LOCAL GOVERNMENT AUTHORITY FINAL ACCOUNT RECONCILIATION IN A COMPUTER ENVIRONMENT. (A CASE STUDY OF LAVUN LOCAL GOVERNMENT, KUTIGI)

By

# Aliyu Danlami Lafene PGD/MCS/362/96/97

DEPARTMENT OF MATHEMATICS/COMPUTER SECIENCE FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA.

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A PROJECT SUBMITTED TO THE DEPARTMENT OF MATHEMATICS/COMPUTER SCIENCE, FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE POSTGRADUATE DIPLOMA IN COMPUTER SCIENCE.

# **MARCH, 2000**

## **CERTIFICATION PAGE**

This project has been read and approved as meeting the requirements of the School of Science and Science Education, Department of Mathematics/ Computer Science, federal University of Technology Minna, Niger State.

Prince R.O Badamosi

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Date

Project Supervisor

Dr. S.A Reju

Head of Department

Date

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External Examiner

Date

#### **ACKNOWLEDGEMENT**

To Allah all praise are due. Nothing can be more rewarding than that Allah has blessed.

Quite frankly, it has not been too easy for one to be engaged in academics and yet struggling with daily work to keep the family and the soul together.

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One should not forget to place on records the special role played by my bossom friend- Abdullahi A. Abuarkar (96/374) you are indeed always available when needed. May Allah continues to showers his blessings on us all.

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Finally, to my course mate (96/97 session Group) you have all been very wonderful. To others too numerous to mention here, I own you all what it takes to make me what I am today. Thanks for been there for me. May Allah bless you all.

## **DEDICATION**

To the almighty Allah for making it possible. Also dedicated to my children and wife who missed me much during the regular school days and the period of having to put ideals on paper. To you all, I saluate your concern.

#### ABSTRACT

The preparation and availability at the required time the financial position of any organisation by way of its final accounts for a particular period is one of the major tools for the measurement of performance.

The preparation of find/accounts in the public sector has in the past not been given any high priority. It is in line with the foregoing facts that the need for computerization of the financial operation of the Local Government as a basis of eliminating the tediousness associated with the preparation of the statements manually which is responsible for the non-preparation of final accounts. The computerization process will involve designing a good program package in Dbase IV for effective preparation of final Account reconciliation in the Local Government.

# CHAPTER FOUR

4.0 SOFWARE/PROGRAM DEVELOPMENT	36
4.1INTRODUCTION	36
4.2 CHOICE OF ALNGUAGE	36
4.3FEATURES OF LANGUAGE CHOSEN	36
4.4HARDWARE REQUIREMENTS	37
4.5STAFF TRAINING	38
4.6 SYSTEM TESTING	38
4.7SYETEM CONVERSION	38-39
4.8STARTING THE SYSTEM	39
4.9 DESCRIPTION OF THE MENU STRUCTURE	40-42
CHAPTER FIVE	
5.0 SUMMARY, RECOMMENDATIONS, CONSLUSION	43
5.1 SUMMARY	43
5.2 RECOMMENDATIONS	43-44
5.3, CONSLUSION	44
REFERENCES	45
PROGRAM LISTING	46-54

ix

#### CHAPTER ONE

#### **1.1 INTRODUCTION**

Information is needed in virtually all fields of human thought and action. At a personal level, if you always had high-quality information you could take better advantage of your future career opportunities and you would be better equipped to make other personal decision.

Apart from the above usefulness of information to personal ends, information is also needed by managers in organization. Managers at all levels must perform such basic management tasks or function as planing, organizing, staffing and controlling. The success of any business is determined by how well its executives performs these activities. And how well these function are carried out is dependent, in part, upon how the information needs of managers are being met. We may wonder why this much dependency on information. It is because each function involves decision making, and decision making must be supported by quality information. If managers information is of poor quality, the decision that are made will probably suffer and the business at best will not achieve the success it might otherwise have had.

#### 2.1ACCOUNTING INFORMATION SYSTEM (an overview)

Speedy and efficient information processing is crucial to our socially conscious and highly developed Technological society, the society we are in now is in haste to get to where it want to and as such the manually operated accounting information in any organization may not be able to meet up with the present ever- increasing amount of information that an organization needs to be viable.

Computers have helped to reduce the intolerable burden of handling the ever-increasing amount of information with which government department, public services and business concerns are expected to contend. Having eased the problem. Computers, because of their ability to analyze information as well as to retain, update and reproduce it, and because of their versatility to present it in a variety of forms, have worsen the information explosion and we could cope with today's volume of information without them.

The availability of accounting information on the scale that computers have made possible has brought many positive benefits. Access to mass accounting information, which it is only possible to search through or analyze quickly enough with the aid of a computer will benefit organization that employs the use of computers.

#### **1.3 OBJECTIVES OF THE STUDY**

The essence of this project work is tailored towards Automation of the Local Government final Accounts. The main objective are:-

- (1) To eliminate delays involved in the preparation of accounting reports.
- (2) To automatically generate all the necessary accounting reports required by the government.
- (3) To check corruption at appropriate time, including other malpractices.
- (4) To observe the problem associated with the existing accounting operation in the Local Government and provide the need for a computerised operation in the organisation.

#### **1.4 SCOPE AND LIMITATION OF THE STUDY**

17.5

This study will examine and analyse the need for a computerised operation in the Accounting department which will replace existing manual operation. The Accounting department of the Local Government is expected to perform various accounting activities like preparation of the necessary accounting reports, preparation of monthly payroll, and advising the local Government on its monetary position e.t.c. However, this study will be limited by time factor as there is no enough time to carry out a study on all the operation of the department. It is also limited by lack of finance which will be needed  $\frac{1}{59}$  meet the requirement of the research.

