

THE BALANCE SHEET

by

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MP-9

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I am going to discuss what is probably the most important financial statement in agriculture in particular and business in general. It is called the balance sheet. The concept of it is simple: it subtracts what you owe from what you own. The difference is called the net worth.

I have heard farmers and ranchers say they don't really know what their operations are worth. Most know quite well how much agricultural land is selling for in their area. But they also know that if they sold out, Uncle Sam would take a big chunk. This may cause confusion.

Information from their accountants can also be confusing. Many accountants don't understand agriculture. Most accountant-prepared balance sheets have land valued at what was paid for it. If you bought some irrigated ground for \$50 per acre 30 years ago some accountants will use that value in the balance sheet even if it's worth \$2000 per acre today.

I'm passing out copies of an article I clipped from the Wall Street Journal last spring. It says that Idaho has more millionaires per capita than any U.S. state. I know that I am not one of them but I also know that some of you in this room are. A few of you may have a net worth in excess of a million dollars and not realize it.

My purpose today is not to get you to figure out how much you are worth. What I hope to do is get you to better understand what a farm or ranch balance sheet is, how it can be prepared, and how it can be used in your business.

In the past, agricultural lenders didn't usually require detailed financial statements from their clients such as lenders to other businesses always have.

*Talk given at the Farm and Ranch Executive Seminar, Sun Valley, Idaho, January 21, 1982.

Due to rising costs, low profit margins, uncertain commodity prices, and huge increases in farm debt agricultural lenders are changing the way they do business. The majority now want to at least see a balance sheet and many want to see much more financial information.

Lenders are getting financial information in three ways:

- (1) from the farmer's accountant
- (2) by filling out forms with the farmer in his office (the upside down balance sheet)
- (3) by requiring the client to provide financial statements.

My opinion is that it is in your best interest to do it yourself or, at the very least, understand how some other well-qualified person is doing it. For a balance sheet to be any good it needs to be accurate. That is your responsibility.

Lenders need a balance sheet to analyze the borrower's financial position and the collateral that is available to back up a loan. Different lenders prepare balance sheets in different ways. Many banks use their own forms exclusively. Most, however, recognize the value of having one universal form used by everyone.

A set of financial statements has recently been developed that is gradually becoming accepted as the universal form. The set is called the Coordinated Financial Statements for Agriculture. I am passing out some order forms for this. Other forms can also work well and I am not trying to sell this system. However, for the rest of my talk I will be talking about the balance sheet from this set.

Next, I am going to show some slides regarding the balance sheet. Gene Nelson, the gentleman here from Oregon State University gets the credit for making these slides. I'll give a narrative along with the slides.

SLIDES 1 - 42

I am handing out a balance sheet for an operation that doesn't exist. Wilson Gray and I designed this operation in our heads. It is a potato and cattle operation that maybe some of you can relate to.

I want to see if you have been listening. Notice that on the front page the market value net worth figure has not been filled in. I want each of you to do this calculation. I'll wait for the correct answer. (USE OVERHEAD) The correct answer is \$1,557,208.

I will now continue with the slides.

SLIDES 43 - 80

Let's again look at the example balance sheet. On the back of the first page I want you to calculate the change in net worth due to inflation. The answer is \$57,283. You may want to know where some of the numbers in this balance sheet come from. These four overhead transparencies show the nine supporting schedules that were used to construct this balance sheet.

Some of you may not understand how the contingent income tax liabilities were calculated. The following three overhead transparencies show the calculations.

Let's now calculate some of the financial figures for this operation. We earlier calculated the net worth to be \$1,557,208. I want each of you to now calculate the current ratio (2.9), the debt to worth ratio (.37), and the current debt ratio (.28).

Now let's assume that this operation decides to buy 500 acres of irrigated land at \$900,000. They sell some of their crops in storage and make a down payment of \$300,000. They take out a loan for the remaining \$600,000.

What is the new net worth? (no change)

What is the new current ratio? It drops from 2.9:1 to 1.1:1.

Remember: bankers like to see a ratio of 2:1 or higher. Is this a wise decision? What else can he do?

The debt to worth ratio increases from .37 to .48. The current debt ratio drops from .28 to .14. Both are still acceptable.

The point is that many of the decisions you make can affect your financial situation. Before making major decisions such as debt restructuring or buying land you may want to see what it does to your balance sheet.

BALANCE SHEET

WHAT YOU OWN (ASSETS)

MINUS

WHAT YOU OWE (LIABILITIES)

EQUALS

NET WORTH

CONTINGENT INCOME TAX LIABILITY CALCULATION

- (1) FIND THE AMOUNT YOU WOULD PAY TAX ON.
- (2) FIND THE RATE YOU WOULD BE TAXED AT.
- (3) MULTIPLY THE AMOUNT IN (1) BY THE RATE IN (2).

