

# **COMPUTERISATION OF HUMAN RESOURCES MANAGEMENT**

**A CASE STUDY OF FEDERAL MINISTRY OF AGRICULTURE,  
ABUJA**

**BY**

**HASSAN OMOMEJI RASHEED  
PGD/MCS/037/96**

**DEPARTMENT OF MATHS/COMPUTER SCIENCE  
FEDERAL UNIVERSITY OF TECHNOLOGY  
MINNA, NIGER STATE - NIGERIA.**

**MARCH, 1998**

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**A PROJECT SUBMITTED TO THE DEPARTMENT OF  
MATHS/COMPUTER SCIENCE  
FEDERAL UNIVERSITY OF TECHNOLOGY  
MINNA, NIGER STATE - NIGERIA.**

**IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF  
POST GRADUATE DIPLOMA IN COMPUTER SCIENCE.**

**MARCH, 1998**

APPROVAL PAGE

This project has been certified for the award of Post Graduate Diploma in Computer Science of the Federal University of Technology, Minna, Niger State, Nigeria.

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## ACKNOWLEDGEMENT

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## DEDICATION

This project is dedicated to Almighty Allah for His guidance over me right from the day I was born. It is also dedicated to my parents for all their efforts in bringing me up to understand the world and also for their wisdom and moral support.

## ABSTRACT

Management has been defined as the act of getting things done through people. The success or failure of management depends largely on participation or otherwise of the people involved. Human resources could be described as the back-bone of any organisation.

Other resources that are of equal importance to an organisation are capital and equipments/Machineries. These two resources could only function resourcefully with the aid of human resources. This bring us to the functions of human resources in an organisation. Few of the functions are listed below.

- i) Getting things done in order to achieve the set goals of the organisation.
- ii) Identifying areas of problems which may hinder the set goals.
- iii) Bringing to the notice of management, ideas that can improve the set goals of the organisation.
- iv) Advising the management on how best to improve on the turn-over.
- v) Identifying the best method to beat competition and proffering the best solution for same.

The above mentioned functions could be seen as the pivot points for the success of an organisation. It could not be over-emphasised therefore to recognise the contribution of human resources to the existence of an organisation. If the human resources of an organisation is not managed properly, the above points will not be realised at all.

This study is not concern with any small organisation but a bigger one where the staff strength may be from 3,000 and above. Managing bigger staff without the use of computer may be cumbersome and tedious and as a result may bring some irregularities of which may hinder the participation of the staff to the success of the organisation.

This project aim is to provide the personnel Management Department with latest technology usage in managing Human Resources. The issues and problems which the project are concerned with are Elements and latest Technology in Human Resources Management; Computerisation of Human Resources Management Economic Consideration on Human Resources Management.

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## CHAPTER ONE

### 1.0 INTRODUCTION

#### 1.1 BACKGROUND OF STUDY

Agriculture occupies a very important place in the economics of Nigeria. A few aspects it dominates include:

- i) Food: Food is one of men's basic needs, and for this reason alone culture is generally given special treatment in all countries and in particular Nigeria.
- ii) Foreign exchange: Exports from Agricultural sector account for a large part of total foreign exchange earnings.
- iii) Employment. Constituting the major sources of employment in the country.
- iv) Raw materials for industry: Supplying adequate raw materials to a growing industrial sector.
- v) Sources of capital. Accumulated savings of farmers could provide source of capital for industry.
- vi) Market: Providing a market for the products of the industrial sector.

In Nigeria, in terms of performance, it might be considered that the first major attempt made by the federal Food Government to increase food production was when it launched the **National Accelerated Food Production Project (NAFPP)** in 1973. Successive governments come up with other programmer such as

- The Operation Feed the Nation 1976-1978.
- The special programme for boosting food production, in 1979 otherwise known as the green revolution.
- The specialize production programe of 1981, and
- The special programm on maize and cassava production of 1982

The main thrust of the Agricultural policy is to increase and sustain the capacity of the sector to fulfil its role. This definitely involve the attainment of self-sufficiency in basic food commodities., Especially those in which the country has comparative economic and ecological advantages. It involves the ability to:



- i) Increase the production of Agricultural raw materials to meet the growing needs of an expanding industrial sector.
- ii) Increase the production and processing of exportable crops with a view to increasing the nation's non-oil foreign exchange earning capacity.
- iii) Increase rural employment opportunities
- iv) Improve and sustain general welfare and the quality of rural life through the provision of social amenities.

## **1.2 HISTORICAL DEVELOPMENT OF THE HUMAN RESOURCES OF FMA**

In the middle of the sixties, the Federal Ministry of Agriculture and Natural Resources was set up and a phase of consultation and coordination in projects for Agricultural development began. In 1966, the Federal initiative and control of the nation's Agriculture was set in motion.

The federal Government established FMA to implement the aforementioned policies through the following departments :

- i) Department of Personnel Management
- ii) Department of Finance and Supply
- iii) Department of Planning, Research and Statistics
- iv) Department of Agriculture
- v) Department of Forestry
- vi) Department of Fisheries
- vii) Department of Livestock
- viii) Department of Agricultural Land Resources
- ix) Department of Agricultural Sciences; and
- x) Department of Agricultural Cooperatives.

## **1.3 LIMITATION**

### **1.3.1 TRAINING NEEDS:-**

There is need for personnel staff handling Personnel Management records to undergo computer training, most especially on Database Management Software. This is necessary because the software to be used will be a Database one it will be a useless effort if those that will handle

it have no training or knowledge of computer at all. It will be advisable to drop the idea of computerisation of Human Resources Management if the staff that will be involved are not computer literate or if training them will be a problem for the organisation.

### **1.3.2 FINANCE**

Computerisation of a system usually requires a large capital initially. Initial capital outlay for the computerisation of Human Resources of the Ministry may be an impediment and if firm action is not taken it may hinder the procurement of all the necessary equipments that will be required. Since the objectives of computerisation is to bring in efficiency to the system, the result will far outweigh the cost and as such the initial capital outlay should not be a problem to the organisation.

### **1.3.3 DATA COLLECTION**

Collection of data is another limitation which will be encountered. In as much there is need for accurate analysis, there is need for data to work on to be accurate. Therefore, there is need for collection of data all over the country.

Government Policy have witnessed some changes in the past ten years, most especially on States and Local Government creation. Ninety percent of the existing staff have been employed more than ten years ago. These staff are all scattered around the country. Though the policy of state and local government creations may not affect their status as human being but it may have affected most of them in the areas of personnel records furnished to the ministry at the point of employment. Therefore, for a genuine record and accurate analysis, there is need to conduct a routine-personnel auditing all over the country.

### **1.3.4 FEDERAL CHARACTER**

Determination of who is who and is where will always be a problem if human resources is continued to be managed manually.

Presently the country is divided into six geographical zones. These zones are used for all placement and distribution of resources in the country. This become a problem if accurate data of staff are not provided and as such it may affect the reliability of analysis conducted on the human resources of the ministry.

field confirm that the confidence resulting from using computer resources personally does more for increasing understanding, productivity and the ability.

