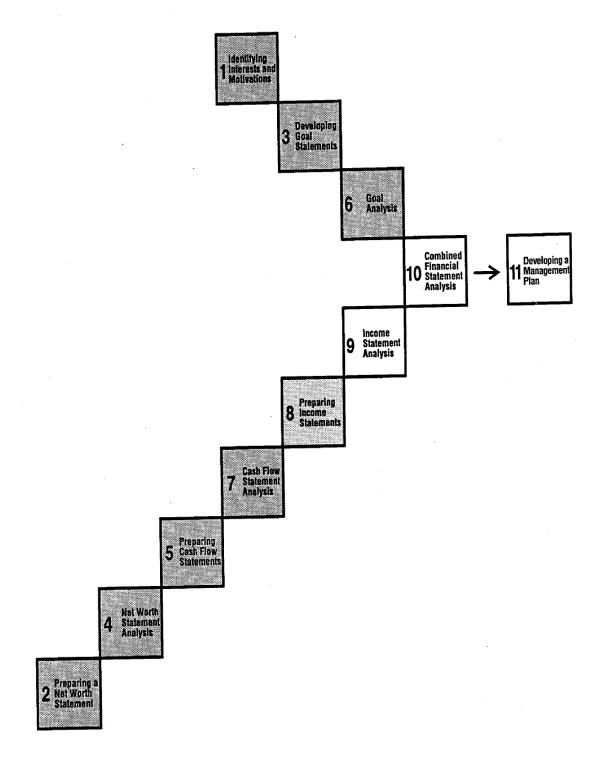


COMPREHENSIVE GUIDE TO FARM FINANCIAL MANAGEMENT

Module 8: Preparing Income Statements



Course Map



Preparing Income Statements

Introduction

Income statements summarize income and expense and the resultant net income for an operation. Cash Income Statements make this summary on a cash basis. Accrued Income Statements summarize the value of production and the cost of production to produce a "true" net income for the farm.

Performance Objectives

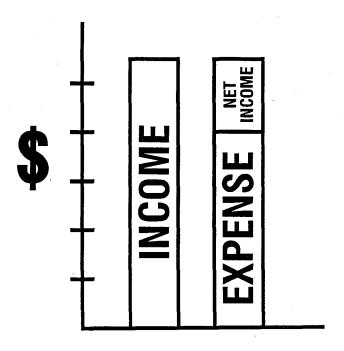
Upon completing the material in this module you will be able to:

- identify two types of income statements;
- define a Cash Income Statement;
- describe the structure of a Cash Income Statement;
- identify the components of a Cash Income Statement;
- prepare your Cash Income Statement;
- define an Accrued Income Statement;
- describe the structure of an Accrued Income Statement;
- identify the components of an Accrued Income Statement; and
- prepare your Accrued Income Statement.

Income Statements

An income statement summarizes farm business income and farm business expense and the resultant net income (or loss) for a given period of time (usually the calendar year).

You will learn about two income statements in this course - the Cash Income Statement and the Accrued Income Statement.



The Cash Income Statement

The Cash Income Statement summarizes farm operating income when it is received as cash and farm operating expense when paid for by cash. Cash Income Statements are usually created for income tax filing purposes.

Cash Income Statement

Name: Shady Bend Farm Period Covered: Jan. 1 to Dec. 31, 20X1

INCOME EXPENSE		EXPENSE	
Grain sales	\$39,399	Seeds and cleaning	\$150
CWB payments	\$2,944	Fertilizer and chemicals	\$6,589
Forage sales	\$1,950	Hail and crop insurance premiums	
Other crop income		Gov't program premiums	\$3,123
Market livestock sales	\$218,888	Machinery repairs and maintenance	\$4,754
Breeding stock sales		Fuel, oil and grease	\$5,777
Livestock product sales		Equipment rental and lease payments	
Other livestock income		Shop supplies and small tools	
Custom work	\$1,500	Feeder livestock purchases	\$800
Rental or share income	- 	Livestock feed and supplements	\$144,051
Government payments and rebates	\$2,207	Livestock supplies. vet fees and drugs	\$5,054
Subsidies	- 	Breeding charges	
Gov't equity programs earned	\$3,750	Trucking and marketing	
Crop and/or hail insurance payouts		Breeding stock purchases	\$25,000
Other gov't payments	\$12,950	Land rental	\$3,000
Other insurance proceeds		Property taxes	\$2,196
Interest earned	- 	General insurance and licenses	\$2,944
Patronage payments		Building and fence repairs	\$4,196
Other	- 	Utilities	\$5,710
Other		Hired Labour	\$27,398
		Accounting, legal and office	\$1,300
		Banking charges and interest	\$18,713
		Other	
TOTAL FARM CASH INCOME	\$283,588	TOTAL FARM CASH EXPENSE	\$260,755
		NET FARM CASH INCOME	\$22,833

Structure of the Cash Income Statement

The first area found in the structure of the Cash Income Statement is the title which indicates the name of the individual or business it was prepared for and the time period it covers (usually the calendar year).

Several different forms exist for creating Cash Income Statements but they differ only in physical layout. All are divided into three sections to list cash operating income, cash operating expense and the resultant Net Farm Cash Income (or loss).

In this course a two column format is used with Farm Cash Income listed on the left hand side of the form and Farm Cash Expense listed on the right side. Net Farm Cash Income is found in the bottom right hand corner immediately below Total Farm Cash Expense.