#### **1.5 THE GENERAL LEDGER**

The General Ledger is in theory, the only document that contains all transaction in accordance with the essential principles of double entry bookkeeping. It contains, in a summarised and classified form, a permanent record of all transactions. The book is divided into separate sections called accounts, each of which usually occupies one page, although it may extend to two or more pages, while on the other hand, several accounts may be included on a single page. The pages (known as folios are numbered consecutively, and any account can be turned up quickly by reference to the alphabetical index provided.

It shall be noted that the from of a ledger's account differs in several important respects from that of a journal.

General Ledger is divided into two sections by a central vertical line on the left hand side are place the credits. The abbreviation "DR and CR" are

placed at the top left and right hand corner respectively, while columns are provided on each side for the date, the nature of transaction, the journal folio and the amount respectively.

The nature of the transaction specified in the second column is usually indicated by stating the name of the other accounts included in the day books or journal entry.

It is from this general ledger that trial balance is extracted to show at a glance the value of income, Expenditure, Assets and Liabilities of any business on a daily basis. With the trial balance in place, profit and Loss Accounts and Balance sheet are easily prepared. placed at the top left and right hand corner respectively, while columns are provided on each side for the date, the nature of transaction, the journal folio and the amount respectively.

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#### CHAPTER TWO

#### 2.1 LITERATURE REVIEW

In its simplistic version, accounting is defined as the language of business. This derives from the fact that every business undertaking will seek to ensure periodically its ability to stay on in operation through sustained profit – making and management of its various assets both liquid and otherwise. Accounting techniques constitutes a means of easy measurements of these and other relevant parameters which relate to the business world.

When vied in a broader perspective, the meaning of the term "business undertaking" will include any kind of organization be it commercial, religious or any other non- profit making institution, and of course even government. Therefore accounting is a very pervasive subject transcending several boarders and affecting the economic pulse of all organizations.

In an ever changing world, accounting has been adapted to a number of special roles, apart from the traditional role of historical record keeping leading to the preparation of various books of accounts, accounting and its tools are employed in financial and management plans, production of various specialized reports which aid their users { investors, shareholders, tax authorities etc} to a more informed position and action. Accounting has also

aided development in technological and many other diverse fields by its direct impact on the overall financial progress of organization pursing these goals.

Generally, the objectives of accounting and financial reporting are as follows:-

[!] To provide financial information useful for determining and predicting the flows, balances and requirements of short term financial resources of the organization.

{2} To provide financial information useful for determining and predicting the economic condition of the organization and changes therein.

{3} To provide financial information useful for monitoring performance under terms of legal, contractual and fiduciary requirement.

{4} To provide information useful for planning and budgeting and for predicting the impact of the acquisition and allocation of resources on the achievement of operational objectives.

{5} To provide financial information useful for evaluating managerial and organization performances through:

{a} The determination of costs of programme, functions and activities
 in a manner which facilitates analysis and valid comparisons with established
 criteria among time.

{b} The evaluation of the efficiency and economy of operations of organizational units, programmes, activities and functions.

{c} The evaluation of the result of the programmes, activities andfunctions and their effectiveness in achieving their goals and objectives.

{d} The evaluation of the equity with which the burden of providing resources for government operations is imposed.

Given the above objectives, accounting is considered so important to an organization such that without it, the immediate pecuniary will be experienced by the organization. Accounting functions procedures and activities are carried out almost immediately transaction takes place. All forms of fraud committed can be more readily exposed by accounting system and procedures and activities, if a good accounting system and practice is installed in the business organization.

Furthermore, the accounting functions provides the working materials with which the audit function commences. In other words, without accounting function being carried out {whether by an accountant or an Auditor} the audit function cannot commence because it is the accounts {ie financial statement} prepared that is being re- examined and reported on by the auditor.

Accounting in business, basically consists of management and financial accounting management costing inclusive accounting takes of the day to day

management information need and is so basic to the profitability and viability of any business. It makes use of business events in the past as well as help to provide information on which to take immediate decisions and helps in planning and projecting operations in the future in the form of budgeting and profit planning.

Financial accounting is rather move traditional and historical records of business events and activities and the preparation of various books of account and financial statements such as ledger, trial balance, profit and loss accounts and balance sheets for use by various parties {both within and outside the business}. It is essentially the financial accounting reports that is subject to auditing.

Accounting is a basic function and indispensable to business progress and prosperity. It takes care of business assets and liabilities, their safety, proper recording, efficient use and adherence to management policies. It combines the three phases of the context of business events past, present and future. Agood accounting system ensures that errors and fraud are thrown open as soon as possible. This is more so because the accounting functions is part of the management responsibilities. When properly designed and implemented, accounting contributes immensely to business progress and profitability.

At this juncture, it is necessary to explain the concept of book keeping. Book keeping can be defined as the science and art of correctly recording in the books all those business transaction of any organization. The recording is done in the books of account such as ledgers, trial balance, financial statement etc.

(a). LEDGER:- A ledger account is a page in a ledger which is devoted solely to financial transactions account is opened for each person, firm or company with the business deals for each of asset(e.g cash stock, plant etc) each particular kind are recorded. When the number of transactions is likely to be too large to be accommodated on one page of the ledger, a number of pages may be reserved or that account.