## CHAPTER TWO

### **2.0 AGRICULTURAL HUMAN RESOURCES BACKGROUND**

The Human Resources of Federal Ministry of Agriculture include the following professionals

- **Technical department.**
  - i) Agriculture officer
  - ii) Agricultural Engineer
  - iii) Fisheries Officer
  - iv) Land Resources Officer
  - v) Livestock Officer
  - vi) Forestry Officer
  - vii) Agriculture Co-operative Officer.
  
- **Service Department**
  - i) Personnel Officer
  - ii) Account Officer
  - iii) Store Officer
  - iv) Statistician
  - v) Program Analyst
  - vi) Librarian

The above mentioned professionals have assistant cadre.

The specialised department that manages Human Resources is the Department of Personnel Management. This department has the following sections to carry out its activities on management.

1. Training & welfare
2. Promotion
3. Retirement
4. Record
5. Discipline
6. Registry.

Apart from the main department of personnel Management, the department still has outfit of its arms in all departments of the ministry to facilitate its management activities on personnel.

## **2.1 TRAINING & WELFARE**

This section involves in human resource development function within the ministry.

The following are the activities which the section is engaged with.

- i) Determining Training needs.
- ii) Systematically Designing Training Programs
- iii) Determining the welfare package for staff.
- iv) Career Development of Employees.

## **2.2 PROMOTION**

This section of the department of personnel Management is involve with the following functions

- i) Determining the staff that are due for promotion at any given time
- ii) Conducting promotion interview for the short-listed staff
- iii) Forwarding the result of the interview to the Public Service Commission of the Federal Ministry of Establishment for ratification.

## **2.3 RETIREMENT**

This is also one other section of Human resources development. The activities engaged in by this section are as follows:-

- i) Determining those that are due for retirement base on government policy.
- ii) Accepting and processing letter of retirement from any willing staff.
- iii) Determination of remuneration/gratuity to be paid to retiring officer.
- iv) Determining the mode and amount to be paid as pension grant.
- v) Advising the personnel Management department on steps to take for all the activities mentioned above

## **2.4 RECRUITMENT**

Although, the recruitment of officers from grade level (GL). 07 and above is solely performed by the public service commission of the Federal Ministry of Establishment for all the ministries; the recruitment section of the personnel management department is responsible for

**Secret Registry-** This section of the registry keeps the track of all the classified information of the ministry. Other functions include:

- i) Safekeeping of all the classified records of staff
- ii) Safekeeping of all the Evaluation performance of staff
- iii) Opening and keeping all records of government classified as secret or confidential
- iv) Retrieving all these records when the need arise.

## **CHAPTER THREE**

### **3.0 SYSTEM ANALYSIS AND DESIGN**

#### **3.1 SYSTEM ANALYSIS**

Before the advent of information technology, system Analysis used to be a specialised branch of Organisation and Method (O&M). Then, the special branch will study the existing problem the organisation was facing and suggest possible alternative ways of solving the problem.

With the advent of information technology, it was realised that most of these possible suggestions can be improved upon and as such best possible alternatives can still be available making use of all new inventions in the areas information technology. If there were no need for information, there would be no need for automated methods to produce it. Necessity has inspired us to develop the information and data processing techniques we now use in order to produce the required information as economically and quickly as possible. It is this necessity that now brings us what is known as System Analysis. System Analysis therefore, consists of the following stages.

- i) Feasibility Study
- ii) Analysis
- ii) Design
- iv) Implementation.

#### **3.2 FEASIBILITY STUDY**

Presently, the management of human resources of the Ministry is being handled manually and it is a cumbersome exercise. At times to locate a file of a single staff in order to generate required data may take a whole day. Investigation also shows that to conduct a daily routine of filing and retrieving of personal files of staff is a tough task and at times there is use to be duplication of file number of staff share the same name.

The identified problems which was gathered from interviewing the key officers of the department of personnel Management includes the following:-

- i) Lack of computer facilities.
- ii) Instability of staff handling the personnel records as result of the pooling system nature of all the federal Ministries.
- iii) Lack of on the job training for staff in charge of human resources.
- iv) Little or no computer knowledge.

### **3.2.1 TECHNICAL SURVEY**

With the expediency approach, the technical survey recognises that computer facilities must be provided for all sections of the departments of personnel Management in the ministry.

With the provision of computer system, there should be a follow-up of training on the job for all the staff that are responsible for the human resources Management. This on-the-job training must be encouraged and training on computer usage must be embarked upon immediately for efficient and effective performance of the staff.

Finally, it was also recognised that at the initial stage, super-micro computer system and Database Management software (DBASE IV) will enhance management performance of Human Resources Management of the Ministry.

### **3.2.2 ECONOMIC JUSTIFICATION.**

The conventional method management being used presently for Human Resources management is so cumbersome and tends to be so slow and data or information generated therefrom cannot be so reliable.

Introduction or changing to a computerised system of managing the Human Resources of the ministry will be a delayed necessary system worthwhile fore the enhancement and effective ways obtaining all the required data and information for the successful implementation of all the government policies.



Among the many advantages of computerisation of the Human Resources Management include the following:-

- i) Elimination of unnecessary and duplication of operation
- ii) Increasing the productivity of staff handling the job
- iii) Increase speed of operations. Generating information is always with quick despatch with computerisation.
- iv) Efficient electronic filing system.
- v) Effective and efficient Human Resources Analysis for decision making.

### **3.3 ANALYSIS**

The aim of this to ensure that all feasible alternatives are eventually produced which will result to users Required specification. The present system must be criticised against the principles of procedure after which the strengths and weaknesses of the system should be present.

The principles of procedure can be achieved through the following questions.

- i) Are the purposes being satisfied? could they be achieved in any other way?
- ii) Is it economical?
- iii) Is the work capable of being carried out by machine?
- iv) Is the system flexible?
- v) Is the principle of execution being observed?
- vi) How reliable is the procedure?
- vii) Is the information being produced in the form best suited to the recipient?
- viii) What equipment and other facilities currently being used could be incorporated in the new procedure?
- ix) Is the information being produced in time for meaningful action to be taken?

The analysis revealed that Human Resources Management will include the following.

- i) Nominal Roll
- ii) Human Resources Analysis
- iii) File Movement
- iv) Training

- v) Promotion
- vi) Retirement activities
- vii) Welfare of personnel
- viii) Discipline of personnel

Although the system analysis phase of the system development is concerned primarily with the system's outputs and inputs, the manner in which the inputs are processed to produce the detailed analysis of the operating characteristics of the current system, the new system is in excellent position to assess other methods of achieving the system's objectives. These alternative methods are analysed in an effort to recommend a choice between the variety of ways to get the job done.

### **3.4 SYSTEM DESIGN**

The system design elements contain the following:-

- i) Outputs
- ii) Inputs
- iii) Files
- iv) Procedures.