Cash Income Statement

Name: Shady Bend Farm	Period Covered: Jan. 1 to Dec. 31, 20X1

INCOME		EXPENSE	
Grain sales	\$39,399	Seeds and cleaning	\$150
CWB payments	\$2,944	Fertilizer and chemicals	\$6,589
Forage sales	\$1,950	Hail and crop insurance premiums	
Other crop income		Gov't program premiums	\$3,123
Market livestock sales	\$218,888	Machinery repairs and maintenance	\$4,754
Breeding stock sales		Fuel, oil and grease	\$5,777
Livestock product sales		Equipment rental and lease payments	
Other livestock income		Shop supplies and small tools	
Custom work	\$1,500	Feeder livestock purchases	\$800
Rental or share income		Livestock feed and supplements	\$144,051
Government payments and rebates	\$2,207	Livestock supplies. vet fees and drugs	\$5,054
Subsidies		Breeding charges	
Gov't equity programs earned	\$3,750	Trucking and marketing	
Crop and/or hail insurance payouts		Breeding stock purchases	\$25,000
Other gov't payments	\$12,950	Land rental	\$3,000
Other insurance proceeds		Property taxes	\$2,196
Interest earned		General insurance and licenses	\$2,944
Patronage payments		Building and fence repairs	\$4,196
Other		Utilities	\$5,710
Other		Hired Labour	\$27,398
		Accounting, legal and office	\$1,300
		Banking charges and interest	\$18,713
		Other	
TOTAL FARM CASH INCOME	\$283,588	TOTAL FARM CASH EXPENSE	\$260,755
		NET FARM CASH INCOME	\$22,833

Components of the Cash Income Statement

Total Farm Cash Income

Total Farm Cash Income summarizes all farm income when it is received as cash. Included would be crop sales, livestock sales, CWB payments, crop insurance payments, etc. Items such as capital sales or non-farm income are not included because they are not farm operating income.

Cash Income Items

The following items normally would be considered income for Cash Income Statement development purposes:

- grain sales
- CWB income
- forage sales
- · other crop income
- market livestock sales
- breeding stock sales
- livestock product sales (milk, eggs, etc.)
- other livestock income
- · custom work
- rental or share income
- government rebates
- subsidies
- government equity programs earned
- other government payments
- crop and/or hail insurance payouts
- other insurance proceeds
- interest earned
- patronage payments

Total Farm Cash Expense

Total Farm Cash Expense summarizes all farm expense when paid for by cash. Seed, fertilizer, chemicals, feed and interest are some items that would be included. Principal payments, family living costs and other non-farm expense items are not included in this component of the Cash Income Statement.

Cash Expense Items

The following items normally would be considered expense for Cash Income Statement development purposes:

- · seed and cleaning
- fertilizer
- · sprays and insecticides
- hail and crop insurance
- Government program premiums
- fuel, oil, and grease
- machinery repairs and maintenance
- · equipment rental and lease payments
- shop supplies and small tools
- feeder livestock purchases
- feed, salt, minerals and vitamins
- veterinary fees and drugs
- livestock supplies
- breeding charges
- trucking and marketing
- breeding stock purchases
- property taxes
- wages
- building and fence repairs
- power
- telephone
- general insurance
- licenses
- accounting, legal and office services
- land rental

Net Farm Cash Income

Net Farm Cash Income measures the difference between total farm cash operating income and total farm cash operating expense.

Cash Income Statement

Name: Shady Bend Farm Period Covered: Jan. 1 to Dec. 31, 20X1

INCOME		EXPENSE	
Grain sales	\$39,399	Seeds and cleaning	\$150
CWB payments	\$2,944	Fertilizer and chemicals	\$6,589
Forage sales	\$1,950	Hail and crop insurance premiums	
Other crop income		Gov't program premiums	\$3,123
Market livestock sales	\$218,888	Machinery repairs and maintenance	\$4,754
Breeding stock sales		Fuel, oil and grease	\$5,777
Livestock product sales		Equipment rental and lease payments	
Other livestock income		Shop supplies and small tools	
Custom work	\$1,500	Feeder livestock purchases	\$800
Rental or share income		Livestock feed and supplements	\$144,051
Government payments and rebates	\$2,207	Livestock supplies. vet fees and drugs	\$5,054
Subsidies		Breeding charges	
Gov't equity programs earned	\$3,750	Trucking and marketing	
Crop and/or hail insurance payouts		Breeding stock purchases	\$25,000
Other gov't payments	\$12,950	Land rental	\$3,000
Other insurance proceeds		Property taxes	\$2,196
Interest earned		General insurance and licenses	\$2,944
Patronage payments		Building and fence repairs	\$4,196
Other		Utilities	\$5,710
Other		Hired Labour	\$27,398
		Accounting, legal and office	\$1,300
		Banking charges and interest	\$18,713
		Other	
TOTAL FARM CASH INCOME	\$283,588	TOTAL FARM CASH EXPENSE	\$260,755
		NET FARM CASH INCOME	\$22,833

Total Farm Cash Income - Total Farm Cash Expense = Net Farm Cash Income

Preparation of the Cash Income Statement

Preparing a Cash Income Statement is a matter of transferring totals for Farm Cash Income and Farm Cash Expense items to the Cash Income Statement. You will find this information on an Actual Cash Flow Statement or in your record keeping system. Remember, you are determining Net Farm Cash Income. Income and expense that is not due to farm operations is not included in the Cash Income Statement. Therefore, capital sales, non-farm income, principal payments, family living costs, income tax and other non-farm related income and expense items are not included.





Once all pertinent information has been entered, enter totals for Farm Cash Income and Farm Cash Expense. Net Farm Cash Income is then calculated by subtracting Total Farm Cash Expense from Total Farm Cash Income.

Let's look at the Cash Income Statement prepared by the owners of the Shady Bend Farm.