#### 2.2 CLASSES OF LEDGER ACCOUNT

i. PERSONAL LEDGER:- This is a form of ledger that records all transactions between the business and the person, firm or company whose name is entered at the head of the account.

ii. IMPERSONAL ACCOUNT:- This is used to record a particular type of transactions as its affect the business itself. For instance, the cash book is an impersonal account which records all cash received and paid by the business. Purchase accounts, recording particular types of transaction Computer application into this area, the accuracy of the calculation and speedy mainpulation of data is ensured.

- II. ACCOUNT RECEIVABLE AND PAYABLE:- These are book used in keeping details about the debtors and creditors respectively at any giving time. These books are always updated to reflect any changes that occur. The introduction of computer has made this task easy. This is because any changes can be entered in form of data and computer will update the affected books as may be required.
- III. INVENTORY AND STOCK CONTROL :- This has to do with keeping records of store items intact, many organizations believe that the relevance of the computer into this area has the biggest payoff. Some organization that have so much of their resources tied up in inventories due to poor inventory handing. For instance a well designed computer program can help to carry out the following functions
  - a. Identify which inventory is excessive and permit cost saving reduction.

- b. Statistically indicate which inventory levels are inadequate and must be increased so loss of customers will not occur because of out of stock condition.
- c. Ensure proper control of stock items since necessary update is required as items are in and out of store.
- v. EN RACTION ON FINAL ACCOUNT:- This is made up of the extraction of general ledger, trial balance income statement and balance sheet. The introduction of computers has help in no small measure in the accomplishment of this task. In a computer system with a well designed accounting systems all these accounts are extracted based on the input data without any human intervention. In addition, the calculations required are always done with every necessary accuracy from the foregoing analysis the application of computers to accounting profession cannot be over emphasized. Infact because of its applications, some software firms have develop standard accounting package such as SBT which is used for keeping and extraction of books of accounts and stock inventory control. There are also standard payroll packages for payroll processing. The presence of these package has further made computers closer to Accountants.

#### 2.5. SCHEDULE OF DUTY AND RESPONSIBILITY

#### **1. TREASURER**

- i. The Treasurer shall ensure conformity to model financial Memorandum and other statutory requirement of Local Government including all financial instruction, edict and Local Government by-law; by close supervision of all accounting function assigned to staff of his department.
- Maintain the control ledger book and prepare schedule of the control Accounts for inclusion in the monthly statement of Accounts.
- iii. Perform other duties from time to time as may be directed by the chairman.

#### 2. ACCOUNTANT:

- Collate all source data from various accounting functions for the purpose of Journal entires and posting according to General ledger to facilitate monthly Trial balance and statement of Accounts.
- ii. Prepare Form LGT 78
- iii. Prepare Authority to incure supplementary Expenditure form.
- iv. Check capital Expenditure and primary health care voucher.

#### **3. REVENUE OFFICER**

- i. Maintain Receipt Book Distribution Register FORM LGT 25
- Constant supervision of Revenue Collectors and preparation of Revenue Chart.
- iii. Maintain master list of all tax payers and revenue centers.
- iv. Taking charge of enforcement of Local Government revenue by-laws.

#### 4. REVENUE COLLECTORS

- i. Collect all revenue and other monies due to the Local Government
- ii. Maintain a revenue collectors cash book form LGT 15
- iii. Write up a monthly report on the district revenue collection to the revenue officer.
- iv. Perform other from time to time as may be directed by the treasurer.

#### 5. ACCOUNTS ASSISTANT 1.

- i. Maintain Relevant daily abstract of Expenditure
- ii. Prepare Retirement benefits form
- iii. Maintain the unallocated store Ledger

Testing or a review of the methods and procedure of the present project feasibility is necessary. The purpose of such a test is to verify that the outlined benefit are, in fact, being achieved.

- (1) Operation feasibility:- This is concerned with the workability of the proposed system. When developed and installed, generally what is considered is that the project has received the support of the management and user.
- (2) Technical Feasibility:- This seeks to clarify if the proposed project can be done with the current equipment, existing software and personnel.
- (3) Financial / Economical Feasibility:- This aspect is taken into consideration to access cost of implementing a proposed project along side with benefit to be derived from implementing it.

# 3.3 REQUIREMENT SPECIFICATION FOR THE PROPOSED NEW SYSTEM

Requirement for the proposed new system is a feature that must be included in a new system. The requirement determination entails studying the existing system and collecting detailed information about the system so as to find out what their requirements are. Requirements determination consist of three activities which must be adhered to:-

- Requirement Anticipation:- These are problem or features that the analyst wished the new system to have as a result of the analysts previous experience.
- (2) Requirement Investigation:- This activity used variety of tookand skills to study current system and document its features for future analysis.
- (3) Requirement Specification:- This activity leads to a description of features for a new system based on the analysis of data produced during the fact-finding investigation.

In line with this, Requirement Specification should be thoroughly done, for the quality of the work performed at this point would reflect later in the characteristic of the new system evolved.

#### 3.4 SYSTEM DESIGN

Design is the process whereby the systems analyst applies his judgements, skills and knowledge to interpret the requirements specification that provides detailed documentation of the new system.

For effective design to be accomplished, certain and relevant basic factors must be consider:-

- Production of required information at the right time, and amount with an acceptable level of accuracy.
- (2) The need to minimize cost and time spent on data preparation.
- (3) Effective safeguards for prevention of frauds and malpractice's.
- (4) Effective design of documents and reports.
- (5) Effective security measures to avoid loss of data stored in file.

