

### NATIONAL OPEN UNIVERSITY OF NIGERIA

### **FACULTY OF AGRICUTURAL SCIENCES**

**COURSE CODE: AEC306** 

COURSE TITLE: FARM RECORDS AND ACCOUNTING

Course Code:	AEC306
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#### 1.0 INTRODUCTION

The farming environment is dynamic - always changing. It faces changes in technology, prices, climate and institutions. These changes affect the performance of an enterprise or enterprises in a farm.

Records are essential in any management operation. A good record keeping system will allow managers to monitor and evaluate the performance of their production system. It will help them identity problem area in the production plan, and to make the necessary corrective measures. Similarly complete records are useful to the manager and technical advisors in assessing any problems in determining factors that contribute to these problems, and in deciding what to do to control these problems.

Farm Records and Accounting a two credit degree course is one of the fundamental courses for Bachelor Degree Programe in Agriculture (B.Sc) and Agricultural Education (B.Sc.Ed) in any University in the world at large.

There are three modules consisting 15 units altogether. The first module starts with farm records. This gives a focus on Types and uses of farm records, analyzing farm records and computering farm records.

The second module focuses on Bookkeeping and Accounting which will enable you to get acquainted with the various books used in keeping farm accounts as well as how to use computer software in accounting.

The third module discusses Trial balance and final accounts. Here you will learn about the limitations and common errors of the trial balance. In addition, you will also learn the various adjustments that needed to be male in the final account of a farm firm

### i. What you will learn in this course

You will learn about Farm records, Bookkeeping and Accounting, Trial balance and final Accounts.

#### 3.0 Course Aims

The aim of this course is to create an indepth knowledge of farm records and Accounting. This will enable farm managers and other workers on the farm to appreciate the role of up-to-date farm records and efficient accounting in sustainable agricultural development. Thus, the aim of farm records and accounting is to:

- i. Explain the meaning and scope of farm records.
- ii. Discuss Bookkeeping and Accounting
- iii. Discuss Trial Balance and final Accounts.

### 4.0 Course objectives

In order to achieve the course aims, there are some overall objectives set for the course. Besides, each module and each unit has their respective objectives which you and your facilitator must constantly refer to, so that no objective is skipped. All the modules and unit objectives are specifics of the course objectives. The course objectives are stated as follows:

- i. Identify the types and uses of farm records.
- ii. State the strategies and techniques for computering farm records.
- iii. Explain the concept of bookkeeping
- iv. Discuss the various books used for bookkeeping.
- v. Prepare balance sheet, Profit and loss account and the cashflow statement.
- vi. Explain the necessary adjustment in the final accounts.
- vii. Prepare final accounts of a farm firm

### 1.0 Working through this course

This course contains some packages that you will be given at the beginning of the semester: one of them is the course material. Your full participation in both the continuous assessment and the final written examination are two areas expected of you to fulfill at the end of the course. The 15 units of the course packaged for you in modules are as shown below:

#### **Module 1 Farm Records**

- Unit: 1 Meaning and Scope of Farm records
  - 2 Types and uses of farm records
  - 3 Developing and improving farm records
  - 4 Analyzing farm records
  - 5 Computerized farm record keeping

### **Module 2: Bookkeeping and Accounting**

- Unit: 1 Meaning and scope of bookkeeping
- 5.0 Bookkeeping
- 6.0 Meaning and Scope of farm accounting
- 7.0 System of farm accounting
- 8.0 Computerized farm Accounting

### **Module 3: Trial Balance and Final Accounts**

- Unit: 1 Meaning and Scope of Trial Balance
  - 2 Limitations and common errors of Trial Balance
  - 3 Final Accounts
  - 4 Adjustments in the final Account I
  - 5 Adjustments in the final Account II

From all indications, you should be able to complete two credit unit about 15 weeks in a semester. Well spread out in each unit are: Introduction to the unit, specific objectives, body of the unit, conclusion, summary, Tutor Marked Assignments and References.

### **Course Material**

Major course materials of the course are as follows:

- i. **Course Guide:** This looks like a blue print that spells out what constitutes the course itself.
- ii. **Study units:** Each of these provides an overview of the content and number of units that will be covered in this course.

- iii. **Assignment files**: These files contain challenging tutorial questions termed as Tutor -Marked Assignment (TMAs) that will enable you to assess yourself at the end of every assignment that will be handed out by your tutor.
- iv. **Presentation schedule:** Certainly, the modus operandis (e.g time table, hours expected on each unit/ Module, assignment submission procedure on how it will be self tutored with the monitoring techniques by Noun will be in the information package of this schedule).

### **Study Units**

Details of the study units have earlier been presented. It is spelt out in modules with corresponding units and titles. You will be expected to spend 2-3 hours in studying a unit.

### **References and other Resources**

Apart from this study unit, some reference materials are provided as additional reading materials to support your study. You may come across them in Noun library or elsewhere.

### <u>Instructional Media</u>

As an open and distance learning University several and relevant multi-media that can make learning possible are available.

### **Assignment File**

This has been discussed later. It is mandatory to always turn in your assignments to any tutor assigned.

### Assessment

You will be expected to complete at least ten assignments by the end of the course. Some of these will be in the form of a project and continuous assessment (CA). You will be expected to write a final examination in the course. The overall score in the course will be a sum of 40% of CA and 60% of written examination. You will be expected to have 50% in the CA and 50% in the written examination; anything short of this will count as failure.

### **Tutor - Marked Assignment**

The TMA is a continuous assessment component of your course. It accounts for 30% of the total score. You will be given four (4) TMAs to answer. Three of these must be answered before you are allowed to sit for the end of course examination. The TMAs would be given to you by your facilitator and returned after you have done the assignment. Assignment questions for the units in this course are contained in the assignment file. You will be able to complete your assignment from information and materials contained in your reading, references and study units. However, it is desirable in all degree level of education to demonstrate that you have read and researched more into your references, which will give you a wider view point and may provide you with a deeper understanding of the subject.

Make sure that each assignment reaches your facilitator on or before the deadline given in the presentation schedule and assignment file. If for any reason you can not complete your work on time, contact your facilitator before the assignment is due to discuss the possibility of an extension. Extension will not be granted after the due date unless there are exceptional circumstances.

### **Final Examination and Grading**

The end of course examination for introduction to Farm Records and Accounting will be for about 3 hours and it has a value of 70% of the total course work. The examination will consist of questions, which will reflect the type of self-testing, practice exercise and tutor -marked assignment problems you have previously encountered. All areas of the course will be assessed.

Use the time between finishing the last unit and sitting for the examination to revise the whole course. You might find it useful to review your self-test, TMAs and comments on them before the examination. The end of course examination covers information from all parts of the course.

### **Course Marking Scheme**

Assignment	Marks
Assignments 1-4	Four assignments, best three marks of the
	four count at 10% each - 30% of course
	marks.
End of course examination	70% of overall course marks.
Total	100% of course materials.

#### **Facilitators/Tutors and Tutorials**

There are 16 hours of tutorials provided in support of this course. You will be notified of the dates, times and location of these tutorials as well as the name and phone number of your facilitator, as soon as you are allocated a tutorial group.

Your facilitator will mark and comment on your assignments, keep a close watch on your progress and any difficulties you might face and provide assistance to you during the course. You are expected to mail your Tutor Marked Assignment to your facilitator before the schedule date (at least two working days are required). They will be marked by your tutor and returned to you as soon as possible.

Do not delay to contact your facilitator by telephone or e-mail if you need assistance.

The following might be circumstances in which you would find assistance necessary, hence you would have to contact your facilitator if:

- 2 You do not understand any part of the study or the assigned readings.
- 3 You have difficulty with the self-tests
- 4 You have a question or problem with an assignment or with the grading of an assignment.

You should endeavour to attend the tutorials. This is the only chance to have face to face contact with your course facilitator and to ask questions which are answered instantly. You can raise any problem encountered in the course of your study.

To gain much benefit from course tutorials prepare a question list before attending them. You will learn a lot from participating actively in discussions.

### **Summary**

Farm Records and Accounting is a course that intends to provide concept of the discipline and is concerned with keeping accurate farm records and maintaining good accounts. Upon completing this course, you will be equipped with the basic knowledge of farm records, bookkeeping and accounting as well as Trial balance and final account. In addition you will be able to answer the following questions:

- 1.0 What are farm records?
- 2.0 What are the basic things to consider in selecting a computer records keeping system?
- 3.0 Which of the computer software known to you will you recommend as the best for farm business.
- 4.0 Distinguish between bookkeeping and Accounting
- 5.0 Explain the three major division of books used in bookkeeping and accounting.
- 6.0 Who is a bookkeeper?
- 7.0 State and explain the major methods of bookkeeping.
- 8.0 State and explain the golden rules of bookkeeping
- 9.0 What are the four variants of the farm accounting system?
- 10.0 What are the four major ways by which farm assets can be valued?
- 11.0 How can complete farm accounting be accomplished electronically?

Of course, the list of questions that you can answer is not limited to the above list. To gain the most from this course you should endeavour to apply the principles you have learnt to your understanding of farm records and accounting.

I wish you success in the course and I hope that you will find it both interesting and useful.

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### **AEC306: FARM RECORDS AND ACCOUNTING**

#### **Contents**

### **Module One: Farm Records**

- Unit 1 Meaning and Scope of farm records
  - 2 Types and uses of farm records
  - 3 Developing and improving farm records
  - 4 Analyzing Farm Records
  - 5 Computerized Farm Record keeping

## Module Two: Bookkeeping and Accounting

Unit 1 Meaning and scope of bookkeeping

- 2 Book keeping
- 3 Meaning and scope of farm Accounting
- 4 System of farm Accounting
- 5 Computerized Farm Accounting

### **Module Three: Trial Balance and final Accounts**

- Unit 1 Meaning and scope of Trial Balance
  - 2 Limitations and common errors of Trial Balance
  - 3 Final Accounts
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### **MODULE ONE: FARM RECORDS**

- Unit 1: Meaning and scope of farm records
- Unit 2: Types and uses of farm records
- Unit 3: Developing and improving farm records
- Unit 4: Analyzing farm records
- Unit 5: Computerized farm record keeping
- Unit 1: Meaning and scope of farm records
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- 2.0 Objectives
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  - 3.1 Definition and scope of farm records
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- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignments
- 7.0 References and other sources

#### 1.0 Introduction

In all spheres of life, adequate information is necessary for decision making. This is also the case for farming decisions. Records are essential in any management operation.

### 2.0 Objectives

It is expected that at the end of this unit, you should be able to:

• Define and explain the scope of farm records.

### 3.0 Body of the unit

## 3.1 Definition and scope of farm records.

Records are statements of fact or data concerning a specific subject which may be specified in physical, monetary, mathematical or statistical terms. Farm records pertain to information recorded on the day-to-day operation of a particular farm.

Farm records can the defined as systematic documentation of all activities taking place in a farm enterprise over a given period of time. It is an act of writing down every activity engaged in on the farm in every production season and at different stages of the production process up to the final disposal of the goods and services to the ultimate consumer.

Farm record keeping is more than just keeping track of what crop was planted in what field, it is a concept applicable to the entire farm operation.

A complete farm record will include all daily activities and transactions and with a proper accounting system it should be possible to have a complete estimate of the profit or loss statement at the end of the year. By keeping a complete farm record on a yearly basis it is possible to have a comparison between years and thereby determine the rate of growth or deterioration of the farm.

There are three basic types of farm records:

- 1. Resources inventories
- 2. Production accounts of livestock and crop operations.
- 3. Income and expenses records.

As a farmer, you use resources such as land, labour, machinery, breeding stock management and financial capital. You must assign value to these resources and

maintain current inventories so that you know the foundation from which you operate, from this resource base, you produce food and fibre. The production account of livestock and crop shows how this resource base is combined with other inputs to yield physical output. Consequently, production records, such as the relationship of feed to weight gain, cow to number of calves, fertilizer to crop yield, or land to total production, are most critical to your farm's profits. Because farmers interact in a marked economy, the cost of the feed and revenue from the market hog or the cost of the fertilizer and the price of the grain are equally important. These income and expense records are related to each other and translate production accounts into Naira and kobo.

### 3.2 Principles of Record Keeping

There are some general principles which apply to all record keeping and these are as stated below:

- All records, to be of value, must be accurate, neat and full. One way of
  making sure that records are accurate is by filling them in as soon as possible
  after the operation or transaction and by checking regularly.
- 2. All the results of record keeping should be compared with some standards which may be the results for previous years or the results for other farms. By comparing results and discussing problems together, farmers can help each other to improve their management.
- 3. The record keeping system should fit into the farm organization or framework.
- 4. The person responsible for keeping the records should develop a habit of regularly and accurately posting transactions.
- All financial transactions should be made through the bank and the monthly statement should be reconciled with the cheque book and record keeping system.

#### 4.0 Conclusion

We have learnt in this unit that farm record keeping is more than just keeping track of what crop was planted in what field. It is a concept applicable to the entire farm operations. Some of the principles of record keeping were enumerated.

### 5.0 Summary

You have learnt in this unit that:

- Farm records can be defined as the systematic documentation of all activities taking place in a farm enterprise over a given period of time.
- There are three types of farm records: resources inventories, production records and income and expense records.
- For all records to be of value it must be accurate, neat, full, current and simple.

### 6.0 Tutor Marked Assignment

- 1. What are farm records?
- 2. List and explain the various farm records a farmer is expected to keep on his farm.
- 3. List and explain the principles guiding keeping of good farm records.

#### 7.0 References and Other Sources

Olukosi, JO and P.O Erhabor (1988): Introduction to Farm Management Economics: Principles and Applications. AGITAB Publishers Ltd, Zaria PP 21 - 22.

Gerloff, D.C and R.W Holland (2006): Establishing and using a farm financial Record - keeping system: The University of Tennessee Agricultural Extension Service U7 PB 1540.