Cash Income Statement

Name: Shady Bend Farm Period Covered: Jan. 1 to Dec. 31, 20X1

INCOME		EXPENSE	
Grain sales	\$39,399	Seeds and cleaning	\$150
CWB payments	\$2,944	Fertilizer and chemicals	\$6,589
Forage sales	\$1,950	Hail and crop insurance premiums	
Other crop income		Gov't program premiums	\$3,123
Market livestock sales	\$218,888	Machinery repairs and maintenance	\$4,754
Breeding stock sales		Fuel, oil and grease	\$5,777
Livestock product sales		Equipment rental and lease payments	
Other livestock income		Shop supplies and small tools	
Custom work	\$1,500	Feeder livestock purchases	\$800
Rental or share income		Livestock feed and supplements	\$144,051
Government payments and rebates	\$2,207	Livestock supplies. vet fees and drugs	\$5,054
Subsidies		Breeding charges	
Gov't equity programs earned	\$3,750	Trucking and marketing	
Crop and/or hail insurance payouts		Breeding stock purchases	\$25,000
Other gov't payments	\$12,950	Land rental	\$3,000
Other insurance proceeds		Property taxes	\$2,196
Interest earned		General insurance and licenses	\$2,944
Patronage payments		Building and fence repairs	\$4,196
Other		Utilities	\$5,710
Other		Hired Labour	\$27,398
		Accounting, legal and office	\$1,300
		Banking charges and interest	\$18,713
		Other	
TOTAL FARM CASH INCOME	\$283,588	TOTAL FARM CASH EXPENSE	\$260,755
		NET FARM CASH INCOME	\$22,833

Net Farm Cash Income = \$283,588 - \$260,755 = \$22,833

On a cash basis, the Shady Bend Farm made a profit of \$22,833 in the year 20X1.

EXERCISE 17

Prepare a Cash Income Statement for the Blakes given this information. Compare your answer with that given on page 33.

Steer calf sales Property taxes	\$15,119 \$450
Seed Cleaning	\$100
CWB final payments	\$1,427
Operating loan at Bank of Sask.	\$20,000
Agreement for Sale interest	\$1,750
Machinery repairs and maintenance	\$2,400
Barley sales	\$3,625
Principal payment on Agreement for Sale	\$5,000
Bank charges	\$10
Licenses	\$240
Canola sales	\$11,450
Cash on hand	\$1,585
Fuel, oil and grease purchases	\$2,800
Government payments received	\$9,783
Breeding stock loan interest	\$3,425
Cull bull sold	\$1,500
Livestock supplies purchased	\$200
Insurance	\$260
Family living expense	\$25,859
Building and fence repairs	\$600
Wheat sales	\$8,583
Land rental payment	\$1,600
Fertilizer purchased	\$2,000
Cull cows sold	\$4,900
Diane's wages	\$16,000
Bull purchased	\$2,500
Income tax paid	\$9,774
Accounting fees	\$200
Heifer calf sales	\$6,720
CWB Cash Advance repaid	\$5,100
Cull Heifer sold	\$1,050
Seed purchases	\$600
Salt, minerals and vitamins purchased	\$1,500
Chemical purchased	\$1,600
Government program premiums	\$3,750
Veterinary fees and drugs purchased	\$1,300
Tractor loan interest	\$2,100
Government equity program payment	\$1,417
Patronage dividend	\$150
Operating loan interest	\$1,469

Exercise 17 continued...

Cash Income Statement

Namai	Period Covered:
Name:	Perioa Coverea:

INCOME	EXPENSE			
Grain sales	 Seeds and cleaning			
CWB payments	 Fertilizer and chemicals			
Forage sales	 Hail and crop insurance premiums			
Other crop income	 Gov't program premiums			
Market livestock sales	 Machinery repairs and maintenance			
Breeding stock sales	 Fuel, oil and grease			
Livestock product sales	 Equipment rental and lease payments			
Other livestock income	 Shop supplies and small tools			
Custom work	 Feeder livestock purchases			
Rental or share income	 Livestock feed and supplements			
Government payments and rebates	 Livestock supplies. vet fees and drugs			
Subsidies	 Breeding charges			
Gov't equity programs earned	 Trucking and marketing			
Crop and/or hail insurance payouts	 Breeding stock purchases			
Other gov't payments	 Land rental			
Other insurance proceeds	 Property taxes			
Interest earned	 General insurance and licenses			
Patronage payments	 Building and fence repairs			
Other	 Utilities			
Other	 Hired Labour			
	Accounting, legal and office			
	Banking charges and interest			
	Other			
TOTAL FARM CASH INCOME	 TOTAL FARM CASH EXPENSE			
	 NET FARM CASH INCOME	NET FARM CASH INCOME		

Exercise 18

Prepare your Cash Income Statement by completing pages 11 to 13 in the Farm Business Planner. Disregard the accrual adjustments at the bottom of each page.

The Accrued Income Statement

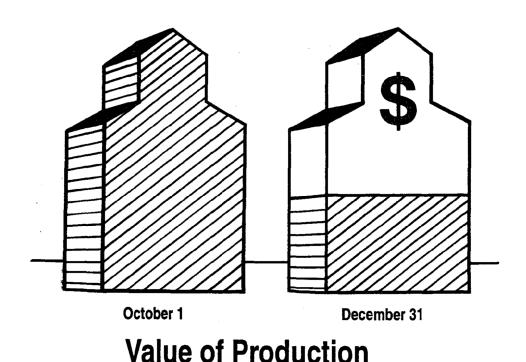
The Accrued Income Statement summarizes income when goods are produced and expense associated with producing those goods, when it is incurred.