#### **3.4.1 OUTPUT**

This is the first stage in system design, It is necessary to consider what is required from the system before deciding how to set about producing it. The possible output on Human

Resources management are:-

- i Nominal Roll
- ii Deployment Roll
- iii Staff training information
- iv Retirement information
- v Promotion information

### **3.4.2 INPUT**

The input will be influenced greatly by the needs of output. The following will be considered

- i) Data collection methods and validation
- ii) Types of input media available
- iii) Volumes of input documents
- iv) Design of input layouts.

#### **3.4.2.1 NOMINAL ROLL INPUT**

Name  
Sex  
Date of Birth  
Qualification  
Date of first appointment  
Date of present appointment  
Rank  
GL  
State of origin  
Location  
Headquarter No  
Departments No  
ID Card No  
Parent department  
Remarks.

#### **3.4.2.2 DEPLOYMENT ROLL INPUT**

Name  
Rank  
GL  
Parent Department  
Working department

Old office

New office deployed

Date deployed date

Remarks.

### **3.4.3 FILES**

The following are to be considered for designing files:-

- i) Storage media
- ii) Method of file organisation and access
- iii) File security
- iv) Record layouts.

### **3.4.4 PROCEDURES.**

Procedures are the steps which unify the whole process. This will start with the origination of the source document and with output document being used for decision making.

## CHAPTER FOUR

### **4.0 SOFTWARE DEVELOPMENT/IMPLEMENTATION**

#### **4.1 CHOICE OF LANGUAGE FOR SOFTWARE DEVELOPMENT**

There is a number of Programming Languages which can be used in coding the procedure on Personnel Management Software. These Languages include:- **BASIC, COBOL, PASCAL, FOXPRO, ORACLE, DBASE.** The dBASE IV is chosen because of the following advantages:

- **DBASE IV** is easy to learn and use. It has the ability to construct, improve indexing, sort and maintain database efficiently.
- **DBASE IV** in handling storage, retrieval and organization of information.
- Easy to track errors and debug with **DBASE IV**.
- Easy customization of reports
- **DBASE IV** programming mode is relatively wide and easy coordination allowed.

#### **4.2 SYSTEM REQUIREMENT**

The major system requirement are the following:

- a. Hardware Requirement
- b. Software Requirement
- c. Implementation
- d. Maintenance
- e. Training.

#### **4.3 COST AND BENEFIT ANALYSIS**

##### **a) Micro-computer System**

- \* Pentium Micro-processor
- \* 16 MB RAM
- \* 2.1 MB Hard Disk
- \* SVGA Colour Monitor
- \* Enhance keyboard
- \* Microsoft Mouse
- \* CD ROM Drive of 32 250,000.00

ii.	A Line Printer	45,000.00
iii.	LaserJet 5 Printer	140,000.00
iv.	Uninterruptible Power Source (UPS) 1.4 KVA	75,000.00
b.	<b><u>Consumable Requirements</u></b>	
v.	10 packets of 1.44 MB HD 3.5" floppy disk (5 Nos.)	15,000.00
vi.	Disk Bank	5,000.00
vii.	5 Cartons of 11" x 14" computer papers	17,500.00
viii.	5 cartons of 11" x 9.5" " "	15,000.00
ix.	10 Reams of Laser Jet papers	7,000.00
c.	<b><u>Software Requirements</u></b>	
x.	Window 95 Operating System	
xi.	DBASE IV MS-DOS	45,000.00
xii.	SPSS	35,000.00
xiii.	WordPerfect 6.1 for Windows	30,000.00
d.	<b><u>Other Requirements</u></b>	
xiv.	Implementation	100,000.00
xv.	Maintenance	100,000.00
xvi.	Training	<u>150,000.00</u>
	<b>Total</b>	<b><u>1,029,500.00</u></b>

The accrued benefits to this system are as follows:

- i) Ability to add, amend and delete records easily.
- ii) Accuracy, speed and ease of use.
- iii) Immediate accessibility to records in a variety of ways.
- iv) Cost of Maintenance.
- v) Ease of use of database by the use of SPSS for analysing Human Resources.
- vi) On-line access to users.

## **4.4 SOFTWARE DEVELOPMENT AND DOCUMENTATION**

### **4.4.1 PROGRAM DEVELOPMENT**

Appendix consists of the **APPLICATION SOFTWARE**. The specification of the Application software is as follows:

Programmer: Hassan Omomeji Rasheed

Program: Computerization of Human Resources Management of Federal Ministry of Agriculture.

Environment: Database Management System (DBASE IV)

Remarks: This program stores information on Human Resources of FMA and make retrieval easy for the Management for decision making.

### **4.4.2 DOCUMENTATION**

#### **4.4.2.1 Starting the System:-**

The successful installation of the Operating System and DBASE IV package, the software can be invoked with the following processes:

1. At the DOS prompt, C:\>  
type: CD DBASE
2. Press Enter key
3. At the prompt, C:\DBASE>  
type: CD staff
4. Press Enter key
5. At the prompt, C:\DBASE\staff>  
type: DBASE
6. Press Enter key
7. Press Esc key and choose 'YES' and press Enter key to get you to DBASE prompt.
8. At the DBASE prompt, .  
type: do pmgt

The software will display on the screen a number of tasks to perform and prompt you to make a choice of subroutine to be executed. The display is as shown below:

**Main Menu**

PERSONNEL MANAGEMENT
MANPOWER STATISTICS
UPDATE SUBSYSTEM
APPEND SUBSYSTEM
SEARCH SUBSYSTEM
SORT SUBSYSTEM
HARDCOPY SUBSYSTEM
BACKUP SUBSYSTEM
STAFF PROMOTION SUBSYSTEM
STAFF RETIREMENT SUBSYSTEM
DEPARTMENT STAFF ESTABLISHMENT
MAINTENANCE SUBSYSTEM
QUIT TO DOS



#### 4.4.2.2 SUBROUTINE ONE: Ministry Staff Analysis

The choice of this subroutine will allow you to do a series of analysis on personnel file.  
Below are the personnel analysis:-

##### MANPOWER STATISTICS

- a. Ministry Staff Analysis
- b. Ministry Staff on GL Analysis
- c. Dept. Staff on Analysis
- d. Dept. Staff on GL Analysis
- e. Dept. Staff strength by Rank
- f. Ministry Staff by location Analysis
- g. Ministry Staff by location on GL analysis
- h. Ministry Staff by State of Origin Anal.
- I. Ministry Staff by State of Origin on GL
- j. Staff Strength by States of Origin
- k. Distribution Analysis by variable names

4.4.2.2(a) MINISTRY STAFF ANALYSIS FORMAT

TOTAL MIN. STAFF	XXXXXXXX
SENIOR STAFF	XXXXXXXX
SNR. OFFICER STAFF	XXXXXXXX
SNR. ASSIST. STAFF	XXXXXXXX
JUNIOR STAFF	XXXXXXXX
MALE STAFF	XXXXXXXX
FEMALE STAFF	XXXXXXXX
MALE SNR. STAFF	XXXXXXXX
MALE SNR. OFFICERS	XXXXXXXX
MALE SNR. ASSISTANT	XXXXXXXX
FEMALE SNR. STAFF	XXXXXXXX
FEMALE SNR. OFFICERS	XXXXXXXX
FEMALE SNR. ASSISTANT	XXXXXXXX
MALE JNR. STAFF	XXXXXXXX
FEMALE JNR STAFF	XXXXXXXX