(1) AMOUNT FOR CURRENT ASSET TAX LIABILITY

CURRENT TAXABLE ASSETS:

LIVESTOCK	14,791	
CROPS AND FEED	290,944	
SUPPLIES	4,240	
PREPAID EXPENSES	1,400	
TOTAL		<u>311,375</u>

CURRENT DEDUCTIBLE LIABILITIES:

ACCOUNTS PAYABLE	3,060	
ACCRUED INTEREST	23,161	
ACCRUED PROPERTY TAX	1,607	
ACCRUED REAL ESTATE TAX	6,034	
TOTAL		<u>33,862</u>

AMOUNT TO PAY TAX ON 277,513

(2) FINDING THE MARGINAL TAX RATE

USE AVERAGE OR TYPICAL-YEAR INCOME

U.S. CORPORATE INCOME TAX RATES (1982)

FIRST \$25,000	16%
\$25,000 - 50,000	20%
\$50,001 - 75,000	30%
\$75,001 - \$100,000	40%
OVER \$100,000	46%

IDAHO CORPORATE INCOME TAX RATE = FLAT 6.5%

IDAHO POTATO AND CATTLE EXAMPLE

1981 INCOME OF \$140,127 WAS UNUSUAL

INCOME OF \$50,000 TO \$75,000 MORE TYPICAL

CALCULATION

$$\begin{aligned} & \text{FEDERAL RATE} + \text{STATE RATE} (1 - \text{FEDERAL RATE}) \\ & = .30 + .065 (1 - .30) \\ & = .30 + .0455 \\ & = \underline{\underline{.3455}} \end{aligned}$$

(3) CONTINGENT INCOME TAX LIABILITY ON CURRENT ASSETS

$$277,513 \times .35 = \underline{\underline{97,129.55}}$$

OTHER CONTINGENT INCOME TAX LIABILITIES

1. MARKETABLE SECURITIES (CAPITAL GAIN)

$$(26,000 - 6500) \times .4 \times .35 = \underline{\underline{\$2,730}}$$

2. MACHINERY

$$(300,750 - 254,763) \times .35 = \underline{\underline{\$16,095}}$$

3. BREEDING STOCK (CAPITAL GAIN)

$$30,691 \times .4 \times .35 = \underline{\underline{\$4,297}}$$

4. REAL ESTATE (CAPITAL GAIN)

$$(1,270,200 - 429,600) \times .4 \times .35 = \underline{\underline{\$117,684}}$$

IDAHO POTATO & CATTLE

CALCULATE THE FOLLOWING AT MARKET VALUE

1. NET WORTH = 1,557,208
2. CURRENT RATIO = 2.9
3. DEBT TO WORTH RATIO = .37
4. CURRENT DEBT RATIO = .28

THE OPERATION DECIDES TO BUY 500 ACRES OF IRRIGATED LAND FOR \$900,000. A DOWN PAYMENT OF \$300,000 COMES FROM CASH ON HAND AND CROPS SOLD OUT OF STORAGE. A LOAN FOR \$600,000 IS TAKEN. CALCULATE THE FOLLOWING AT MARKET VALUE.

1. NET WORTH = same
2. CURRENT RATIO = 1.1
3. DEBT TO WORTH = .48
4. CURRENT DEBT RATIO = .14



SCHEDULE 1 - SECURITIES

No. of Shares or Face Value	Description	Date Acquired	Percent Owned	Cost or Basis		Current Market Value	
				Per Unit	Total	Per Unit	Total
MARKETABLE							
200	Farmland State Bank	1967	100	\$ 12.50	\$ 2,500	\$ 50.00	\$ 10,000
800	United Oil	1972	100	5.00	4,000	20.00	16,000
				TOTAL		\$ 6,500	\$ 26,000
NOT READILY MARKETABLE							
5,985	Federal Land Bank	1970	100	\$ 5.00	\$ 29,925	\$ 5.00	\$ 29,925
				TOTAL		\$ 29,925	\$ 29,925

SCHEDULE 2 - SUPPLIES

SCHEDULE 4 - BREEDING STOCK

Item	Quantity	Value	Number	Description	Age	Wt.	\$/Unit	Value	
Diesel Fuel	1000 gal	\$ 1,100	10	Heifer Calves	1/2	470	\$249.10	\$ 2,491	
Gasoline	750 gal	900	1	Bull	3	1500	1200	1,200	
Oil	100 gal	300	10	Red Heifers	1 1/2	850	500	5,000	
Grease	10 gal	40	40	Cows	3-5	1000	550	22,000	
Parts	-	1,300							
Veterinary - Medical		600							
		TOTAL						\$ 4,200	

SCHEDULE 3 - PERSONAL & RECREATIONAL VEHICLES

Make & Model	Year	Value
		\$
		TOTAL
		\$

SCHEDULE 5 — FARM REAL ESTATE

OWNED:	Legal Description	Title Held in Name of	Percent Owned	Date Acquired	Acres	Cost or Basis	Accumulated Depreciation	Book Value	Estim. Mkt. V.
act 1 Land Residence	5 1/2 Sec 20, Sec 21	Ind. Pat. & Cat.	100	1964	960	\$ 360,000	\$	\$ 360,000	\$1,152,000
Service bldgs.			100	1964		25,000	25,000	0	
Improvements	Storage		100	1975		100,000	32,400	69,600	110,000
act 2:	Barn & Corrals		100	1970		2,800	2,800	0	3,200
TOTAL					960	\$ 487,800	\$ 59,200	\$ 429,600	\$ 1,270,200