# **Unit 2: Types and uses of farm Records**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 The body of the unit
  - 3.1 Types of Farm Records
  - 3.2 Uses of Farm Records
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignment
- 7.0 References and other sources

### 1.0 Introduction

Records are important to the financial health of the farm. Good records do not ensure your farm will be successful, however success is unlikely without them. Accurate and up-to-date records are essential to successful farm management. Before any financial, budgeting or financial decisions can be made, farm records must be maintained.

Farm records are like report cards students receive in school, with a farm report card, you can tell how well you are managing your operation compared with other producers in your "class". You can also see the strengths and weaknesses of your farm operation. In this unit, attempts will be made to highlight the various uses of farm records.

### 2.0 Objectives

It is expected that at the end of this unit, you should be able to:

- State and explain the various types of farm records
- State and explain the uses of farm records.

### 3.0 The Body of the Unit

### 3.1 Types of farm Records

There are three basic types of farm records: resources inventories production accounts of livestock and crop operations, and income and expense records.

<u>Records Inventories</u> - As a farmer you use resources such as land labour, machinery, breeding stock, Management and financial capital.

You must assign value to these resources and maintain current inventories so that you know the foundation from which you operate, from this resources base, you produce food and fiber.

<u>Production accounts of livestock and crops -</u> The production accounts of livestock and crop show how this resources base is combined with other inputs to yield physical output, consequently production records such, as the relationship of feed to weight gain, cow to number of calves, fertilizer to crop yield, or land to total production, are most critical to your farm's profits.

<u>Income and Expense records</u> - because farmers interacts in a market economy, the cost of the feed and revenue from the market hog or the cost of the fertilizer and the price of

grain, are equally important. These income and expense records are related to each other and translate production account into Naira and kobo (fig 1).

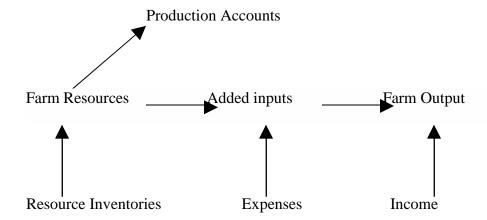


Fig 1: Types of Farm Records

#### 3.2 Uses of Farm Records

#### **Resources Inventories**

You must count and assign value to your resources to inventory your farm. These resources include both assets and liabilities. Assets are all items you own; liabilities indicate what you owe. Counting assets is relatively easy. With a notebook and paper, walk around your farm and survey your assets. Record the number of milk cows, hectares of tilled land etc valuing assets, is more difficult. Assets such as grain will probably be valued at the net market price for which they could be sold. Tractor could be valued at their original cost minus depreciation. Similarly land could be valued at its market price (if developed for residential houses) or at its agricultural value. Liabilities are easier than assets to count and value. A listing of debts to banks and other creditors usually is sufficient. The only difficulty is adjusting for accrued interest.

Resources can be counted and assigned a value more often, but most farmers find an end - of year valuation most useful. Resources inventories are not a "flow" concept, but a "stock" measurement. The most direct application of resources inventory, is completing a balance sheet to determine your networth. A resource inventory also is useful for computing non cash expenses, such as depreciation. Resources on the farm

often are used as collateral for a loan. A resource inventory provides a helpful summary of those assets to be used as collateral.

Finally, with an up-to-date inventory of your farm's resources, you can consider options for growth and diversifications more carefully and efficiently.

#### **Production Accounts.**

Production Accounts are used to measure the performance of crop and livestock enterprises on the farm, some production information can be derived from income and expense records, for example where total kilogramme purchased might be noted. This information while useful, usually is not specific or complete enough. More detailed production accounts can and should be kept, usually classified as crop, livestock or labour records.

Often included under crop records are farm maps. Farm maps are used to describe soil conditions cropping patterns, field layouts and building locations. Other written crop records show crop rotations, yields, fertilizer rates and pesticide applications. This information can be summarized and will indicate the efficiency of production.

Livestock and poultry records usually include subsections for mortality, breeding, performance and feed information. Mortality records list the number of livestock and track disease problems. Breeding records ensure that only superior individuals or groups of individuals are used to parent offspring with desired characteristics.

Performance records for livestock are divided between birth and productive information. Birth records indicate date of birth, important dates in the animal's life, parental evaluation and weaning information. Production records refer more directly to herd size, rate of gain, kilogramme sold and purchased.

Finally, feed records are important in evaluating overall production efficiency. Feed normally constitutes at least 50percent of the total cost of raising an animal for meat. The type of feed ration, its formulation and the rate of feeding should be monitored closely.

Another major category of production record keeping is labour. Labour records are important particularly when labour shortages are a problem. By knowing the amount and timing of labour required per operation of an enterprise you can better plan what enterprises are feasible when faced with labour constraints on the farm.

#### **Income and Expense Records.**

A transactions journal and general ledger are useful for recoding income and expense records. In the transactions journal, you record financial transactions as they happen. In the general ledger, you begin organizing your farm records into a meaningful format. Important uses of the transactions journal and general ledger are to provide information for the income statement and cash flow statement. With the income statement, you can calculate farm profit. The cash flow statement is a summary of the timing and flow of Naira in and out of the farm business. It helps you meet cash obligations.

For most farmers, a simple yet suitable transactions journal is the farm checkbook. It helps you keep track of the majority of income and expense transactions needed for a complete set of records, with the information from the transactions journal; the farmer organizes cash receipts and expenses in the general ledger by date and category.

#### 4.0 Conclusion

In this unit, we have leant that accurate and up-to-date records are essential to successful farm management. Records are used among others to: evaluate past performance of the operation, provide a financial picture of the present situation, and serve as a planning guide for future decisions.

### 5.0 Summary

In this unit, we have learnt that:

- There are three basic types of farm records: resource inventories, production accounts of livestock and crop operation, and income and expense records
- Farm records are used among others to: evaluate past performance of the operation, provide a financial picture of the present situation and serve as a planning guide for future decisions.

### **6.0** Tutor Marked Assignment

- 1. State and explain the various types of farm records
- 2. State and explain the various uses of farm records

### 7.0 References and Other Sources

Hanson J.C, D.M, Johnson and B.V. Lesley (1991): Developing and Improving Your Farm Records. Fact sheet P 542, Maryland Cooperative Extension, University of Maryland.

Jose, P (1994): Financial Record Keeping Software Review. Texas Agricultural Extension Service Bulletin B - 5089, Texas A and M University system, May 1994

# **Unit 3: Developing and improving farm records**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 The body of the Unit
- 3.1 Developing farm Records
- 3.2 Improving farm Records
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignments
- 7.0 References and other sources

### 1.0 Introduction

In this unit you will learn about developing and improving farm records. You will be acquainted with record keeping and record analysis, selecting a record keeping system and comparison of the hand and computer system of record keeping.

### 2.0 Objectives

It is expected that, at the end of this unit, you should be able to:

- Explain the concept of record keeping and record analysis
- Compare the hand and computer system of record keeping
- Explain how farm records can be improved.

### 3.0 The body of the Unit

### 3.1 Developing farm records

Record keeping refers to keeping, filing, categorizing and maintaining farm financial and production information.

Record analysis refers to evaluating farm records. The evaluation process allows a farm manager to make informed decisions based on actual (or projected) farm performance. Obviously, record analysis cannot take place within first keeping records.

The hand system and the computer system are the two methods of developing and keeping farm records.

### 3.1.1 The hand system

A large number of hand systems are available. One of the simplest systems involves the recording by hand of all financial transactions in a journal format. Purchases and sales activities are listed by hand as they occur. The enterprises show the date, the item involved (quantity, size etc) and cash involved in sale or purchase.

Table 1: Example of whole farm Record keeping

Income Expense

Date	Description	Calves	Cull	Maize	Feed	Supplies	Fuel
			Cows				
10/1	Sold 10 calves	N 100,00					
	at <del>N</del> 10,000						
10/1	Purchased feed				N40,000		
	(2 tons)						
10/3	Sold 2 cows at		<del>N</del> 120,000				
	N60,000						
10/6	Purchased					<del>N</del> 20,000	
	supplies						
10/8	Purchased 1500						<del>N</del> 97,500
	litres of fuel						
10/11	Sold 2000kg of			N200,000			
	maize						

For example Table 1 portrays a whole-farm record-keeping system. The date and a short description of each transactions are listed first followed by the Naira amount of each transaction under the appropriate income or expense category. The number of income and expense categories depends on the amount of specificity desired by the farm manager.

Table 2 is smaller to Table 1 but adds an enterprise accounting section. In addition to the income and expense categories, the transaction is also listed in an enterprise category. For example, "the purchased supplies" expense of N20,000 is first listed under the supplies category. But N16,000 of the expense is listed under "cow/calf" expenses and N4,000 is listed under maize. Again the number of enterprises used depends on the amount of detail desired by the farm manager.

Table 2: Example of Enterprise Record Keeping
Income

		Income			Expense			Enterprises			
Date	Description	Calves	Cull	Maize	Feed	Supplies	Fuel	Cow/Ca	lf	M	aize
			Cows					Income	Expense	Income	Expense
10/1	Sold 10 calves at 10,000	N100,000									
10/1	Purchased feed (2 tons)				N 40,000				N 40,000		
10/3	Sold 2 cows at N60,000		<del>N</del> 120,000					N 120,000			
10/6	Purchased supplies					N 20,000			N 16,000		N 4,000
10/8	Purchased 1500 litres of fuel						N 97,500		N 2,500		N 95,000
10/11	Sold 2000kg of maize			N 200,000						N200,000	

Regardless of the system selected, entries should be made regularly. In addition, disciplining oneself to make easy transaction through a bank checking account will ease record keeping difficulties. And reconciling bank statements with farm records ensures accuracy.

### 3.1.2 Computerized record keeping system.

This entails the use of different software package in record keeping. In 1994 Pena et al evaluated six computerized farm record keeping programs with each program having some unique features.

Selecting a computerized record keeping program should be done on the basis of features needed. Some program will allow for enterprise accounting, some programs will calculate payroll reports for employees. Few financial record keeping programs allow for production records to be kept simultaneously with financial records. For example, in many programs, sales of grain or livestock can be reported in Naira only, with no accounting for kilogrammes

A computerized record-keeping system will not necessarily save time. Its real advantage is in record analysis. Once the information is posted in the computer software reports and analysis can be created, changed and printed. Computerized systems quickly

and accurately sort and report a great deal of information. They can also provide monthly or annual summaries for identifying strengths and weaknesses of an operation

Table 3: Comprise of the hard system and Computerized system of record keeping

Hand System	Computer System
Low initial out-of-pocket expense	Higher initial out-of-pocket expense
Easy to implement	May require significant study
Time consuming	Fast
More opportunities to make mistakes	Accurate
Limited in extent of analysis without	Can be a powerful analysis tool
extraordinary investment of time and effort	

### 3.2 Improving Farm Records

Accurate records are essential for evaluating your farms performance: accurate analysis required accurate data. Too often farmers rely on publications which describe an average farm instead of personal records that describe their farm. To make the best financial decisions concerning your farm, use data collected from your farm. It is possible to make the job of record keeping easier by using forms and accounting systems designed especially for the farm. A good source for record keeping books is your local extension agent or agricultural lender. Also software packages for farm record keeping can be purchased for your personal computer.

Accuracy is just as important in management record keeping as in tax and financial record keeping. If the management information isn't accurate, it may do more harm than if you didn't have it at all. With physical quantities, check sheets are recommended as a tool for testing the equality of the sources and uses of quantities and thereby testing the accuracy of quantity information. The sources/amount of account for should equal or at least closely approximate the uses/amount accounted for. Quantity sources typically include beginning inventory quality, quantity purchased, quantity produced and quantity transfer in from other production enterprises/production centers. Uses typically include: quantity sold, quantity fed if feed or grain, quantity spoiled or death loss in livestock, quantity transferred out to other enterprises/ production centers,

and ending inventory quantity. Inventory change is a critical element if quantities are to coincide with accrual adjusted financial measures.

Completeness is another matter entirely. A farmer could wear himself out keeping track of every type of information that might remotely be useful for management analysis purposes. The appropriate criteria for how much and what management information to record are:

- 1. Does the benefit of recording and using the information sufficiently exceed the cost to make it worthwhile?
- 2. If the information is collated, will it be used to influence farm decision making?

As you try to apply these criteria, it may be helpful to think about what information is likely to change how you operate the farm. Information that will change how you operate and lead to improved yields would seem to produce a net benefit. Unfortunately, we generally don't have the luxury of knowing that the information will pay off. But, it is a good idea to have a plan in mind about how the management information will be used before investing large amounts of time and money collecting that information. Management records are only useful when they are used.

#### 4.0 Conclusion

Farmers have to continually make management decisions, as we have so far identified. These management decisions determine the outcome of a farm operation in relation to investment undertaken, financing of the operation, protection, or custodial and consumption behaviour of the farm household. Thus, to make good decisions, farmers must have relevant information

### 5.0 Summary

In this unit you have learnt that:

- Keeping records are essential to the efficient management of a farm business
- Accurate records and resulting analyses help farmers make financial and production decisions
- Traditional hand record- keeping systems continue to work well for many farmers

- Computerized record keeping and analysis program have been accepted and used by a number of farmers also
- Developing and using a farm record keeping system will allow the farm manager to make more informed decisions affecting the profitability of the farm

### 6.0 Tutor - Marked Assignment

- 1. Differentiate between record keeping and record analysis
- 2. Compare and contrast hand system and computerized system of record keeping.

#### 7.0 References and Other Sources.

Gerloff, D.C and R.W. Holland (2006) Establishing and using a farm financial record-keeping system. The University of Tennessee Agricultural Extension Source UT PB 1540

Jose, P (1994): Financial Record keeping Software Review Texas Agricultural Extension Service Bulletin B-5089, Texas A&M University system, May 1994.

