# COMPUTERISATION OF MONTHLY REPORT IN THE AGRICULTURAL

CREDIT OFFICE, CENTRAL BANK OF NIGERIA, MINNA.

BY

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NIGER STATE, NIGERIA

SEPTEMBER, 2001

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A PROJECT SUBMITTED TO THE DEPARTMENT OF MATHEMATIC/COMPUTER

SCIENCE, IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF A

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AND SCIENCE EDUCATION, FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA,

NIGER STATE

SEPTEMBER 2001

# CERTIFICATION

I Certify that this project work was carried out by Mr OLUSHOLA JOHN ALABI, in the

Department of Mathematics and Computer science is filly adequate in scope and quality as a

project for the award of Post Graduate Diploma in Computer Science of the Federal University of

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Date

Head of Department

Date

**External Examiner** 

# DEDICATION

I dedicate this project work to my Grandmother Mrs Wuraola V. Oyedepo who so much believes in me.

# ACKNOWLEDGEMENT

Without the valuable guidance and protection of the Almighty God, this project would probably never see the light of day. I am grateful to Almighty God who sent the following people as the channel of success, so far in this regard.

I acknowledge the assistance which I received from my Supervisor, Mal Yusufu who spare his precious time in advising, and going through the manuscripts, provide constructive criticisms and useful suggestion in the process of completing this project.

Dr Reju the head of Department, Price Badmus, Mr Ezeako, Mr Kola, Dr Yomi, Mal Audu Isah, Mr Hakimi Danladi I'm sincerely grateful for the knowledge you have imparted in me.

My appreciation goes to the Family of Prof. And Mrs Oladimeji my parent, my source of inspiration and guiding angel; Mr and Mrs Pekoyeni, my brothers and sisters. May God bless you abundantly.

This acknowledgement will not be completed without mentioning my mentor Mr and Mrs Segun Oke, Folusho, also my friends Bash, AB, Yemi, Rekiah, Becky, Fati and the host of others who too numerous to mention. I am truly grateful.

God bless you all.

# TABLE OF CONTENT

Certific	cation			iii
Dedica	tion			iv
Acknow	wledgement			v
Table o	of Content			vi
Abstrac	ct			viii
CHAP	TER ONE			
1.0	Introduction			1
1.1	Purpose of the	e study		1
1.2	Important and	signific	ant of the study	2
1.3	Scope and del	limitatio	n	3
1.4	Limitation			3
1.5	Summary			3
CHAP	TER TWO			
2.0	Literature Re	view		5
2.1	Agricultural C	Credit		5
2.1.2	Types of Agri	ic Credit		6
2.1.3	Sources of A	gric Cre	dit	8
2.1.4	Role of Agric	Credit		9
2.2	Agric Monthl	y Repor	t	12
2.3	Objective of I	Monthly	Report	13
2.4	Summary			14
CHAP	TER THREE			
3.0	System analys	sis and I	Design	15
3.1	Process of pro	ogram d	evelopment	16
311	The existing s	system		17

3.2	Cost benefit analysis	23
3.2.1	Software cost	23
3.2.2	Operation cost	23
3.2.3	Benefit analysis	24
3.3	Feature of Foxpro	25
3.4	Output design	32
3.5	Summary	34
CHAP	TER FOUR	
4.0	Program and Implementation	36
4.1	proposed flowchart	36
4.2	Programme and Documentation	40
4.3	Result of the package	41
4.4	Requirement specification for the proposed system	41
4.4.1	Hardware requirement	41
4.4.2	Software requirement	-42
4.5	Change over	-42
4.6	Summary	- 43
CHAF	PTER FIVE	
5.0	General summary and conclusion	44
5.1	Summary	44
5.2	Conclusion	45
5.3	Recommendation	46
Refere	ence	47
Progra	amming	
Result	S	

#### **ABSTRACT**

One of the major constraints identified as confronting higher agricultural productivity is inadequate capital, modern tools and credit facilities to the farmers in Nigeria

In order to ameliorate the situation of the farmer the government of Nigeria through the monetary authority directed all commercial Banks to allocate certain percentage of their total lending to agricultural sector yearly

More over the Federal Government also took a major step by establishing the Agricultural Credit Guarantee Scheme Fund (ACGSF) by decree No. 20 0f 1977 to shoulder 75% of the risk of default by farmer.

However, since the establishment of the ACGSF in 1977 to date, the method of storing processing and retrieval of farmer information and records have been a traditional method.

This project work produced a software package which help in reducing the burden of manual method of report written, storing of data, retrieval of data and fast processing of data to produce information

The programming language used in the project work is the visual foxpro, this is a window base programming language which is easier to learn and user friendly.

# **CHAPTER ONE**

### 1.0 INTRODUCTION

## 1.1 THE PURPOSE OF THE STUDY

Agriculture used to be the main stay of the Nigerian economy well before independence until the early 1970's when oil became the dominant factor of the economy. More than 85% of Nigerians were engaged in one form of farming or the other. However, Agriculture suffered severe neglect since the advent of the oil boom as a result, the nation started to import food and other agricultural products that were hitherto, produced in the country.

Severe approaches have been embarked on by the different government to alleviate these problems. Notable among these approaches are: National accelerated food production program (1973); Operation feed the nation (1976); The green revolution (1980); Directorate for food, road and rural infrastructure (1986).

Special projects were also embarked upon to enhance agricultural production such as the World Bank assisted agricultural development project,

River basin and rural development authority, Mass enlightenment campaigns e.t.c.

Lawal (19930 also notes that credit supply in agriculture has long been identified as a veritable tool towards agricultural development in developing countries. Owing to this the Federal Government also took a major step by establishing the agricultural credit guarantee scheme by decree number 20 of 1977 to shoulder 75% of the risk of default by farmers.

The purpose of the fund is to provide guarantee in respect of loan granted by any bank for agricultural purposes with the aim of increasing the level of bank credit to agricultural sector.

The study is carried out to serve as a feed back to government on the impact of the agricultural loan granted to farmers and at the same time help to evaluate and co-ordinate loans guaranteed.

# 1.2 THE IMPORTANCE AND SIGNIFICANCE OF THE STUDY

Agricultural credit to farmers is an important instrument in improving farm productivity and marketing. Therefore, the major theme of this study is the impact of agricultural guarantee scheme on agricultural credit delivery in Nigeria.

Notable significance of the study include:

It helps the government to know the impact of agricultural credit.

- It helps in decision as the feed back will give the government information about every thing on board.
- It aids timely decision-making.
- It will increase the rating of the bank.
- 4. It will ease the tension of the workers.

# 1.3 SCOPE AND DELIMITATION

In this study, emphasis is placed on assessing the impact of agric credit office on agricultural credit delivery in Nigeria on one hand and the operations of the bank on the other hand.

This study will help to produce timely report, accurate report and error free report.

### 1.4 LIMITATIONS

Study of this nature cannot be devoid of problems or limitations. The major constraints were:

- There were few writings on agricultural financing within reach and the few available were far apart.
- High cost of traveling from one place to the other due to peculiar cost of petrol at some period of this project work.
- Access to information at the bank was highly restricted as most of their information was classified.

#### 1.5 SUMMARY

This is an introductive chapter, which discusses the purpose of the study, importance of the study, scope and limitations of the study.

The main purpose of the study is to produce a fast, timely report, easy to use and user-friendly package.

- Some of the importance listed in this chapter include:
- Help the government to know the impact of Agricultural Credit office and all the importance of feed back.
- The scope tells us the impact of Agricultural credit, while the problems shows difficulty met in the course of this project work.
- Most important is the scarcity of material and high cost of transportation.

# **CHAPTER TWO**

- 2.0 LITERATURE REVIEW
- 2.1 Agricultural Credit Monthly Report
- 2.1.1 Agricultural Credit

This is money advanced to an individual or an organization for agricultural purposes. The borrowers pay the money after specified period. The pays the principal plus the interest.

According to Baker (1965) "Credit is an asset or financial reserve, and loan is any portion of this that is used on which the user incurs an interest charged". However, majority of the Nigerian farmers are small scale farm operators & usually the credit approach for them as fully disbursed but they are small and barely enough for their needs. Thus equating credit and loans. The few exceptions are in large scale agricultural projects where approved credits of large sizes and are therefore down-down in trenches of loans.