# 3.5 COST AND BENEFIT ANALYSIS OF THE NEW SYSTEM

#### (1) DEVELOPMENT COST

4 PC (486DX, 266/MH2 Processor	650,000
102 U.R Keyboard	50,000
Laser Jet Printer (6L)	50,000

Miscellaneous Expenses

20,000

# TOTAL

N 830,000:00

(2) SOFTWARE REQUIREMENT

 WORD PROCESSING (6.1 Version)
 25,000:00

 D Base Program
 15,000:00

 Spread Sheet
 10,000:00

 Widow '98
 5,000 :00

 TOTAL
 N 55,000:00

## **OPERATING COST**

System Analysis & Design	24,000:00
For 3wks at 8,000/wak	
Installation	15,000:00
Training & Development	21,000:00
Utilities	20,000:00
2 A/C (2 ½ HP)	100,000:00
Stationeries	50,000:00
Miscellaneous Expenses	30,000:00

#### TOTAL

N 260,000:00

#### **GRAND TOTAL**

#### N1,145,000:00

#### **3.6 BENEFITS OF THE PROPOSED SYSTEM**

- (1) Enhance the efficient operation of the Account department.
- (2) Creation of speedy processing of transaction and generation of necessary reports.

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- (3) Avoidance of constant problem such as loss of information as being experienced with the existing manual procedure.
- (4) Maintenance of data security.
- (5) It will facilitate prospects for effective planning and control through speedy documentation of transaction and retrieval of information.
- (6) Reduce or total elimination of fraudulent and sharp practices.

#### 3.7 PROBLEMS OF THE CURENT SYSTEM

The current system is unable to produce final Accounts as at when due accurately and this hinders timely formation of current policies.

Problems specifically identified as militating against the existing system of Government Accounting practices in the Local Government include thus:-

- (1) Lack of complete and proper record of accounting operations of the local Government. This may be due to loss fmisplaced accounting information or documents in handling and/or in entry processes.
- (2) Time lag in the preparation of final Accounts. This problem emanate from delays in rendition of returns of account by the various departments and units.
- (3) In comprehensive control mechanism:- This is because when most processes are manually done. It becomes too cumber some put to part all human vices in check.
- (4) The volume of document is large and storage facilities are insecure and inadequate.

#### 3.8 INPUT REQUIREMENT

The proposed system will require three forms of input. These are:-

- (a) Account code Entry
- (b) Estimate Entry
- (c) Transaction Entry

### (A) ACCOUNT CODE ENTRY

This entry contains details of new code that needs to be included into the available code. It is expected to be designed to contain information such as:-

Head code and description

Subhead code and description

Section code and description

#### (B) ESTIMATE ENTRY:-

This is expected to be designed to aid entry of budgeted amount for each of the available account codes.

- (b) RECEIPTS AND PAYMENTS:- This is a report that shows the list of receipts and payments.
- (c) **RECURRENT EXPENDITURE BY SUBHEADS:-** This report lists all recurrent revenues by subheads.
- (d) RECURRENT EXPENDITURE BY SUBHEADS:- This report lists all recurrent expenditure by subheads.
- (e) CONSOLIDATED REVENUE FUND:- This is a report that show previous year's which rolled over into the current year and recurrent revenue of the current year.
- (f) CAPITAL RECEIPTS BY SUBHEAD:- This is used to list capital receipts by subheads.
- (g) CAPITAL EXPENDITURE BY SUBHEAD:- This is used to list capital expenditure by subheads.
- (h) CAPITAL DEVELOPMENT FUND:- This forms the details of report that are capitalized from the balances of the previous year.

**NOTE:-** Items b,c,d, f and g are emphasized in this project.

#### **3.1.0. DATABASE FILES DESIGN**

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The design of database files defines the descriptions of all the database files that are used in a system. It includes the description of the contents of files used and their structures. Therefore, all the files that are used in this system are fully described in this section.

The proposed Computerised Government Accounting System in the Local Government consists of six database filed namely:

ACCOUNT.DBF,HEAD.DBF,SUBHEAD.DBF,SECTION.DBT,TRANS.DB F,AND BALANCE.DBF.

#### **ACCOUNT. DBF**

T

This is a file that contains details of all the available account codes. The structure of this file is as shown below:

S/NO FIELD NAME		FIELD TYPE	WIDTH	DEC
1.	ACODE	CHARACTER	8	
2.	ESTIMATED	NUMBERIC	20	2
3.	ACTUAL	NUMERIC	20	2
4.	BBF	NUMBERIC	20	2
5.	HEAD	CHARACTER	3	
6.	SUBHEAD	CHARACTER	2	

7.	SECTION	CHARACTER	2
8.	TYPE	CHARACTER	2

## HEAD.DBF

T

This is a reference file which contains the various head code and their respective description. The structure of this is as stated below:

S/NO	FIELD NAME	FIELD TYPE	WIDTH	DEC
1.	CODE	CHARACTER	3	
2.	DESC	CHARACTER	20	
3.	TYPE	CHARACTER	2	

#### SUBHEAD.DBF

T

This is a reference file which contain the various subhead codes and their respective description. The structure of this file is as stated below:

	S/NO	FIELD NAME	FIELD TYPE	WIDTH	DEC
1.	CODE	CHARACT	ſER	2	
2.	DESC	CHARACTE	R	20	
3.	TYPE	CHARACTE	R	2	
4.	HEAD	CHARACTE	R	3	

#### **SECTION.DBF**

This is a reference file which contains the various section codes and their respective description. The structure of this file is as stated below:

S/N	0	FIELD NAME	FIELD TY	'PE	WIDTH	DEC	
1.	CODE	CH	ARACTER	2			
2.	HCODE	E CH	ARACTER	3			
3.	DESC	CH	IARACTER	20			

## **TRANS.DBF**

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\*

This is a file that contain the details of all the transactions of financial actives. The structure of this file is as shown below:

S/NC	) FIELD NAME	FIELD TYPE	WIDTH	DEC
1.	ACODE	CHARACTER	8	
2.	DATE	DATE	8	
3.	AMOUNT	NUMERIC	15	2
4.	HEAD	CHARACTER	3	
5.	SUBHEAD	CHARACTER	2	
6.	SECTION	CHARACTER	2	
7.	TVN	CHARACTER	6	
8.	PSN	CHARACTER	6	
9.	TYPE	CHARACTER	2	

#### **BALANCE.DBF**

This is a file that contains details of balances of all account codes. The structure of this file is as shown below:

S/N	O FIELD NAME	FIELD TYPE	WIDTH	DEC
1.	ACODE	CHARACTER	8	a.
2.	ACTUAL	NUMERIC	20	2
3.	HEAD	CHARACTER	3	
4.	SUBHEAD	CHARACTER	2	
5.	SECTION	CHARACTER	2	
6.	TYPE	CHARACTER	2	
7.	TOTALM	NUMERIC	20	2

#### 3.11 PROGRAM DCUMENTATION

The proposed system is design to work on suite of programs developed design in modules. It involves the physical construction of the logical described above. The procedures defines the program the specification for output, input, file and processing into computer software. The designing of the computer software is important to ensure that the actual programs produced perform all tasks as intended and to allow for future modifications to be performed in an efficient manner and with a minimum destruction to the design of the system. Therefore, the documentation of the program specification are specified accordingly.

#### **CHAPTER FOUR**

# 4.0 SOFTWARE/ PROGRAM DEVELOPMEENT.

## 4.1 INTTRODUCTION

This is the stage of program development and implementation when the conceptional requirement of the new system and the overall objectives are to be transformed into physical reality. This stage is very important because it is the most crucial stage in achieving a successful new system.

## 4.2 CHOICE OF LANGUAGE

The programming language used for this project is Dbase iv.

Dbase iv is a data base management system, a powerful tool for managing data, this means that vast amount of information can be stored, related, manipulated and retrieved with speed and efficiency.

## 4.3 FEATURES OF LANGUAGE CHOSEN.

{1} It provides a full relational data base environment to users.

{2} Data can be verified automatically as they are entered into field.
 up to 255 fields can be specified for record.

36

{3} Pop-up menus and windows can be designed.

{4} It has a larger number of memory variables, users- defined function up to 99 files can be opened at a time.

# 4.4 {1} HARDWARE REQUIREMENTS.

The proposed system requires the followings:

- {a} Personal computer 836 main processor
- {b} Ram 16MB
- $\{c\}$  Floppy disk drive- 3.5 5.25
- {d} Colour monitor
- {e} Laser Jet printer {At least 5L or 6L}
- {f} Stabilizer 500 VA.
- {g} Ups 2000VA

## **{2}** SOFTWARE REQUIREMENT

- $\{a\}$  Ms-Dos 6.0 6.1 version
- {b} Window 98 Version
- {c} Text Editor {MS-DOS}
- {d} Dbase iv\ fox pro / clipper.

#### 4.5 STAFF TRAINING

The amount and period of training for this system will depen upon its complexity and the available skill on the groun presently.

The proposed system will be users-friendly. However, it necessary to have an in – house training for the various personno in the organization.

The training will cover areas like Basic computing an operations guidelines for the accounts staff in general.Thi training should not exceed four weeks of vigorous practicals i the usage of the designed packages.

## 4.6 SYSTEM TESTING.

System testing is a vital stage in program implementation. This involve the use of test data on the new system in order to ensure that system work accurately and efficiently before live operations commences.

System testing serves as a confirmation that all is quits okay and correct as well as an opportunity to show the users that the system works as required.

## 4.6 SYSTEM CONVERSION

38

The following approaches could be used during conversion:

{1} Parallel Approach:- This is a method where the old method is operated simultaneously for sometime with the new system to make sure that the new system meets the requirements that the old system has been meeting all along and to determine whether the new system will be able to stand the test of time.

{2} Direct Method:- This is a method where the old system is discontinued and the new system becomes operational immediately.

{3} Piecemeal Approach:- This is a method where by changing to a new system is done gradually until the desired result is installed in other parts of the organization gradually.

Based on the above approaches, the parallel method was recommended.

#### 4.8 **STARTING THE SYSTEM**

As stated earlier in this chapter, the new system is developed using the combination of dBASE IV Clipper Version 5.3. The inclusion for the compilation allows for the running of the system direct from the operating system prompt. This implies that typing "LGAFACCT" at the operating system prompt displays the first level menu in which users would select from the choice available.

#### 4.7 DESCRIPTION OF THE MENU STRUCTURE

The menu structure will be discussed using the figures representing the screen design of the proposed system.

Specifically, the new system has seven options in the first level these options TRANSACTION UPDATE, MONTH-END menu are PROCESS, REPORTS GENERATION, DAILY ENQUIRY, FILE MANAGEMENT, UTILITIES, and SYSTEMS EXIT. Each of these options can be selected using the arrow keys to highlight the options of interest. The options are discussed in turns as follows:

**TRANSACTION UPDATE:-** Daily accounting transactions regarding the L.G are expected to be entered into the proposed system. The transaction update menu enables the users to manipulate the accounting transaction entries. It has facilities for entering new accounting transactions, modifying, viewing and deleting of the existing transaction.

**MONTH-END PROCESS:-** This is an option used to process the transactions entered into the transaction file to up date balances of each of the affected account codes. This is expected to be done on monthly bases in a cumulative manner in order to facilitate the end of year processing of the final

account. The system prompts for a confirmation to process transaction and it gives the status of processing within the period of operation thereby reflecting the internal operations of the system.