# **Unit 4: Analyzing farm Records**

- 12.0 Introduction
- 13.0 Objectives
- 14.0 The Body of the Unit
- 3.1 Analyzing Farm Records
- 3.2 Financial statements and list of Required Records
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignment
- 7.0 References and other sources

#### 1.0 Introduction

Once a farm record keeping system has been established analyzing the records can begin. Decision making can be greatly enhanced by analyzing both production and financial records and their impact on profitability. In this unit you will learn about a number of financial analysis tools that can be used when accurate and complete farm records are available.

### 2.0 Objectives

It is expected that, at the end of this unit, you should be able to:

• Discuss the various methods of analyzing farm records.

### 3.0 The body of the unit

### 3.1 Analyzing Farm Records

A number of financial analysis tools can be used when accurate and complete farm records are available. These tools include the balance sheet, income statement and projected monthly cash flow statement (including family living expenses). These three financial statements provide information for making short and long term financial decisions.

#### 3.1.1 The Balance Sheet

Also known as the financial statement or statement of networth. The balance sheet provides an overall financial snapshot of the farm business on a specific date. It lists all of the assets (property) and liabilities (loans) of the business as of the balance sheet date. Income and expense records are not needed for the balance sheet. A value for each asset and the outstanding balance for each liability is given in the balance sheet. Ideally, the balance sheet should separate assets and liabilities into current asset (less than one year of life), intermediate (one to seven years of life) and long-term (longer than seven years of life, mainly buildings and land) categories and should list cost (original cost less depreciation) and market value (current expected sale price) for each.

The balance sheet gives the farm manager a "snapshot" of the networth on a specific date. The networth is the value of all assets on the farm less the amount of money owed against those assets.

Some of the ratios and relationships on a typical networth statement are examined below.

1. Current Ratio (Liquidity) It is a measure of a business' ability to meet current debt obligations as they come due without disrupting normal operations.

The ratio is calculated by dividing the current assets by the current liabilities.

#### Current ratio = Current Assets

#### Current Liabilities

As a general rule, two Naira of current assets to one naira of current liabilities represents a strong ratio. A current ratio of 1.5:1 is good. 1 to 1 is weak and <1 to 1 often results in cashflow problems.

#### 2. Debt to Asset Ratio (Solvency)

It is a measure of the business' ability to meet its total debt obligations, if all the assets were to be sold. It provides an indication of the business ability to continue in the event of severe financial adversity caused by perils such as drought, excess moisture or a decline in commodity prices. It also shows the percentage of the assets that are financed by outside creditors. The ratio is calculated by dividing the total liabilities by the total assets and is expressed as a percentage.

#### Debt to Asset ratio = Total liabilities x = 100

#### Total Assets 1

As a general rule, a farm business having under 25% of its assets financed is in a fairly strong position while between 25% to 40% is moderate, and between 40% and 60% is in an increasingly weaker position. The higher the debt ratio, expressed as a percentage the greater the financial risk as a result of the higher borrowing costs.

### 3. Earned financial progress (profitability)

Earned financial progress refers to the increase in the farm business networth from the beginning of the period to the end of the period as a result of the income earned by the business. The key word is earned' which excludes changes in networth as a result of an owner's contributions to the business, the gain on the sale of the assets or the re-

evaluation of the assets including land, buildings and breeding stock. It is important to track the increases to networth that relate directly to income earned by the business as opposed to other adjustments or transactions.

#### 3.1.2 Income Statement

Other names used for this important accounting statement include: a profit and loss statement, an operating statement and an income and expense statement. The income statement lists the income and expenses of a business over a period of time called the accounting period.

Year - to year profits are calculated on the income statement also known as the profit/loss statement. The income statement is used to calculate net cash income, adjusted by changes in inventories and capital items.

The Net farm income refers to the 'bottom line' profit that is earned (or projected to earn) by the business during the accounting period. The Net Farm Income provides the answer to the question of how much profit the farm has made or is projected to make, in the business plan.

Analyzing the Net Farm Income as a return on the farm assets and equity (networth) can also be informative. Since the Net Farm Income represents the return the farm earns on investment.

The measures of profitability are as discussed below.

#### 1. Returns on Assets (ROA)

It is a measure of profitability measuring the rate of return that the farm business earns on its average asset base over the period. The higher the return, the more profitable the farm business.

$$ROA = Net Farm Income + Interest expense - labour x 100$$

$$Total Farm Assets (Average) 1$$

#### 2. Return on Equity (ROE)

It is a measure of the return to the networth (equity) in the business. The farm equity is the capital that could be invested elsewhere (if you were not farming) and so this analysis provides an interesting perspective to see just how good a return a farmer is receiving on his investment in farming as compared to other alternatives. It is calculated by dividing the Net Farm Income less the unpaid labour/management costs, by the

1

average value of the farm equity (networth) for the period and is expressed as a percentage.

$$ROE = Net Farm Income - Labour x 100$$

Farm Equity (average) 1

A return on equity exceeding the return on assets indicated an economical use of borrowed funds. In other words, it paid to borrow money because the return on this borrowed capital was greater than the cost of borrowing.

#### 3. Expense/Revenue Ratio

Shows the percentage of the farm income that is required to cover the operating expenses, excluding the principal and interest payments. The ratio is calculated by dividing the operating expenses by the value of the farm production and is expressed as a percentage.

Expenses/Revenue Ratio = 
$$\underline{\text{Operating expenses}}$$
 x  $\underline{100}$ 

Value of farm production 1

The value of farm production is the total value of the farm sales less the cost of purchased feeds, grain and market livestock.

#### 3.1.3 Cash flow

The cashflow projection stimulated the anticipated financial activity that will flow through the farm bank account during the accounting period.

The projected monthly cashflow statement is used to look ahead to the next year of operations. By projecting a cashflow for the next year, potential cash shortfalls can be noted and appropriate changes in the farm operation can be analyzed.

### 3.2 Financial statement and list of Required Records

Table 4 illustrates the kinds of records that go into the making of financial statements and production summaries. The left column contains the financial or production statement desired by the farm manager. The right column contains the records required to complete the statement.

Records can be used for more than one statement for example, "Debt payments" are used in the income statement, cashflow statement and in income taxes, likewise,

"Farm Income and Expense" are used in the Income statement, Cashflow statement, Enterprise Analysis and Income Taxes.

Table 4: Financial Statements and list of Required Records.

Statement	Records Required
Balance sheet	Farm Assets cost and Value. Farm and Personal Assets
	changes, Livestock, Crop and other products
	Inventories, Loan balances
Cash flow	Farm Income and Expenses Non - Farm Income and
	Expenses Debt payments.
Enterprise Analysis	Farm Income and Expenses. Livestock and Crop yields.
Income Statement	Farm Income and Expenses Interest Payments Livestock
	and Grain Inventories Accounts payable & Receivable
Income Taxes	Farm Income and Expenses Non-Farm Income and
	expenses, Interest Payments, Depreciation Schedule

### 4.0 Conclusion

In this unit you have attempted to learn about how farm records are used to analyze a farm business, as well as the financial statements and list of required records.

### 5.0 Summary

In this unit, you have learnt that:

- A number of financial analysis tools-The balance sheet, income statement and projected cashflow statement can be used to analyze a farm business when accurate and complete farm records are available.
- The balance sheet provides an overall financial snapshot of the farm business on specific date.
- The income statement is used to calculate net cash income, adjusted by changes in inventories and capital items.
- The projected monthly cashflow statement is used to look ahead to the next year of operations. By projecting a cashflow for the next year, potential cash shortfalls can be noted and appropriate changes in the farm operation can be analyzed.

There are some records required for some financial statements. For instance
in preparing the balance sheet, records needed include: farm Assets cost and
value, farm and personal assets, changes in livestock, crop and other product
inventories, loan balances.

### **6.0 Tutor Marked Assignment**

1. Use your knowledge of a balance sheet and ratio analysis to complete the balance sheet below. Given that the net capital ratio = 4, the current ratio = 2 and the intermediate ratio = 3

Assets	Liabilities
Total Current Assets N 400,000	Total current Liabilities
Total Intermediate Assets	Total Intermediate Liabilities
Total Fixed Assets	Total Long-term Liabilities
	Total Liabilities Networth
Total Assets	Total Liabilities and Networth N4,000.000

- . . . . .

2. Of what use is the Returns on Equity ratio in farm financial analysis.?

#### 7.0 References and other sources

Gerloff, D.C and R.W Holland (2006) Establishing and using a farm financial Record keeping system. The University of Tennesse Agricultural Extension Service UT PB 1540

Moore, K.J (2002): "What are the most necessary farm records and how do i interprete and use them" Frequently Asked farm Management and Marketing Questions (FAO No 9). The pursue University Cooperative Extension Service Publications - Purdue Extension - Knowledge to Go

Wiebe, P.I (2004): "Analyzing a Farm Business": A guide to help producers prepare, analyze and interprete farm business plans in order to make informed management decisions. Published by Manitoba Agriculture and Food Section, Manitoba University.

# **Unit 5: Computerized Farm Record keeping**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 The body of the unit
  - 3.1 Computerized farm record keeping
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignment
- 7.0 References and other sources

### 1.0 Introduction

A concern of many financial consultants and lenders is that many farmers lack adequate records to monitor and analyze the financial health of their farm business. Lack of financial data makes it difficult to determine proper debt loads, or to develop plans for businesses with major financial problems.

A variety of methods could be used in collecting the necessary farm record information: hand kept records, simple or complex computer systems. As farm size and or debt increases, many farmers and lenders look for computer program that allow fast data entry, have internal checks for accuracy and allow summarizing the data in a variety of ways. Most begin their search by asking: Is there a simple computer program that will keep my records like the farm account books"? In this unit therefore, attempts will be made to explain the various commercial software program that can do an excellent record keeping job on the farm.

## 2.0 Objectives

It is expected that at the end of this unit you should be able to:

- List and explain the uses of the various commercial software programs available to keep computerized farm records.
- State the advantages and the disadvantages of each software system/program.

## 3.0 The body of the unit

## 3.1 Computerized Farm Record Keeping

In recent times, there are numerous commercial software programs that can do an excellent job of recording basic income and expense data for farmers, plus quickly summarizing and preparing a variety of financial reports, while not ruling out hand kept records, there are some basic questions to consider in selecting a computer record keeping system. The focus will be on software (computer program that performs various tasks) rather than the hardware (computer and printer).

Farm record keepers can pick their software from four groups:

- 1. Simple cash systems: Quicken
- 2. General cash accrual accounting system: Quick Books, DacEasy, peachtree

- 3. Farm Cash/ accrual accounting systems PCMars, Transactions Plus (TA+) by FBS Systems, Redwing
- 4. Add-ons for analysis: Spreadsheets, FINPACK, AFRA by FBS.

### 3.1.1 Advantages and Disadvantages of each system

#### Simple cash systems

In a simple cash system, users are able to record all cash transactions of both the farm and family. Quicken is the only program listed due to its widespread use across the United States of America. Its popularity is due to the ease of data entry and to its low price. This single - entry system is essentially an electronic checkbook. However, it allows users to track loans, stock portfolios and other financial/ assts. The ability to easily enter data, write cheques from the computer, reconcile the cheque book with the bank statement and quickly create reports for financial and tax purposes explains its broad acceptance, there is a payroll module that can be added which is adequate for the firm with only a few employees.

Critics of Quicken point to producers with limited knowledge of accounting concepts who fail to property classify income and expense entries that lead to flawed reports, Quicken does not have a chart of accounts with income and expense categories specific to agriculture users can correct this problem by contacting extension agents for training and obtained a sample chart of accounts to use with their farm records. Others fault Quicken for the lack of fields to track physical quantities.

Properly used, Quicken can provide useful, accurate summaries of all cash transactions, including sales and purchases of capital assets such as machinery and breeding livestock. Once the depreciation schedule is created, not by Quicken, producers have all data needed for tax reporting.

#### General cash/accrual accounting systems.

Three programs: Quickbooks, DacEasy, and Peachtree are listed under general cash accrual accounting systems. QuickBooks is representative of this group. QuickBooks has an excellent chart of accounts specific to agriculture. Reconciliation of computer accounts with bank statements is quite easy. Double -entry features allow either cash or accrual reports, firms with employees enjoy the ease of generating payroll checks and all related employee reporting. The user begins by entering a beginning cost

basis balance sheet. As daily receipts and expenditures are entered, the balance sheet is updated. But unless the user also records transfers of feed from inventory to livestock, monthly depreciation etc the intra-year balance sheets are not correct. For farm users a balance sheet once a year is typically all that is useful and necessary. This is accomplished by taking a year end inventory and entering the adjustments, including depreciation to make the year-end balance sheet. The beginning and ending balance sheets, plus cash receipts and expenditures give the user an accrual income statement, thus providing your basic financial statements.

Use of a program such as QuickBooks does require some knowledge of accounting. Again, these are general accounting programs and may not allow for recording physical quantities. There are some training materials and Web sites that can assist producers who wish to use such programs. Like Quicken, it allows you to separate the data into enterprise groups, such as dairy versus crops. In order to produce accurate financial statements, only information relating to the farm business should be recorded. If a computer is used to track family income and expense, you should have separate checkbooks and use Quicken to record all non farm transactions, while more expensive than Quicken, the price tag is still attractive to many small businessmen, including farmers.

#### Farm Cash accrual accounting systems.

The farm cash accrual accounting systems require some knowledge of accounting. Most focus only on the farm business, but some allow family or other business data to be kept in the same system. Trying to totally integrate many programs, especially the integration of feed produced, purchased, fed and sold with all cash transactions can be a daunting task. By starting with the basic program and adding others as needed, major problems should be avoided.

## 3.1.2 Getting beyond Just keeping records

Any of the above types of record systems can get annual summaries of cash receipts and expenses. This includes sale and purchase of capital assets, principal and interest payments and addition/borrowings. To obtain financial statement and analyze financial position requires using the data in a separate program.

This may be an additional module from the software company, or it may be a separate program. In either case, the chart of accounts used must match up with the grouping of income and expense categories in the other program.