Ahe (1901), also defined Agric credit as "that which encompasses all loans and advance granted to borrower whether beneficiaries of agricultural reforms or some due one to finance and service product activities relating to agriculture, fix inject for processing, marketing, storage and distribution of products resulting for these activities"

In Nigeria, as well as all over the world, it is important to note that agriculture is no longer a homogeneous industry as it is made up of several distinct gaps with unique Christians. Whether the farmer is an individual or a fairly unit or a co-operative group, the types of finance required we conditioned by certain factors such as

- (i) Identification and accessibility to appropriate finance.
- (ii) Availability of loan able funds from the identified source.
- (iii) Satisfaction by the borrowing farmer of the lender's criteria which are noted in should principles of lending and
- (iv) Accommodation of such credits within the law of the land and in accordance with economic, political, monetary, first and societal polices of government.

# 2.1.2

# TYPES OF AGRIC CREDIT

There seems to be a general consensus in the literature that agric credit can be divided into three categories:

# i. Short Term Finance

This is required to cover annual (seasonal) working capital for growing crops, wages, purchase of feeds and other short them asset that are completely used up during production.

#### ii. Medium Term Finance

This encompasses funds tied up for two to five years in asset that are eventually used in the production process. These assets are partly fixed like vehicles, tractors and livestock.

# iii. Long Term Finance

This is usually needed to finance fixed assets such as land and land right, construction of farm buildings, purchase of machinery plants and equipment, etc. for development purposes. The period normally ranges from ten years upward.

The above classification is based on the duration and usage of the credit.

Markings

(1987) while accepting the above categorization, based his own on the type of farmer using the loan.

According to him there are distinct categories of need in agriculture for which credit is required and these are:

- 1. Emergent Farmer Credit
- Commercial Bank Credit
- Group Development Credit.

Emergent farmers are those load users who are a little more that substitute producers seeking to establish a foothold in market economy: They constitute a majority of the farming population.

Commercial farmers on the other hand are the importers but small class. While Group development credit is an essential category of need to use at the group or community level.

#### 2.1.3 SOURCE OF AGRIC CREDIT

There are different sources of funds for agricultural purposes, which analysts have classified in a number of ways. Formal and informal NOT institutional and institutional, private and public, internal and external, etc. Those classifications are based on certain features.

When we talk of institutional and non institutional we are trying to draw a line between funds that can be obtained from banks and non-banking governmental established agencies and those obtainable from unorganized private money lenders/unrecognized groups on the other hand.

In Nigeria, one can identify four broad categories of Banks that are involved directly in providing credits to farmers. They are:

- Central bank of Nigeria which by its peculiarities is unique being also the apex bank.
- The commercial Bank which supply a substantial portion of total agricultural credit in the economy, especially the short and medium term loans.
- Merchant Bank as required to give medium to long term credits to Nigerian farmers.
- 4. The development Bank which are specialized financial institution expected to play significant roles by their long term financing of agro allied industries. The Nigerian Agricultural and co-operative Bank (NACB) is entirely required to finance farmers directly or through their bodies all over the country.

It is important to note the role played by foreign institutional sources notable international bank for reconstruction and Development (IBRD) otherwise known as World Bank. It's mode of operation is to extend loans to national governments for the purpose of financing development projects thus, sparing itself the task of dealing directly with numerous investors. In this way, the bank had advanced substantial loans to Federal and State governments for Agricultural Development projects in which a large number of Nigerian rural dwellers are actively engaged.

### 2.1.4 ROLE OF AGRICULTURAL CREDIT

There are divergent views as to exact causes of the poor state of the agricultural section various scholars seem to have arrived at a consensus that the most important factor that has tended to inhibit any meaningful improvement is the inadequate of credit facilities, because modern agriculture apart from being capital intensive and mechanized it is carried out on a large scale.

Given the predominantly subsistence nature of the peasant farmer he relies mainly on his own capital or/land borrowing from friends, local money lenders and tractor which apart from the inadequate carry with them exorbitant interest charges.

Miller (1954) observed that "lack of credit is generally recognized as an important constraint in expanding food production and modernizing agriculture. Adopting new technology he believes ordinarily requires the use of some inputs which are not available in the forms and hence must be purchased from others".

Lack of credit or finance may not necessarily prevent the adoption of new technology by some financially able individuals and organizazation. Experience in Nigeria has shown that unless agricultural credit is made avoidable on suitable terms, majority of small farmers will be seriously handicapped. In Nigeria, there are small scale farmers are the most important group, hence it is then not large producers that Nigeria must lost for in most of its expanded food production.

The United Nations through its food and Agriculture Organisation (1965) reported that "agricultural credit makes a substantial improvement. Agricultural product ultimately, raising the standard of living of the rural population, in as much as it provides the farmer with a means of improving his land, of using modern tools and machinery and of introducing better methods of cultivation".

From the foregoing assertions and inclusion, one can sum up the assumption behind conventional credit programmes as being:

- i. The farmer need credit to adopt new technology.
- ii. That they cannot get credit at reasonable cost from unrecognized private sources outside the programme.
- iii. That the provisions of Credit breaks in most important constraint at small farmer's progress.

Many studies have shown the potential effect of increased level of capital in agricultural product.

Ogunfowora (1972) concluded that "when increased level of capital base is combined with improved technology, greater opportunity exists for larger volume of

production and higher level of farm income". Agricultural credit is meant to enable the former purchase production equipment and other form inputs. Credit is therefore, less important to agricultural development of these equipment and supplies are not readily available at convenient markets. Where they are readily available and the farmer are capable of learning how to use them, agricultural credit can accelerate the adoption of improved technique.

FAO (1969) observed that "Agricultural credit is only one of the many factors playing a part in the complicated process of stepping up agricultural production. It is stressed that, far from being a panacea credit is not even the harmless patent medicine which it is often thought to be".

For agricultural credit to perform its functional role of increasing farm productivity, it has to be properly utilized and this is dependent on the provision of certain preconditions among which are extension services, technology, education and training.

FAO (1965) summarized these pre-requisites necessary for successful implementation of agricultural credit policies as follows:

- The existence of adequate and efficient socio-economic planning and the
  desire of all parties to group concerned to implement it. Effective planning
  presupposes the existence of adequate statistical and administration at all levels.
- 2. An adequate rural infrastructure (road, rail, storage, etc.).
- 3. An efficient system of stabilizing fluctuation in price agricultural produce.

# 2.2 AGRICULTURAL MONTHLY REPORT

Agricultural monthly report or return is a report which indicates the activities of The agricultural credit. This includes:

- a. Amount of loan given in the month.
- b. Amount of loan fully repaid in the month
- c. Bank in which this loan are given or repaid.
- d. Purpose of the loan
- i. Crop
- ii. Animal
- iii. Fishing
- e. Number of extension made in the month.
- f. Number of enhancement made in the month
- g. Number of default
- Total number of loan granted from the beginning of the year and for inception of the scheme.

This report is sent to the Agric Finance Officer in Abuja every end of the month to

give the government a feed back on the activities of the scheme.

# 2.3 OBJECTIVE OF MONTHLY REPORT

The main objective of monthly report is to generate a fund back of the activities of this scheme and to evaluate the performance of each center of Agric Credit Office.

Other objectives include:

- i. Appraisal of each center
- ii. Identify the problem at each center.
- iii. Know which of the bank offers the facility.
- iv. Know which purpose the load is collected for.
- v. Know which bank has the highest
- loan granted
- loan repaid
- Enhancement
- Extension
- Default etc.

## 3.4 SUMMARY

The chapter which is entitled Literature review talk about Agric Credit and Monthly Report.

Agric credit enlighten us on types of credit (short, medium and long term finance).

Sources of Agric credit which includes central Bank of Nigeria, Commercial

Banks, Merchant Banks and Development Banks amongst many others.

We also look into role of Agric credit, pre-requisites for successful implementation of Agricultural Credit Policies and then the problems of Agricultural credit. |The problems are in three categories i.e. structural (bureaucracy, TOP-DOWN implementation, Personal and loan supply shortage. Other problem also exist like poor supervision of loan, untimely disbursement of loans and monthly return and report which lead to the undertaken of this project work.

