

Pesticide Safety Education and IPM Program

University of the Virgin Islands School of Agriculture

RESEARCH | EXTENSION | TEACHING

Farm Records and Accounting
FARMERS FIRST #5 – “Thirsty Thursdays”

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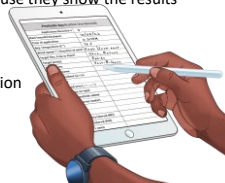
FARM RECORDS AND ACCOUNTING

Records tell the farm manager where the business has been and whether its on the path to making profits and creating financial stability.

Records are the manager’s report card because they show the results of management decisions over past period.

Purpose and use of Records

- Measure profit and assess financial condition
- Provide data for business analysis
- Assist in obtaining credit



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- Measure the profitability of individual enterprises
- Assist in the analysis of new investments
- Prepare income tax returns

Farm Business Activities



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- **Balance sheet:** is the report that shows the financial condition of the business at a point in time.
- **Income statement:** is a report of revenue and expenses ending with an estimate of net farm income.
- **Enterprise reports:** they are useful for determining which enterprises are contributing the most profit to the business and are suitable for expansion.
- **Income tax reports:** the information from any farm accounting system must be sufficient to prepare the farm tax return
- **Employee records:** any business with employee must keep considerable data related to each employee. This includes not only information such as hours worked but financial data on gross pay, deductions for income taxes and social security.
- **Depreciation schedule:** Annual depreciation on all depreciable assets must be computed and recorded as an expense before an income statement can be produced.
- **Inventory report:** A useful report, particularly for large crop farms and livestock operations.

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BASIC ACCOUNTING TERMS

- **Account payable:** An expense incurred but not yet paid. E.g. items charged at farm supply stores where purchaser is given 30 to 90 days to pay.
- **Account receivable:** Revenue for a product/service that has been sold/provided but no payment has been received.
- **Accrued expense:** An expense that accumulates/accrues daily but has not been paid (e.g., interest on loans and property taxes).
- **Asset:** Any item of value, tangible or financial on a farm or ranch, e.g. machinery, land, buildings, livestock
- **Credit:** An entry in accounting which is on the righthand side of a double – entry ledger. It is used to record a decrease in the value of an asset or increase in a liability.

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- **Debit:** An entry on the left – hand side of a double entry ledger. It is used to record an increase in an asset or expense account and decrease in a liability.
- **Expense:** a cost or expenditure incurred in the production of revenue.
- **Inventory:** The physical quantity and financial value of products produced for sale that have not yet been sold (e.g., grain in storage or livestock ready for sale).
- **Liability:** A debt or other financial obligation that must be paid in the future (e.g., loans from a bank, accounts payable and accrued expenses).

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- **Net farm income:** revenue minus expenses. It is also the return to the owner’s equity capital.
- **Owner equity:** the difference between business assets and business liabilities.
- **Prepaid expense:** a payment made for a product or service in an accounting period before the one in which it will be used to produce revenue.
- **Profit:** revenue minus expenses minus opportunity costs.
- **Revenue:** the value of products and services produced by a business during an accounting period. Revenue maybe either cash or noncash.

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Accounting period

An accounting period is a period of time, such as a quarter or a year, for which a financial statement is produced.

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Single Versus Double Entry

Single entry cash system: only one entry is made in the books to record a receipt or an expenditure.

Double – entry accounting, every transaction is entered twice. For every debit , there is an equal and offsetting credit and vice versa. A debit is simply an entry on the left side of the ledger, while a credit is an entry on the right side.

Debits record increases in asset accounts while credits record decreases in the value of asset accounts.

For example, a checking account balance is an asset account where a debit is an increase and a credit is a decrease in the account balance.

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Chart of Accounts

| Account | Description | Type |
|------------------------------|--------------------------------|---------------------------|
| Asset related accounts | | |
| 1000 | Cash on hand | Cash |
| 1010 | Checking account | Cash |
| 1100 | Accounts receivable | Accounts receivable |
| 1200 | Inventory – crops | Inventory |
| 1300 | Inventory – market livestock | Inventory |
| 1500 | Equipment | Fixed assets |
| 1610 | Building | Fixed assets |
| 1600 | Inventory – breeding livestock | Fixed assets |
| 1900 | Land | Fixed assets |
| 1990 | Accumulated depreciation | Accumulated depreciation |
| Liability – related accounts | | |
| 2000 | Accounts payable | Accounts payable |
| 2420 | Current portion long term debt | Other current liabilities |
| 2480 | Other current liabilities | Other current liabilities |
| Revenue – related accounts | | |
| 4020 | Sales crops | Income |
| 4080 | Sales livestock | Income |
| 4120 | Government payments | Income |
| 4200 | Other income | Income |
| 5000 | Gain on sale of assets | Income |
| Expense – related accounts | | |
| 6400 | Crop expense | Expense |
| 6500 | Livestock expense | Expense |
| 7010 | Property taxes | Expense |
| 7050 | Insurance expense | Expense |