Spread sheets are available that can be used with year end inventory data to develop balance sheets, income statements and analysis. Check the Montana state University web site for ones currently available, little cash outlay is required, but you will need to spend time to understand how to collect and enter the data to do it right. FINPAC provides another way to develop and analyze financial statements. It is also possible to use a program that is integrated with the basic software like TA+ or Red wing.

## 3.1.3 The Best Program (System) for Farm Business

Which program (system) is best for your farm business? No one can predict which program is best. The following may help in the decision.

- 1. Examine farm specific programs
  - If you:
  - Need complete, well documented financial statement
  - Have, or are planning on a large amount of debt
  - Have many employees
  - Have someone who has some knowledge of accounting
  - Forsee a need for more extensive records in the future.
- 2. Examine cash based or generic programs, e.g Quicken if you:
  - Keep records primarily for tax purposes.
  - Prefer to use spreadsheets, FINPACK or an accountant to generate and analyze financial statements.
  - Have few employees
  - Can get needed production data elsewhere
  - Have little knowledge of computers.

#### 4.0 Conclusion

In this unit we have learnt that computerized farm record keeping could be done with the aid of any of the following groups of software: Simple cash systems (Quicken) General cash accrual accounting systems (e.g QuickBooks, DacEasy Peachtree), Farm

cash accrual accounting systems (e.g PCMars Transactions plus (TA+), Redwing); Addons for analysis (e.g Spreedsheets, FINPACK, AFRA by FBS

## 5.0 Summary

In this unit, we have learnt that:

- All accounting software discussed in this unit allow checks to be written with the computer as the data are entered.
- All allow for reconciliation of accounts with bank statements- a major step in improving the accuracy and completeness of farm business records.
- Reports can be tailored to the needs of the tax preparer, accountant and manager using the computerized software program for record keeping.
- The major disadvantage for some is that they all require use of a computer.
- Any program can get the needed cash receipt and expense data. However, to get
  useful financial statements an inventory must be taken at the end of each
  business year. Without this, it is impossible to develop accurate balance sheets
  and income statements.
- Farmers who need accurate, complete financial statements and analysis should consider using some form of computer record system.
- Such statements can be prepared using a simple cash only system like Quicken
  when used in conjunction with spreadsheets other software programs such as
  FINPACK or the AFRA program by FBS or in conjunction with an accountant.

## **6.0** Tutor Marked Assignment

- List and explain the uses of the various commercial software program available to keep computerized farm records.
- 2. State the advantages and the disadvantages of each software system/program
- 3. What are the basic things to consider in selecting a computer record keeping system?
- 4. Which of the computer software known to you will you recommend as the best for farm business?

## 7.0 References and other sources

Duvick, R. D (2007): Computerized Farm Record Keeping. Ohio State University Bulletin 890-01 Department of Agriculture, Environmental and Developmental Economics, the Ohio State University, Columbus.

## Module Two: Bookkeeping and Accounting

- Unit 1 Meaning and scope of bookkeeping
  - 2 Book keeping
  - 3 Meaning and scope of farm accounting
  - 4 System of Farm accounting
  - 5 Computerized Farm Accounting
- Unit 1: Meaning and scope of bookkeeping
- 1.0 Introduction
- 2.0 Objectives
- 3.0 The Body of the unit
  - 3.1 Meaning and scope of book keeping
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignment
- 7.0 References and other sources

#### 1.0 Introduction

In this unit you will learn about meaning and scope of book keeping. You will be acquainted with the distinction between book keeping and accounting as well as the various books used for book keeping.

## 2.0 Objectives

It is expected that, at the end of this unit, you should be able to:

- Explain the concept of book keeping
- Distinguish between book keeping and accounting.
- Discuss the various books used for book keeping.

## 3.0 The body of the unit

## 3.1 Meaning and scope of Book keeping

Book - keeping may be defined as the science of recording transactions involving money or money's worth in a regular and systematic manner in such a way that the books of accounting will show a true and fair state of the financial worth of a business readily at any point in time.

Book-keeping is the recording of transactions i.e the record making phase of accounting. The recording of transactions tend to be mechanical and repetitive, it is only a part of the field of accounting and probably the simplest part.

On the other hand, accounting includes the design of accounting systems, preparation of financial statements, audits, cost studies, development of forecast, income tax work, computer applications to accounting information as an aid to making business decisions.

The books that are used for book keeping fall naturally into the following divisions namely:

- Principal books: under this sub-head we have the ledger and the cash book.
   These are the main books which are used for practicing the system of accounts.
- Subsidiary books: This is otherwise known as books of original entry, first entry or prime entry. Many details are recorded in these books before the amounts concerned are transferred to the ledger accounts.

3. Statistical or memorandum books: In these books are found various details connected with the business operations that cannot conveniently be recorded in other books. Examples of these are the cost books and stock books of a manufacturing firm, the registers of shareholders in limited liability companies, the policy registers of an insurance company etc.

### 4.0 Conclusion

We have examined the meaning and scope of book keeping; the books that are used for book keeping were also discussed.

## 5.0 Summary

In this unit, we have learnt that:

- Book keeping is the science of recording transactions involving money or money's worth in a regular and systematic manner in such a way that the books of accounts will show a true and fair state of the financial worth of a business readily at any point in time.
- The various books that are used for book keeping can be classified into: Principal books, subsidiary books, statistical or memorandum books.

## **6.0** Tutor Marked Assignment

- 1. Define book-keeping and Accounting
- 2. Distinguish between book keeping and accounting.
- 3. Explain the three major divisions of books used in book keeping and accounting.

#### 7.0 References and other sources

Olofinlana L.O and R.W Odewale (1999): Fundamentals of Accounting Volume 1, Second Edition, Stecom Publishers Ltd Akure, Ondo State, Nigeria pp 15-18.

# Unit 2: Book keeping

- 1.0 Introduction
- 2.0 Objective
- 3.0 The body of the unit
  - 3.1 Book keeper
  - 3.2 Book keeping systems
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignment
- 7.0 References and other sources

### 1.0 Introduction

In this last unit (unit one), you have found out that, book keeping is the record making phase of accounting. You have also learnt that, the various books that are used for book keeping can be classified into: principal books, subsidiary books, statistical or memorandum books. In this unit, you will learn about the book keeper as well book keeping systems.

## 2.0 Objectives

At the end of this unit, you will be expected to be able to:

• Explain the various systems of Book keeping.

## 3.0 The Body of the unit

### 3.1 Book keeper

A book keeper (or book keeper), also known as an accounting clerk or accounting technician, is a person who records the day-to-day financial transactions of an organization. A book keeper is usually responsible for writing the "daybooks", The daybooks consist of purchase, sales, receipts and payments. The bookkeeper is responsible for ensuring all transactions are recorded in the correct day book, suppliers ledger, customer ledger and general ledger. The book keeper brings the books to the trial balance stage. An accountant may prepare the income statement and balance sheet using the trial balances and ledgers prepared by the bookkeeper.

## 3.2 Bookkeeping Systems

Two common bookkeeping systems used by businesses and other organizations are the single entry book keeping system and the double-entry bookkeeping system.

## 3.2.1 Single - entry system

The primary book keeping record in single-entry book keeping is the cashbook which is similar to a checking (chequing) account register but allocates the income and expenses to various income and expense accounts Separate account records are maintained for petty cash, accounts payable and receivable and other relevant transactions such as inventory and travel expenses.

The main characteristic of this system is the keeping of personal accounts only. For example, a trader who operates this system will certainly have a cashbook, but he may or may not write the cashbook up correctly, since he alone operates the books and the business. He will have access to his bank account and this is enough for him to know the state of the business. Besides the cashbook, he will also keep his customers accounts to whom goods are sold on credit just for the record. For creditors he may not bother much to record their transactions, since this is based on personal dealings.

This is one of the problems often encountered when the double entry system is not in use. Other accompanied problem of the single entry system are non keeping of the following records:

- i. Accurate Expenses Account
- ii. Total sales and purchases of Goods
- iii. Accurate figures for creditors
- iv. Acquired Assets of the business (besides the debtors)
- v. Accurate figure for capital Account at any given time.

When these records are not in place, it will be very difficult to have complete records leading to trial balance.

To prepare the profit and Loss Account and a balance sheet from single entry book-keeping, the following procedure are recommended:

- i. Build up a statement of Affairs and capital Account: This requires the value of assets and liabilities to be determined in facts and figures. This is done by taking the value of:
- ii. Cash available at the beginning and end of a trading period including cash at bank.
- iii. Available assets both at the beginning and close of business e.g furniture, machinery, stock in trade and the value of debtors including prepaid and bills receivable.
- iv. Consider the value of sundry creditors, this will include personal advances to the proprietor, bank overdrafts, bills payable and outstanding expenses owing.

v. Construct a capital account for the owner of the business. On credit (Cr) side insert the opening balance of the capital, then add any additional capital contributed either in the form of cash or of other assets.

On the Debit side enter the closing balance of capital at the end of the period. The difference between the two sides of the capital account will represent the profit or loss for the period.

Note: If the opening capital exceeds the closing capital, such excess is considered to be a loss and where the closing capital exceeds the opening capital, it is regarded as profit for the period.

#### Example 1

The following is an example of a single entry record, Prepare a statement of Affairs and statement of profit for the year ended.

Ascertain both the opening and closing capital.

	Jan 1 <sup>st</sup>	Dec 31 <sup>st</sup>
	N	N
Stock - in -trade	25,000	80,000
Machinery	15,000	40,000
Furniture	30,000	50,000
Debtors	60,000	75,000
Creditors	55,000	100,000
Insurance Prepaid	-	2,500
Electricity prepaid	4000	6,750
Cash in hand	30,000	12,000
Cash at book	50,000	37,500

By January 1<sup>st</sup>, accrued expenses was N3,000 and wages owing was N11,200. At the end of the year, 5% provision for Bad debts was to be set aside. Also at the close of the business rent owing was N 8500 and bills payable was N11,150. The amount withdrawn by the owner in the year was N20,000. Within the year, he sold his used car for N 40,000 and the proceeds paid into his business account.

- i. Find the value of sales in the period
- ii. Find the value of purchases in the period.
- iii. Calculate the cost of goods sold

Where the opening stock and purchases are added together, the result is the cost of goods available for sale. When closing stock is deducted, the resulting figure is cost of Goods Sold.

### iv. Then find the Gross profit

To find sales and purchases figure:

#### SALES CONTROL ACCOUNT

Dr - Opening value of debtors

Cr - Cash received from debtors

Cr - Closing value of debtors

The difference between the debit and credit sides represents the value of sales in the period,

#### PURCHASES CONTROL ACCOUNT

Dr - Cash paid to Creditors

Cr - Opening value of creditors and take down below the lines.

The "difference" between the debit and credit sides represents the value of purchases in the period.

The following transactions shows the preparation of sales control Account and the purchases control Account.

	N
Opening figure of debtors for the year, Jan 1st 200-1	40,000
Opening figure of creditors for the year, Jan 1st 200-1	55,000
Cash received from debtors within the year	250,000
Cash paid to creditors within the year	180,000
Closing figure of creditors at the end of trading Dec 31 200-1	35,000
Closing figure of debtors at the end of trading Dec 31 200-1	60,000

Solution: Example 1

Sales Control Account

200-1	N	200-1	N

Jan 1 Dec 31 200-2	Balance b/f Sale (difference)	40,000 <u>270,000</u> <u>310,000</u>	Dec 31	Cash Balance c/d	250,000 60,000 310,000
Jan 1	Balance b/d	60,000			

### **Purchases Control Account**

		N	200-1		N
200-1	Cash	180,000	Jan 1	Balance b/f	55,000
Dec 31	Balance c/d	<u>35,000</u>	Dec 31	Purchases differences	<u>160,000</u>
200-2		215,000			<u>215,000</u>
			200-2		
			Jan 1	Balance b/d	35,000

# Statement of Affairs as at 1st January

	N	N		N	N
Capital Fund			Fixed Assets		
Cash Introduced			Machinery	15,000	
(difference)		144,000	Furniture	30,000	
					45,000
Current Liabilities:			Current Assets		
Creditors	55,000		Stock	25,000	
Accrual expenses	3,000		Debtors	60,000	
Wages owing	12,000		Electricity		
			prepaid	4,000	
		70,000	Cash in hand	30,000	
			Cash at bank	<u>50,000</u>	
					<u>169,000</u>
		214,000			214,000

### Note:

Under the capital fund, cash introduced in January was arrived at by substracting the current liabilities from the total of both fixed and current assets. This difference

between Assets and liabilities in the statement of Affairs is the cash introduced (capital) on 1<sup>st</sup> January.

#### 2. Preparation of Statement of Profit

After the opening statement of Affairs has been opened and the capital ascertained the next step is to prepare the statement of profit for the year. But before this is done, the closing capital will have to be ascertained as well.

Capital at the close of business is ascertained thus:

	DR	CR
ASSETS:	N	N
Machinery	40,000	
Furniture	50,000	
Stock in trade	80,000	
Debtors	75,000	
Cash	12,000	
Electricity Prepaid	6,750	
Insurance	2,500	
Bank	37,500	
LIABILITIES		100,000
Creditors		8,500
Rent Owing		11,500
Bills payable		183,750
Closing capital (difference)		303,750
	303,750	

Before you prepare the "statement of profit", observe the following steps.

1. Find the difference between the opening and closing capital. The difference given the apparent "profit" for the year.

2. Note the withdrawals made by the owner of the business, and any introduction of capital during the trading period. Also note the amount by which fixed assets have been depreciated. The same thing applies to Bad debts provision.