Accrued Income Statement

Name: Shady Bend Farm Period Covered: Jan. 1 to Dec. 31, 20X1

	t criod deverce. Dan: 1 to De	
n Income		\$283,588
Crops Inventory	+ \$26,100	
Crops Inventory	- \$30,750	
Livestock Inventory	+ \$60,250	
Livestock Inventory	- \$34,875	
Accounts Receivable	+ \$9,000	
Accounts Receivable	- \$10,000	
duce used in the home	+ \$450	
Total Adjustments	+ \$20,175	+ \$20,175
	ACCRUED FARM INCOME	\$303,763
n Expense		\$260,755
Supplies Inventory	- \$2,600	
Supplies Inventory	+ \$3,663	
Accounts Payable	+ \$4,000	
Accounts Payable	- \$3,750	
Accrued Interest	+ \$3,589	
Accrued Interest	- \$3,781	
	+ \$16,500	
Total Adjustments	+ \$17,621	+ \$17,621
	ACCRUED FARM EXPENSE	\$278,376
	ACCRUED NET FARM INCOME	\$25,387
	Crops Inventory Crops Inventory Livestock Inventory Livestock Inventory Accounts Receivable Accounts Receivable duce used in the home Total Adjustments Expense Supplies Inventory Supplies Inventory Accounts Payable Accounts Payable Accrued Interest Accrued Interest	Crops Inventory + \$26,100 Crops Inventory - \$30,750 Livestock Inventory + \$60,250 Livestock Inventory - \$34,875 Accounts Receivable + \$9,000 Accounts Receivable - \$10,000 duce used in the home + \$450 Total Adjustments + \$20,175 ACCRUED FARM INCOME **ACCRUED FARM INCOME** **ACCRUED FARM INCOME** **ACCRUED FARM INCOME** **ACCOUNTS Payable + \$4,000 Accounts Payable + \$4,000 Accounts Payable - \$3,750 Accrued Interest + \$3,589 Accrued Interest - \$3,781 Accrued Interest + \$16,500 **Total Adjustments** **ACCRUED FARM EXPENSE** **ACCRUED FARM EXPENSE**

The Accrued Income Statement differs from the Cash Income Statement in that income and expense are matched to a production period rather than to cash. It is a true measure of profitability because Accrued Net Farm Income is the value of production less the cost of production. The Accrued Income Statement adjusts for the fact that farm businesses rarely sell their entire production in the period in which it was produced. Inventory often remains due to lack of marketing opportunities or an income tax planning strategy.



The Accrued Income Statement is created by making adjustments to Farm Cash Income and Farm Cash Expense. Doing so matches the cost of production to the value of the goods produced (expenses to income) and allows you to determine the true profitability of the farm business.

Structure of the Accrued Income Statement

The Accrued Income Statement may take several different forms. One method is to make adjustments to Net Farm Cash Income (Farm Cash Expense is already subtracted from Farm Cash Income). To aid your understanding of Accrued Income Statement development, the method used in this course makes adjustments to Farm Cash Income and Farm Cash Expense. Use this method when preparing your own Accrued Income Statement. Regardless of the format used, the value of the Accrued Net Farm Income calculated is the same.

The first area of the Accrued Income Statement is the title which indicates the name of the individual or business for which the statement was prepared and the time period for which it was prepared (usually the calendar year).

The Accrued Farm Income and Accrued Farm Expense sections with their respective adjustments follow in descending order. Accrued Net Farm Income follows as a measure of the income produced minus the expense associated with producing that income.

Accrued Income Statement

Name: Shady Bend Farm Period Covered: Jan. 1 to Dec. 31, 20X1

Dena i aimi	Torrod Covered. dan. The Bet	<u> </u>
come		\$283,588
Crops Inventory	+ \$26,100	
Crops Inventory	- \$30,750	
Livestock Inventory	+ \$60,250	
Livestock Inventory	- \$34,875	
Accounts Receivable	+ \$9,000	
Accounts Receivable	- \$10,000	
e used in the home	+ \$450	
Total Adjustments	+ \$20,175	+ \$20,175
	ACCRUED FARM INCOME	\$303,763
		^
pense		\$260,755
Supplies Inventory	- \$2,600	
Supplies Inventory	+ \$3,663	
Accounts Payable	+ \$4,000	
Accounts Payable	- \$3,750	
Accrued Interest	+ \$3,589	
Accrued Interest	- \$3,781	
	+ \$16,500	
Total Adjustments	+ \$17,621	+ \$17,621
	ACCRUED FARM EXPENSE	\$278,376
	ACCRUED NET FARM INCOME	\$25,387
	Crops Inventory Crops Inventory Livestock Inventory Livestock Inventory Accounts Receivable Accounts Receivable e used in the home Total Adjustments Epense Supplies Inventory Supplies Inventory Accounts Payable Accounts Payable Accrued Interest Accrued Interest	Crops Inventory

Components of the Accrued Income Statement

The Accrued Income Statement is broken down into three components - Accrued Farm Income, Accrued Farm Expense and Accrued Net Farm Income.

Accrued Farm Income

In the Accrued Farm Income section, inventory adjustments are made to total Farm Cash Income to establish a value for production in the period. The value of ending inventory for income producing enterprises (crops, livestock, etc.) and accounts receivable is added to Farm Cash Income, while the value of beginning inventory for these items is subtracted. This is the process of matching income to the production period.

The theory behind these adjustments is that the value of the goods produced is included in either Farm Cash Income from the sale of farm production (all production is sold), or ending value of production inventories (no production is sold). Most likely the value is found in a combination of the two (some production is sold and some is held in inventory).

Some product inventory or receivables from a previous production period may be present at the beginning of the year. They do not accrue to (match with) this production period and therefore should be subtracted from Farm Cash Income.

Total Farm Cas	h Income		\$283,588*
+ Ending	Crops Inventory	+ \$26,100	
- Beginning	Crops Inventory	- \$30,750**	
+ Ending	Livestock Inventory	+ \$60,250	
- Beginning	Livestock Inventory	- \$34,875**	
+ Ending	Accounts Receivable	+ \$9,000	
- Beginning	Accounts Receivable	- \$10,000**	
+ Value of pro	oduce used in the home	+ \$450	
	Total Adjustments	+ \$20,175	+ \$20,175
ACCRUED FARM INCOME			\$303,763

^{*}Cash income from the sale of production from this and previous periods.

^{**}These items represent production from a previous period.