RENTED: Legal Description	Landlord	Type of Lease	Expires	Acres	Annul Cash R
					\$
TOTAL					\$

SCHEDULE 6 — NON-FARM REAL ESTATE

Description	Title Held in Name of	Percent Owned	Date Acquired	Cost or Basis	Accumulated Depreciation	Book Value	Estim. Mkt. V.
				\$	\$	\$	\$
TOTAL				\$	\$	\$	\$

- Personal
- Business
- Consolidated

BALANCE SHEET

As of Dec. 31, 198

Name Idaho Potato & Cattle

Address _____

Phone _____

ASSETS					LIABILITIES AND NET WORTH						
Current Assets					Modified Cost	Market Value	Current Liabilities			Modified Cost	Market Value
Cash (on hand) or in checking					\$ 20,127	\$ 20,127	Accounts payable:				
Savings accounts & time certificates					120,000	120,000	Labor \$ 1,200	Feed & seed \$ 300			
Hedging account equity							Repairs 400	Fert & chem			
Marketable bonds & securities (Sch. 1)					6,500	26,000	Storage	Fuel & oil 1,000			
Notes & accounts receivable (good)							Other	Mach hire	\$ 3,060	\$ 3,060	
Livestock & poultry to be sold:							Medical & other personal				
Kind	No	Avg Wt	S/Unit	Value			Notes payable within 12 months				
							(to whom, maturity, purpose)				
Steers	22	500	.62	6,820							
Heifers	10	470	.53	2,491							
Cows	10	1000	.37	3,700							
Bull	1	1700	.50	850							
Cull Hf.	2	850	.547	930							
					14,791	14,791					
Crops and feed:							Principal portion of longer term debts				
Item	Quant	Unit	S/Unit	Value			due within 12 months (Sch. 8)				
							Intermediate		18,322	18,322	
Watoes	40,000	cwt	6.00	240,000			Long term		9,000	9,000	
Wheat	6,000	bu	3.50	21,000			Estimated accrued interest on:				
Hay	145	T	60	8,700			Accounts \$	Notes \$			
Barley	4,000	cwt	5.00	20,000			Intermediate liabilities	\$ 2,567			
B. Barley	216	cwt	5.50	1,188			Long term liabilities	\$20,594	23,161	23,161	
Min. sup	17	cwt	3.28	56	290,944	290,944	Estimated accrued tax liability:				
							Property		1,900	1,900	
Cash investment in growing crops:							Real estate		7,600	7,600	
Crop	Acres	S/Ac	Value				Employer payroll withholdings				
							Income & Soc. Sec				
							Accrued rents & lease payments				
							Other (including relatives)				
Supplies (Sch. 2)				4,240	4,240		Contingent income tax liability:				
Prepaid expenses				1,400	1,400		Current assets			97,130	
Other							Marketable securities				
TOTAL CURRENT ASSETS					\$ 458,002	\$ 477,502	TOTAL CURRENT LIABILITIES			\$ 63,043	\$16,5
Intermediate Assets							Intermediate Liabilities (Sch. 8)				
Notes & accounts receivable (good)					\$ 12,500	\$ 12,500	(Principal due beyond 12 months)				
Machinery, equipment, trucks (Sch. 9):						300,750	Notes payable		\$ 19,881	\$ 19,881	
Cost or Basis				\$462,925		Sales contracts					
Less accumulated dep				254,763		Life insurance policy loans		5,000	5,000		
Breeding stock (Sch. 4)				30,691	30,691	Other					
Retirement accounts (IRA, HR-10)						Contingent income tax liability:					
Cash value of life insurance (Sch. 7)				13,500	13,500	Machinery			16,095		
Securities not readily mktable (Sch. 1)				29,925	29,925	Breeding stock			4,297		
Personal & recreational vehicles (Sch. 3)						Securities not readily mktable					
Household goods & personal effects						Contingent income tax liability & interest penalty on retirement accts					
Other											
TOTAL INTERMEDIATE ASSETS					\$ 341,379	\$ 387,366	TOTAL INTERMEDIATE LIABILITIES			\$ 24,881	\$ 45,275
Fixed Assets							Long Term Liabilities (Sch. 8)				
Contracts & notes receivable					\$	\$	(Principal due beyond 12 months)				
Farm real estate (Sch. 5):						1,270,200	Mortgage on farm real estate		\$ 252,000	\$ 252,000	
Cost or Basis				\$487,800		Land contracts					
Less accumulated dep				52,200	429,600	Mortgage on non-farm real estate					
Non-farm real estate (Sch. 6)						Other					
Other						Contingent capital gains tax liability:					
						Real estate			117,684		
TOTAL FIXED ASSETS					\$ 429,600	\$ 1,270,200	TOTAL LONG TERM LIABILITIES			\$ 252,000	\$ 369,684
TOTAL ASSETS					\$ 1,228,981	\$ 2,135,068	TOTAL LIABILITIES			\$ 337,924	\$ 577,860
							NET WORTH			\$ 881,057	\$ 1,557,200
							TOTAL LIABILITIES AND NET WORTH			\$ 1,228,981	\$ 2,135,068