## STATEMENT OF PROFIT AND LOSS FOR THE YEAR ENDED $31^{\rm ST}$ DECEMBER

		N			N
Dec 31	Sundry Liabilities	120,000	Dec 31	Sundry Assets	303,750
	Closing capital c/d	183,750			
		<u>303,750</u>			303,750
	Opening Capital				
	Jan 1	144,000	Dec 31	Capital b/d Drawing	183,750
	Sales (car)	40,000			20,000
	Bad debts (provision)	3,750			
	Net Profit	<u>16,000</u>			
		203,750			203,750

#### CAPITAL ACCOUNT

		N			N
Dec 31	Drawings	20,000	Jan 1	Balance c/d	144,000
	Balance c/d	140,000		Net profit	16,000
		<u>160,000</u>			160,000

## 3.2.2 Double - entry system

The double entry system of bookkeeping is one whereby two (2) entries are made for every transaction. Here, we come to the long established principle of double entry bookkeeping. The first golden rule is:

Every debit entry must have a corresponding credit entry and every credit entry must have a corresponding debit entry. The second golden rule is debit the account that receives and credit the account that gives.

The objectives of double entry system are to:

- 1. Provide a permanent, systematic and complete record of financial transactions.
- 2. Provide financial records for the value of assets and liabilities, purchases and sales, income and expenses.
- 3. Provide records for ascertaining profit or loss made at any given time.
- 4. Show the financial work of an organization at any point in time.
- 5. Check the arithmetical accuracy of monetary transactions recorded in the books of accounts.
- 6. Help in detecting fraud and other irregularities that may arise from inadequate accounting records.
- 7. Provide financial records for business comparative purposes within and without the activities of the organization.
- 8. Provide basis for planning and effective control of business operations.

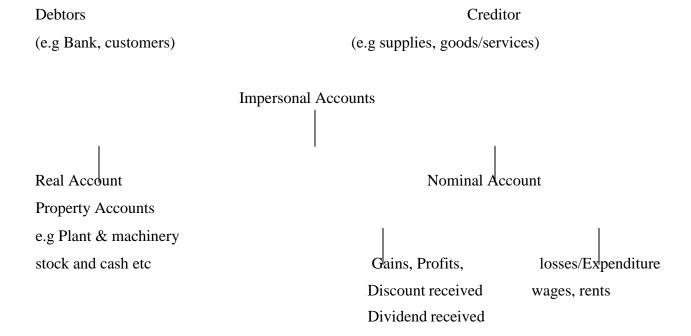
<u>The ledger</u> is the principal book of accounts. Every other entries or transactions in all the other books of account are recorded in it. A ledger account has two sides, one for recording values received and the other for recording value given. It could be defined as a diary of events in which all happenings (financial transactions) are recorded for easy reference and to assist in the double entry system. A Specimen of ledger.

Dr Cr

Date	Particulars	Folio	<del>N</del> : k	Date	Particulars	Folio	N : K

The Accounts in the ledger are s shown below

Personal Accounts



#### **Subsidiary Books**

Subsiding books are the records of transactions entered in separate books, mainly for the purpose of listing and classifying the various transactions as they occur and to avoid the risk of errors and omissions of direct entries in the ledger. Subsidiary books are also called books of original entry or "books of prime entry"

The subsidiary books required in business are:

- ii. Purchases journal/purchase day Book. This book contains the particulars of goods bought on credit. Particular of each purchase with date and names of seller are entered in it and the amount is posted individually to the credit of the account of the supplier in the ledger. The total amount of purchases for a given period is posted to the Debit of purchases Account.
- iii. Sales Journal/ sales Day Book: In the book, a daily record is made of all sales of goods on credit. Particulars of each sales with date, name of consumer and the good sold are entered in it. However, all transactions entered in this book have to be posted to the credit of the sales account at the end of a given period.
- iv. Purchases Returns Book

This contains particulars of goods returned, the date and the name of the seller

/ supplier. All postings being made in respect of purchases returns are taken to the Debit of the account of the seller/ supplier to whom goods are returned; and the periodic total is posted to the credit of the purchases Returns Account.

#### v. Sales Returns Book

This book records goods sold but later returned for one reason or the other (i.e defective, under-size, wrong supply, irregular size or colour etc).

Like the purchases Returns, it records the names, date, goods returned and the reason for its return. All posting being made in respect of this returns are taken to the credit of the account of the customer who returned the goods. The respective totals are posted to the Debit of sales Returns Account periodically.

#### vi. The Journal Proper

The journal or Journal proper is used for the purpose of recording transactions, which because of their nature cannot be entered in any other book of prime entry. It is also used for opening and closing entries, transfer of items or corrections of errors etc.

#### Example 1

Enter the following transactions in double entry system in the ledger accounts of L. Oladimeji for the month of January  $19 \times 8$ 

- Jan 1 Started business with N 600,000, 300,000 in the bank, N 200,000 in hand and N 100,000 on loan from D. Twins by cheque
  - 2 Bought N 150,000 goods by cheque
  - Bought N 300,000 goods on credit from P. Balogun
  - 4 Sold goods on credit to J. Peter N 200,000 and P. John N 250,000
  - 5 Bought motor van paying by cash N 100,000
  - 6 Paid motor expenses by cheque N 10,000
  - Returned goods to P. Balogun N 20,000
  - 8 Goods returned by P. John N 25,000

- 9 Paid P. Balogun by cheque N 150,000
- The following people paid by cheque J. Peter N 170,000 and P. John N 190,000
- Oladimeji brought a further N 100,000 into the business and deposited it in the bank
- Bought Office furniture on credit from P. Tete N 400,000.
- Bought office stationery on credit from A Darko N 20,000
- Paid rent by cash N 10,000
- Returned part of the office furniture to P. Tete N 50,000
- Paid P. Tete by cheque N 150,000
- 17 Sold some of the office furniture for cash N N70,000
- Took cash for private use N 15,000
- 19 Took goods work N 10,000 for private use
- 20 Bought building on credit from A Abankwa N 400,000
- 21 Received rent N 10,000 from part of the building sub-let cheque
- Paid rent by cheque N 30,000
- Repaid part of D. Tale's loan by cheque N 80,000
- Cash sales paid direct the bank N 400,000
- 31 Cash sales N 150,000

#### Solution

#### L. Oladimeji's ledger accounts for the month of January 19 x 8

#### Capital Account

19 x 8	N	19 x 8	N	
		Jan 1 Bank	300,000	
		1 Cash	200,000	
		11 Bank	100,000	
	Loan I	D. Tale's Account		
19 x 8	N	19 x 8	N	
Jan 25 Ba	nk 80,000	Jan 1 Bank	100,000	

## Bank Account

19 x 8		N	19 x 8			N	
Jan 1	Capital	300,000	Jan 1	Purcha	ase	150,000	
1	Loan (D. Tale	)100,000	6	Mo	tor expenses	1	0,000
	10 J. Pete	r 170,0	00	9	P.		Balla
150,000							
10	P. John	190,000	16	P. Tet	e	150,000	
11	Capital	100,000	22	Rent		30,000	
21	Rent Receive	10,000	25	Loan	(D. Tale)	80,000	
26	Sales	400,000					

## Cash Account

Jan 1 Capital       200,000       Jan 5 Motor van       100,000         17 Office Furniture 70,000       14 Rent       10,000	19 x 7	N	19 x 8	N
17 Office Furniture 70,000 14 Rent 10,000	Jan 1 Capital	200,000	Jan 5 Motor van	100,000
	17 Office Furnitur	re 70,000	14 Rent	10,000
31 Sales 150,000 18 Drawings 15,000	31 Sales	150,000	18 Drawings	15,000

## Purchase Account

19 x 8		N	19 x 7	N
Jan 2	Bank	150,000		
3	P. Balla	300,000		

# P. Balogun's Account

19 x 8	N	19 x 8	N			
Jan 7 Returns outv	vards 20,000	Jan 3 Purchases	300,000			
9 Bank	150,000					
Sales Account						
19 x 8	N	19 x 8	N			
		Jan 4 J. Peter	200,000			
		4 P. John	250,000			

19 x 8	N	19 x 8	N
Jan 4 Sales	20,000	Jan 10 Bank	170,000
	P. Jol	nn's Account	
19 x 8	N	19 x 8	N
Jan 4 Sales	250,000	Jan 8 Return inwards	25,000
		10 Bank	180,000
	Motor	van Account	
19 x 8	N	19 x 8	N
Jan 5 Cash	100,000		
19 x 8	Motor Ex	xpenses Account	N
Jan 6 Bank	100,000	17 X 0	17
oun o Burne		Outward Account	
19 x 8	N	19 x 8	N
		Jan 7 P. Balogun	20,000
		I	
	Returns	Inward Account	

26

31

Bank Cash 400,000

150,000

### Office Furniture Account

19 x 8	N	19 x 8	N
Jan 12 P. Tete	400,000	Jan 15 P. Tete	50,000
		17 Cash	70,000
	P. Tete	e's Account	
19 x 8	N	19 x 8	N
Jan 15 Office Furn	iture 50,000	Jan 12 Office furniture	400,000
16 Bank	150,000		
	Office Stat	cionery Account	
19 x 8	N	19 x 8	N
Jan 13 A. Darko	20,000		
	A. Dark	to's Account	
19 x 8	N	19 x 8	N
		Jan 13 Office stationery	20,000
	Rent Exp	enses Account	
19 x 8	N	19 x 8	N
Jan 14 Cash	10,000		
22 Bank	30,000		
	Drawir	ngs Account	
19 x 8	N	19 x 8	4
Jan 18 Cash	15,000		
19 Goods with	drawn 10,000		
	Buildi	ng Account	
19 x 8	N	19 x 8	N

Goods Withdrawn Account

19 x 8

19 x 8	N	19 x 8	N
		Jan 19 Drawings	10,000
	Rent Re	eceived Account	
19 x 8	N	19 x 8	N
		Jan 21 Bank	10,000
	Rent Ex	xpenses Account	
19 x 8	N	19 x 8	N
May 22 Bank	30,000		

#### **Balancing off of Account**

This means finding the balance on each account that make the debit side equal to the credit side. The balance is the accounting term indicating the difference between the two sides of an account. If the total of the debit entries exceeds the total of the credit entries, the account is said to have a debit balance, if the total of the credit entries exceeds the total of the debit entries, the account is said to have a credit balance. If the total of the debit entries equal the total of the credit entries, the account is said to have a nil balance and is thus self closing.

#### Example ii

Record the following transactions in the ledger account of D. Kollo for the month of March 19 X 7 and balance off accounts at the end of the month

19 X 7

Mar 1 Started business with:

Cash in hand
100,000

Cash at bank
1,400,000

Loan from A.Ojo by cash	300,000
Loan from J.Ajayi by plant and Machinery worth	200,000
Mar 2 Brought goods from J .Paul	250,000
5 Sold goods Joseph and Sons	200,000
7 Sold goods for cash	100,000
11Draw cheque for self	50,000
12 Brought goods from A. Lakolu	300,000
18 Paid cash to Bank	70,000
20 Cash Purchases	40,000
21 Paid J. Paul by cheque	200,000
24 Sold goods by cheque	600,000
26 Withdraw from current acct to saving acct	250,000
28 traveling expenses paid by cheque	100,000
29 Traveling expense Owing	20,000
30 Outstanding rent expenses	10,000
31 Paid advertising by cheque	20,000
31 Paid by cheque the balance in A Ojo's account	
31 Banked all the money in cash till except	10,000

## Solution

D. Kollo's ledger accounts for the month of March 19 x 7  $\,$ 

## Capital Account

	•		
19 x 7	N	19 x 7	N
Mar 31 Bal c/d	1,500,000	Mar 1 Cash	100,000
	1,500,000	1 Bank	1,400.00 1,500.00
		April 1 Bal b/d	1,500,000
	Loan Acc	ount (A. Ojo)	
19 x 7	N	19 x 7	N
Mar 31 Bank	300,000	Mar 1 Cash	300,000

## Loan Account (J. Ajayi)

19 x 7	N	19 x 7		N
Mar 31 Bank 2	200,000	Mar 1 Plant &	Machinery	200,000

### Bank Account

19 x 7	N	19 x 7	N
Mar 1 Capital	1,400,000	Mar 11 Drawings	50,000
18 Cash	70,000	21 J. Paul	200,000
24 Sales	600,000	26 Deposit Accou	ant 250,000
31 Cash	380,000	28 Travelling expe	enses 100,000
		31 Advertising exp	enses 20,000
		31 J. Ajayi	200,000
		31 A. Ojo	300,000
		31 Bal cd	1,330,000
	2,450,000		2,450,000
April 1 Bal b/d	1,330,000		

## Cash Account

19 x 7	N	19 x 7	N
Mar 1 Capital	100,000	Mar 18 Bank	70,000
1 Loan (A. C 7 Sales	Ojo) 300,000 100,000	20 Purchases 31 Bank 31 Bal c/d	40,000 380,000 <u>10,000</u>
	500,000		500,000
Bal b/d	10,000		

## Plant and Machinery Account

19 x 7	N	19 x 7	N
Mar 1 Loan (J.Ajayi)	200,000		

### Purchase Account

19 x 7	N	19 x 7	N
Mar 2 J. Pal	250,000	Mar 31 Bal c/d	590,000
15 A.Lakolu	300,000		
20 Cash	40,000		
	590,000		590,000
April 1 Bal b/d	590,000		
	J. Paul	's Account	
19 x 7	N	19 x 7	<del>N</del>
Mar 21 Bank	200,000	Mar 2 Purchases	250,000
31 Bal c	/d	,000	
	250,000		250,00
	Joseph &	Sons Account	
19 x 7	N	19 x 7	N
Mar 5 Sales	200,000		
	Sales	Account	
19 x 7	N	19 x 7	N
Mar 31 Bal c/d	900,000	Mar 5 Joseph & Sons	200,000
		7 Cash	100,000
		24 Bank	600,000
	900,000		900,000
		April 11 Bal b/d	900,000
	Drawin	s Accourt	
19 x 7	N	19 x 7	N
1) X /			

#### A. Lakolu's Account 19 x 7 N 19 x 7 N Mar 15 Purchases 300,000 Deposit Account 19 x 7 N 19 x 7 N Mar 26 Bank 250,000 Travelling Expenses Outstanding Account 19 x 7 N 19 x 7 N Mar 28 Bank Mar 31 Bal c/d 100,000 120,000 29 Travelling Exp. Out <u>20,00</u> 120,000 120,000 April 1 Bal b/d 120,000 Travelling Expenses outstanding Account 19 x 7 N 19 x 7 N Mar 29 Travelling Exp 20,000 Outstanding Rent Expenses Account N 19 x 7 19 x 7 N Mar 30 Rent Expenses 10,000 Rent Expenses Account 19 x 7 19 x 7 N Mar 30 Outstanding rent expenses 10,000 Advertising Expenses Account 19 x 7 19 x 7 N N Mar 31 Bank 20,000

Note: The accounts with only one entry need not to be balanced although if the accounts are balanced there is no problem.