The aspect of monthly report discussed what is contained in the monthly report. It also talk about the objective of monthly Report.

# **CHAPTER THREE**

# 3.0 SYSTEM ANALYSIS AND DESIGN

The monthly reports of Agricultural credit office are usually done by semicomputer. This ;is to say the date are input into loans guarantee and those loans which are fully repaid. This record are the printed out and a manual manipulation is done by generating other reports. These reports includes:

- 1. Bank by purpose for animals
- 2. Bank by purpose for crops.
- Default report.
- 4. Extension report
- 5. Enhancement report

The introduction of computer software package which will automatically produce this report to reduce the manual work loan on the staff and erroneous reports.

The analysis is concerned with the study and gathering of date about existing semi-computerized used for producing the monthly report. The identification of problems and difficulties encountered by the members of staff responsible for the production of the monthly report.

The system analysis in this regard, is concerned with producing a more flexible, user friendly and more accurate software package m. place of the semi-computerized system.

# 3.1 PROCESS OF PROGRAM DEVELOPMENT

The software development process is a co-operative effort of the user's and computer professional. While computer professional are those familiar with the technology and how it can be applied to meet a business information processing familiarity with their respective function areas. The skills and knowledge of these two groups compliment each other and information system during the system development process.

The user in this case are the member of staffs of the agricultural credit Office who are responsible for the compilation and generation of the Agric. Credit Monthly Report.

System development process is essentially the same, be it for an air line reservation system. Micro credit scheme or an inventory management system. As a ember of a project Team progress through the procedure out lined in a system development methodology, the result of one step provides the input for the next and/or subsequent steps. The project Team typically is made up of both users and computer professionals. The methodological approach to system development is a too that information services and user —managers employ to coordinated the effects of a variety of people engaged in a complex process. For a successful program development of the Monthly Report of

Agricultural credit Office software, it is assumed that the writer of the project is part of thee term (programmer).

#### 3.2 THE EXISTING SYSTEM

Before designing anew or enhanced information system, sufficient and proper grasp of the existing work and information flow was made. This was close by conducting interview with the staff of Agricultural credit office Department of Central Bank of Nigeria, Minna Branch. The interview and observation gathered from the case study were documented and information flow of the propose Agricultural credit Grantee scheme system was reduced to input, processing and output for easy design technique of the Agricultural credit Grantee scheme software.

The existing system is documented, analysis was carried out on the documentation in order to identify the obvious problems of semi-computerized existing report writing, including inefficiencies in information flow and storage, duplication effort, inaccuracy of operational data and so on.

After the identification of all relevant and non-relevant problems, possible solution were used in order to commence the system design for the alterative of the system objectives.

The existing system made use of lot us 1,2,3, packaged software for it monthly

shows the borrowers name, address, purpose of loan / type, amount borrowed, interest change on loan, note of granted, note of fully repaid. Another report produced is the fully repaid report. This shows the borrowers name address, Bank which the loan is borrowed from, Type of the loan, amount borrowed, amount fully repaid, time of repayment. This is shown in fig 3.1

It is from this report that the loan guaranteed for crop or animal is extracted. After the manual extraction the summation is also done manually before it than typed for the report. The format of this is shown in fig 3.2 and 3.3, crop and animal respectively. The software to be developed in this project is mainly for this report.

# MONTHLY REPORT OF LOAN GUARANTEED BY AGRIC CREDIT OFFICE FOR THE MONTH OF AUGUST 2000 GUARANTEE REGISTER

DATE OF	N143 CT	VIII 65 05		T			REGISTER				nammar	mom.:
DATE OF	NAME	NAME OF	TYPE	FARMING	AMT	INT	DURATION	FINAL	FILE	GUARANTEE	EXPIRY	TOTAL
APPLICATION	OF	BORROWR	OF	ACTIVITY		١.		REPAYMENT	NO.	CERT. NO.	DATE	REPAYMENT
	BANK		LOAN					DATE				MADE
	Druite		LOAL					DAIL				IVIDIL

S/NO.	NAME OF	GUARANTEE	TYPE OF	FARMING	AMOUNT	TOTAL	EXPIRY DATE	DATE OF
	BORROWR	CERT. NO.	LOAN	ACTIVITY	GUARANTEED	REPAYMENT		FULLY
						MADE		REPAYMENT

Fig 3.1

CENTRAL BANK OF NIGERIA MINNA CURRENCY CENTRE

#### MONTHLY RETURN OF LOANS GUARANTEED BY BANK AND PURPOSE

MONTH: SEPTEMBER, 1998 STATE: NIGER

				L	I V E	S	T O C	K						TOTAL	FOR	CUMM.TO	TAL
S/NO.	NAME OF BANK	CA	TTLE	SHEET	PAGOAT	PIGG	ERY	RABI	TTARY	PO	ULTRY	FISH	HERIES	THE MO	ONTH	FROM JA	NUARY
		NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO.	AMOUNT	NO	AMOUNT
1	BANK OF THE NORTH LTD.	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	1	12,000.00
2	UNITED BANK FOR AFRICA PLC.	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
3	FIRST BANK OF NIGERIA PLC.	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	2	60,000.00
4	UNION BANK OF NIGERIA PLC.	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	1	20,000 00	NIL	NIL	1	20,000.00	4	41,000.00
5	ALLIED BANK OF NIGERIA PLC	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
6	INTER-CITY BANK LTD	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
7	NIGERIA ARAB BANK LTD	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
8	HABIB BANK OF NIGERIA PLC.	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
9	AFRIBANK PLC.	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
10	SAVANNAH BANK OF NIG. PLC.	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
11	AFRICAN CONT BANK PLC.	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
12	NORTH-SOUTH BANK LTD	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL
	TOTAL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	,	20,000 00	NIL	NIL	1	20.000 00	NIL	NIL
	CUMMULATIVE TOTAL:-	1	12,000 00	NIL	NIL	1	10.000 00	NIL	NIL	3	85,000 00	1	6,000 00	NIL	NIL	7	113,000 00

PREPARED BY

CHECKED BY (ACM

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Fig 33

7

# 3.2. Cost And Benefit Analysis

a.	A Compaq Desktop	200,000.00
b.	HP Laser jet 11200	40,000.00
c.	APC 650 V A UPS	16,000.00
		256,000.00

# 3.2.11 Software cost

	a.	Office 96	10,000.00
	b.	Window 98/2000	10,000.00
			20,000.00
3.2.2		Operation Cost	
	a.	Installation cost	15,000.00
	b.	Maintenance cost	10,000.00
	C.	Miscellaneous cost	20,000.00
			45,000.00

# **Total Cost Analysis**

Development Cost	250,000.00
Operational Cost	45,000.00
Software Cost	20,000.00
	315,000.00

# 3.33 Benefit Analysis

The following are the benefit analysis on computerization of the Agric Credit Office:

- (i) Data Security and protection will be ensured.
- (ii) Reporting will be timely thus improving grading
- (iii) There will be more accurate recording, this will also improve grading
- (iv) Modification and manipulation is easier
- (v) User friendliness.

# 3.3 FEATURE OF FOXPRO

Visual foxpro is ;a programming language which makes it easy for you to organize data, define database files and build application. It quickly crates forms, queries and reports with the visual design tools and wizards.

Visual foxpro also makes it possible for you to rapidly create full featured application by providing an integrated developmental environment with powerful object-oriented programming tools, client/server capabilities and active support.

Other feature and advantage of visual foxpro includes:

1. Reduce data Duplication. The Agric. Monthly Report deals largely with large data and the current package in use duplicate data. That is the same data is typed in several time. Bus with Foxpro data are collected once validated, stored and accessed separately for a number of purposed report to be generated.

With reduced data duplication data can be shared but it is essential that good integrity and security features operate in such system.

- 2. Increase speed of implementing system. With Foxpro speed of implementation is very high as staff do not ester same data several time, validating, sorting and storing it many time. Most of the data needed are already held in the database.
- 3. Ease File Access by programmers. This program Foxpro is an up grade of Dbase, thus anybody who has an ideal in programming can easily learn it and access it.
- 4. Improve standard, increase integrity provide a management view and increase data independence are some other feature of Foxpro.