1. Year age _____ Physical condition _____
2. Ages of dependents _____
3. Marital status: (Do not complete if this is an application for individual unsecured credit unless you reside in a community property state or property upon which you are relying as a basis for repayment of the credit requested is located in a community property state.)
 married separated
 unmarried (single, divorced, or widowed)
4. Spouse or other person: Complete only if (check as applicable) a spouse or other person is a:
 co-applicant, or the applicant is relying upon the income or assets of a spouse or other person for repayment of the loan.
 Name _____
 Address _____
 Employer _____
 Involvement in farm operation _____
5. Form of business organization:
 proprietorship partnership corporation
6. If applicant is or includes a partnership or corporation:
 Explain type and percent ownership _____

 Have you provided the lender a current borrowing resolution?
 Yes No
7. Have you ever or are you now involved in bankruptcy?
 Yes No

8. Have you filed any _____ state & federal income tax return
 Yes No
9. Are any taxes delinquent or under dispute? Yes No
10. Are you a defendant in any suits or legal actions or are any judgments or mechanic's liens outstanding? Yes No
11. Have you prepared a will and/or estate plan? Yes No
 How recently? _____
12. List off-farm employment, if any: _____

13. List any contingent liabilities as endorser, co-signor or guarantor (names and amounts): _____

14. Insurance on buildings \$ _____
15. Insurance on machinery, equipment, and livestock \$ _____
16. Insurance on crops \$ _____
17. Liability insurance coverage \$ _____
18. Do you carry:
 Life insurance (Sch. 7) Yes No
 Medical and hospital insurance Yes No
 Disability insurance Yes No
 Workmens' compensation Yes No
 If yes _____
 number of paid employees _____

STATEMENT OF OWNER EQUITY

Net worth, beginning of period (modified cost)	\$ 748,930
Net income for period	+ 140,127
Gifts and inheritances received for period	+ _____
Additions to paid-in capital (for partnership or corporation)	+ _____
TOTAL AVAILABLE	\$ 889,057
Less: Gifts made for estate transfer	- _____
Net worth, end of period (modified cost)	- 889,057
EQUALS NET WITHDRAWALS (transfer to schedule 10, 12, Income Statement)	\$ 0

SUMMARY

Period	Market Value Net Worth	Cost or Basis Net Worth	Net Worth Change Caused by Value Change
Ending	\$ 1,557,208	\$ 889,057	
Beginning	1,359,798	748,930	
Change	(a) \$ 197,410	(b) \$ 140,127	(a-b) \$ 57,283

The above information and the statement on the reverse are furnished for the purpose of securing and maintaining credit and are certified to be complete and correct. The undersigned authorize the below named lender to make all inquiries deemed necessary to verify the accuracy of the information contained herein to determine my (or our) creditworthiness and to answer questions about his credit experience with me (or us). I (or we) agree to notify said lender promptly of any material change herein.

Prepared for (lender) _____ Date Signed _____, 19____
 Applicant _____ Co-applicant _____

SCHEDULE 7 - LIFE INSURANCE

Insurance Company	Beneficiary	Type of Policy	Face Value	Cash Value
Country Life	Idaho Potato & Cattle	whole life	\$ 50,000	\$13,500
Farmers Mutual	Idaho Potato & Cattle	level term	100,000	
TOTAL			\$ 150,000	\$13,500

SCHEDULE 8 - INTERMEDIATE AND LONG TERM LIABILITIES

	To Whom	Purpose and/or Security	Due Date	Interest Rate	Payment Dates	Accrued Interest	Current Principal Balance	Portion of Principal		
								Due within 12 months	Due beyond 12 months	
INTERMEDIATE										
Notes	Farm land Bank	Storage Facil	8-83	8.5	8-15	\$ 1810	\$ 38,203	\$ 18,322	\$ 19,88	
	TOTAL						\$	\$	\$	\$
	Sales Contracts						\$	\$	\$	\$
TOTAL						\$	\$	\$	\$	
Life Insurance Policy Loans	Country Life	Cash Value		.5	12/31	\$	\$ 5,000	\$ -	\$ 5,000	
	TOTAL						\$	\$ 5,000	\$	\$ 5,000
	Other						\$	\$	\$	\$
TOTAL						\$	\$	\$	\$	
LONG TERM										
Farm Real Estate Mortgages	Land Bank	960 a	1-5-05	8	1/5	\$20,594	\$261,000	\$ 9,000	\$252,000	
	TOTAL						\$	\$	\$	\$
	and contracts						\$	\$	\$	\$
TOTAL						\$	\$	\$	\$	
Non-Farm Real Estate Mortgages	TOTAL						\$	\$	\$	\$
	Other						\$	\$	\$	\$
	TOTAL						\$	\$	\$	\$