#### 4.4.2.2(d) STAFF STRENGTH BY STATES OF ORIGIN

TOTAL MIN. STAFF	XXXXXXXX
ABIA ORIGIN STAFF	XXXXXXXX
ADAMAWA ORIGIN STAFF	XXXXXXXX
AK/IBOM ORIGIN STAFF	XXXXXXXX
ANAMBRA ORIGIN STAFF	XXXXXXXX

#### 4.4.2.2(e) DISTRIBUTION BY VARIABLE NAMES

DISTRIBUTION BY [var.1], [var.2], [var.3], [var.4]

var.1	var.2	var.3	var.4	Frequency	Cum.Frequency
XXXXX	XXXXXXXX	XXXXX	XXXXX	XXXXXXXXXX	XXXXXXXXXX

#### 4.4.3 SUBROUTINE TWO: Update Subsystem

The Update Subsystem will allow you to populate your personnel file and to do the following:

1. Add Record
2. Move Backward by a record
3. Move Forward by a record
4. Delete/Recall record
5. Edit Record
6. Prepare File for Reindex
7. Search Record
8. Quit to main menu.

#### 4.4.3.2 State Code

States are given codes for easier identification for analysis.

#### STATE CODE

State Code			
Numeric	Mnemonic	State	State Capital
01	ABI	Abia	Umuahia
02	ADA	Adamawa	Yola
03	AKW	Akwa-Ibom	Uyo
04	ANA	Anambra	Awka
05	BAU	Bauchi	Bauchi
06	BAY	Bayelsta	Yenagoa
07	BNU	Benue	Makurdi
08	BOR	Borno	Maiduguri
09	CRO	Cross-River	Calabar
10	DEL	Delta	Asaba
11	EBO	Ebonyi	Abakaliki
12	EDO	Edo	Benin
13	EKI	Ekiti	Ekiti
14	ENU	Enugu	Enugu
15	FCT	Fed. Cap. Territory	Abuja
16	FOR	Foreign	Foreign
17	GOM	Gombe	Gombe
18	IMO	Imo	Owerri
19	JIG	Jigawa	Dutse
20	KAD	Kaduna	Kaduna
21	KAN	Kano	Kano
22	KAT	Katsina	Katsina
23	KEB	Kebbi	Birnin-Kebbi
24	KOG	Kogi	Lokoja
25	KWA	Kwara	Ilorin
26	LAG	Lagos	Ikeja
27	NAS	Nassarawa	Lafia
28	NIG	Niger	Minna
29	OGU	Ogun	Abeokuta
30	OND	Ondo	Akure
31	OYO	Oyo	Oyo
32	OSU	Osu	Osogbo
33	PLA	Plateau	Jos
34	RIV	Rivers	Port-Harcourt
35	SOK	Sokoto	Sokoto
36	TAR	Taraba	Jalingo
37	YOB	Yobe	Damaturu
38	ZAM	Zamfara	Gusau

Mnemonic code is recommended to use for easier identification.

#### 4.4.3.3 Department Code

Departments are given codes for unique identification for analysis. Mnemonic codes are used for easier identification. Ministry of Agriculture Departments are given codes to serve as guides to other Ministries and Parasatals in giving codes to their departments.

#### DEPARTMENT/DIVISION CODE

CODE	DEPT/DIV	
Numeric	Mnemonic	Department
01	PMD	Department of Personnel Management
02	FSD	Department of Finance and Supply
03	PRS	Department Of Planning, Research and Statistics
04	FDA	Federal Department Of Agriculture
05	FIS	Fedepartment of Fisheries
06	FLD	Federal Livestock Department
07	ALR	Department Of Agricultural Land Resources
08	FOR	Federal Department of Forestry
09	ASC	Department Of Agricultural Sciences
10	FDC	Federal Department of Agricultural Cooperatives

#### 4.4.3.4 Rank Code

Ranks are given codes for analysis purpose. Department of Planning Research and Statistics is taken as a guide for other Departments of the Ministry.

<b>RANK CODE</b>	<b>RANK</b>
PRS001	Director
PRS002	Deputy Director
PRS003	Assistant Director
PRS004	Chief Statistician
PRS005	Chief Program Analyst
PRS006	Chief Planning Officer
PRS007	Chief Research Officer
PRS008	Chief Librarian
PRS009	Chief Research Officer
....	
....	
....	

#### **4.4.3.5      Operations**

The simple operations that can be performed under update subroutine are:

- |                             |   |
|-----------------------------|---|
| <b><u>Add</u></b>           | This option will enable you to add record of new member of staff to personnel file.   |
| <b><u>Backward</u></b>      | The option will allow you to move backward one record at a time in the personnel file.  |
| <b><u>Delete/Recall</u></b> | This option will enable you to delete or recall the display record on the screen.   |
| <b><u>Edit</u></b>          | This option allow you to edit or update the display record on the screen.   |
| <b><u>Forward</u></b>       | The option is to move to the next record of personnel file.   |
| <b><u>Prepare</u></b>       | This option prepares the file in order of department, descending order of grade level and also in the order of date of present appointment. |
| <b><u>Print</u></b>         | The option send record on screen to the printer for hardcopy.   |
| <b><u>Search</u></b>        | This option enable you to search for a particular record you require for necessary actions.   |
| <b><u>Quit</u></b>          | This option returns you to main menu.   |

#### **4.4.4    SUBROUTINE THREE: Append Subsystem**

This subroutine allows different file names that have the same structure be appended together to form a single large file. For instance, file of different departments of the Ministry can be appended together to form a single file for the Ministry.

#### **4.4.5    SUBROUTINE FOUR: Search Subsystem**

This subroutine provides facility to search for a particular records for decision making only. It does not allow you to edit as in the update subsystem.

#### 4.4.6 SUBROUTINE FIVE: Sort Subsystem

Sort Subsystem sorts personnel file in any of the orders given below.

PERSONNEL FILE SORT MENU
a. Sort in descending GL and dept series
b. Sort in GL, sex and dept. series
c. Sort in GL, state of origin and dept. series
d. Sort in GL, location and dept. series
e. Sort in GL, date of birth and dept. series
f. Sort in GL, date of first appoint. and dept. series
g. Sort in GL, date of present appoint. and dept. series
h. Sort in GL, rank and dept series.