5. Error Report Preservation: One the data keyed in the program writing is correct. Foxpro is sure to give you an accurate report all the.

The existing system formats used have been devised for a semi-computerization.

Then need modifications for full computerized as well as for preparation of monthly report. The changes also take care of improvements in their functional efficiency and effectiveness.

Input refers to the mode of entering data into the system. Its basically influenced by the needs of the output.

For a good output the data collection, types of input media available and the design layout must be considered. The aim is to use an input devise that has the highest level of accuracy, flexible, user friendly and easy to understand. The input device employed in this study is the keyboard and disk drive.

Under the input design, the format of input file shall be completed with their structure. This includes the field, file name, file type, width (number of characters, decimal) the number of digit after the decimal point if any.

The design for the input file are therefore given below:

File 1.

This file describes how the loan guarantee register is filled and the fully repaid.

File name G register cbn Key length 13 .the input form design is shown fig 4.4

File Name	File Type	File Width	Decimal
D application	Date	8	
N bank	Character	3	7
N borrower	Character	30	
T loan	Character	10	
T facmaret	Character	15	
Amt	Numeric	9	2
I rate	Numeric	3	
Duration	Character	8	
F r dat	Date	8	
F num	Numeric	4	
Gcertn	Numeric	20	

D expry	Date	8	
T re mde	Numeric	9	2
Rem	. Character	40	,

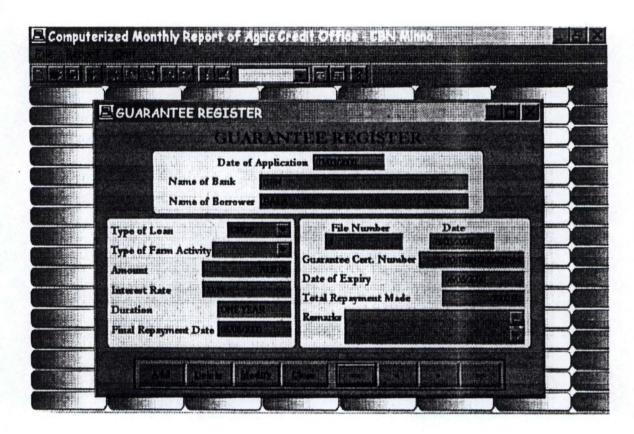


Fig 44

File 2

This file describes the loan granted for crop activities

File name: Gbankpurpose.crop Key length 16

File Name	File Type	File Width	Decimal
Month	Character	10	
Year	Date	8	
N bank	Character	3	
Crop	Character	15	
M total	Numeric	9	2
Cum total	Numeric	9	2
T f bank	Numeric	9	2
Cum + bank	Numeric	9	2

The input form design for loan guarantee for crop is shows in Fig. 3.5

This file describes the loan granted for annual activities.

File name: G bank purpose ani key length 16

File 3

File Name	File Type	File Width	Decimal
Month	Character	10	
Year	Date	8	
N bank	Character	3	
Crop	Character	15	
M. total	Numeric	9	2
Cum total	Numeric	9	2
T f bank	Numeric	9	2
Cum + bank	Numeric	9	2

The input form design for loan guarantee for animal is shown in fig. 3.6.

le Beport	rized Monthly Repor : [교육교육교육		ial .		- 1[-5]
	BANK AND PURPE				
	A CONTROL OF THE PROPERTY OF T	AL BANK OF NIGERIA - MINN	A CURRENCY CENTRE	material state	
	MONTHLY RETU	IRN OF LOANS GURANT	EED BY BANK AND PUR	POSE	
	Month JUNE	widelike in the Tr	210		
	Name of Bank UBN			article appropriate and a	
	CROPS	Menthly Total	Cummulative Total from January	[	
	Cassava	No. Amount	No. Amount		
	Coxpen	0	0 000	TOPES CONT.	
	ConstC en				
	Maize Sec. Beas				
-	Yam	0 1 100	000		
	Total	for the Month for Bank	# 152800000		
	3	ulative Total for all Banks	3 225000.00		

F19 3 5

THE PERSON NAMED IN	A SEED AND PURPO	Andreas Andrea	131	
	CENTR	AL BANK OF NIGERIA MINN	A CURRENCY CENTRE EED BY BANK AND PURE	OSE
	Month JUNES Name of Bank PON	na igai al Lacksana - Y	еат	
	LIVESTOCK	Monthly Total	Cummulative Total from January	
3	Carde. Sheep Coats	1 6000,	0 000	
	Piggery Pablitary	3 (0000 no.		
5"	Fooliey Fishtries	0 7 000		Close
	\$3	or the Month for Bank ulative Total for all Banks		

Fig 3.6

## 3.4 OUTPUT DESIGN

This refers to the end product of the data processing that is, the information degenerated by the system. It is necessary to; consider what is required for the system before deciding on how to go about producing it.

The execution of the input of a program results to the output which is the information expected. The output can either be soft or hard copy. The report expected to be generated from the execution are:

- (i) Guarantee Register.
- (ii) Monthly Return of loans guaranteed by bank for crop activities.
- (iii) Monthly Return of loans guaranteed by bank for animal activities.

## 3.5 FILES DESCRIPTION

This design element is very much linked to input output. Input is processed against file to produce the necessary output. Consideration is usually given to

- (a) Storage Median
- (b) Method of file organization and assess
- (c) File security
- (d) Record layout.

File description under their project, we shall consider the information on the fields as regards the guarantee register, Bank by purpose for crop and Bank by purpose for animal.

Dapplication: This shows the date in which the application was received by the bank.

N bank: This shows the name of the bank the application was received from.

N borrower: This shows the name of the borrower.

T loan: This shows the types of loan either crop or animal purpose.

T farmact: This shows the actual activities (under animal we have poultry, fishing e.t.c. and under crop we have maize, rice e.t.c.)

Amt: This shows the total amount applied and granted

I rate: This shows the interest charge on loan.

Duration: This indicate the time for which the loan is granted.

Frdate: This shows the date in which the loan is expected to be repaid.

Fnum: This shows the file number of the borrower.

G Cret n: This indicates the guarantee certificate number of the borrower.

Dexpiry: This shows the date the loan expires.

Tremele: This show the total repayment made.

Rem: This is a comment on the borrower.

On the file 2 and 3 are the same except that one is made for crop and the other for animal.

Month: This shows the month the loan was granted.

Year: It shows the year the loan was granted.

Nbank: shows the bank that is granting the loan.

Crop/animal: This shows the type of crop/animal as the case may be.

M total: This is the monthly total for a particular bank.

Cum total: This shows the total of all loan granted by a bank from all the different farming activities.

Cum bank: This is the cumulative total for all banks.

### 3.6 SUMMARY

In the Chapter we have the system analysis and design under which we discussed the process of program development which is said to be a cooperative effort of user and computer professional. The existing system is also discussed in this chapter which is said to be semi-computerization i.e. manual extraction and summation.

Cost benefit analysis is also discussed here, cost indicates the Development Cost, operation cost and software cost, this amount to N315,000.00. The benefit amongst others include data security, timely reporting, accurate reporting, easier modification and manipulations

The feature of foxpro is included in this chapter. This feature includes

Reduction of duplication, Increase speed of Implementation, Ease of file access,

Improve standard and error free reports.

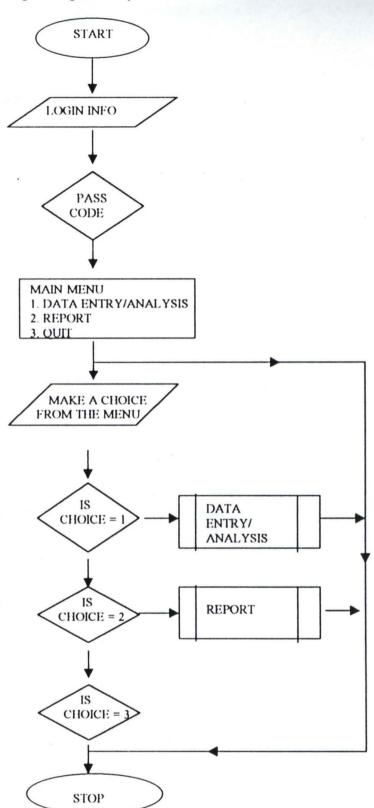
Amongst other things discussed in this chapter is the form design of the proposed package which include input form design for guarantee register i.e. form I, input form design for loan granted for cropping activity i.e. form II and form 3 is an input form designed for loan granted for animal activity.