Item	Year, Make & Model	Date	Percent Owned	Cost Basis	Accumulated Depreciation	Book Value	Estimate
Tractor	1980, John Deere, 150 HP	1980	100	\$ 42,100	\$ 6,010	\$ 36,090	\$ 36,000
Tractor	1977, International, 100 HP	1977	100	24,700	14,115	10,585	18,000
Tractor	1979, John Deere, 80 HP	1973	100	18,200	16,380	1,820	9,000
Chisel	1978, Oliver, 13'	1978	100	4,200	1,800	2,400	2,400
Plow	1979, John Deere, 5 Rollover	1979	100	7,800	2,228	5,572	5,000
Risc	1976, John Deere, 14'	1976	100	5,100	3,643	1,457	3,000
Shovel	1981, John Deere, 18'	1981	100	600	85	515	500
Seed Cutter	1979, Milestone	1979	100	10,500	3,000	7,500	6,000
Excaper	1978, Spudnik	1978	100	3,100	3,471	4,629	4,500
Piler	1975, Davis	1975	100	7,600	6,870	760	6,000
Planter	1977, Beane	1977	100	9,200	5,257	3,943	5,200
Loader	1973, Milestone	1973	100	1,900	1,900	0	700
Cultivator	1972, Hillston, 4 row	1970	100	1,200	1,200	0	600
Expayer	1968, Beane, 8 row	1972	100	1,100	1,100	0	500
Roller	1971, Beane made	1971	100	700	700	0	400
Windrower	1979, Kogan	1979	100	9,800	2,800	7,000	7,000
Harvester	1981, Lockwood	1979	100	9,800	2,800	7,000	7,000
Scaper blade	1972, John Deere	1972	100	400	400	0	100
Truck	1962, Beo, Tandem	1972	100	400	400	0	100
Truck	1972, International, Tandem	1972	100	6,200	5,580	620	4,000
Truck	1976, White, Tandem	1976	100	9,800	7,000	2,800	7,000
Tractor	1976, Zimatic	1976	100	13,900	1,986	11,914	13,000
Tractor	1978, Lockwood	1978	100	28,000	12,000	16,000	16,000
Tractor	1980, Valley	1980	100	35,000	5,000	30,000	25,000
Pickup	Ford 4WD	1981	100	10,000	1,428	8,572	7,500
Pickup	Chevrolet 4WD	1977	100	7,000	4,000	3,000	3,000
Welder	Century	1969	100	300	300	0	150
Air Compressor	Deere 1 HP	1972	100	250	250	0	100
Gen Drill	John Deere 17'	1975	100	1,900	1,628	272	800
Combine-Grain	John Deere 6600	1975	100	40,000	34,286	5,714	20,000
Weather	Heaton	1972	100	8,100	4,628	3,472	5,000
Barler	Heaton	1975	100	4,900	1,400	3,500	3,500
Bulk Bed	Tesco, 20'	1977	100	3,000	1,714	1,286	2,000
Bulk Bed	Tesco, 20'	1977	100	3,000	1,714	1,286	2,000
Bulk Bed	Tesco, 20'	1977	100	3,000	1,714	1,286	2,000
Tractor	Zimatic	1976	100	20,000	14,286	5,714	9,000
Tractor	Lockwood	1978	100	28,000	13,000	15,000	16,000
Tractor	New Holland	1974	100	4,200	2,400	1,800	3,500
Tractor	Powder River	1973	100	450	450	0	150
Tractor	Langhorn	1979	100	425	283	142	250
TOTAL				\$ 42,100	\$ 6,010	\$ 36,090	\$ 36,000
				\$ 42,925	\$ 2,208,162	\$ 254,763	\$ 320,750

20 min 20 sec
27

TITLE: Describing Your Financial Position With a Balance Sheet
Author: Tiff Harris
No. of Slides: 80
Time:

SLIDE 1: Black (Establish music)

SLIDE 2: (Music under)

Borrowing large amounts of money to finance farm operations is a common and necessary practice in American agriculture. In fact, the amount of capital borrowed per farm in the U.S. has tripled over the past 10 years.

SLIDE 3:

The large amount of credit used in agriculture today requires farmers to carefully manage borrowed money. While successful farmers are quick to point out the importance of developing their own financial management skills,

SLIDE 4:

they also emphasize the importance of working closely with their agricultural lenders. Lenders are, after all, specialists in agricultural credit, and can serve an important role as financial advisors to farmers.

SLIDE 5:

To do so, however, farmers and their lenders must be able to communicate clearly with one another. Lenders need a great deal of financial information as they make their decisions about loan applications, and most of this information must be provided by farmers, and in ways that lenders can use.

SLIDE 6:

Given the complexity of modern farm operations, what is the best way to organize and provide all the financial information needed by lenders?

SLIDE 7:

More and more farmers are turning to a coordinated set of financial statements that have been developed specifically for agriculture.

SLIDE 8:

In this program, we'll briefly explore the first of these coordinated statements: the Balance Sheet.

SLIDE 9: (Music up)

TITLE: Describing Your Financial Position With a Balance Sheet
(Music out on slide change).