**REPORTS GENERATION:-** This menu is used for the selection of reports that needs to be printed.

**DAILY ENQUIRY:-** This option is used to make enquirges as regards the financial position of Local Government affairs at any given time. It has a submenu which shows the two categories. Once a category is selected, the system prompts for the account code of interest which will then show the financial state of that particular code.

**FILE MANAGEMENT:-**This is an option that helps to maintain account codes of the L.G. It allows users to update either codes file or station file such that a new code can be created, an existing code can be modify, viewed or deleted. The screen design for new account code creation and this is similar to the screen design for modifying and deleting existing codes. For viewing code, a submenu for the categories of the account codes are displayed from which the user selects a category as required. After the selection, a list of all the available codes in the selected category are displayed.

**UTILITIES:-** The utility option enables the user to perform tasks within the system. It has a submenu with two options as displayed. The estimate Data

Entry in the submenu is used to input the budgeted figures for a particular year per account codes. The New Year Update is expected to prepare account position for the incoming year as in the case of consolidated revenue fund and capital development fund.

**EXIT:-** This is an option used to stop the system and the working takes the user back to the operating system prompt.

#### **CHAPTER FIVE**

# 5.0 SUMMARY, CONCLUSION & RECOMMENDATIONS5.1 SUMMARY

Computerization in any organization is carried out with the hope of eliminating or reducing to certain minimum level the use of manual method in carrying out its activities. It is also done with the sole aim of improving the speed, accuracy and efficiency in collection, manipulation, storage, reporting and dissemination of data.

Indeed with automation, reports can be generated in good time, thus enabling the organization to take quick and effective decisions over her financial obligations

#### 5.2 **RECOMMENDATIONS**

Systems are bound to face changes, as technology, economy, and society change, therefore, the new system should be modified from time to time. The following are recommended:-

1. The hardware requirements for this new system should be provided immediately.

- 2. The user/operators of this system needs to be trained for about 4 weeks on the proper usage, maintenance ethics of the system
- the organization should endeavour to see that all activities connected with funds and accounting are fully computerized to ensure proper accountability.
- 4. One staff should be made to be in charge of the new computer procured.

# 5.3. CONCLUSION

The presence of computerization of operations in done because of the expected benefits.

Most organizations have fully computerized application.

In addition, the world is going into computer age and any organization that wants to be relevant needs to be computerized.

However, it does not only requires for an organization to be computerized that matters but in addition, the effective operation of such computerized procedures needs to be pursued with all the required necessity.

In realization of this, the proposed system when finally in operation will in no doubt bring the establishment immeasurable benefits in its present and future day to day activities.

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```
set talk off
set stat off
set scor off
set safe off
set wrap on
set date brit
do whil .t.
 set colo to bg
 clea
* set colo to w/rb+,gr+/w,gr,w/n
 set colo to w+/b+,b+/w+,w+,b+/w+
 clea
 @ 2,5 clea to 23,74
 (a) 2,5 to 4,16 doub
 (a) 2,17 to 4,57 doub
 (a) 2,58 to 4,74 doub
 @ 3,7 say 'LGAFACCT'
 (@) 3,19 say 'LOCAL GOVERNMENT FINAL ACCOUNTS'
 @ 3,60 say 'DATE:'
* set colo to rb+/w+
 (a) 3,65 say date()
* set colo to w+/rb+
 (a) 2,5 to 23,74 doub
 (a) 6,32 say 'M A I N M E N U'
 (a), 8,29 to 16,50
 (a) 19,8 to 21,71
 @ 20,10 say 'Use '+chr(25)+' or '+chr(24)+' key to highlight option & Press
'+chr(17)+chr(196)+chr(217) +' key to select'
@ 9,31 prom "TRANSACTION UPDATE"
 (a) 10,31 prom "MONTH-END PROCESS"
 @ 11,31 prom "REPORTS GENERATION"
 @ 12,31 prom "DAILY ENQUIRY"
 @ 13,31 prom "FILE MANAGEMENT"
 (a) 14,31 prom "UTILITIES"
@ 15,31 prom "E X I T"
menu to ch
do case
  case ch == 0
   loop
  case ch == 1
   do acct1
  case ch==2
   do acct2
  case ch==3
   do acet3
  case ch==4
   do acct4
  case ch==5
  do acct5
```

```
case ch == 6
   do acct6
  othe
   exit
 endc
endd
clea
retu
(a) 1,5 clea to 23,74
(a) 1,5 to 3,16 doub
@ 1,17 to 3,57 doub
(a) 1,58 to 3,74 doub
@ 2,7 say 'NGSFACCT'
(a) 2,19 say 'LOCAL GOVERNMENT FINAL ACCOUNTS'
(a) 2,60 say 'DATE:'
*set colo to bg/w+
(a), 2,65 say date()
*set colo to w+/bg
@ 1,5 to 23,74 doub
@ 5,28 say 'TRANSACTION UPDATE MENU'
(a) 7,17 to 15,49
(a) 20,8 to 22,71
(a) 21,10 say 'Use '+chr(25)+' or '+chr(24)+' key to highlight option & Press
'+chr(17)+chr(196)+chr(217) +' key to select'
@ 8,19 say "TRANSACTION UPDATE" colo "b+/w+"
@ 9,19 say "MONTH-END PROCESS"
(a) 10,19 say "REPORTS GENERATION"
@ 11,19 say "DAILY ENQUIRY"
@ 12,19 say "FILE MANAGEMENT"
@ 13,19 say "UTILITIES"
@ 14,19 say "E X I T"
(a) 12,41 to 18,62
@ 15,42 say ''
do whil .t.
 @ 13,43 prom "CREATE TRANSACTION"
 @ 14,43 prom "MODIFY TRANSACTION"
 @ 15,43 prom "VIEW TRANSACTION"
 @ 16,43 prom "DELETE TRANSACTION"
 (a) 17,43 prom "E X I T"
 menu to ch2
 save scre
 do case
  case ch2 == 0
   loop
  case ch2 == 1
    do acct11
  case ch2 == 2
    do acct12
  case ch2==3
```