Conversely, the value of ending product inventory and receivables is added to Farm Cash Income because it represents production not sold in the period. Beginning inventory that has been carried through to the end of the year is adjusted by subtracting it initially.

The final adjustment to Farm Cash Income in the Accrued Farm Income section is the addition of the value of farm produce (beef, pork, eggs, etc.) used in the home. If not consumed by the farm family, this production would have been either sold or added to ending inventory. This value could be substantial and should be included to improve the accuracy of your Accrued Income Statement.

Total Farm Cash Income			\$283,588*
+ Ending	Crops Inventory	+ \$26,100**	
- Beginning	Crops Inventory	- \$30,750	
+ Ending	Livestock Inventory	+ \$60,250**	
- Beginning	Livestock Inventory	- \$34,875	
+ Ending	Accounts Receivable	+ \$9,000**	
- Beginning	Accounts Receivable	- \$10,000	
+ Value of produ	uce used in the home	+ \$450**	
	Total + \$20,175 Adjustments		
	ACCRUED	FARM INCOME	\$303,763

^{*}Cash income from the sale of production from this and previous periods.

^{**}These items represent production from the current period.

Accrued Farm Expense

The Accrued Farm Expense section deals with adjustments to Farm Cash Expense to establish the cost of production for the period.

First, the value of ending supplies inventory (feed, seed, fertilizer, chemicals, etc.) is subtracted from Farm Cash Expense. You will note that this is directly opposite to the adjustments made in the Accrued Farm Income section. In this case ending inventories are subtracted (not added) and beginning inventories are added (not subtracted). Remember, you are adjusting Farm Cash Expense to determine the cost of production. Ending supplies inventory was either paid for by cash (included in Farm Cash Expense) or financed by an account payable (we will look at payables shortly). Since they were not used in the production process, their value is subtracted from Farm Cash Expense.

The beginning value of supplies inventory is added to Farm Cash Expense. This inventory is available for use (and likely will be used) in this production period. Beginning supplies inventory carried through to the end of the year is adjusted with the subtraction of ending supplies inventory from Farm Cash Expense.

Total Farm Cash	Total Farm Cash Expense				
- Ending	Supplies Inventory	- \$2,600**			
+ Beginning	Supplies Inventory	+ \$3,663***			
+ Ending	Accounts Payable	+ \$4,000			
- Beginning	Accounts Payable	- \$3,750			
+ Ending	Accrued Interest	+ \$3,589			
- Beginning	Accrued Interest	- \$3,781			
+ Depreciation		+ \$16,500			
	Total Adjustments	+ \$17,621	+ \$17,621		
	ACCRUE	D FARM EXPENSE	\$278,376		

^{*}Cash expense from the payment of expense items for this and previous periods.

^{**}Expense items not used in this period.

^{***}Expense items available for use in this period.

Don't get fooled by the adjustments made to accounts payable - they are made in the same manner to the accounts receivable in the Accrued Farm Income section. The reason is that you are adjusting expense. The beginning value of accounts payable (trade accounts, arrears, etc.) is subtracted from Farm Cash Expense. It accrues to (matches with) a previous production period. Ending accounts payable value is added to Farm Cash Expense - it accrues to this production period.

Total Farm Cash Expense			\$260,755
- Ending	Supplies Inventory	- \$2,600	
+ Beginning	Supplies Inventory	+ \$3,663	
+ Ending	Accounts Payable	+ \$4,000*	
- Beginning	Accounts Payable	- \$3,750**	
+ Ending	Accrued Interest	+ \$3,589	
- Beginning	Accrued Interest	- \$3,781	
+ Depreciation		+ \$16,500	
	Total Adjustments	+ \$17,621	+\$17,621
	ACCRUED FARM	I EXPENSE	\$278,376

^{*}Expense items from this period.

^{**}Expense items from a previous period.

Adjustments are also made to Farm Cash Expense for the net change in the value of interest accrued on term loans for production assets (breeding stock, machinery, buildings, land, etc.) over the period covered by the Accrued Income Statement. This adjustment could be substantial if a new loan was taken out in the period or if a large principal payment was made on an existing loan. Again, remember the theory when making the adjustment. The value of beginning accrued interest is subtracted from Farm Cash Expense. It accrues to (matches with) a previous production period. The value of ending accrued interest is added to Farm Cash Expense. It accrues to this production period.

Total Farm Cash Expense			\$260,755
- Ending	Supplies Inventory	-\$2,600	
+ Beginning	Supplies Inventory	+\$3,663	
+ Ending	Accounts Payable	+\$4,000	
- Beginning	Accounts Payable	-\$3,750	
+ Ending	Accrued Interest	+\$3,589*	
- Beginning	Accrued Interest	-\$3,781**	
+ Depreciation		+\$16,500	
	Total Adjustments	+\$17,621	+\$17,621
	ACCRUED FARM	EXPENSE	\$278,376

^{*}Expense items from this period.

^{**}Expense items from a previous period.

Most often the biggest adjustment in the Accrued Farm Expense section is a charge for depreciation. Depreciation is the process of charging the cost of a depreciable asset (machinery and buildings) as a business expense. Although it is a non-cash cost, depreciation is a real production cost for the wear and obsolescence of these capital assets used in the production process. Think of it as the difference between the fair market value of an asset at the beginning of the year and the fair market value of that asset at the end of the year. Don't confuse depreciation with capital cost allowance used when filing income tax. Seldom are the two equal in value.

Accrued Net Farm Income

Once Accrued Farm Income and Accrued Farm Expense have been determined, Accrued Net Farm Income is calculated by subtracting Accrued Farm Expense from Accrued Farm Income.