SLIDE 10:

Preparing a Balance Sheet is a logical first step toward better communication with lenders, because it provides them with the information they need to analyze the current financial position of a farm business.

SLIDE 11:

A Balance Sheet is like a snapshot of the farmer's financial situation. It describes what is owned, what is owed to others, and the difference between the two at one moment in time. That moment in time is the last day of the tax year, which for most farmers is December 31.

SLIDE 12:

To show what goes into a Balance Sheet, we'll be looking at one developed by Fred Farmer for his operation. We'll begin with a quick tour of Fred's completed Balance Sheet, noting some of its important features. Then we'll talk about what it tells Fred and his lender, and wind up with a few tips on how to prepare a Balance Sheet.

SLIDE 13:

The first thing you'll notice about this Balance Sheet is that it's divided right down the middle. On the left side, Fred has recorded the dollar value of all the things he owns that have marketable value. These are called assets.

SLIDE 14:

On the right side of the form are Fred's liabilities and net worth. Liabilities are the dollar value of all Fred's debts and obligations.

SLIDE 15:

At the bottom of the right side is Fred's net worth. To find his net worth, Fred subtracts his total liabilities from his total assets. Doing this simple calculation is like pretending that he has sold all his assets and paid off all his debts and other obligations. The amount left over is his net worth.

SLIDE 16:

Finding this net worth is the main reason for doing a Balance Sheet. In Fred's case, it tells him the difference between what he owns and what he owes to others as of December 31.

SLIDE 17:

Fred's net worth reflects the value of both his personal and business assets and liabilities. That's why this is called a consolidated Balance Sheet. It is possible to develop a Balance Sheet which includes only business assets and liabilities, but for farmers it's usually more convenient to combine the personal and business aspects of the operation.

SLIDE 18:

The dollar amount of Fred's net worth depends on the value of his assets and liabilities. Because there are two ways to place a dollar value on assets and liabilities, there are two columns on either side of the Balance Sheet. One column is labeled "Modified Cost"; the other "Market Value".

SLIDE 19:

In the Modified Cost column on the asset side, Fred has valued his securities, machinery, and real estate according to what he paid for them, less any depreciation.

SLIDE 20:

In the Market Value column, he's recorded the value of his assets according to what he would receive for them if he were to sell them on December 31st.

SLIDE 21:

On the liability side, you'll notice there are entries in the market value column that don't show up in the cost column. These entries make the market value of total liabilities higher than the corresponding cost value. We'll explain why this difference exists in a few minutes.

SLIDE 22:

Now, then, because there are two ways to value assets and liabilities, Fred ends up with two net worth figures. The difference between assets and liabilities in the cost column reveals his "modified-cost net worth", and the Market Value column shows Fred's "market-value net worth". Both of these figures are important.

SLIDE 23:

When looking at changes in net worth from year to year, it's helpful to realize that while market value net worth may be going up because of reinvested net income, this figure also includes the effects of inflation.

SLIDE 24:

Some assets go up in market value each year simply because of inflation. Land is a good example. Fred's market value net worth, however, does indicate how much collateral he has to back up a loan.

SLIDE 25:

An increase in his modified-cost net worth, on the other hand, definitely shows that Fred is reinvesting his net income, because this figure does not include the effects of inflation. In other words, changes in his cost net worth reflect on Fred's ability as a financial manager. Now then, to get an idea of the kind of information that goes into a Balance Sheet, let's take a closer look at Fred's assets and liabilities.

SLIDE 26:

There are three categories of assets and liabilities: current, intermediate, and fixed or long term. By comparing the different groups of assets with the corresponding groups of liabilities, Fred can look at the current, intermediate, and long term financial position of his business.

SLIDE 27:

Assets are classified according to the relative ease with which they can be sold and converted to cash. Liabilities are classified according to when they fall due. (Pause - 2 beats).

SLIDE 28:

Fred's current assets are cash, or anything he can convert to cash in short order without disrupting the normal operation of his business. In addition to cash, they consist of his savings, equity in a hedging account, marketable securities, notes receivable, livestock to be sold, crops and feed in storage, cash invested in his growing crops, supplies on hand and some prepaid expenses. Note that the cost and market values are the same for all these assets

SLIDE 29:

except for marketable securities, where the market value is now higher than what these securities cost Fred several years ago.

SLIDE 30:

Fred's intermediate assets consist of production items with a useful life of between one and ten years, such as machinery, equipment, and breeding stock. Also included here are things like the money Fred has in a retirement account, the cash value of his life insurance, securities that are not readily marketable, his personal vehicles, and his household goods.

SLIDE 31:

The cost of Fred's machinery, sometimes referred to as "book value", is equal to what he originally paid for the asset minus the depreciation charged off over the years. You'll notice that market value is higher than book value, which simply means that Fred could sell his machinery for more than the book value.

SLIDE 32:

Fixed assets are permanent in nature, and consist primarily of real estate and its improvements. In Fred's case, he has both farm and non-farm real estate. The cost total is equal to the amount Fred originally paid for his farm real estate, minus accumulated depreciation, plus the \$20,000 value of his house. Not surprisingly, the market value of Fred's real estate is considerably higher than the cost total. He bought the land several years ago and its value has gone up.