## 3.2.3 Computerized bookkeeping

Computerized bookkeeping removes many of the paper "books" that are used to record transactions and usually enforces double entry bookkeeping, computer software increases the speed at which bookkeeping can be performed.

## 3.2.4 Online bookkeeping

Online bookkeeping or remote bookkeeping allows source documents and data to reside in web-based application which allow remote access for bookkeepers and accountants. All entries made into the online software are recorded and stored in a remote location. The online software can be accessed from any location in the world and permit the bookkeeper or data entry person to work out of an office. The paperwork can either be delivered to the bookkeeper, or a company can scan its business documents and upload them to a secure location or into an online bookkeeping application on a regular basis. This allows the bookkeeper to work remotely with these documents to update the books. Users of the technology include:

- Mobile employees scanning and sending in their receipts and bills while on the road to get reimbursed more quickly.
- Organizations with multiple officers centralizing their accounting department and having the documents scanned and sent to this location.

#### 4.0 Conclusion

In this unit, we have learnt about bookkeeping and the various methods of bookkeeping.

## 5.0 Summary

In this unit, you have learnt that:

• Bookkeeping is the act of keeping accounts in a regular and systematic manner. i.e the record making phase of accounting.

- The books that are used for bookkeeping fall naturally into the following divisions; principal books, subsidiary books and memorandum books.
- The major methods of bookkeeping are single entry and double entry. However, bookkeeping can be done on-line or computerized.
- The golden rules for double entry system are:
- i. Every debit entry must have a corresponding credit entry and every credit entry must have a corresponding debit entry.
- ii. Debit the account that receives and credit the account that gives.

## **6.0** Tutor Marked Assignment

- 1. Who is a bookkeeper?
- 2. State and explain the major methods of bookkeeping
- 3. State and explain the golden rules of bookkeeping
- 4. Enter the following transactions in double entry form in the books of Jokoje & Sons and balance off the accounts at the end of mouth.

#### 19 x 9

Dec 1 Started business by cheques N 900,000 and N 100,000 by cash

- 2 Bought goods on credit from Tade & sons N 400,000
- 3 Paid for carriage on purchases by Cash N 15,000
- 5 Sold goods by cheque N 700,00
- 7 Bought motor vehicle on credit from loto Ltd N 700,000
- 9 Sold goods in credit to Boluwatife & Daughters N 600,000
- 11 Received cheque from Boluwatife N 250,000
- 13 Returned goods to Taiwo & Sons N 25,000
- 15 Bought goods on credit from Pelu & Sons N 400,000
- 17 Paid Loto Ltd N 500,000 by cheque
- 19 Paid carriage on sales by cash N 18,000
- 21 Draw cheque for N 50,000 for business use
- 23 Withdraw cash for personal use N 30,000
- 25 Paid for advertising in cash N 9,000
- 26 Paid salaries and wages by cheque N 75,000

- 27 Paid the balance on Tade & sons account by cheque
- 28 Banked cash in the cash till with the exception of N,000
- 31 withdraw N 70,000 from current account to deposit account

### 7.0 References and other sources

Olofinlana, L.O and R.W Odewale (1999); Fundamentals of Accounting volume 1, second Edition, Stecom Publishers, Akure, Ondo State, Nigeria. Pp 16-30.

Igben, R.O (2004): Financial Accounting Made Simple. Volume 1 First edition. EL - TODA Ventures Ltd, Lagos, Lagos State, Nigeria PP 221-226.

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Pinson, L and J. Jinnett (1993): Keeping the Books, Second Edition. Upstart Publishing Company, Inc. PP 10.

# **Unit 4: System of Farm Accounting**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 The Body of the unit
  - 3.1 Systems of farm Accounting
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignment
- 7.0 References and other sources

#### 1.0 Introduction

Making observations on the business and deriving information is one of the most important roles of farm management. Farm Accounting provides information to control money flow in the business. It provides information on financial "worthness", performance and monetary checking. In this unit, you will learn about the systems of farm accounting.

## 2.0 Objectives

At the end of this unit, you will be expected to be able to explain the various systems of farm accounting.

## 3.0 The body of the unit

## 3.1 System of farm Accounting

Accounts are financial records of what the farmer spends and receives.

Potentially, a complete system of farm accounting should give the farmer much information. e.g.

- i. The current cash position and estimates of the future cash positions.
- ii. The past profitability of different crops.
- iii. The amounts owed to the farmer by debtors, and by him to creditors.
- iv. The value of the business assets (plant, stock, land and building etc) and.
- v. The profitability of the whole farm and estimates of likely future profits.

Four variants of the accounting system are discussed in this unit and these are:

## 3.1.1 Farm Income Statement or Cash Analysis Account

The Farm Income Account is a statement of all cash transactions that took place with regard to the farm for the year that has just ended. In the farm Account book, Sales and receipts are recorded on the left hand side, while purchases and expenses are recorded on the right hand side. Under each of the two sides of the Account, there are three columns: Date, Details and Total.

Table 5: Farm Income Statement for the Year ended Dec 31, 2007

Sales and Receipts N			Pu	Purchase and Expenses N		
Date	Details	Total	Date	Details	Total	
		received			paid	
Jan 1	Opening balance					
	being cash in bank	1,000,000		Implements	100,000	
				Wages	500,000	
				Feeds	1,200,000	
				Seeds	80,000	
				Fertilizer	50,000	
July	Yams	400,000		Rent	20,000	
Sept	Maize	250,000				
Nov	Cassava	180,000				
Nov	Eggs	500,000				
Nov	Broiler	600,000				
Dec	Others	450,000				
		3,380,000			2,000,000	
				Closing Balace		
				being cash in bank	1,380,000	
		3,380,000		-	3,380,000	

Year 2008: Opening balance being cash in bank = N1,380,000

## 3.1.2 Farm Trading Account or Profit and loss Account

In order for a farmer to know whether he had made a profit or loss during the year, he needs to present his records in form of trading account in details.

The profit and loss Account provides information about the performance of the business in a given period of time. This is normally in one year. Profit is a return to the management. So, a manager will be interested in making judgments based on the profit earned.

In the farm Trading Account, it is customary to put "purchase and Expenses on the left hand side and "sales and Receipts" on the right. The closing valuation is also on the right and opening valuation on the left

Table 6: Farm Trading Account as at December 31, 2007.

Purchases and Expenses	N	Sales and Receipts	N
Opening valuation		Sheep	250,000
Sheep	250,000	Goat	388,000
Goat	410,000	Yams	200,000

Seed	40,000	Cocoa	450,000
Fertilizer	120,000	Maize	198,000
Cocoa Trees	850,000	Melon	104,000
Sprays	35,000	Produce consumed	158,000
Maize	88,000	Miscellaneous	
Yam	54,000	Receipts	112,000
Melon	66,000	Total Receipts	1,860,000
Total opening valuation	1,913,000	Closing Valuation	
		Cocoa Trees	1,000,000
		Sheep	300,000
Expenses		Goat	480,000
		Seed	32,000
Implements	45,000	Maize	140,000
Insecticides	25,000	Yam	33,000
Wages	101,000	Melon	77,000
Feeding Stuffs	44,000	Implements	88,000
Rent	50,000	Total closing	
Seeds and fertilizer	210,000	Valuation	2,100,000
Depreciation	500,000		
Veterinary Services	72,000		
Total Expenses	2,960,000	_	
Farm Profit	1,000,000		
	3,960,000		3,960,000
3.1.3 Balance Sheet		-	

The balance sheet otherwise known as the networth statement or financial statement which applies to a point in time and represents a stock concept. It is like taking a snapshot of the business at a particular point in time. The networth statement shows the value of the assets that would remain if the business were to be liquidated and all outside claims paid.

By definition, networth statement is equal to total assets minus total liabilities, that is:

The Networth statement sometimes gives information on the solvency of the business and is used as basis for credit because it shows the ability of the business to meet short-run financial demands. If the total assets exceed the total liabilities, the business is solvent. The greater the networth, the better the solvency position of the business.

Table 7: A Networth Statement for Chivita Farm as at Dec 31st 2006

Assets	( <del>N</del> )	Liabilities	( <del>N</del> )
Current		<u>Current</u>	
Cash	600,000	Account Payable now	400,000

Crops	400,00		
Working Capital		<u>Intermediate</u>	
Suppliers	250,000	Account Payable	600,000
Tools	50,000	Within three years	
Fixed Capital		Long Term	
Land	900,000	Account Payable in	500,000
Building	300,000	20 years	
Fencing	200,000	Total liability	1,500,000
		Net Worth	1,200,000
Total Assets	2,700,000	Total Liability	
		+ Networth	2,7000,000

#### 3.1.4 Farm Assets Valuation

Valuation entails obtaining a realistic measure of the current value of the assets of the farm business. The first thing to do in assets valuation is the listing of all the resources available in physical terms then, place value on the assets. The various methods of valuation include valuation at cost, market price, net selling price, reproductive value etc.

- 1. Valuation at cost:- This entails entering in the inventory, the actual amount invested on the asset when it was originally acquired. A major disadvantage of this method is that after the buiness has been in operation for sometimes, the original cost is no more of much value since the conditions might have changed.
- 2. Valuation at Market Price- The market price of an assets at the time under consideration can be taken as its value e.g. land
- 3. Valuation at Net Selling price some costs such as cost of advertisement and transportation might be incurred when selling an asset. Whatever price can be obtained in the market for the assets (i.e market price (Pm) less the cost of selling (Cs) is the net selling price (Pns), Notationally,

$$Pns = Pm - Cs$$

4. Valuation by Reproductive Value

An asset can be valued at what it would cost to produce it at present prices and under present methods of production. This method is more useful for long-term assets and has little or no application for short - lived assets

#### 4.0 Conclusion

We have learnt in this unit the various forms of farm accounting.

## 5.0 Summary

You have leant in this unit that:

- Accounts are financial records of what the farmer spends and receives.
- Farm accounting provides information to control money flow in the business. It
  provides information on financial worthiness, performance and monetary
  checking.
- The four variants of farm accounting system are: Farm Income Statement or cash Analysis Account, Farm Trading or profit and Loss Account, Farm Balance sheet or Networth statement and Farm Assets valuation.
- Farm assets could be valued using these methods: valuation at cost, valuation at market price, valuation at net selling price and valuation by reproductive value.

## **6.0** Tutor Marked Assignment

- 1. What are the four variants of the farm accounting system?
- 2. What are the four major ways by which farm assets can be valued.
- 3. With the aid of an equation, explain the concept of balance sheet.

#### 7.0 References and other sources

Adesimi, A.A (1988): Farm Managements Analysis with Perspectives through the Development process. Pp 43-52.

Olukosi, J.O and P.O Erhabor (1988) Introduction to farm management Economics: Principles and Application AGITAB Publisher Ltd, Zaria Pp 48 - 61.

## **Unit 5: Computerized Farm Accounting**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 The body of the Unit
  - 3.1 Farm Funds: Complete Farm Accounting
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignment
- 7.0 References and Other Sources

#### 1.0 Introduction

This is the computer age and the world is becoming a global village. In this unit, we shall examine complete farm Accounting using a software known as Farm funds.

## 2.0 Objectives

It is expected that at the end of this unit, your should be able to.

\* Explain the features of the farm funds.

### 3.0 The Body of the unit

#### 3.1 Farm Funds

Farm Funds is the only farm accounting software that fully integrates with field records (Farm Trac), herd management records (Farm Stock), and mapping (Farm site). Do you know your cost per acre? What is your cost per kilogramme of livestock? Farm funds offers easy enterprising per field, livestock groups, machine, or structure while still maintaining the records you need for tax purposes. Eliminate the stress by keeping your receipts in the shoebox and let farm funds create tax reports you need.

The features of the farm funds are

- Double entry accounting for both cash and accrual books
- Integrates with Farm Trac to keep accounting records at the same time as keeping field histories, herd notations and chemical records.
- Up to date inventory tracking
- Profitability of each field and herd of animals is automatically calculated.
- Supports detailed cost records for equipment
- Full payroll system that calculates Federal and most state withholdings
- No monthly closings required and year-end is simple
- Records animal weights and feedings to calculate feed conversion and cost per kilogramme gained for each livestock group.
- Tax schedule area allows you to create reports to make tax preparation easy.
- Generate market value balance sheets.
- Includes budgeted cashflows
- Keep family living costs separate from farm costs.

- Full check recording system. Includes interactive check register for easy editing and printing of transactions.
- Predefined accounts and financial statement formats are available that can easily be modified to reduce set up time.
- Depreciation amounts for equipment, structures, land improvements and livestock can be entered.
- REQUIRES Farm Trac, Microsoft window 98 or higher, 133 MHZ Processor, 64MB Memory, 20MB Hard drive space.
- Enhancements in farm Funds version 2009 includes: Expanded Budget comparison Report and the cashflow statement.

#### 4.0 Conclusion

We have learnt in this unit that farm accounting can be computerized and that complete farm accounting could be carried out using computer software such as Farm Funds.

## 4.0 Summary

In this unit, you have learnt that:

- Farm Funds is the only farm accounting software that fully integrates with field records, herd management and mapping.
- For efficient performance of the farm fund, it requires Farm Trac, Microsoft window 98 or higher, 133MHZ processor, 64MB Memory, 20MB Hard Drive space.
- The features of the Farm Fund among other include double entry accounting for both cash and accrual books.