Total Farm Cash Expense			\$260,755
- Ending	Supplies Inventory	-\$2,600	
+ Beginning	Supplies Inventory	+\$3,663	
+ Ending	Accounts Payable	+\$4,000	
- Beginning	Accounts Payable	- \$3,750	
+ Ending	Accrued Interest	+\$3,589	
- Beginning	Accrued Interest	-\$3,781	
+ Depreciation		+\$16,500*	
	Total Adjustments	+\$17,621	+\$17,621
	ACCRUED FARM	EXPENSE	\$278,376**
	ACCRUED NET FAR	M INCOME	\$25,387***

^{*}A non-cash cost for the loss in value of capital assets due to their use in the production process.

^{**}The real cost of production.

^{***}The true profit produced by the farm in the production process.

Preparation of the Accrued Income Statement

You determined that the Accrued Income Statement is developed by making adjustments to Farm Cash Income and Farm Cash Expense for value of product and supply inventory changes, changes in the value of accounts receivable and payable, changes in accrued interest, allowances for the value of farm produce used in the home and depreciation. Now you need to determine where to obtain this information.

Farm Cash Income and Farm Cash Expense are found in the Cash Income Statement. These values are transferred to the Accrued Income Statement. Changes in the value of inventories, receivables, payables, accrued interest and an allowance for depreciation can be found by comparing the respective values found in beginning and ending Net Worth Statements prepared for the period covered by the Accrued Income Statement.

Total Farm Cash	Income		\$283,588
+ Ending	Crops Inventory	+ \$26,100	
- Beginning	Crops Inventory	- \$30,750	
+ Ending	Livestock Inventory	+ \$60,250	
- Beginning	Livestock Inventory	- \$34,875	
+ Ending	Accounts Receivable	+ \$9,000	
- Beginning	Accounts Receivable	- \$10,000	
+ Value of pro	duce used in the home	+ \$450	
	Total Adjustments	+ \$20,175	+ \$20,175
		ACCRUED FARM INCOME	\$303,763
Total Farm Cash	Expense		\$260,755
- Ending	Supplies Inventory	- \$2,600	
+ Beginning	Supplies Inventory	+ \$3,663	
+ Ending	Accounts Payable	+ \$4,000	
- Beginning	Accounts Payable	- \$3,750	
+ Ending	Accrued Interest	+ \$3,589	
- Beginning	Accrued Interest	- \$3,781	
+ Depreciation		+ \$16,500	
	Total Adjustments	+ \$17,621	+ \$17,621
		ACCRUED FARM EXPENSE	\$278,376
	ACCI	RUED NET FARM INCOME	\$25,387

Changes in the value of product and supply inventory and accounts receivable will be found in the current and intermediate assets section (include market and breeding livestock) of the Net Worth Statement. The change in value of accounts payable and accrued interest will be found in the current liabilities section.

Depreciation can be determined by observing the change in the fair market value of machinery and equipment which have been entered in the intermediate assets section. Changes in the fair market value of buildings have been entered in the fixed assets section.

Value of farm produce used in the home (if significant) should be kept in a separate area of your record keeping system.

Total Farm Cash	Income		\$283,588
+ Ending	Crops Inventory	+ \$26,100(1)	
- Beginning	Crops Inventory	- \$30,750(1)	
+ Ending	Livestock Inventory	+ \$60,250(2)	
- Beginning	Livestock Inventory	- \$34,875(2)	
+ Ending	Accounts Receivable	+ \$9,000(1)	
- Beginning	Accounts Receivable	- \$10,000(1)	
+ Value of pro	duce used in the home	+ \$450(3)	
	Total Adjustments	+ \$20,175	+ \$20,175
		ACCRUED FARM INCOME	\$303,763
Total Farm Cash	Expense		\$260,755
- Ending	Supplies Inventory	- \$2,600(1)	
+ Beginning	Supplies Inventory	+ \$3,663(1)	
+ Ending	Accounts Payable	+ \$4,000(4)	
- Beginning	Accounts Payable	- \$3,750(4)	
+ Ending	Accrued Interest	+ \$3,589(4)	
- Beginning	Accrued Interest	- \$3,781(4)	
+ Depreciation		+ \$16,500(5)	
	Total Adjustments	+ \$17,621	+ \$17,621
		ACCRUED FARM EXPENSE	\$278,376
	ACCF	RUED NET FARM INCOME	\$25,387

⁽¹⁾ Found in Current Assets Section (2) Found in Current and Intermediate Assets Section (3) Found in Record Keeping System (4) Found in Current Liabilities Section (5) Found in Intermediate and Fixed Assets Section

Once you have determined all these values simply "plug" them into the proper areas of the Accrued Income Statement to determine your Accrued Net Farm Income. Remember the theory presented in this section when making the adjustments to Farm Cash Income and Farm Cash Expense. Match income and expense to the proper production period in which they were incurred.



Let's see how the Shady Bend Farm prepared its Accrued Income Statement. Farm Cash Income and Farm Cash Expense was determined in the Cash Income Statement. Beginning and ending Net Worth Statements need to be examined to determine changes in inventories, receivables, payables, accrued interest and the depreciation of equipment and buildings in that operation for the year 20X1.