#### 4.4.7 SUBROUTINE SIX: Hardcopy Subsystem

Hardcopy subsystem prints nominal roll and deployment roll reports of personnel file for decision making. In the report, you will find the following:

##### 4.4.7.1 Nominal Roll

<u>Field Description</u>	<u>Field Name</u>
S/No.:	#
Name:	#surname, #firstname, #midname
Sex :	#sex
Date of Birth:	#dbirth
Qualification:	#qualif
Date of First Appointment:	#dfappt
Date of Present Appointment:	#dpappt
Rank	#rank
GL:	#gl
State of Origin:	#stateorig



Location:	#plocation
Headquarters No.:	#hqrtrfile
Department No.:	#deptfile
Id Card No:	#idcardno
Parent Dept.:	#pdeptcode
Remarks:	#remarks

#### **4.4.7.2 Deployment Roll**

<u>Field Description</u>	<u>Field Name</u>
S/No.:	#
Name:	#surname, #firstname, #midname
Rank:	#rank
GL:	#gl
Parent Department:	#pdeptcode
Working Department:	#wkdeptcod
Old Office:	#lwkunit
New Office Deployed:	#pwkunit
Deployed Date	#deploydat
Remarks	#remarks

#### **4.4.11 SUBROUTINE TEN: Maintenance Subsystem**

This subroutine allow you to perform the following operations:

1. Find and Remove duplicate entries
2. Verify new entries
3. Verify entries marked for deletion
4. Remove entries marked for deletion

#### 4.4.13 PERSONNEL FILE STRUCTURE

	<u>Field Name</u>	<u>Type</u>	<u>Width</u>
1.	PDEPTCOD	Character	3
2.	SURNAME	Character	16
3.	FIRSTNAM	Character	15
4.	MIDNAME	Character	15
5.	INITIALS	Character	6
6.	TITLE	Character	6
7.	RANK	Character	30
8.	RANKCODE	Character	5
9.	GL	Character	2
10.	WKDEPTCODE	Character	3
11.	LWKUNIT	Character	25
12.	PWKUNIT	Character	25
13.	DEPLOYDAT	Date	8
14.	DBIRTH	Date	8
15.	DFAPPT	Date	8
16.	DPAPPT	Date	8
17.	PSTATION	Character	13
18.	STATNCODE	Character	3
19.	NATIONAL	Character	15
20.	STATEORIG	Character	12
21.	STATEOCOD	Character	3
22.	QUALIF	Character	30
23.	REMARKS	Character	20
24.	SEX	Character	1
25.	DEPTFILE	Character	15
26.	HQRTFILE	Character	15
27.	IDCARDNO	Character	8
28.	CADRE	Character	1
29.	PHYFIT	Character	1
30.	IDENTITY	Character	35
31.	NEW	Logical	1

#### 4.4.15 SYSTEM CHANGEOVER

The moment of truth has arrived. The system is designed and all the work necessary to make it operate has been done. Now we must convert from the old system to the new . We have several approaches. For this system we shall explore only three approaches viz:

- i) Crash Approach
- ii) Pilot Approach and:
- iii) Parallel Approach

##### (i) CRASH APPROACH

In the crash conversion approach, we discard the old system and replace it with the new one overnight. In a twinkling of an eye, all of the new procedures, programs, data files, and inputs are made operational. Crash conversion also known as **Direct Changeover**, represents the ultimate confidence in the work done in designing and implementing the new system.

This is not recommended for the implementation of Human Resources Software Management for the Ministry since level of knowledge of Computer application in the Ministry still need improvement through training and retraining.

##### (ii) PILOT APPROACH

In the pilot approach, we try out the new system somewhere else to determine whether it works fine. This approach works best when the new system is small in scope or is one that operates as a number of identical systems in different parts of the organisation.

Therefore this system is also not appropriate for the management of human resources of the Federal Ministry of Agriculture.

##### (iii) PARALLEL APPROACH

In the parallel approach, we operate the old and new system simultaneously for a period of time to make sure that the new system meets the requirements that the old system has been meeting all along. This type of Changeover is recommended for the Ministry because the users will gradually get acquainted with the new system over a reasonable period of time. This method of conversion offers the users opportunity of comparing the result of the old manual system and the new computerized system, and thus build up users' confidence.

## CHAPTER FIVE

### **5.1 SUMMARY**

The study is aimed at improving the management of Human Resources Nominal Roll, Deployment Roll and provision of information on staff strength and its distribution pattern on the activities of the Ministry.

### **5.2 CONCLUSION**

The major goal of this project is to effectively and efficiently design and develop a computerized database for Agricultural Human Resources to provide information such as:

- i) Professional staff strength on each activity of the Ministry to measure efficiency.
- ii) Distribution of staff by their state of origin, sex and location.
- iii) The staff that are due for promotion.
- iv) Members of staff nearing retirement age etc.

### **5.3 RECOMMENDATIONS**

Initially, the capital outlay for the computerization of Human Resources Management may look huge but its cost benefit outweigh the actual cost in the future. It is therefore recommended that the newly developed system of computerization of Human Resources Management be implemented by the Federal Ministry of Agriculture without delay. It is also recommended for all the Federal and State ministries of the federation as well as government Parastatals.

The implementation of the new system will provide the management with

- \* accurate, reliable and timely data/information on human resources;
- \* speed and ease of data/information retrieval and accuracy of use;
- \* immediate and on-line evaluation of performance operations;

- \* on-line access to a potential user; and
- \* easy analysis of Human Resource for decision making.

## REFERENCES

1. Federal Ministry of Agriculture (1989); Agricultural Policy in Nigeria. Federal Government Press Ltd., Lagos.
2. Federal Government of Nigeria (1988) ; Civil Service Reforms and Regulations. Federal Government Press Ltd., Lagos.
3. Institute of Public Service (1983); International Public Management Development Programs. The University of Connecticut .
4. Richard W. Brightman & Jeffery M. Dimsdale (1986); Using Computers in an Information Age Delmar Publishers Inc.
5. Federal Ministry of Agriculture (1991); Digest of Agricultural Statistics. Federal Ministry of Agriculture, (Dept. of Planning, Research & Statistics) Abuja.

ENDCASE  
CLEAR  
ENDDO  
-

CLEAR  
i = 1  
j = 2  
ii = 20  
jj = 78  
DO WHILE i < 9  
@ i,j TO ii,jj DOUBLE  
@ i,j FILL TO ii,jj COLOR GB/RG  
i = i + 1  
j = j + 2  
ii = ii - 1  
jj = jj - 2  
ENDDO  
@ 10,25 SAY 'PERSONNEL MANAGEMENT'  
@ 12,32 SAY 'OF'  
@ 14,20 SAY 'FEDERAL MINISTRY OF AGRICULTURE'  
@ 15,17 TO 17,55 DOUBLE  
@ 16,23 SAY 'PRESS ENTER KEY TO CONTINUE'  
SET CONSOLE OFF  
WAIT  
SET CONSOLE ON  
RETURN  
-