SLIDE 33:

Okay. Adding Fred's current, intermediate, and fixed assets together reveals the value of his total assets \$705,300 on a cost basis, and \$1,231,555 at market value. (Pause)

SLIDE 34:

Over on the liabilities and net worth side of the Balance Sheet, Fred has recorded all his debts and obligations. His current liabilities are those due within the operating year. He has accounts payable for repairs, feed and seed, and supplies. He also has a note payable, and is liable for a portion of the principal of his longer term debts the portion due within the next 12 months. Along with this liability for principal, Fred has \$16,264 in accrued interest.

SLIDE 35:

Accrue means to accumulate over time. Accrued interest is the unpaid interest which has accumulated on Fred's debts since his last payments. This is the amount Fred would have to pay in interest if he paid off his loans on December 31st.

SLIDE 36:

Similarly, Fred has some accrued taxes and accrued rent for the pasture land he leases. (Pause - 2 beats).

SLIDE 37:

For the liabilities we've looked at so far there is no difference between the figures in the Modified Cost column and those in the Market Value Column. The total current liabilities, however, are different in the two columns. This is because the market value total includes a kind of liability not found in the cost column. You see, if Fred really did sell his assets at their market value, he'd have to pay tax on the revenue he'd receive from the sale.

SLIDE 38:

In other words, he has a contingent income tax liability contingent on the sale of the assets. In Fred's case, the contingent income tax liabilities associated with his current assets and marketable securities are \$54,968 and \$1,950 respectively. Adding up both columns gives Fred's total current liabilities as you see here.

SLIDE 39:

Intermediate liabilities are those due from one to 10 years beyond the Balance Sheet date. For Fred, they consist of notes payable, a loan on the cash value of his life insurance, and contingent income tax liabilities. These contingent tax liabilities depend on the market value of Fred's machinery and breeding stock. Also included here are the taxes and interest penalty he would incur for early withdrawal from his retirement account.

SLIDE 40:

On a cost basis, Fred's long term liabilities consist of the unpaid balance on his mortgage, minus the principal payment due within 12 months. That was included above under current liabilities. The market value total of his long term liabilities includes the mortgage, plus a contingent capital gains tax liability which he would incur should he sell his land.

SLIDE 41:

Adding Fred's current, intermediate, and long term liabilities together results in total liabilities of \$331,869 on a cost basis and \$511,232 at market value.
(Pause)

SLIDE 42:

To calculate his net worth, then, Fred subtracts his total liabilities from his total assets. On a modified-cost basis, Fred's net worth is \$373,431, and at market value his net worth amounts to \$720,323. In other words, if Fred sold out on December 31st and paid off all his liabilities, including the income taxes that would be due, he'd have \$720,323 left over. (Music in, carry under)

SLIDE 43:

So far we've talked about what a Balance Sheet is, and the kind of information that goes into one. We've looked at Fred's assets and liabilities, and calculated his net worth. The next thing we want to do is take a look at some ways Fred can use his Balance Sheet to help manage his finances.

SLIDE 44:

Fred's lender helps him interpret the information in his Balance Sheet. This interpretation usually consists of comparing various numbers on the Balance Sheet to one another.

SLIDE 45:

Comparing numbers is done by calculating the ratio of one number to the other. These ratios convert the numbers on a balance sheet into meaningful information. There are quite a few ratios that can be calculated, but for our purposes we'll be looking at three which describe the financial soundness of Fred's business.

SLIDE 46:

One of the most often used ratios is called the "current ratio", and it measures the ability of the business to pay all of its current liabilities out of its current assets. In other words, it answers the question: "if all your current liabilities came due at the same time, could you cover them with your cash or near cash assets?"

SLIDE 47:

The current ratio is calculated by dividing current assets by current liabilities. In Fred's case, his current ratio is 1.25 to 1. Lenders generally agree that a truly safe level is about 2 to 1, so Fred's current position is not ideal. The higher the ratio, the safer is the short-run financial position of the business.

SLIDE 48:

Another thing Fred would like to know is how much he depends on borrowed capital to finance his business, and how much of it is financed by the investment of his own capital.

SLIDE 49:

He can determine this by calculating what is known as the "debt to worth ratio". This calculation is done by dividing Fred's total liabilities by his net worth.

SLIDE 50:

The result is a debt to worth ratio of .7 to 1 which Fred's lender finds acceptable. Agricultural lenders like to see a ratio of 1 to 1 or less. For this one, a higher number is not good, because the higher the debt to worth ratio, the greater is the risk of financial problems.

SLIDE 51:

A third ratio focuses attention on the structure of Fred's liabilities. Called the "current debt ratio", it shows what portion of Fred's total liabilities will come due within 12 months.

SLIDE 52:

This ratio is calculated by dividing total current liabilities by total liabilities. Fred's current debt ratio is .3 to 1, which means that he has 30¢ in current liabilities for every one dollar in total liabilities. There's no best level for this ratio, but the higher the ratio the greater the demands on cash flow to make debt payments on time.