Net Worth Statement

Name: Shady Bend Farm Date: Jan. 1 to Dec. 31, 20X1

ASSETS LIABIL			ΓIES		
Curren	t		Curre	nt	
	Beginning	Ending		Beginning	Ending
Cash on hand	\$1,750	\$2,200	Operating loan	\$14,000	\$12,000
Seed and Feed Inventory	\$4,425	\$4,600	Cash Advances	\$9,500	\$9,000
Grain and Feed Inventory	\$26,325	\$21,500	Accounts Payable	\$3,750	\$4,000
Market Livestock Inventory	\$21,000	\$20,000	Immediate Principal Due	\$3,000	\$5,000
Supplies Inventory	\$3,663	\$2,600	Long Term Principal Due	\$6,116	\$6,116
Notes and Accounts Receivable	\$10,000	\$9,000	Intermediate Accrued Interest	\$164	\$109
Personal and Other	\$1,975	\$2,125	Long Term Accrued Interest	\$3,617	\$3,480
Total Current Assets	\$69,138	\$62,025	Total Current Liabilities	\$40,147	\$39,705
Intermedi	ate		Intermed	diate	
	Beginning	Ending		Beginning	Ending
Breeding Stock	\$13,875	\$40,250	Breeding Stock Loans		\$7,000
Machinery and Equipment	\$71,000	\$64,000	Machinery & Equipment Loans	\$6,000	\$3,000
Personal	\$15,000	\$14,000	Personal Loans		
Stocks and Bonds	\$2,500	\$2,750	Consolidation Loans		
Other	\$13,400	\$13,000	Other		
Total Intermediate Assets	\$115,775	\$134,000	Total Intermediate Liabilities	\$6,000	\$10,000
Fixed			Long To	erm	
	Beginning	Ending		Beginning	Ending
Land	\$202,680	\$202,680	Building Loans	\$49,574	\$469,384
Buildings	\$124,500	\$115,000	Land Loans	\$99,706	\$96,780
RRSPs			Consolidation Loans		
Co-operative Equity	\$2,261	\$2,478	Other		
Market Quota					
Personal					
Non-Farm Real Estate					
Total Fixed Assets	\$329,441	\$320,158	Total Long Term Liabilities	\$149,280	\$143,164
TOTAL ASSETS	\$514,354	\$516,183	TOTAL LIABILITIES	\$195,427	\$192,869
			NET WORTH	\$318,927	\$323,314

Now let's see how the Cash Income Statement and the beginning and ending Net Worth Statements combine to produce the Accrued Income Statement for the Shady Bend Farm.

Accrued Income Statement

Name: Shady Bend Farm Period Covered: Jan. 1 to Dec. 31, 20X1

Total Farm Cash	Income		\$283,588
+ Ending	Crops Inventory	+ \$26,100	
- Beginning	Crops Inventory	- \$30,750	
+ Ending	Livestock Inventory	+ \$60,250	
- Beginning	Livestock Inventory	- \$34,875	
+ Ending	Accounts Receivable	+ \$9,000	
- Beginning	Accounts Receivable	- \$10,000	
+ Value of pro	duce used in the home	+ \$450	
	Total Adjustments	+ \$20,175	+ \$20,175
		ACCRUED FARM INCOME	\$303,763
Total Farm Cash	Expense		\$260,755
- Ending	Supplies Inventory	- \$2,600	
+ Beginning	Supplies Inventory	+ \$3,663	
+ Ending	Accounts Payable	+ \$4,000	
- Beginning	Accounts Payable	- \$3,750	
+ Ending	Accrued Interest	+ \$3,589	
- Beginning	Accrued Interest	- \$3,781	
+ Depreciation	1	+ \$16,500	
	Total Adjustments	+ \$17,621	+ \$17,621
		ACCRUED FARM EXPENSE	\$278,376
	ACCI	RUED NET FARM INCOME	\$25,387

On an accrued basis, the Shady Bend Farm made a profit of \$25,387 in the year 20X1.

Exercise 19

Using the Cash Income Statement created for the Blakes in Exercise 17 (page 12) and given the following beginning and ending Net Worth Statements for their operation, prepare their Accrued Income Statement. Assume that they use \$600 of home raised beef for their own consumption.

Net Worth Statement

Name: John and Diane Blake

Date: Jan. 1 to Dec. 31, 20X1

ASSETS			LIABILIT	TIES	
Current			Curre	nt	
	Beginning	Ending	ing Beginning		
Cash on hand	\$1,585	\$1,846	Operating loan	\$20,000	\$12,000
Seed and Feed Inventory	\$7,119	\$5,280	Cash Advances	\$5,100	\$5,000
Grain and Feed Inventory	\$17,250	\$21,873	Accounts Payable	\$1,600	\$1,600
Market Livestock Inventory	\$7,450	\$8,650	Immediate Principal Due	\$6,511	\$6,511
Supplies Inventory	\$1,260	\$1,700	Long Term Principal Due	\$5,000	\$10,000
Notes and Accounts Receivable	\$8,147	\$10,600	Intermediate Accrued Interest	\$747	\$642
Personal and Other	\$237	\$296	Long Term Accrued Interest	\$436	\$374
Total Current Assets	\$43,048	\$50,245	Total Current Liabilities	\$39,394	\$36,127
Intermed	iate		Intermed	liate	
	Beginning	Ending		Beginning	Ending
Breeding Stock	\$63,350	\$66,500	Breeding Stock Loans	\$25,112	\$21,601
Machinery and Equipment	\$33,200	\$29,000	Machinery and Equipment Loans	\$12,000	\$9,000
Personal	\$10,300	\$10,000	Personal Loans		
Stocks and Bonds			Consolidation Loans		
Other	\$12,780	\$13,197	Other		
Total Intermediate Assets	\$119,630	\$118,697	Total Intermediate Liabilities	\$37,112	\$30,601
Fixed		* -,	Long Te	·	+ ,
	Beginning	Ending	3	Beginning	Ending
Land	\$53,280	\$153,280	Building Loans	3 3	. J
Buildings	\$2,000	\$1,800	Land Loans	\$30,000	\$120,000
RRSPs	\$4,600		Consolidation Loans		
Co-operative Equity	\$592	\$627	Other		
Market Quota					
Personal					
Non-Farm Real Estate	\$25,000	\$25,000			
Total Fixed Assets	\$85,472	\$180,707	Total Long Term Liabilities	\$30,000	\$120,000
TOTAL ASSETS	\$248,150	\$349,649	TOTAL LIABILITIES	\$106,506	\$186,728
	1		NET WORTH	\$141,644	\$162,921

Exercise 19 continued...