\* PMINIT.PRG  
SET SAFETY OFF  
SET TALK OFF  
SET INTENSITY OFF  
\*REST FROM MD  
\*TD = DTOC( DATE() )  
\*M1 = MONTH( CTOD( MD ) )  
\*M2 = MONTH( CTOD( TD ) )  
\*Y1 = YEAR( CTOD( MD ) )  
\*Y2 = YEAR( CTOD( TD ) )  
\*IF .NOT. FILE( 'PMMADD.MEM' )  
STORE '' TO DELETED  
STORE SPACE(15) TO MSURNAME  
STORE SPACE(12) TO MFIRSTNAM  
STORE SPACE(12) TO MMIDNAME  
STORE SPACE(6) TO MINITIALS  
STORE SPACE(6) TO MTITLE  
STORE SPACE(1) TO MPHYFIT  
STORE SPACE(1) TO MSEX  
STORE SPACE(15) TO MNATIONAL  
STORE SPACE(12) TO MSTATEORIG  
STORE SPACE(3) TO MSTATEOCOD  
STORE SPACE(30) TO MRANK



```

STORE SPACE(5) TO MRANKCODE
STORE SPACE(2) TO MGL
STORE SPACE(2) TO MUSS
STORE SPACE(1) TO MCADRE
STORE SPACE(8) TO MDBIRTH
STORE SPACE(8) TO MDFAPPT
STORE SPACE(8) TO MDPAPPT
STORE SPACE(13) TO MPSTATION
STORE SPACE(3) TO MSTATNCODE
STORE SPACE(35) TO MQUALIF
STORE SPACE(3) TO MPDEPTCOD
STORE SPACE(3) TO MWKDEPTCOD
STORE SPACE(25) TO MLWKUNIT
STORE SPACE(25) TO MPWKUNIT
STORE SPACE(8) TO MDEPLOYDAT
STORE SPACE(3) TO MUNITCODE
STORE SPACE(25) TO MREMARKS
STORE SPACE(14) TO MHQRTFILE
STORE SPACE(12) TO MDEPTFILE
STORE SPACE(7) TO MIDCARDNO
STORE SPACE(20) TO MIDENTITY
SAVE TO PMMADD
*ENDIF
*USE &PMFILE INDEX IDCARDNO, HQTRFID, DEPTFID, NAME, GL, DEPTCODE, DPAPPT, DBIRTH,
DFAPPT, RANKCODE, STATECOD, STATNCOD
USE &PMFILE INDEX PDEPTCOD, GL, HQTRFILE, IDENTITY
RETURN
-
* PMAPPEND.PRG
* THIS PROGRAM APPEND DATA FILE TO DATABASE FILE
CLEAR
?
?
?
?
?
ACCEPT ' TYPE FILE NAME TO APPEND TO (EG. PMGTFMA.DBF): ' TO PMFILE
USE &PMFILE
CLEAR
?
?
?
?
?
?' TYPE A TO APPEND DATA FROM OTHER FILE OR ANY OTHER KEY TO CANCEL '
SET CONSOLE OFF
WAIT TO NEXT
SET CONSOLE ON
* IF THEY DO WANT TO APPEND FROM THE CONVERSION FILE
IF UPPER(NEXT) = 'A'
USE &PMFILE
CLEAR

```

```

STORE .T. TO MORE
DO WHILE MORE
SET FORMAT TO PMSORT
* TO FIND OUT WHAT TO DO NEXT
STORE '' TO COMMAND
READ
* DELETE THE FILE SNOMINAL IF IT IS EXISTING
* PERFORM DESIRED FUNCTION
DO CASE
CASE COMMAND = 'A'
CLEAR
DO SPROGRES
* SORT IN DESCENDING ORDER OF GL IN DEPTS SERIES
SORT ON PDEPTCOD, GL/D, DPAPPT, DFAPPT TO SNOMINAL
* SORT ON PDEPTCOD, GL/D, DPAPPT TO SNOMINAL
CLOSE ALL
COPY FILE SNOMINAL.DBF TO &PMFILE
CASE COMMAND = 'B'
CLEAR
DO SPROGRES
* SORT IN DESCENDING ORDER UNDER GL IN SEX AND DEPTS SERIES
SORT ON PDEPTCOD, SEX, GL/D TO SNOMINAL
COPY FILE SNOMINAL.DBF TO &PMFILE
CASE COMMAND = 'C'
CLEAR
DO SPROGRES
* SORT IN DESCENDING ORDER OF GL IN STATE OF ORIGIN SERIES
SORT ON PDEPTCOD, STATE, GL/D TO SNOMINAL
COPY FILE SNOMINAL.DBF TO &PMFILE
CASE COMMAND = 'D'
CLEAR
DO SPROGRES
* SORT IN DESCENDING ORDER OF GL IN LOCATIONS AND DEPTS SERIES
SORT ON PDEPTCOD, PPOST, GL/D TO SNOMINAL
COPY FILE SNOMINAL.DBF TO &PMFILE
CASE COMMAND = 'E'
DO SPROGRES
* SORT IN DESCENDING ORDER OF GL IN DATE OF BIRTH AND DEPTS SERIES
SORT ON PDEPTCOD, DBIRTH, GL/D TO SNOMINAL
COPY FILE SNOMINAL.DBF TO &PMFILE
CASE COMMAND = 'F'
DO SPROGRES
* SORT IN DESCENDING ORDER OF GL IN DATE OF FIRST APPOINTMENT AND DEPTS
SERIES
SORT ON PDEPTCOD, DFAPPT, GL/D TO SNOMINAL
COPY FILE SNOMINAL.DBF TO &PMFILE
CASE COMMAND = 'G'
DO SPROGRES
* SORT IN DESCENDING ORDER OF GL IN DATE OF PRESENT APPOINTMENT AND DEPTS
SERIES
SORT ON PDEPTCOD, DPAPPT, GL/D TO SNOMINAL
COPY FILE SNOMINAL.DBF TO &PMFILE

```

```

CASE COMMAND = 'H'
DO SPROGRES
* SORT IN DESCENDING ORDER OF RANK IN DEPTS SERIES
SORT ON PDEPTCOD, RANKCODE/D, GL/D TO SNOMINAL
COPY FILE SNOMINAL.DBF TO &PMFILE
CASE COMMAND = 'I'
* STORE .F. TO MORE
CLEAR
CLOSE ALL
EXIT
ENDCASE
ENDDO

```

```

* PROMOTI.PRG
* THIS PROGRAM DISPLAY STAFF DUE FOR PROMOTION.
CLEAR
SET TALK OFF
SET DEVICE TO SCREEN
*?
*?
ACCEPT ' TYPE FILE NAME TO PROCESS (EG. PMPRS.DBF): ' TO PMFILE
?
?
*ACCEPT ' TYPE DATE OF TODAY (EG. 05/27/1995): ' TO CDATE
TDATE = DATE()
CDATE = TDATE
LADATE = YEAR(TDATE) - 2
LADATE1 = YEAR(TDATE) - 3
LADATE2 = YEAR(TDATE) - 4
USE &PMFILE
COPY TO PROMOTF.DBF FOR (VAL(GL) < 7 .AND. LADATE > YEAR(DPAPPT)) .OR. (VAL(GL) > 6 .AND.
LADATE1 > YEAR(DPAPPT) .AND. VAL(GL) < 15) .OR. (VAL(GL) > 14 .AND. LADATE2 =
YEAR(DPAPPT))
USE PROMOTF
CLEAR
@ 3,5 SAY 'THE REPORT IS EITHER SEND TO SCREEN OR PRINTER'
ACCEPT ' SEND REPORT TO THE PRINTER? (Y/N): ' TO MRPT
MRPT = UPPER(MRPT)
DO CASE
CASE MRPT = 'N'
J = 0
STORE .T. TO MORE1
DO WHILE MORE1 .AND. .NOT. EOF()
CLEAR
@ 1,10 SAY ORGNAM
@ 2,10 SAY REPLICATE('=',LEN(ORGNAM))
@ 3,10 SAY 'STAFF DUE FOR PROMOTION'
@ 4,10 SAY REPLICATE('-',23)
@ 5,10 SAY 'AS AT'
@ 5,16 SAY CDATE
@ 6,1 TO 19,78 DOUBLE