## **6.0** Tutor Marked Assignments

- 1. How can complete farm accounting be accomplished electronically?
- 2. State the major features of the farm funds.
- 3. What are the enhancements in the 2009 version of the Farm Funds?

## 7.0 References and other sources

Farm Funds: Complete Farm Accounting. Farm funds - Farm Accounting from Farm works software, martens farm <a href="http://www.123">http://www.123</a> farm workers. Com/funds.htm.

Farm Works Software (version 14):

Major New features and Enhancements. Farm works software 2009 (Version 14) - Integrated farm and Agribusiness Management. <a href="http://www.123">http://www.123</a> farmworks. Com/farmworks 2009. htm.

# MODULE THREE: TRIAL BALANCE AND FINAL ACCOUNTS.

Unit 1: Meaning and Scope of trial balance.Unit 2: Limitations and common errors of trial balanceUnit 3: Final Accounts

Unit 4: Adjustments in the final Accounts I.
Unit 5: Adjustments in the final Accounts 11

#### Unit 1 Meaning and scope of Trial Balance

- 1.0 Introduction
- 2.0 Objectives
- 3.0 The body of the unit
- 3.1 Definition of Trial balance
- 3.2 Constructing a Trial Balance
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignment
- 7.0 References and Other Sources

#### 1.0 Introduction

If the double - entry principle have been completely and correctly applied, it is obvious that the total of all debit entries will be equal to the total of all credit entries. By extension, the total of the debit balances should be equal to the total of the credit balances. The list drawn up showing the balances extracted from all accounts is known as a trial balance. This unit examines the definition of trial balance, its functions and how to construct it.

#### 2.0 Objectives

By the end of this unit, you should be able to:

- Define and explain trial balance
- State the functions/ purposes of trial balance
- Construct a trial balance

## 3.0 The body of the unit

#### 3.1 Definition of trial Balance

The Trial balance can be defined as the list of accounts balances at a given point in time drawn up to test the arithmetical accuracy of accounting entries. A trial balance can also be defined as a check of arithmetical accuracy of the bookkeeping to test the double whether it has been completed in the ledger or not. A trial balance is a list of balances both credit and debit extracted from the ledgers and cash book of a company as at a particular date. It is not an account but a statement showing the list of accounting balances. The total of all the debit balances in the accounts must equal the sum of all the credit balances.

In accounting, the trial balance is a worksheet listing the balance at a certain date of each ledger account in the columns, namely debit and credit. Under the double - entry system, in any transaction the total of any debit must equal the total of any credit. So in a trial balance the total of the debit side should always be equal to the total of the credit side.

If the journal entries are error - free and were posted properly to the general ledger, the total of all the debit balances should equal the total of all the credit balances.

If the debit do not equal the credits then an error has occurred somewhere in the process.

The total of the accounts on the debit and credit side is referred to as the trial balance

## 3.2 Constructing a trial balance

A trial balance can be constructed in two ways:

#### 1. By means of Totals

Since a trial balance is a test of arithmetical accuracy, it will be wrong to adopt this means of totals in extracting an accurate trial balance. For this reason, this method is rarely used. But it could be used where there are less transaction to cope with in the books.

#### 2. By means of Balances

This is the most popular method used in taking out the balances of accounts in order to extract an accurate trial balance. This method has some advantages amongst which is the outright revelation of compensating errors, where the total of the debit column of the trial balance has to agree with the total of those subsidiary books together with the closing cash balance but omitting the cash balance in the opening entries.

The procedure for extracting the trial balance is:

- i. Close the ledger accounts
- ii. Write the correct heading: Trial Balance as at (or on) specify the period.
- iii. All the debit balances in the ledger accounts would appear under the debit column of the trial balance.
- iv. All the credit balances in the ledger accounts would appear under the credit column of the trial balance.
- v. The additions of both the credit and debit columns must be equal.

#### Examples

To calculate the trial balance, first determine the balance of each general ledger account as shown in the example below:

Lawyer's Ledger accounts for the month of September, 19 x 8

Cash		Accounts Receivable			
Sep 1 750,000 17 40,000 25 42,500	Sep 15 100,000 28 50,000	Sep 17	70,000	Sep	25 42,500
Bal 682,500		Bal 27,5	00		

Parts Inventory		Accounts Payable	
Sep 8 250,000	Sep 18, 27,500	Sep 28 5,000	Sep 8 250,000
Bal 222,500			Bal 200,000
Capital		Revenue	'
	Sep 1 750,000		Sep 17 110,000
	Bal 750,000		Bal 110,000
Expenses			
Sep 15 100,000			
Sep 18 27,500			
Bal 127,500			

Once the account balances are known, the trial balance can be calculated as shown below Trial Balance as at  $30^{th}$  September,  $19 \times 8$ 

	<del>N</del> : K
Debits	Credit
682,500	
27,500	
222,500	
	200,000
	750,000
	110,000
127,500	
<del>-1,060,000</del>	<del>-1,060,000</del>
	682,500 27,500 222,500

In this example, the debits and credits balance. This result does not quarantee that there are no errors.

The trial balance serves three purposes:-

v. It serves as a check on the "arithmetical accuracy" of the entries, as already mentioned, and.

- vi. It is the basis upon which the Trading and Profit and Loss Account and Balance sheet are drawn upon.
- vii. It ensures that all the credit entries in the books have a corresponding debit entries.

#### 4.0 Conclusion

This unit has enabled you to understand what a trial balance is and how it is being constructed. In addition, the purposes of the trial balance was highlighted.

## 5.0 Summary

This unit has acquainted you with:

- What the definition of trial balance is
- The purposes of a trial balance.
- The Construction of a trial balance from a ledger.

## **6.0** Tutor Marked Assignment

- 1. State and explain the concept of Trial balance.
- 2. State three uses/ purposes of the trial balance.
- 3. State the procedure for extracting the trial balance.

#### 7.0 References and other sources

Igben, R.O (2004): Financial Accounting Made Simple. Volume 1 EL-TODA ventures Limited, Lagos, Nigeria Pp 17-25.

Trial balance - Wikipedia, the free encyclopedia. http://en,wikipedia.org/wiki/Trial balance

Trial balance. <a href="http://www.netmba.com/accounting/fin/process/trial/">http://www.netmba.com/accounting/fin/process/trial/</a>

Williams, J.R, S.F Haka, M.S Bettner, J.V Carcello (2008): Financial and Managerial Accounting, McGraw-Hill Irwin. Publisher P. 26

#### Unit 2: Limitation and common errors of the trial balance

- 1.0 Introduction
- 2.0 Objectives
- 3.0 The body of the unit
  - 3.1 Limitations of the trial balance
  - 3.2 Common errors of the trial balance
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignment
- 7.0 References and other sources

#### 1.0 Introduction

Agreement of the trial balance does not mean that there are no errors in the entries as there are some errors which will not prevent the trial balance from agreement.

## 2.0 Objectives

It is expected that at the end of this unit you would be able to:

- State and explain the limitations of the trial balance.
- State and explain the common errors that can affect the trial balance.

## 3.0 The body of the unit

#### 3.1 Limitations of the trial balance

The limitations of the trial balance lies in the type of errors that though they exist in the accounts yet do not affect balancing of the trial balance. These are discussed in turns:

- 1. Error of omission: This is where a transaction is not recorded at any time at all in the books. That is, when a transaction is completely omitted from the accounting records. The trial balance will not be affected and the error remains unrevealed.
- 2. Error of commission: This is when the entries are made at the correct amount, and the appropriate side (debit or credit) but one or more entries are made to the wrong account of the correct type. For example, if fuel costs are incorrectly debited to the postage account (both expenses accounts). This will not affect the totals.
- 3. Error of original entry: This is when both sides of a transaction include the wrong amount. For example, if a purchase, invoice for N21,000 is entered as N12,000, this will result in an incorrect debit entry (to purchases) and an incorrect credit entry (to the relevant creditor account) both for N9,000 less, so the total of both columns will be N9.000 less, and will thus balance
- 4. Error of principle: This is when the entries are made to the correct amount, and the appropriate side (debit or credit), as with an error of commission, but the wrong type of account is used, for example, if fuel costs (an expense account) are debited to stock (an asset account). This will not affect the totals.
- 5. Compensating error: This is where a combination of errors cancel each other out or where one account has been under or over debited or credited with the certain amount,

and another account over or under debited or credited with the same account. This will not prevent the trial balance agreement. So, the error remains undetected. For example, where purchases account balance is increased by N2,000 and sales account balance is also increased by N2000, the two accounts would cancel out the error.

- 6. Error of Reversal: This is when entries are made to the correct amount, but with debits instead of credits, and vice versa, for example, if a cash sale for N1,000 is debited to the sales account, and credited to the cash account, such an error will not affect the totals.
- 7. Error of complete Reversal of Entry: This error occurs where the double entry for a transaction is reversed resulting in a situation whereby the account that ought to be debited is credited and the account that ought to be credited is debited. For example, an amount paid to a supplier may be wrongly debited to the cash book and credited to his personal account.
- 8. Error of Transposition: The meaning of this error can be deduced from the meaning of the word "<u>transpose</u>" as to cause two or more things to change places. Error of transposition, therefore, is a mistake involving the changing of the places of the numerals making up an amount. For example, N3,101 may be wrongly posted as N3,01, N4,233 may be wrongly posted as N4,332 and so on.

When the error of transposition occurs at the time source document is written or at the time the source document is posted to the subsidiary book, it is effectively an error of original entry. This is the reason why error of original entry and error of transposition are sometimes regarded as one and the same,

## 3.2 Errors affecting the trial balance

If the trial balance is not in balance, then an error has been made somewhere in the accounting process. The following is listing of common errors that would result in an unbalanced trial balance; this listing can be used to assist in isolating the cause of the imbalance.

- 1. Summation error for the debits and credits of the trial balance.
- 2. Error transferring the ledger account balances to the trial balance columns.
  - i. Error in numeric value
  - ii. Error in transferring a debit or credit to the proper column

- iii. Omission of an account
- 3. Error in the calculation of a ledger account balance.
- 4. Error in posting a journal entry to the ledger.
  - i. Error in numeric value
  - ii. Error in posting a debit or credit to the proper column
- 5. Error in the Journal entry
- i. Error in a numeric value
- ii. Omission of part of a compound journal entry.

#### 4.0 Conclusion

In this unit, we have learnt about the limitations of the trial balance as well as the common errors of the trial balance.

## 5.0 Summary

You have learnt in this unit that:

- Agreement of the trial balance does not mean that there are no errors in the entries.
- The limitations of the trial balance lies in the types of errors that though they exist in the accounts yet do not affect balancing of the trial balance.
- Errors that do not affect the trial balance include among others: Error of
  omission, error of commission, error of original entry, error of principle,
  compensating error, error of reversal and error of complete reversal of entry.
- Errors that affect the trial balance include among others: Summation error, error in the calculation of a ledger account balance.

## **6.0** Tutor Marked Assignments

- 1. State and explain five limitations of the trial balance.
- 2. State and explain common errors that affects the trial balance.

## 7.0 References and other sources

Igen, R.O (2004): Financial Accounting Made simple. Volume 1, EL-TODA ventures Limited Lagos, Nigeria.

Trial balance. <a href="http://www.netmba.com/accounting/fin/process/trial/">http://www.netmba.com/accounting/fin/process/trial/</a>

Trial balance - Wiwipedia, the free encyclopedia. <a href="http://en.wikipedia.org/wiki/trial">http://en.wikipedia.org/wiki/trial</a> balance.

#### **Unit 3: Final Accounts**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 The Body of the unit
  - 3.1 Manufacturing account in a manufacturing organization
  - 3.2 Trading account
  - 3.3 Profit and loss Account
  - 3.4 Profit and Loss Appropriation account in partnership and limited liability companies
  - 3.5 Balance sheet
  - 3.6 Notes to the accounts
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignment
- 7.0 References and other sources

#### 1.0 Introduction

In this unit you will learn about final accounts. You will be acquainted with the various accounts that make up the final account.

## 2.0 Objectives

It is expected that, at the end of this unit, you should be able to:

- Explain the concept of final accounts.
- Prepare the various accounts that makes up the final accounts

## 3.0 The body of the unit

The term final account is applied to the following in its broad form.

- i. Manufacturing account is a manufacturing organization.
- ii. Trading account
- iii. Profit and loss account
- iv. Profit and loss Appropriation account (in partnership and limited liability companies)
- v. Balance sheet and
- vi. Notes to the account (in limited liability companies.

## 3.1 Manufacturing Account

The main purpose of preparing the manufacturing account is to determine the cost of production whether it is more profitable to continue in production of the goods for sale or it is more economical to purchase them wholesale from outside suppliers. If it is found that the cost of production of the good is lower than outside purchase, them it is worthwhile producing but if the cost is higher than outside procurement, then it is uneconomical to produce within.

## 3.2 Trading Account

The trading Account helps in determining the trading position of a business. The aim of the Trading Account is to ascertain the gross profit or gross loss for a certain period. The gross profit or gross loss is arrived at after charging the goods and materials and other items of direct cost.

The gross profit figure can be used to compare the performance of one business with another and to help in taking certain progressive business decisions with the pricing of goods for sale.

## 3.2.1 Trading Account Layout:

Debit: on the debit side are placed the stock at the start i.e. at the commencement of the period to which the account relates.

All purchases (cash and credit) out of which all returns (returns outwards) are to be lessen, carriage inwards i.e the charge made for conveyance of goods by land. Less closing stock of goods available at the end of a trading period.

<u>Credit</u>: on the credit side are placed the sales, less all sales returns (Returns inwards), closing stock of good -i.e the value of the goods unsold at the end of the period.

The summary of the layout is as follows:

		N		N
Opening Stock + Purchases Less Returns	xxx	XXX	Sales	XXX
Outwards + Carriage Inwards Goods available for sale - Closing stock Cost of goods sold Gross Profit c/d	<u>xx</u>	xxx	Less Returns Inward	XX
		XXX		XXX

#### Note:

The difference between cost of goods sold and the Net sales (if there is Returns Inwards) represents the Gross profit made and this is transferred down to the credit of profit and loss Account.