SLIDE 53:

A high current debt ratio may indicate a need to refinance some short term debts. Too often, farmers finance the purchase of intermediate assets with shorter term loans. Generally, loans should be structured to allow repayment over a period of years corresponding to the expected life of the asset.

SLIDE 54:

Fred can use these ratios to help make management decisions. For example, suppose he was thinking about selling his inventory of grain to purchase a new \$50,000 tractor. This decision would change the composition of his assets and liabilities

SLIDE 55:

and his current ratio would drop from 1.25 to .9, which means that this decision would make an already tight current financial situation even worse. Let's take another example.

SLIDE 56:

Suppose Fred's thinking of refinancing his land debt in order to purchase another \$500,000 worth of farm real estate. This transaction would change his fairly safe debt to worth ratio of .7 to a more risky 1.4. In other words, he'd have to be much more careful in his management to avoid financial failure.

SLIDE 57:

Fred can use his Balance Sheet for other things as well. Suppose it's now one year later, and Fred has just finished his new Balance Sheet. Using this Balance Sheet, and the one from last year, Fred can complete his Income Statement for the year.

SLIDE 58:

On the back side of the Balance Sheet is a section labeled "Statement of Owner Equity". Taking information from his Income Statement, this section shows Fred how his net worth has changed from last year. Using modified-cost net worth figures, he can see how much his net worth has increased over the year ...

SLIDE 59:

and where the increase came from. In Fred's case, there were no gifts and inheritances or additions to paid in capital. His cost net worth grew solely because he reinvested his net income.

SLIDE 60:

Earlier in the program, we pointed out that market-value net worth includes the effects of inflation, while modified-cost net worth does not. In the summary section of the Statement of Owner Equity, Fred can separate the effects of inflation on his net worth over the year from the effects of his management ability.

SLIDE 61:

He does this by first calculating the changes in his market value and cost net worth from last year. (Pause - 2 beats).

SLIDE 62:

Then he subtracts the change in his cost net worth from the change in his market value net worth. This shows how much of the change in his net worth is due to changes in the value of his assets and liabilities; in other words, inflation. (Pause - music up - out on natural break.)

SLIDE 63:

Well, as you can see, the Balance Sheet can be very helpful in managing the financial end of a farm business. It's the place to start, because it describes the current financial position of the business in terms of assets, liabilities, and net worth. But what's the best way to go about developing a Balance Sheet? Many farmers have filled out the Balance Sheet, and based on their experience, there are five steps recommended as the best way to go.

SLIDE 64:

First of all, fill in the preliminary information at the top of the Balance Sheet - name and address, the date of the statement, and whether it's a Personal, Business, or Consolidated statement.

SLIDE 65:

The second step is to collect certain information on the Balance Sheet date. The Balance Sheet should reflect the financial position as of December 31st. That means certain information must be obtained on that date. Information like the market price for grain in storage and the exact amount of cash and supplies on hand.

SLIDE 66:

Third, when you're ready to sit down and prepare the Balance Sheet, gather together all the necessary records. These records include, for example, hedging accounts, unpaid bills, crop and livestock inventories, loan balances and payments, tax returns, and past Balance Sheets if there are any.

SLIDE 67:

The fourth step, then, is to fill out the supporting schedules. Some of these may have been started on December 31st. These schedules should now be finished before starting the Balance Sheet itself.

SLIDE 68:

These supporting schedules can make the job of completing the Balance Sheet much easier. They are like worksheets which summarize information about individual assets and liabilities. There are nine schedules all together.

SLIDE 69:

The first four deal with securities, supplies, personal vehicles, and breeding stock. (Pause - 1 beat)

SLIDE 70:

The next four schedules are for summarizing farm real estate, non-farm real estate, life insurance, and intermediate and long term liabilities. (Pause - 1 beat).

SLIDE 71:

The last schedule, then, lists Fred's machinery, equipment, and trucks. It's easier to fill out all the schedules first, before starting the Balance Sheet itself.

SLIDE 72:

The fifth and final step is to complete the Balance Sheet, starting at the top and transferring the totals from the supporting schedules to the form as they are called for.

SLIDE 73: (Music up, then under)

By the time you've completed the Balance Sheet, you will have discovered several things. Most importantly, you'll have a better understanding of the farm business in financial terms. How assets compare with liabilities, what collateral is available to support a loan, and some idea of how much risk can be taken.

SLIDE 74:

Farmers will better understand how their lenders look at their businesses. And because the Balance Sheet explains things in familiar terms, the ability of lenders to recognize the needs of farmers, and to finance their operations will improve.

SLIDE 75:

A completed Balance Sheet allows farmers and lenders to speak the same language. This improvement in communication, along with all the new information about the farm business, will lead to the real payoff in preparing the Balance Sheet:

SLIDE 76:

Farmers, doing a better job managing their business and setting financial goals for the future. (Music up - 2 seconds)

SLIDE 77: Production Credit (6 seconds)

SLIDE 78: Artwork Credit (6 seconds)

SLIDE 79: Century communications credit (6 seconds)

SLIDE 80: Black (Music out)