# **CHAPTER FOUR**

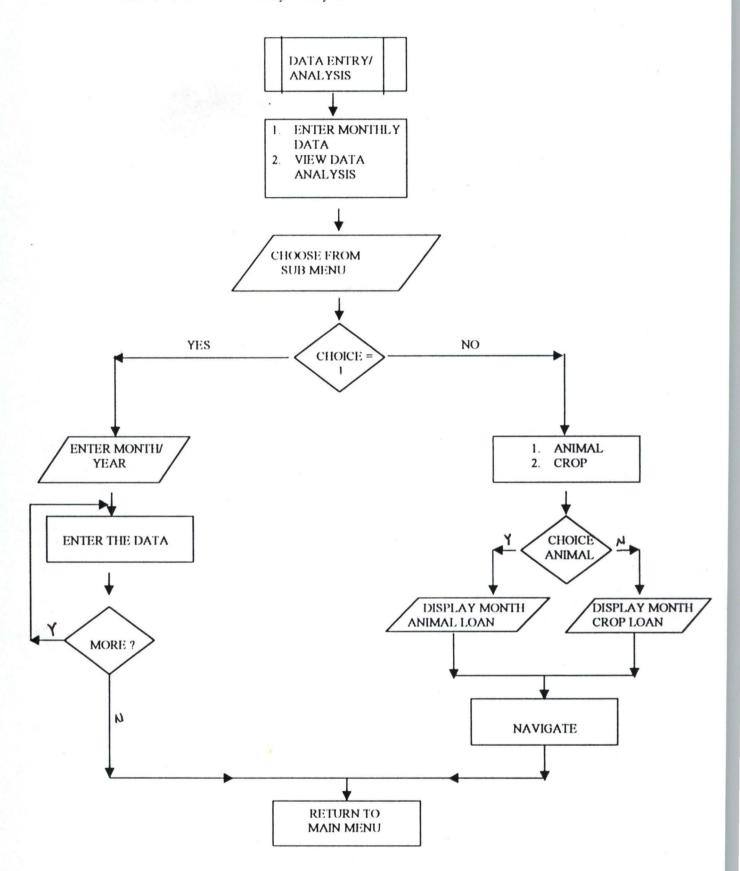
# 4.0 PROGRAMMING AND IMPLEMENTATION

# 4.1 PROPOSED FLOW CHART

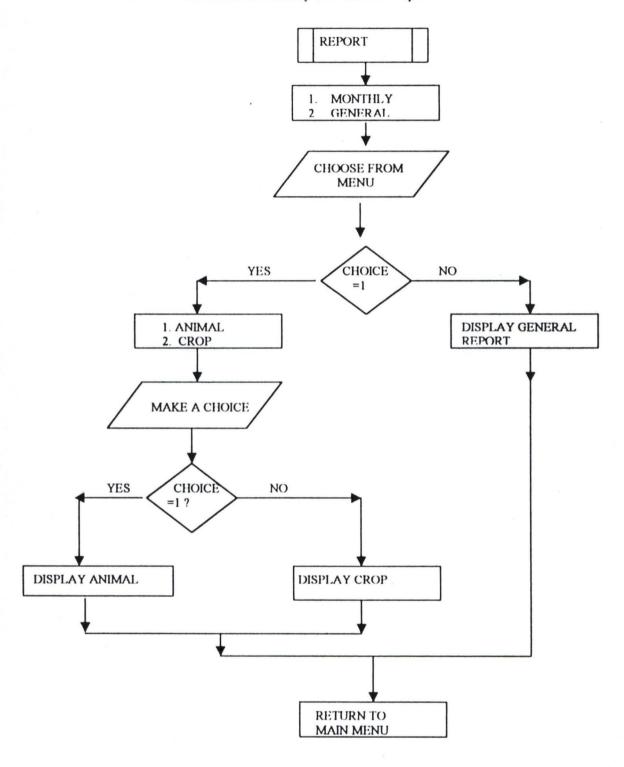
Flow chart is a graphical representation of data, information and work flow by the interconnection of specialized symbols and flow line. The combination of symbols and flow lines portray the logic of the program or system. 1. A flowchart of login and general input of data



# 2. Flowchart of Data Entry/ Analysis



# 3. A flowchart of Monthly and General Report



### 4.3 PROGRAM DOCUMENTATION

This is the process of describing the way the program works. There are two forms of documenting i.e. external and internal documentation.

External documentation refers to explanation given about the working of the program. This shows a normal authorized use how to change reports such as codes, description, amount borrowed amount repaid date etc.

For the program of this project, upon loading the package a welcome form is shown which reads Welcome to monthly report of loan guaranteed by Agric Credit Office. This is shown in Fig. 4.1. After this the login in form is shown this request for your name and password. This is shown in Fig. 4.2.

Upon successfully entry your password the a form comes on your screen which leaves the menu bars namely File, Report and Quit. If the file menu is clicked it gives two sub menu i.e. the animal or Crop form. If the Report is clicked on it gives General and Annual reports suspense. If the general submenu is clicked it shows a login form which request for the month and year of request report. If the other submenu is clicked on it gives two other submenus which is the crop and animal menus. If either of this is clicked on a login form appears which request for the year and month of interest. The last menu which is the Quit menu allows the user to completely exit from the program.



Fig 42

## 4.4 RESULT OF THE PACKAGE

The output of the data entered are as follows:

- General Guarantee Register. This output is the result of data entered in Fig.
   3.4. It gives the date of the application, Name of bank, Name of borrower. This could be seen in Fig. 4.3.
- 2. Monthly Return of loan guaranteed for cropping activities. This shows the type of crop the loan is used for. This crops includes cassava, cowpea, G/Corn, Maize, Soyabeans and Yam. It also gives the bank that is granting the loan, the amount that is granted. This output is shown in Fig. 4.4.
- 3. Monthly Return of loan granted for animal activities. This is like the crop types. It is the output of Fig. 3.6. The output of this is shown in Fig. 4.5.

# 4.5 REQUIREMENT SPECIFICATION FOR THE PROPOSED SYSTEM

# 4.5.1 Hardware Requirement

- Compaq System Desktop
- (i) Model 12 x 2 300
- (ii) Processor PIII

a)

- (iii) Memory 64 MB (RAM)
- (iv) Storage Capacity 6.6 GB

- (v) Modem 56 K
- (vi)  $CD ROM 6 \times DVD$
- (vii) Floppy Disk Drive 1.44
- (viii) VOU 14.1" TFT
- (b) Printer HP Laser jet 1100
- (c) UPS Mercury 52SV

# 4.5.2 Software Requirement

- (a) Operating System
- (b) Window 98/2000
- (c) Microsoft office 97

## 4.6 CHANGE OVER

The change over from old to the new system may take place when the system has been proved to the satisfaction of the system analyst and the other implementation activities have been completed. The user managers are satisfied with the result of the system tests, training of staff and reference manuals.

The method and approach used for the change over is the parallel running method. The parallel system teaching means processing current data by both the old and new system is kept alive and operational until the new system has been

proved for at least one system circle using full live data in the real operational environment of the equipment, people and data. The result of the new system will be compared with the old system to ensure its efficiency, capability and durability before acceptance by the user.

Once the change over aids and the user staff complete their training and the parallel system teaching is successful, the change over task is designed to ensure that the software developed replicate the functionality of the system to be replaced.

#### 4.7 SUMMARY

At the end of this chapter we were able to see the program flowchart which shows the main menu (Data entry 1 analysis, Report, Quit) We also have the program documentation, the documentation show how user can login, access the report, this also show how to enter report and view report and how to quit the program.

The result of the package are also covered in this chapter, the report are general guarantee report, monthly return for loan guaranteed for crop and animal.