#### 3.3 Profit and Loss Account

The profit and Loss Account is an account into which all gains and losses are collected. Where the gains made in the trading period exceed the losses or expenses, the excess is the Net profit. However, where the losses are greater than the gains, the difference is the Net Loss.

The Profit and loss account is used to ascertain the net profit or net loss for the same period of trading after charging administrative selling and distribution expenses and some other financial charges (like discount allowed, bank charges, interest on loan) etc against the gross profit or included with the gross loss to increase the non-profitability of the business during the financial year.

## 3.3.1 Profit and Loss Account Layout:

The profit and Loss Account, contains on the credit side, the Gross profit shown by the Trading Account and on the Debit side all the expenses or losses incurred in carrying out the business.

XYZ

Profit and loss Account for the year ended 31<sup>st</sup> December,.....

	N		N
Gross Loss B/d	XX	Gross Profit b/d	XX
Wages and Salaries	XX	Discount Received	XX
Rent and Rates	XX	Interest on Deposit Account	XX
Insurance Premium	XX	Recoveries or part	
Advertising	XX	Recoveries of Bad Debts	XX
Carriage Outwards	$\mathbf{X}\mathbf{X}$	Selling Bonuses	$\mathbf{X}\mathbf{X}$
Discount Allowed	$\mathbf{X}\mathbf{X}$	Profit on sale of Asset	$\mathbf{X}\mathbf{X}$
Stationery and Postages	$\mathbf{X}\mathbf{X}$	Income from Investment	$\mathbf{x}\mathbf{x}$
Bad Debts	$\mathbf{X}\mathbf{X}$	Commission Received	$\mathbf{x}\mathbf{x}$
Provision for bad debts	$\mathbf{X}\mathbf{X}$	Rent Received	$\mathbf{X}\mathbf{X}$
Depreciation	$\mathbf{X}\mathbf{X}$	Net Loss	$\mathbf{X}\mathbf{X}$
Lighting and Heating	$\mathbf{X}\mathbf{X}$		
Telephone Expenses	$\mathbf{X}\mathbf{X}$		
Loan Interest	XX		
Bank charges	$\mathbf{X}\mathbf{X}$		
General Expenses	$\mathbf{X}\mathbf{X}$		
Repairs and Renewals	$\mathbf{X}\mathbf{X}$		
Accounting & Professional charges	$\mathbf{X}\mathbf{X}$		
Travelling Expense	$\mathbf{X}\mathbf{X}$		
Salesmen Commission	$\mathbf{X}\mathbf{X}$		
Distribution Expenses	XX		
Entertainment Expenses	XX		

Legal charges	XX		
Net Profit c/d	XX		XX
Net Loss b/d	XX	Net Profit b/d	XX

Note:

Gross profit and Gross Loss, Net Profit and Net Loss figures occur at the same time, it only shows the side they would appear if any of them should occur.

Moreover, expenses incurred in carrying on the affairs of a business concern will vary in accordance with the surrounding circumstances. This is also applicable to gains made. The above list of expenses and income are by no means exhaustive.

## 3.4 Profit and Loss Appropriation Account

The objective of the Profit and loss appropriation account is to show all dispositions, divisions and appropriations of the net profit and loss.

The Profit and Loss Appropriation Account is the third segment of the conventional Trading, Profit and Loss Account. The Net profit of the Profit and Loss Account is usually brought down to this account as an opening balance. Added to it is the amount charged for interest on drawings.

On the Debit side are interest on capital so charged on each partner, the amount paid as commission or salaries to partners. The difference between the debit and credit sides represents the balance of profits or loss to be shared between or among the partners.

#### 3.5 The Balance Sheet

The balance sheet is a statement of the assets at a particular moment in time and the liabilities and proprietor's capital, Besides being the statement of asset and liabilities, it also shows whether a business is solvent or insolent i.e. the ability of the business and its inability to meet its financial obligations as at when due. The difference between the assets and liabilities represents the capital of the business.

The balance sheet shows the summary form of the financial state of the concern as disclosed in the books. It is to be noted that the balance sheet is not an account but a

statement of the assets and liabilities of a person or business on a given date arranged in the form of the book-keeping equation which runs thus:

Capital + Liabilities = Assets

This is known as the accounting equation.

				XYZ			
	Bal	ance	sheet	as at 31 <sup>st</sup> December,			
Capital:	P	1	N	Fixed Assets:		N	N
Capital	XX			Land and Buildings		XX	
Add: Net Profit	XX			Less: Provision for Depreciation		$\underline{XX}$	XX
	XX			Plant & Machinery		XX	
Less: Drawings	$\underline{XX}$			Less Provision for Dep		XX	xx
			XX	Motor vehicles		XX	
				Less: Provision for Dep		XX	XX
				Furniture and fittings		XX	l <u></u>
				Less: Provision for Depreciation		XX	XX
				Loose Tools		XX	
				Less: Provision for Deprecation		XX	XX
Long Term Liability:							
Loan			XX				
				Current Assets:			
				Stock		XX	
Current Liabilities				Debtors	XX		
				Less:			
Bank overdraft	XX			Prov. For Bad debts	XX	XX	
Trade creditors	XX			Bills Receivable		XX	
Bills payable	XX			Bank Deposit		XX	
Accrued Expense	XX			Cash		XX	
Income Received in				Prepayments		XX	
Advance	<u>XX</u>						
				Accrued Income		XX	
		$\underline{XX}$					XX
		$\underline{XX}$					XX

## 3.5 Notes to the Accounts

The notes to the accounts give a brief explanatory information to the users of accounting statements as to how and why some items have been treated in the books and states its compliance with the legal requirements of disclosure of some relevant and significant transactions.

#### Example

The following information is in respect of the business affairs of Olaoluwa and Sons Enterprises for the year ended 31<sup>st</sup> March 19 x 4

- i. Stock on 31<sup>st</sup> March, 19 x 4 was N38,500
- ii. Provide depreciation on plant and machinery which has a life span of 12 years and a residual value of N4,000.
- iii. Provide depreciation on motor vehicle at the rate of 20% on the net book value.
- iv. The organization sub-let the building on 30<sup>th</sup> June, 19 x 3 and the rent received covered 30<sup>th</sup> June 19 x 3 to 1<sup>st</sup> October, 19 x 4.
- v. Loan from S. Johnson was received on 1<sup>st</sup> January, 19 x 3 at 15 percent per annum and only N4,500 have been paid as interest throughout the period.
- vi. 20% P.a deposit on NN Bank Limited was made on 31<sup>st</sup> May, 19 x 3.
- vii. Maintain provision for doubtful debts on debtors as 5 percent and adjust the provision for discounts allowable on debtors to 1 percent.
- viii. Create a provision for discount received on creditors at ½ percent.
- ix. Provide for interest on capital account as 1 percent.
- x. The following expenses are under-paid: Telephone N4,000 and salaries and wages N11,500.
- xi. Salaries and wages paid include N3,500 for direct wages.
- xii Distribution and selling expenses was over-paid by N1,500.

#### Question

- 1. Prepare the trial balance from the extract of the books during the same period.
- 2. Make the necessary adjustments and prepare:
- i. The Trading and Profit and loss Account for the year ended 31st March, 19x 4 and
- ii. The Balance sheet as at 31<sup>st</sup> March, 19 x 4

(Note: show you answer to the nearest Naira)

#### **Solution**

1. Trial balance: The following is the trial balance extracted from his books during the same period.

	DR	CR
	N	N
Purchases and Sales	500,000	750,000
Returns	10,500	15,000

Debtors and Creditors 60,50	00   75,100
Carriage on purchases 1,50	00
Carriage on sales 2,00	00
Bad debts written off 5,00	00
Provision for bad debts - 1 <sup>st</sup> April 19 x 3	2,500
Provision for discount on debtors - 1 <sup>st</sup> April 19 x 3	1,000
Salaries and Wages 20,00	00
Lighting 4,50	00
Telephone Expenses 5,00	00
Stationery 7,00	00
Bank Charges 1,00	00
Loan from S. Johnson	40,000
Loan interest owing - 1 <sup>st</sup> April, 19 x 2	1,500
Travelling Expenses 1,6	00
Loan Interest 4,5	00
20% P.a Deposit in NN Bank Ltd 60,0	00
Interest on Bank Deposit	7,000
Salesmen Commission 2,	700
Distribution and selling Expenses 25	,000
Buildings 80	,000
Plant and Machinery at cost 100	,000
Provision for Depreciation on plant & Machinery	32,000
Motor vehicles at cost 150	,000
Provision for depreciation on motor vehicles	60,000
Rent Received from building sub-let	12,000
Stock on hand - 1 <sup>st</sup> April, 19 x 3	,000
Bank and Cash 3	,000
Drawings 5	,800
Capital	87,000
Discounts 7,	000 8,500
1,091,	600 1,091,600

Olaoluwa and Sons Enterprises Trading Account for the year ended  $31^{st}$  march, 19 x 4.

Λ 4.				
	N	N		N
Opening Stock		35,000	Sales (Gross)	750,000
Add:			Les Returns Inwards	10,500
Purchases	500,000		Net Sales	739,500
Carriage on purchase	1,500			
	501,500			
Less:				
Returns Outwards	<u>15,000</u>			
		486,500		
Goods Available for				
Sale		521,500		
Less: Closing Stock		38,500		

Cost of Goods sold	483,000	
Gross Profit c/d	<u>256,500</u>	
	<u>739,500</u>	<u>739,50</u> 0

## Olaoluwa and Sons Enterprises profit and Loss Account for the year ended $31^{st}\,\text{March}\,19\;x\;4$

-	N	N		N	N
Discount Allowed		7,000	Gross Profit b/d		253,000
Carriage on sales		2,000	Discount Received		8,500
Bad Debts		5,000			
Provision for bad debts		525	Interest on Bank Deposit	7,000	
Lighting		4,500	Add: Outstanding	<u>3,000</u>	
Telephone Expenses	5,000				10,000
Add: under paid	<u>4,000</u>		Rent Received	12,000	
		9,000	Less: Received in Add	<u>4,800</u>	
Stationery		7,000			7,200
Bank charges		1,000			
Interest on Loan			Decrease in provision for		
	4,500		discount in debtors		425
Add: Interest owing	3,000				.20
	7,500				
Less: Payment in arrears	<u>1,500</u>		Provision for discount		
			received on creditors		375
		6,000	Toolived on creditors		3,6
Salesmen commission		2,700			
Travelling Expenses		1,600			
Salaries and Wages	20,000	,			
Add Owing	11,500				
C	31,500				
Less: Direct Wages	3,500				
S		28,000			
		,			
Distribution and selling					
expenses	25,000				
Less: Prepaid	1,500				
	1,000	23,500			
Dep: Motor vehicle	18,000	_2,200			
Plant & Machinery	8,000				
· . · .		26,000			
Provision for interest in		,			
capital		870			
Net Profit c/d		154,806			
		<u> </u>	4		<del>279,501</del>
			<sub>1</sub> I		,,,,,,,,

## Olaoluwa and Sons Enterprises Balance Sheet as at 31st March, 19 x 4

	N	N	Fixed Assets:	N	N
Capital		87,000	Building		80,000
Add: Net Profit		<u>154,806</u>	Plant & Machinery	100,000	
		241,806	Less: Provision for Dep	40,000	
Less drawings		5,800			60,000
		236,006			
Long term liability loan:			Motor vehicles	150,000	
S. Johnson_	40,000				
<u>Current Liabilities:</u>			Less: Prov. For Dep	<u>78,000</u>	
Creditors	75,000				<u>72,000</u>
Less Provision for					212,000
Discount Received	376				
		74,724	<u>Current Assets:</u>		
Accruals:			Stock	38,500	
Telephone	4,000		Debtors	56,900	
Provision for interest on	870		Prepaid Distribution &	1,500	
capital			Selling expenses		
Interest on loan	3,000		Interest Receivable (W.C)	3,000	
Salaries and Wages	11,500		Bank Deposit	60,000	
Rent Received in Advance	4,800		Bank and Cash	3,000	
		<u>24,170</u>			<u>162,900</u>
		374,900			374,900

## Workings:

(W.a)

## Provision for Bad Debts Account

19 x 4	N	19 x 3	N
Mar 31 Bal c/d	3,025	April 1 Bal b/d	2,500
		19 x 4	
		Mar 31 Profit and Loss	525
	3,025		3,025

## Provision for Discount Allowed on Debtors Account

19 x 4	H	19 x 3	N
Mar 31 Profit and Loss	425	April Bal b/d	1,000
31 Bal c/d	575		

1,000

Calculation of provision of discount on debtors:

 $= (N60,500 - N3,025) \times 1\% = N575$  approximately

Calculation of Total Debtors: N: N

Debtors as per Trial Balance 60,500

Less:

Provision for Bad Debts 3,025

Provision for Discount Allowed

on Debtors 575

3,600

<u>56,90</u>0

(w.b) Interest on loan from Johnson

Date Received: 1st January, 19 x 3

Amount of loan: N40,000

Rate: 15% per annum Amount paid: N4,500

 $1^{st}$  January, 19 x 3 to  $31^{st}$  March, 19 x 3 = 3 months

 $1^{st}$  April 19 x 3 to  $31^{st}$  March 19 x 4 = 12 months

 $15\% \times N40,000 \times 3/12 = N1,500$ 

15% x N40,000 = N6,000

Out of the N4,500 that was paid N1,500 is in respect of the last financial period and N3,000 is in respect of this financial period out of the N6,000 that is actually due, and as such N3000 is still outstanding.

(w.c) 20% p.a Deposit in NN Bank Ltd (Note vi):

Date of deposit: 31st May 19 x 3

Total months used in the bank = 10 months

i.e June 19 x 3 to March 19 x 4