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Double – Entry Accounting

| | Debit (\$) | Credit (\$) | Comment |
|-------------------------------------|------------|-------------|-----------------------|
| Receive income from a crop sale | | | |
| Account | | | |
| 1010 Cash | 12,000 | | Increase in asset |
| 4020 Crop sales | | 12,000 | Increase in income |
| Write a check for farm insurance | | | |
| Account | | | |
| 7050 Insurance Expense | 9,320 | | Increase in expense |
| 1010 Cash | | 9,320 | Decrease in asset |
| Borrow operating capital | | | |
| Account | | | |
| 1010 Cash | 15,000 | | Increase in asset |
| 2010 Operating loan | | 15,000 | Increase in liability |
| Depreciate machinery | | | |
| Account | | | |
| 6601 Depreciation expense – pick up | 3,000 | | Increase in expense |
| 6602 Depreciation expense – tractor | 8,000 | | Increase in expense |
| 1710 Accumulated depreciation | | 11,000 | Decrease in asset |
| Pay account at feed store | | | |
| Account | | | |
| 2001 Account at County Feed | 1,200 | | Decrease in liability |
| 1010 Cash | | 1,200 | Decrease in asset |

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Design for Record Taking on a Crop Farm

1. **Crop name:**
2. **Date planted:**
3. **Planting method:** (e.g., direct seeding, transplanting, broadcast seeding, container planting)

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Design for Record Taking on a Crop Farm

1. **Machinery and Equipment Record**

| Date | Type of Operation | Machinery or Equipment used | Total Area Covered | Cost of service |
|------|-------------------|-----------------------------|--------------------|-----------------|
| | | | | |

2. **Labor Record**

| Week | Amount of Hired/Family labor used | Total amount of labor used | Wage rate | Total Cost of Hired labor | Total value of family labor |
|--------|-----------------------------------|----------------------------|-----------|---------------------------|-----------------------------|
| Week 1 | | | | | |
| Week 2 | | | | | |

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Records

3. **Chemical inputs record**

| Date of Application | Type of Fertilizer or Insecticide | Quantity | Cost per unit | Total cost |
|---------------------|-----------------------------------|----------|---------------|------------|
| | | | | |

4. **Harvests record**

| Date | Quantity harvested | Quantity of crop after drying and threshing or milling |
|------|--------------------|--|
| | | |

5. **Sales record**

| Date | Quantity sold | Price per unit | Total sales (\$) | Quantity given out as gifts. |
|------|---------------|----------------|------------------|------------------------------|
| | | | | |

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Design for **Record Taking** on a Livestock Farm (poultry, goats, sheep, and cattle)

1. **Feed Record:** House or Pen Number..... Month.....

| Date | Description of Feed | Price per unit | Weight in Kilos | Total Value |
|------|---------------------|----------------|-----------------|-------------|
| | | | | |

Total feed in the month (kg).....

Total value of feed in the month (\$).....

Average price per unit of feed.....

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2. **Other costs record :** House or Pen Number.....
Month/Quarter/Year

| Item | Quantity | Cost |
|---------------------------|----------|------|
| Day old chicks or pullets | | |
| Labor | | |
| Light and Heating | | |
| Water | | |
| Medications | | |
| Depreciation on Housing | | |
| Depreciation on Equipment | | |
| Miscellaneous items | | |

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3. **Egg Production Record**

| Day | Number of Eggs Collected | Number of Cracked Eggs | Total Number of Good Eggs |
|------------------------------------|--------------------------|------------------------|---------------------------|
| 1 | | | |
| 31 | | | |
| Total Number of Eggs for the month | | | |

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4. Flock Number Record

| Day | Number of Birds | Number of Dead Birds | Number of Birds Removed | Number of Birds Remaining | Number of Birds Added |
|-----|-----------------|----------------------|-------------------------|---------------------------|-----------------------|
| 1 | | | | | |
| 31 | | | | | |

Total number of dead birds at the end of the month.....
 Total number of live birds at the end of the month.....
 Total number birds remaining at the end of the month.....

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5. Egg Sales Record

| Day | Eggs sold (in Dozens) | | Value of eggs sold | |
|-------|-----------------------|-------|--------------------|-------|
| | Large | Small | Large | Small |
| 1 | | | Total value | |
| 31 | | | | |
| Total | | | | |

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6. Chicken (Meat) Sales Record

| Day | Number of Birds | Value of Birds Sold |
|-------|-----------------|---------------------|
| 1 | | |
| 31 | | |
| Total | | |

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Questions ?

Place an X to indicate whether each business event is a production, investment or financing activity

| Event | Production | Investment | Financing |
|------------------------------|------------|------------|-----------|
| Pay cash for tractor repairs | | | |
| Borrow \$40,000 | | | |
| Pay interest on the loan | | | |
| Charge \$12,000 of feed | | | |
| Equipment depreciates | | | |
| Sell \$35,000 of corn | | | |
| Purchase pick up | | | |
| Pay principal on a loan | | | |

2. Explain the difference between an account payable and an account receivable?

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