage of those full costs.

For example:

- How often are you driving the truck for personal reasons?

  15% of the time.

  Then allocate 15% of the costs associated with that truck to your family living costs.

While it is nearly impossible to arrive at an exact figure, you don't want to forget about these components.

Account for family living expense.

Below is a list of items to remember when reviewing your cost of family living. Fill in what is appropriate for you.

Food (including restaurants, groceries, etc.)	$
Utilities & maintenance	$
Insurance (life, auto and other)	$
Health insurance and health care cost	$
Clothing/ Personal items	$
Home repairs	$
Gifts & donations	$
Education and extracurricular needs	$
Recreation	$
Technology and associated services	$

Congratulations!

You've completed your
FARM FINANCIALS WORKBOOK.
You now have a solid picture of your farm's financial health.

For more tools and information,
visit mycompeer.com
or call (844) 426-6733.

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