```
do acct13
  case ch2 == 4
   do acct14
  othe
   exit
 endc
 rest scre
endd
clea
retu
use current
mprocess=process
mcdate=date
mth=month(mcdate)
cmth=cmonth(mcdate)
yr=year(mcdate)
use
clea
@ 10,20 to 14,59
@ 11,22 say 'YOU ARE READY TO PROCESS TRANSACTION'
@ 13,29 say 'TO CONTINUE (Y/N) ...'
k=0
do while k=0
 k=inkey()
 if uppe(chr(k)) $ 'YN'
  exit
 endi
 k=0
endd
clea
if uppe(chr(k)) $ 'N'
 retu
endi
use trans
if eof()
 @ 12,17 say 'NO TRANSACTIONS TO PROCESS - Press any key ...'
 set cons off
 wait
 set cons on
 use
 clea
 retu
endi
use
@,2,5 to 22,74 doub
(a) 1,19 to 3,60 doub
                                                  ACCOU
@ 2,20 say ' LOCAL GOVERNMENT OF FINANCE, MIN
(a), 4,24 to 6,54 doub
@ 5,25 say ' MONTH-END PROCESSING SCREEN '
```

```
if mprocess='Y'
 (a) 12,20 to 17,58
 (a) 13,22 say 'YOU ARE ABOUT TO RE-PROCESS FOR THE'
 @ 14,22 say 'MONTH OF '+ uppe(cmth)+', '+ltri(str(yr))
 @ 16,29 say 'TO CONTINUE (Y/N) ...'
 K=0
 do while K=0
  k=inkey()
  if uppe(chr(k)) $ 'YN'
   exit
  endi
  k=0
 endd
 if uppe(chr(k)) $ 'N'
  clea
  retu
 endi
else
 (a) 12,21 to 16,57
 @ 13,23 say 'PREPARING ALL NECESSARY FILES !!!'
 @ 15,29 say 'PLEASE DONT TOUCH ...'
 use account inde account
 do whil .not. eof()
  mactual1=actual1
  repl actual2 with mactual1
  skip
 endd
 use aledger
 appe from ledger.dbf
 use abalance
 appe from balance.dbf
 use ledger
 zap
 use balance
 zap
 appe from account.dbf
 inde on acode to balance
endi
(a) 12,20 clea to 17,58
(a) 13,28 to 15,51
@ 14,30 say 'ARRANGING FILES ...'
use trans
inde on head+subhead+dtoc(date) to temp
all=reccount()
use
sele 1
 use account inde account
sele 2
 use trans inde temp
sele 3
```

use ledger sele 4 use balance inde balance recnumb=0 mtotamt=0 sele 2 macode=acode sele 1 seek macode mactual2=actual2 mtype=type sele 2 @ 13,28 clea to 15,51 @ 8,21 to 20,58 (a) 16,22 to 16,57 (a) 10,23 say 'OPERATION: PROCESSING TRANSACTIONS' (a) 12,23 say 'PERIOD: '+uppe(cmth)+', '+ltri(str(yr)) @ 14,23 say 'STATUS: 0% COMPLETED' @ 18,30 say 'PLEASE KEEP OFF !!!' do whil .not. eof() recnumb=recnumb+1 \* macode=acode mdate=date mamount=amount mhead=head msubhead=subhead msection=section mtvn=tvn mpsn=psn mactual2=mactual2+mamount mtotamt=mtotamt+mamount sele 3 appe blan repl acode with macode, amount with mamount, subhead with msubhead repl head with mhead, tvn with mtvn, date with mdate, psn with mpsn repl section with msection, balance with mtotamt, type with mtype sele 2 skip if macode <> acode resacode=acode sele 4 seek macode repl actual1 with mactual2,totalm with mtotamt macode=resacode mtotamt=0 sele 1 repl actual1 with mactual2 seek macode mactual2=actual2 mtype=type

```
sele 2
 endi
 sofar=recnumb/all*100
 (a) 14,31 say sofar pict '999'
endd
clos all
use current
repl process with 'Y'
use
(@, 18,27 say 'PRESS ANY KEY TO EXIT ...'
set cons off
wait
set cons on
clea
retu
(a) 1,5 clea to 23,74
@ 1,5 to 3,16 doub
@ 1,17 to 3,57 doub
(a) 1,58 to 3,74 doub
@ 2,7 say 'NGSFACCT'
(a) 2,19 say 'LOCAL GOVERNMENT FINAL ACCOUNTS'
@ 2,60 say 'DATE:'
(a) 2,65 say date()
@ 1,5 to 23,74 doub
(a) 5,28 say 'REPORTS GENERATION MENU'
@ 7,12 to 15,44
@ 20,8 to 22,71
(a) 21,10 say 'Use '+chr(25)+' or '+chr(24)+' key to highlight option & Press
'+chr(17)+chr(196)+chr(217) +' key to select'
@ 8,14 say "TRANSACTION UPDATE"
(a) 9,14 say "MONTH-END PROCESS"
(a) 10,14 say "REPORTS GENERATION" colo "b+/w+"
@ 11,14 say "DAILY ENQUIRY"
@ 12,14 say "FILE MANAGEMENT"
@ 13,14 say "UTILITIES"
@ 14,14 say "E X I T"
(a) 12,34 to 18,68
@ 15,35 say ''
do whil .t.
 @ 13,36 prom "RECURRENT REVENUE STATEMENT"
 @ 14,36 prom "RECURRENT EXPENDITURE STATEMENT"
 @ 15,36 prom "STATEMENT OF CAPITAL RECEIPT"
 (@ 16,36 prom "CAPITAL EXPENDITURE STATEMENT"
 (a) 17,36 prom "E X I T"
 menu to ch2
 save scre
 do case
  case ch2 == 0
```