```

```

@ 6,1 FILL TO 19,78 COLOR R/GR
@ 7,2 SAY 'DEPT'
@ 7,20 SAY 'NAME'
@ 7,35 SAY 'RANK'
@ 7,50 SAY 'GL'
@ 7,53 SAY '1ST.AP.DATE'
@ 7,65 SAY 'LAST APPT.DAT'
@ 8,2 SAY REPLICATE('-',4)
@ 8,7 SAY REPLICATE('-',20)
@ 8,30 SAY REPLICATE('-',18)
@ 8,50 SAY REPLICATE('-',2)
@ 8,53 SAY REPLICATE('-',10)
@ 8,65 SAY REPLICATE('-',13)
K = 9
DO WHILE K < 19 .AND. .NOT. EOF()
STORE SPACE(1) TO CHOICE3
J = J + 1
@ K,3 SAY PDEPTCODE
@ K,7 SAY INITIALS PICTURE 'XXXX'
@ K,12 SAY SURNAME
@ K,29 SAY RANK PICTURE 'XXXXXXXXXXXXXXXXXXXXX'
@ K,50 SAY GL
@ K,54 SAY DFAPPT
@ K,67 SAY DPAPPT
SKIP
K = K + 1
ENDDO
@ 20,25 SAY 'C)ONTINUE, Q)UIT'
@ 21,20 SAY 'PLEASE CHOOSE ONE OPTION:'
@ 21,50 GET CHOICE3 PICTURE '!'
READ
DO CASE
CASE CHOICE3 = 'Q'
CLEAR
STORE .F. TO MORE1
CASE CHOICE3 = 'C'
CLEAR
LOOP
ENDCASE
ENDDO
IF J = 0
CLEAR
@ 4,8 TO 8,65 DOUBLE
@ 5,10 SAY MDEPTC
@ 5,15 SAY 'IS NOT IN THE FILE'
@ 7,10 SAY 'PRESS ANY KEY TO RETURN TO THE MAIN'
SET CONSOLE OFF
WAIT
SET CONSOLE ON
ENDIF
CLEAR
CASE MRPT = 'Y'

```

```
DO AUDITRPT
ENDCASE
* RELEASE LOCAL VARIABLE
RELEASE CHOICE3, J, LADATE, LADATE1, LADATE2, TDATE, CDATE
CLOSE ALL
USE &PMFILE
CLEAR
RETURN
```

-

```
* RETIRE1.PRG
* THIS PROGRAM DISPLAY STAFF DUE FOR RETIREMENT.
SET TALK OFF
CLEAR
SET DEVICE TO SCREEN
?
?
ACCEPT ' TYPE FILE NAME TO PROCESS (EG. PMPRS.DBF): ' TO PMFILE
?
?
*ACCEPT ' TYPE DATE OF TODAY (EG. 05/27/1995): ' TO CDATE
TDATE = DATE()
CDATE = TDATE
BDATE = YEAR(TDATE) - 59
*BDATE = YEAR(TDATE) - 30
FDATE = YEAR(TDATE) - 34
CLEAR
USE &PMFILE
COPY TO RETIREF.DBF FOR YEAR(DBIRTH) < BDATE .OR. YEAR(DBIRTH) = BDATE .OR.
YEAR(DFAPPT) < FDATE .OR. YEAR(DFAPPT) = FDATE
USE RETIREF
@ 3,5 SAY 'THE REPORT IS EITHER SENT TO THE SCREEN OR PRINTER'
ACCEPT ' SEND THE REPORT TO PRINTER? (Y/N): ' TO MRPT
CLEAR
MRPT = UPPER(MRPT)
DO CASE
CASE MRPT = 'N'
J = 0
STORE .T. TO MORE1
DO WHILE MORE1 .AND. .NOT. EOF()
CLEAR
@ 1,10 SAY ORGNAM
@ 2,10 SAY REPLICATE('=',LEN(ORGNAM))
@ 3,10 SAY 'STAFF DUE FOR RETIREMENT WITHIN THE NEXT TWELVE MONTHS'
@ 4,10 SAY REPLICATE('-',54)
@ 5,10 SAY 'AS AT'
@ 5,16 SAY CDATE
@ 6,1 TO 19,78 DOUBLE
@ 6,1 FILL TO 19,78 COLOR R/GR
@ 7,2 SAY 'DEPT'
@ 7,20 SAY 'NAME'
```

```

@ 7,35 SAY 'RANK'
@ 7,50 SAY 'GL'
@ 7,53 SAY 'BIRTH DATE'
@ 7,64 SAY '1ST.APPT.DATE'
@ 8,2 SAY REPLICATE('-',4)
@ 8,7 SAY REPLICATE('-',20)
@ 8,30 SAY REPLICATE('-',18)
@ 8,50 SAY REPLICATE('-',2)
@ 8,53 SAY REPLICATE('-',10)
@ 8,64 SAY REPLICATE('-',13)
K = 9
DO WHILE K < 19 .AND. .NOT. EOF()
STORE SPACE(1) TO CHOICE3
J = J + 1
@ K,3 SAY PDEPTCODE
@ K,7 SAY INITIALS PICTURE 'XXXX'
@ K,12 SAY SURNAME
@ K,29 SAY RANK PICTURE 'XXXXXXXXXXXXXXXXXXXXXXX'
@ K,50 SAY GL
@ K,54 SAY DBIRTH
@ K,66 SAY DFAPPT
SKIP
K = K + 1
ENDDO
@ 20,25 SAY 'C)ONTINUE, Q)UIT'
@ 21,20 SAY 'PLEASE CHOOSE ONE OPTION:'
@ 21,50 GET CHOICE3 PICTURE '!'
READ
DO CASE
CASE CHOICE3 = 'Q'
CLEAR
STORE .F. TO MORE1
CASE CHOICE3 = 'C'
CLEAR
LOOP
ENDCASE
ENDDO
IF J = 0
CLEAR
@ 4,8 TO 8,65 DOUBLE
@ 5,10 SAY MDEPTC
@ 5,15 SAY 'IS NOT IN THE FILE'
@ 7,10 SAY 'PRESS ANY KEY TO RETURN TO THE MAIN'
SET CONSOLE OFF
WAIT
SET CONSOLE ON
ENDIF
CASE MRPT = 'Y'
DO RETRPT
ENDCASE
CLEAR
* RELEASE LOCAL VARIABLE