Accrued Income Statement

Name:		Period Covered:	
Total Farm Cash	Income		
+ Ending	Crops Inventory		
- Beginning	Crops Inventory		
+ Ending	Livestock Inventory		
- Beginning	Livestock Inventory		
+ Ending	Accounts Receivable		
- Beginning	Accounts Receivable		
+ Value of prod	duce used in the home		
	Total Adjustments		
		ACCRUED FARM INCOME	
Total Farm Cash	Expense		
- Ending	Supplies Inventory		
+ Beginning	Supplies Inventory		
+ Ending	Accounts Payable		
- Beginning	Accounts Payable		
+ Ending	Accrued Interest		
- Beginning	Accrued Interest		
+ Depreciation			
	Total Adjustments		
		ACCRUED FARM EXPENSE	
	ACCF	RUED NET FARM INCOME	

Compare your answers with that given on page 34.

Exercise 20

Prepare an Accrued Income Statement for your farm using the worksheet found at the end of this module.

When you have prepared your Accrued Income Statement you may wish to attach the Statement to the Farm Business Planner directly.

Summary

In this module you have been introduced to two income statements - the Cash Income Statement and the Accrued Income Statement. Both summarize farm business income and farm business expense and the resultant net income for a given period (usually the calendar year).

Net income as summarized by the Cash Income Statement reflects profits on a cash basis. Net Farm Cash Income is simply the difference between farm production sold for cash and farm expenses paid for by cash. There is no relationship between cash income and expense and the production period covered by the Cash Income Statement.

The Accrued Income Statement summarizes net income on an accrued basis. Accrued Net Farm Income is the difference between the value of production and the cost of producing that production. Therefore, it is a true measure of business profitability.

Cash Income Statements are useful only for tax management - not for making farm business management decisions. The Accrued Income Statement can provide useful farm business management information as we will see in the next module.

Module 8 Exercise Answers

Exercise 17

Cash Income Statement

Name: <u>John and Diane Blake</u> Period Covered: <u>Jan. 1 to Dec. 31, 20X1</u>

INCOME		EXPENSE	
Grain sales	\$23,658	Seeds and cleaning	\$700
CWB payments	\$1,427	Fertilizer and chemicals	\$3,600
Forage sales		Hail and crop insurance premiums	
Other crop income		Gov't program premiums	\$3,750
Market livestock sales	29,289	Machinery repairs and maintenance	\$2,400
Breeding stock sales		Fuel, oil and grease	\$2,800
Livestock product sales		Equipment rental and lease payments	
Other livestock income		Shop supplies and small tools	
Custom work		Feeder livestock purchases	
Rental or share income		Livestock feed and supplements	\$1,500
Government payments and rebates		Livestock supplies, vet fees and drugs	\$1,500
Subsidies		Breeding charges	
Gov't equity programs earned	\$1,417	Trucking and marketing	
Crop and/or hail insurance payouts		Breeding stock purchases	\$2,500
Other gov't programs	\$9,783	Land rental	\$1,600
Other insurance proceeds		Property taxes	\$450
Interest earned		General insurance and licenses	\$500
Patronage payments	\$150	Building and fence repairs	\$600
Other		Utilities	
Other		Hired Labour	
		Accounting, legal and office	\$200
		Banking charges and interest	\$8,754
		Other	
TOTAL FARM CASH INCOME	\$65,724	TOTAL FARM CASH EXPENSE	\$30,854
		NET FARM CASH INCOME	\$34,870

Comments:

The operating loan, cash on hand and Diane's wages are not farm business income items. Therefore, they would not be included in the Cash Income Statement.

Similarly, the principal payment on the Agreement for Sale, family living expense, income tax paid and CWB Advance repayment **are not** farm business expense items and would not be included in the Cash Income Statement.

Exercise 19

Accrued Income Statement

Name: John and Diane Blake Period Covered: Jan. 1 to Dec. 31, 20X1

Total Farm Cash	Income		\$65,724
+ Ending	Crops Inventory	+ \$27,153	
- Beginning	Crops Inventory	- \$24,369	
+ Ending	Livestock Inventory	+ \$75,150	
- Beginning	Livestock Inventory	- \$70,800	
+ Ending	Accounts Receivable	+ \$10,600	
- Beginning	Accounts Receivable	- \$8,147	
+ Value of pro	duce used in the home	+ \$600	
	Total Adjustments	+ \$10,187	+ \$10,187
		ACCRUED FARM INCOME	\$75,911
Total Farm Cash	Expense		\$30,854
- Ending	Supplies Inventory	- \$1,700	
+ Beginning	Supplies Inventory	+ \$1,260	
+ Ending	Accounts Payable	+ \$1,600	
- Beginning	Accounts Payable	- \$1,600	
+ Ending	Accrued Interest	+ \$1,370	
- Beginning	Accrued Interest	- \$1,183	
+ Depreciation		+ \$4,400	
	Total Adjustments	+ \$4,147	+ \$4,147
		ACCRUED FARM EXPENSE	\$35,001
	ACCI	RUED NET FARM INCOME	\$40,910

Accrued Income Statement

Name:	Period Covered:		
Total Farm Ca	ash Income		
+ Ending	Crops Inventory		
- Beginning	Crops Inventory		
+ Ending	Livestock Inventory		
- Beginning	Livestock Inventory		
+ Ending	Accounts Receivable		
- Beginning	Accounts Receivable		
+ Value of pro	duce used in the home		
	Total Adjustments		
	ACC	RUED FARM INCOME	
Total Farm Ca	ash Expense		
- Ending	Supplies Inventory		
+ Beginning	Supplies Inventory		
+ Ending	Accounts Payable		
- Beginning	Accounts Payable		
+ Ending	Accrued Interest		
- Beginning	Accrued Interest		
+ Depreciation	1		
	Total Adjustments		
	ACCR	UED FARM EXPENSE	
ACCRUED NET FARM INCOME			