```
loop
  case ch2==1
   do acct31
  case ch2 == 2
   do acct32
  case ch2==3
   do acct33
  case ch2 == 4
   do acct34
  othe
   exit
 endc
 rest scre
endd
clea
retu
do whil .t.
 clea
 (a) 1,5 to 3,16 doub
 (a) 1,17 to 3,57 doub
 (a) 1,58 to 3,74 doub
 @ 2,7 say 'NGSFACCT'
 @ 2,19 say 'LOCAL GOVERNMENT FINAL ACCOUNTS'
 @ 2,60 say 'DATE:'
 @ 2,65 say date()
 clea gets
 (a) 1,5 to 23,74 doub
 @ 5,31 say 'DAILY ENQUIRY MENU'
 (a), 7, 17 to 15, 49
 (a) 20,8 to 22,71
 @ 21,10 say 'Use '+chr(25)+' or '+chr(24)+' key to highlight option & Press
'+chr(17)+chr(196)+chr(217) +' key to select'
 @ 8,19 say "TRANSACTION UPDATE"
 (a) 9,19 say "MONTH-END PROCESS"
 @ 10,19 say "REPORTS GENERATION"
 (a) 11,19 say "DAILY ENQUIRY" colo "b+/w+"
 @ 12,19 say "FILE MANAGEMENT"
 (a) 13,19 say "UTILITIES"
 @ 14,19 say "E X I T"
 (a) 13,41 to 17,62
 (a) 15,42 say ''
 @ 14,43 prom "REVENUE CODES"
(a) 15,43 prom "EXPENDITURE CODES"
 (a) 16,43 prom "E X I T"
 menu to ch2
 do case
  case ch2 == 0
   loop
  case ch2 == 1
```

```
do acct41
  case ch2==2
   do acct42
  othe
   exit
 endc
endd
clea
retu
do whil .t.
clea
 (a) 1,5 to 3,16 doub
 (a) 1,17 to 3,57 doub
 @ 1,58 to 3,74 doub
 @ 2,7 say 'NGSFACCT'
 (a) 2,19 say 'LOCAL GOVERNMENT FINAL ACCOUNTS'
@ 2,60 say 'DATE:'
 (a), 2,65 say date()
 clea gets
 (a) 1,5 to 23,74 doub
@ 5,30 say 'FILE MANAGEMENT MENU'
 (a), 7, 17 to 15, 49
@ 20,8 to 22,71
@ 21,10 say 'Use '+chr(25)+' or '+chr(24)+' key to highlight option & Press
'+chr(17)+chr(196)+chr(217) +' key to select'
@ 8,19 say "TRANSACTION UPDATE"
(a) 9,19 say "MONTH-END PROCESS"
(a) 10,19 say "REPORTS GENERATION"
(a) 11,19 say "DAILY ENQUIRY"
@ 12,19 say "FILE MANAGEMENT" colo "b+/w+"
@ 13,19 say "UTILITIES"
@ 14,19 say "E X I T"
@ 13,41 to 17,62
@ 15,42 say ''
(a) 14,43 prom "CODES TABLE FILE"
 @ 15,43 prom "STATION TABLE FILE"
 @ 16,43 prom "E X I T"
menu to ch2
 do case
  case ch2 == 0
   loop
  case ch2 == 1
   do acct51
  case ch2==2
   do acct52
  othe
   exit
 endc
endd
```

```
clea
retu
do whil .t.
 clea
 (a) 1,5 to 3,16 doub
 (a) 1,17 to 3,57 doub
 (a) 1,58 to 3,74 doub
 @ 2,7 say 'NGSFACCT'
 (a) 2,19 say 'LOCAL GOVERNMENT FINAL ACCOUNTS'
 @ 2,60 say 'DATE:'
 (a) 2,65 say date()
 clea gets
 @ 1,5 to 23,74 doub
 (a) 5,33 say 'UTILITIES MENU'
 @ 7,17 to 15,49
 @ 20,8 to 22,71
 @ 21,10 say 'Use '+chr(25)+' or '+chr(24)+' key to highlight option & Press
'+chr(17)+chr(196)+chr(217) +' key to select'
 (a) 8,19 say "TRANSACTION UPDATE"
 (a) 9,19 say "MONTH-END PROCESS"
 (a) 10,19 say "REPORTS GENERATION"
 @ 11,19 say "DAILY ENQUIRY"
 @ 12,19 say "FILE MANAGEMENT"
 (a) 13,19 say "UTILITIES" colo "b+/w+"
 @ 14,19 say "E X I T"
 (a) 13,41 to 17,64
 @ 15,42 say ''
 (a) 14,43 prom "ESTIMATES DATA ENTRY"
 @ 15,43 prom "NEW YEAR UPDATE"
 @ 16,43 prom "E X I T"
 menu to ch2
 do case
  case ch2 == 0
   loop
  case ch2 == 1
   do acct61
  case ch2==2
   do acct62
  othe
   exit
endc
endd
clea
retu
```