This chapter shows the requirement specification for the proposed system i.e. Compaq desktop system, Hp LaserJet on 525V UPS. It also shows the software requirement.

#### **CHAPTER FIVE**

## 5.0 GENERAL SUMMARY AND CONCLUSION.

#### 5.1 SUMMARY

This project work – Computerisation of monthly report is written with a particular interest on Agric Credit Office Central Bank of Nigeria, Minna branch as a case study -

The project is summarized into five chapters for proper reference as explained below:

Chapter one of this project work emphasized on the introduction, background of the study, brief history of agric credit office, problem definition and fact finding technique.

Chapter two on the other hand did not fail to discuss the literature review under which we have types of agric credit, source, role and problems of agric credit. Emphasis was also on agric credit monthly report and importance of monthly report.

Also in Chapter three we talk on system analysis and design, discussion was made on the existing system, design of proposed system, features of fox pro and form design among other things.

However, in Chapter four we have system implementation and documentation, hard and soft ware requirement and change over.

Lastly Chapter five, which is the summary and conclusion of the whole project, work of the previous four chapters.

#### 5.2 CONCLUSION.

Computerization involves issues of people and management as well as hard ware and soft ware. Information is a resource requiring effective management as much or more than any other organization resource, it is evident that the advantage of computer system facilitates handling of large amount of data, a high degree of accuracy, suitability for processing edges that repeat themselves over and over again, suitability for performing complex calculations, speed and using common data to served different procedure.

One keen interest is the general desire to improve the changeover from the old system of producing monthly report to a new designed system for the agricultural credit office. This is aimed at dealing with the delay in producing the report, mistakes in report and the time wasting manual execution of data involve in the old system.

This system have been tested, validated and have equally proved to be efficient in all ramification.

# 5.3 RECOMMENDATION

Since the computerization this monthly reports have prove excellent. I therefore recommend that the soft ware should be implemented in other branches of the agricultural credit office.

I also wish to recommend that effort should be made to computerize other report writing in the agricultural credit office.

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#### **MAIN PROGRAM**

CLEAR ALL
CLOS ALL
SET DEFA TO c\jobs\cbn
SET DATE TO british
SET TALK OFF
SET STATUS OFF
SET ECHO OFF
SET DELETED OFF
SET STATUS BAR OFF

PUBLIC iscrop STORE 0 TO iscrop

\_SCREEN.WINDOWSTATE = 2
\_SCREEN.CAPTION = "Computerized Monthly Report of Agric Credit Office - CBN Minna"
\_SCREEN.ICON = "agric.ico"
\_SCREEN.PICTURE = "hover.gif"
DO FORM frimwelcome
READ EVENTS

## PROGRAM FOR GENERATING CROP REPORTS

SET TALK OFF SET CENTURY ON SET SAFETY OFF CLOS DATA

CREATE TABLE cworkmonth (bankname c(50), cassno N(4), cowpno N(4), gcornno N(4), maizeno N(4), soyano N(4), yamno N(4), cass\_amt N(17,2), cowp\_amt N(17,2), gcorn\_amt N(17,2), maize\_amt N(17,2), soya\_amt N(17,2), yam\_amt N(17,2), gencass N(4), gencowp N(4), gengcorn N(4), genmaize N(4), gensoya N(4), genyam N(4), cass\_gen N(17,2), cowp\_gen N(17,2), gcorn\_gen N(17,2), maize\_gen N(17,2), soya\_gen N(17,2), yam\_gen N(17,2), crmonthnum N(4), crmonthamt N(17,2), crgenmamt N(4), crgenmamt N(17,2))

SET SAFETY ON
USE cworkmonth IN 2 AGAIN
USE maintable IN 1 AGAIN
PUBL xmonth, xyear, bname
SELE 1
GO TOP
DO WHILE !EOF()
bname = bank name

SELE 2 &&cworkmonth
LOCATE FOR ALLT(bankname) = ALLT(bname)
IF FOUND()

SELE 1 IF !EOF() SKIP

bname = bank name

**ENDIF** 

ELSE

SELE 2 &&cworkmonth APPEND BLANK

REPL bankname WITH bname

SELE 1 IF !EOF()

SKIP

bname = bank\_name

**ENDIF** 

**ENDIF** 

**ENDDO** 

PUBL xcassno, xcowpno, xgcornno, xmaizeno, xsoyano, xyamno, tno, tamt STORE 0 TO xcassno, xcowpno, xgcornno, xmaize, xsoyano, xyamno, tno, tamt

PUBL xcass\_amt, xcowp\_amt, xgcorn\_amt, xmaize\_amt, xsoya\_amt, xyam\_amt STORE 0 TO xcass\_amt, xcowp\_amt, xgcorn\_amt, xmaize\_amt, xsoya\_amt, xyam\_amt

PUBL xgencass, xgencowp, xgenmaize, xgensoya, xgengcorn, xgenyam, cfinalno, cfinalamt STORE 0 TO xgencass, xgencowp, xgenmaize, xgensoya, xgengcorn, xgenyam, cfinalno, cfinalamt

PUBL xcass\_gen, xcowp\_gen, xgcorn\_gen, xmaize\_gen, xsoya\_gen, xyam\_gen, xcgenmonthnum, xcgenmont

PUBL tgencass, tgencowp, tgengcorn, tgensoya, tgenmaize, tgenyam, tcgennum, tcgenamt STORE 0 TO tgencass, tgencowp, tgengcorn, tgensoya, tgenmaize, tgenyam, tcgennum, tcgenamt

PUBL tcass\_gen, tcowp\_gen, tgcorn\_gen, tmaize\_gen, tsoya\_gen, tyam\_gen STORE 0 TO tcass\_gen, tcowp\_gen, tgcorn\_gen, tmaize\_gen, tsoya\_gen, tyam\_gen

PUBL xcmonthnum, xcmonthamt STORE 0 TO xcmonthnum, xcmonthamt bname = bankname

SELE maintable

SET FILT TO MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(bank\_name) = ALLT(bname)

COUNT AND SUM FOR CROPS IN THE MONTH

COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "CASSAVA" AND ALLT(bank\_name) = ALLT(bname)) TO xcassno COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "COWPEA" AND ALLT(bank\_name) = ALLT(bname)) TO xcowpno COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "GUINEA CORN" AND ALLT(bank\_name) = ALLT(bname)) TO xgcornno

COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "MAIZE" AND ALLT(bank\_name) = ALLT(bname)) TO xmaizeno COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "SOYA BEANS" AND ALLT(bank\_name) = ALLT(bname)) TO xsoyano

COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "YAM" AND ALLT(bank\_name) = ALLT(bname)) TO xyamno

SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "CASSAVA" AND ALLT(bank\_name) = ALLT(bname)) TO xcass\_amt

SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "COWPEA" AND ALLT(bank\_name) =

ALLT(bname)) TO xcowp\_amt

SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "GUINEA CORN" AND ALLT(bank\_name) = ALLT(bname)) TO xgcorn\_amt

SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "MAIZE" AND ALLT(bank\_name) = ALLT(bname)) TO xmaize amt

SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "SOYA BEANS" AND ALLT(bank\_name) = ALLT(bname)) TO xsova\_amt

SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "YAM" AND ALLT(bank\_name) = ALLT(bname)) TO xyam amt

- \* CUMMULATIVE TOTALS FOR ALL CROPS FOR A PARTICULAR BANK
  SET FILT TO BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND
  ALLT(bank\_name) = ALLT(bname)
  COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND
  ALLT(type\_loan) = "CROP" AND ALLT(bank\_name) = ALLT(bname)) TO xcgenmonthnum
  SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND
  ALLT(type\_loan) = "CROP" AND ALLT(bank\_name) = ALLT(bname)) TO xcgenmonthamt
- \* CUMMULATIVE TOTALS FOR ALL CROPS FOR ALL BANKS
  COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND
  ALLT(type\_loan) = "CROP") TO tgennum
  SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND
  ALLT(type\_loan) = "CROP") TO tgenamt
- \* CUMMULATIVE TOTALS FOR CROPS FROM JANUARY FOR ALL BANKS
  SET FILT TO BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND
  ALLT(type loan) = "CROP"

COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "CASSAVA") TO xgencass

COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "COWPEA") TO xgencowp

COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "GUINEA CORN") TO xgengcorn

COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "MAIZE") TO xgenmaize

COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "SOYA BEANS") TO xgensova

COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "YAM") TO xgenyam

SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "CASSAVA") TO xcass gen

SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "COWPEA") TO xcowp\_gen

SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "GUINEA CORN") TO xgcorn\_gen

SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "MAIZE") TO xmaize gen

SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "SOYA BEANS") TO xsoya gen

SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "YAM" ) TO xyam gen

## MONTHLY TOTALS FOR CROPS FOR ALL BANKS

SET FILT TO MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP"

COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "CASSAVA") TO tgencass

COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "COWPEA") TO tgencowp

COUNT FOR (MONTH (frepay\_date) = nmonth AND YEAR (frepay\_date) = xyear AND ALLT (type\_loan)

= "CROP" AND ALLT(type\_activ) = "GUINEA CORN") TO tgengcorn
COUNT FOR (MONTH(frepay date) = nmonth AND YEAR(frepay date) = xyear AND ALLT(type loan)

= "CROP" AND ALLT(type\_activ) = "MAIZE") TO tgenmaize

COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "SOYA BEANS") TO tgensova

COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "YAM") TO tgenyam

SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "CASSAVA") TO teass\_gen SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "COWPEA") TO teowp\_gen SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "GUINEA CORN") TO tgcorn\_gen

SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "MAIZE") TO tmaize\_gen SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "SOYA BEANS") TO tsoya\_gen SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "CROP" AND ALLT(type\_activ) = "YAM") TO tyam\_gen

#### SET FILT TO

xcmonthnum = xcassno + xcowpno + xgcornno + xmaizeno + xsoyano + xyamno xcmonthamt = xcass amt + xcowp amt + xgcorn\_amt + xmaize\_amt + xsoya\_amt + xyam\_amt

#### SELE 2 &&cworkmonth

REPL cassno WITH xcassno , cass\_amt WITH xcass\_amt

REPL cowpno WITH xcowpno, cowp\_amt WITH xcowp\_amt

REPL gcornno WITH xgcornno, gcorn\_amt WITH xgcorn\_amt

REPL maizeno WITH xmaizeno, maize\_amt WITH xmaize\_amt

REPL soyano WITH xsovano, soya amt WITH xsova amt

REPL yamno WITH xyamno, yam\_amt WITH xyam\_amt

REPL gencass WITH xgencass, cass\_gen WITH xcass\_gen

REPL gencowp WITH xgencowp, cowp gen WITH xcowp gen

REPL gengcorn WITH xgengcorn, gcorn\_gen WITH xgcorn\_gen

REPL genmaize WITH xgenmaize, maize gen WITH xmaize gen

REPL gensoya WITH xgensoya, soya\_gen WITH xsoya\_gen

REPL genyam WITH xgenyam, yam\_gen WITH xyam\_gen

REPL crmonthamt WITH xcmonthamt, crmonthnum WITH xcmonthnum

REPL crgenmamt WITH xcgenmonthamt, crgenmnum WITH xcgenmonthnum

#### **ENDSCAN**

SUM crgenmant TO cfinalant SUM crgenmum TO cfinalno SUM crmonthnum TO tno SUM crmonthamt TO tamt

SET SAFETY OFF IF USED ("CROPS")

USE

ENDIF COPY TO crops SET SAFETY ON

# PROGRAM FOR GENERATING ANIMAL REPORTS

CREATE TABLE workmonth (bankname c(50), cattleno N(4), sheepno N(4), pigno N(4), poultno N(4), rabitno N(4), fishno N(4), cat\_amt N(17,2), sheep\_amt N(17,2), pig\_amt N(17,2), poult\_amt N(17,2), rabit\_amt N(17,2), fish\_amt N(17,2), gencattle N(4), gensheep N(4), genpig N(4), genpoult N(4), genrabit N(4), genfish N(4), cat\_gen N(17,2), sheep\_gen N(17,2), pig\_gen N(17,2), poult\_gen N(17,2), rabit\_gen N(17,2), fish\_gen N(17,2), monthnum N(4), monthamt N(17,2), genmnum N(4), genmamt N(17,2)) SET SAFETY ON USE workmonth IN 2 AGAIN USE maintable IN 1 AGAIN SELE 1 GO TOP DO WHILE !EOF() bname = bank name SELE 2 &&workmonth LOCATE FOR ALLT(bankname) = ALLT(bname) IF FOUND() SELE 1 IF !EOF() SKIP bname = bank name **ENDIF** ELSE SELE 2 &&workmonth APPEND BLANK REPL bankname WITH bname SELE 1 IF !EOF() bname = bank\_name ENDIF

SET TALK OFF SET SAFETY OFF SET CENTURY ON CLOS DATA

PUBL xcattleno, xsheepno, xpigno, xpoultno, xfishno, xrabitno, tno, tamt STORE 0 TO xcattleno, xsheepno, xpigno, xpoultno, xfishno, xrabitno, tno, tamt

PUBL xcat\_amt, xsheep\_amt, xpig\_amt, xpoult\_amt, xfish\_amt, xrabit\_amt STORE 0 TO xcat\_amt, xsheep\_amt, xpig\_amt, xpoult\_amt, xfish\_amt, xrabit\_amt

PUBL xgencattle, xgensheep, xgenpig, xgenpoult, xgenfish, xgenrabit, finalno, finalamt STORE 0 TO xgencattle, xgensheep, xgenpig, xgenpoult, xgenfish, xgenrabit, finalno, finalamt

PUBL xcat\_gen, xsheep\_gen, xpig\_gen, xpoult\_gen, xfish\_gen, xrabit\_gen, xgenmonthnum, xgenmonthamt STORE 0 TO xcat\_gen, xsheep\_gen, xpig\_gen, xpoult\_gen, xfish\_gen, xrabit\_gen, xgenmonthnum, xgenmonthamt

PUBL tgencattle, tgensheep, tgenpig, tgenpoult, tgenfish, tgenrabit, tgennum, tgenamt STORE 0 TO tgencattle, tgensheep, tgenpig, tgenpoult, tgenfish, tgenrabit, tgennum, tgenamt

PUBL tcat\_gen, tsheep\_gen, tpig\_gen, tpoult\_gen, tfish\_gen, trabit\_gen STORE 0 TO tcat\_gen, tsheep\_gen, tpig\_gen, tpoult\_gen, tfish\_gen, trabit\_gen

PUBL xmonthnum, xmonthamt STORE 0 TO xmonthnum, xmonthamt

SELE 2 &&workmonth SCAN

**ENDIF** 

**ENDDO** 

bname = bankname

SELE maintable SET FILT TO MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(bank\_name) = ALLT(bname)

COUNT AND SUM FOR ANIMALS IN THE MONTH COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(type\_activ) = "CATTLE" AND ALLT(bank\_name) = ALLT(bname)) TO COUNT FOR (MONTH(frepay date) = nmonth AND YEAR(frepay date) = xyear AND ALLT(type loan)

= "ANIMAL" AND ALLT(type\_activ) = "SHEEP/GOAT" AND ALLT(bank\_name) = ALLT(bname)) TO

COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(type\_activ) = "PIGGERY" AND ALLT(bank\_name) = ALLT(bname)) TO

COUNT FOR (MONTH(frepay date) = nmonth AND YEAR(frepay date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(type\_activ) = "FISHERIES" AND ALLT(bank\_name) = ALLT(bname)) TO

COUNT FOR (MONTH(frepay date) = nmonth AND YEAR(frepay date) = xyear AND ALLT(type loan) = "ANIMAL" AND ALLT(type activ) = "POULTRY" AND ALLT(bank\_name) = ALLT(bname)) TO

COUNT FOR (MONTH (frepay\_date) = nmonth AND YEAR (frepay\_date) = xyear AND ALLT (type\_loan) AND ALLT(type activ) = "RABITTARY" AND ALLT(bank\_name) = ALLT(bname)) = "ANIMAL" TO xrabitno

SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(type\_activ) = "CATTLE" AND ALLT(bank\_name) = ALLT(bname)) TO xcat amt

SUM amount FOR (MONTH(frepay date) = nmonth AND YEAR(frepay date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(type\_activ) = "SHEEP/GOAT" AND ALLT(bank\_name) = ALLT(bname)) TO xsheep\_amt

SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(type\_activ) = "PIGGERY" AND ALLT(bank\_name) = ALLT(bname)) TO xpig amt

SUM amount FOR (MONTH(frepay date) = nmonth AND YEAR(frepay date) = xyear AND ALLT(type loan) = "ANIMAL" AND ALLT(type activ) = "FISHERIES" AND ALLT(bank name) = ALLT(bname)) TO xfish amt

SUM amount FOR (MONTH(frepay date) = nmonth AND YEAR(frepay date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(type\_activ) = "POULTRY" AND ALLT(bank\_name) = ALLT(bname)) TO xpoult amt

SUM amount FOR (MONTH(frepay date) = nmonth AND YEAR(frepay date) = xyear AND ALLT(type loan) = "ANIMAL" AND ALLT(type activ) = "RABITTARY" AND ALLT(bank name) = ALLT(bname)) TO xrabit\_amt

CUMMULATIVE TOTALS FOR ALL ANIMALS FOR A PARTICULAR BANK SET FILT TO BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(bank name) = ALLT(bname)

COUNT FOR (BETWEEN(MONTH(frepay date), 1, nmonth) AND YEAR(frepay date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(bank\_name) = ALLT(bname)) TO xgenmonthnum

SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(bank\_name) = ALLT(bname)) TO xgenmonthamt

CUMMULATIVE TOTALS FOR ALL ANIMALS FOR ALL BANKS COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL") TO tgennum

SUM amount FOR (BETWEEN(MONTH(frepay date), 1, nmonth) AND YEAR(frepay date) = xyear AND ALLT(type loan) = "ANIMAL") TO tgenamt

CUMMULATIVE TOTALS FOR ANIMALS FROM JANUARY FOR ALL BANKS
 SET FILT TO BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND
 ALLT(type\_loan) = "ANIMAL"

COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "CATTLE") TO xgencattle

COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) =

"SHEEP/GOAT" ) TO xgensheep

COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "PIGGERY") TO xgenpig

COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "FISHERIES") TO xgenfish

COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "POULTRY") TO xgenpoult

COUNT FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "RABITTARY") TO xgenrabit

SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "CATTLE") TO xcat\_gen

SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "SHEEP/GOAT") TO xsheep\_gen

SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "PIGGERY") TO xpig\_gen

SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "FISHERIES") TO xfish gen

SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "POULTRY") TO xpoult gen

SUM amount FOR (BETWEEN(MONTH(frepay\_date), 1, nmonth) AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(bank\_name) = ALLT(bname) AND ALLT(type\_activ) = "RABITTARY") TO xrabit gen

\* MONTHLY TOTALS FOR ANIMALS FOR ALL BANKS
SET FILT TO MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL"

COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(type\_activ) = "CATTLE") TO tgencattle

COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan)

= "ANIMAL" AND ALLT(type\_activ) = "SHEEP/GOAT") TO tgensheep
COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan)

"ANIMAL" AND ALLT(type\_activ) = "PIGGERY") TO tgenpig
COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan)

= "ANIMAL" AND ALLT(type\_activ) = "FISHERIES") TO tgenfish

COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(type\_activ) = "POULTRY") TO tgenpoult

COUNT FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(type\_activ) = "RABFITARY") TO tgenrabit

SUM amount FOR (MONTH(frepay\_date) = nmonth AND YEAR(frepay\_date) = xyear AND ALLT(type\_loan) = "ANIMAL" AND ALLT(type\_activ) = "CATTLE") TO tcat\_gen

```
SUM amount FOR (MONT) I(frepay_date) = nmonth AND YFAR(frepay_date) = xyear AND ALL T(type_loan) = "SHEEP/GOAT") TO tsheep_gen
                          SUM amount FOR (MONTH (frepay_date) = nmonth AND YEAR (frepay_date) = xyear AND ALLT (type_loan) = "ANIMAL" AND ALLT (type_activ) = "SHEEP/GOAT") TO tsheep_gen and the system of the s
                       ALLT(type_loan) = "ANIMAL" AND ALLT(type_activ) = "SIII:EP/GOAT") TO tsheep_gen
ALLT(type_loan) = "ANIMAL" AND ALLT(type_activ) = "PIGGERY") TO tpig_gen
                     SUM amount FOR (MONTH(frepay_date) = nmonth AND YEAR(frepay_date) = xyea

SUM amount FOR (MONTH(frepay_date) = nmonth AND YEAR(frepay_date) = xyea

MONTH(frepay_date) = nmonth AND YEAR(frepay_date) = xyea
                  ALLI(type_loan) = "ANIMAL" ANI) ALLI(type_activ) = "PIGGERY") To tpig_gen

ALLI(type_loan) = "ANIMAL" ANI) ALLI(type_activ) = "PIGGERY") To tpig_gen

ANIMAL "ANI) ALLI(type_activ) = "FISHERIES") To tfish_gen
            ALLT(type_loan) = "ANIMAL." ANI) ALLT(type_activ) = "FISHERIFS" ) TO tfish_gen
ALLT(type_loan) = "ANIMAL." ANI) ALLT(type_activ) = "FISHERIFS" ) TO tfish_gen
ALLT(type_loan) = "ANIMAL." ANI) ALLT(type_activ) = "POULTRY") TO tpoult_gen
           SUM amount FOR (MONTH(frepay_date) = nmonth AND YEAR(frepay_date) = xyear ASUM amount FOR (MONTH(frepay_date) = nmonth AND YEAR(frepay_date) = xyear ASUM amount FOR (MONTH(frepay_date) = nmonth AND YEAR(frepay_date) = xyear ASUM AND YEAR(frepay_date) = xyear AS
         ALLT(type_loan) = "ANIMAL" ANI) ALLT(type_activ) = "POULTRY") TO tpoult_gen
ALLT(type_loan) = "ANIMAL" ANI) ALLT(type_activ) = "POULTRY") TO tpoult_gen
ALLT(type_loan) = "ANIMAL" ANI) ALLT(type_activ) = "RABITTARY") TO trabit_gen
       ALLT(type_loan) = "ANIMAL" AND ALLT(type_activ) = "RABITTARY") TO trabit_gen
      SET FILT TO
  Xmonthnum = xcattleno + xsheepno + xfishno + xpigno + xpoultno + xrabitno
  xmonthamt = xcalleno + xsneepno + xlisnno + xpigno + xpoultno + xraoitno
xmonthamt = xcal_amt + xsheep_amt + xlish_amt + xpig_amt + xpoult_amt + xrabit_amt
SELE 2 &&workmonth
REPL cattleno WITH xcattleno, cal_amt WITH xcat_amt
REPL sheepno WITH xsheepno, shep amt WITH xsheep_amt
REPL fishno WITH xfishno, fish ant WITH xfish ant
REPL poultno WITH xpoultno, pot amt WITH xpoult_amt
REPL pigno WITH xpigno, pig_a WITH xpig_amt
 REPL rabitno WITH xrabitno, ralamt WITH xrabit_amt
REPL gencattle WITH xgencattle gen WITH xcat_gen
REPL gensheep WITH xgensheep gen WITH xsheep gen
REPL genpig WITH xgenpig, pigWITH xpig_gen
REPL genfish WITH xgenfish, fir WITH xfish gen
REPL genpoult WITH xgenpoult_gen WITH xpoult_gen
REPL genrabit WITH xgenrabit3en WITH xrabit_gen
REPL genrault WITH xmonthanthnum WITH xmonthnum
 REPL monthamt WITH xgenmogenmnum WITH xgenmonthnum
```

## **ENDSCAN**

SUM genmamt TO finalamt SUM genmnum TO finalno SUM monthnum TO tno SUM monthamt TO tamt

SET SAFETY OFF COPY TO animals SET SAFETY ON