```

```
RELEASE CHOICE3, J, BDATE, TDATE, FDATE, CDATE
CLOSE ALL
USE &PMFILE
CLEAR
RETURN
```

```
-
PMSTAT.PRG
* THIS PROGRAM DISPLAYS OR PRINTS THE RESULT OF THE STAFF ANALYSIS
*RESTORE FROM ORGNAM
DO WHILE .T.
USE &PMFILE
CLEAR
SET FORMAT TO PANALSAY
MODE2 = 'MANPOWER STATISTICS'
CHOICE2 = ''
SCRPRT = ''
READ
DO CASE
  CASE SCRPT = '2'
  SET DEVICE TO PRINTER
  CASE SCRPT = '1'
  SET DEVICE TO SCREEN
ENDCASE
DO CASE
  CASE CHOICE2 = 'A'
  DO MINANAL
  CASE CHOICE2 = 'B'
  DO MINANAGL
  CASE CHOICE2 = 'C'
  DO DEPANAL
  CASE CHOICE2 = 'D'
  DO DEPANAGL
  CASE CHOICE2 = 'E'
  DO RANKS
  CASE CHOICE2 = 'F'
  DO MSSTATE
  CASE CHOICE2 = 'G'
  DO MSSTATGL
  CASE CHOICE2 = 'H'
  DO MSSORIG
  CASE CHOICE2 = 'I'
  DO MSSORIGL
  CASE CHOICE2 = 'J'
  DO SORANAGL
  CASE CHOICE2 = 'K'
  DO DISTRIB
  CASE CHOICE2 = 'L'
  CLEAR
  EXIT
ENDCASE
ENDDO
```

RETURN

-

CLEAR

@ 5,10 TO 7,39 DOUBLE

@ 5,10 FILL TO 7,39 COLOR R/W

@ 6,11 SAY 'WAIT: SORTING IS IN PROGRESS'

RETURN

-

\*SET PATH TO STAFF

SET DEVICE TO SCREEN

CLEAR

ACCEPT 'PLEASE ENTER TODAY DATE (E.G., JULY 24, 1994): ' TO MTDATE

CLEAR

ACCEPT ' TYPE THE FILE NAME TO PRINT: ' TO PMFILE

ACCEPT ' TYPE DEPT. NAME:' TO MDEPT

MDEPT = UPPER(MDEPT)

\*ACCEPT ' HARDCOPY OF SORTED FILE? (Y/N): ' TO SOPT

CLEAR

ACCEPT ' PLEASE TYPE STARTING REC. NUMBER: ' TO STREC

MTDATE = UPPER(MTDATE)

TD = LEN(MTDATE) + 23

SET DEVICE TO PRINT

SREC = 1

\*SOPT = UPPER(SOPT)

\*IF SOPT = 'Y'

USE &PMFILE

\*ELSE

\*USE ABUJA3

\*ENDIF

DO WHILE .NOT. EOF()

DO WHILE .NOT. EOF() .AND. SREC >= VAL(STREC)

K = 12

\*EJECT

@ 2,70 SAY 'FEDERAL MINISTRY OF AGRICULTURE AND NATURAL RESOURCES'

@ 3,70 SAY REPLICATE('-',52)

@ 4,70 SAY MDEPT

\*@ 4,70 SAY 'LOCATION: BORNO STATE'

@ 5,87 SAY 'NOMINAL ROLL'

\*@ 5,70 SAY 'PERSONNEL AUDIT AS AT'

\*@ 5,93 SAY MTDATE

\*@ 6,70 SAY REPLICATE('-',TD)

@ 6,87 SAY REPLICATE('-',12)

@ 9,1 SAY REPLICATE('-',250)

@ 10,3 SAY 'S/NO.'

@ 10,9 SAY '|'

@ 10,34 SAY 'NAME'

@ 10,58 SAY '|'

@ 10,59 SAY 'SEX'

@ 10,62 SAY '|'

@ 10,64 SAY 'DATE OF'

@ 10,73 SAY '|'



@ 10,81 SAY 'QUALIFICATIONS'  
@ 10,104 SAY '|'  
@ 10,106 SAY 'DATE OF'  
@ 10,115 SAY '|'  
@ 10,117 SAY 'DATE OF'  
@ 10,127 SAY '|'  
@ 10,138 SAY 'RANK'  
@ 10,158 SAY '|'  
@ 10,159 SAY 'GL'  
@ 10,161 SAY '|'  
@ 10,162 SAY 'USS'  
@ 10,165 SAY '|'  
@ 10,168 SAY 'STATE OF'  
@ 10,177 SAY '|'  
@ 10,180 SAY 'LOCATION'  
@ 10,191 SAY '|'  
@ 10,193 SAY 'DEPT.FILE ID.'  
@ 10,207 SAY '|'  
@ 10,208 SAY 'HQTR.FILE ID.'  
@ 10,222 SAY '|'  
@ 10,223 SAY 'ID.CARD NO'  
@ 10,233 SAY '|'  
@ 10,234 SAY 'DEPT'  
@ 10,239 SAY '|'  
@ 10,240 SAY 'DIV/'  
@ 10,244 SAY '|'  
@ 10,254 SAY 'REMARKS'  
@ 11,9 SAY '|'  
@ 11,58 SAY '|'  
@ 11,62 SAY '|'  
@ 11,64 SAY 'BIRTH'  
@ 11,73 SAY '|'  
@ 11,104 SAY '|'  
@ 11,105 SAY 'FIRST APPT'  
@ 11,115 SAY '|'  
@ 11,117 SAY 'PRES. APP'  
@ 11,127 SAY '|'  
@ 11,158 SAY '|'  
@ 11,161 SAY '|'  
@ 11,165 SAY '|'  
@ 11,169 SAY 'ORIGIN'  
@ 11,177 SAY '|'  
@ 11,191 SAY '|'  
@ 11,207 SAY '|'  
@ 11,222 SAY '|'  
@ 11,233 SAY '|'  
@ 11,234 SAY 'CODE'  
@ 11,239 SAY '|'  
@ 11,240 SAY 'UNIT'  
@ 11,244 SAY '|'  
@ 12,1 SAY REPLICATE('-',250)  
@ 13,9 SAY '|'

```
@ 13,58 SAY '|'  
@ 13,62 SAY '|'  
@ 13,73 SAY '|'  
@ 13,104 SAY '|'  
@ 13,115 SAY '|'  
@ 13,127 SAY '|'  
@ 13,158 SAY '|'  
@ 13,161 SAY '|'  
@ 13,165 SAY '|'  
@ 13,177 SAY '|'  
@ 13,191 SAY '|'  
@ 13,207 SAY '|'  
@ 13,222 SAY '|'  
@ 13,233 SAY '|'  
@ 13,239 SAY '|'  
@ 13,244 SAY '|'  
REC = 0  
DO WHILE REC < 22 .AND. (.NOT. EOF())  
K = K + 2  
L = K + 1  
KS = LEN(SURNAME)  
KF = LEN(FIRSTNAM)  
KS = KS + 10  
KF = KF + KS + 1  
@ K,1 SAY SREC PICTURE '999999'  
@ K,9 SAY '|'  
@ K,10 SAY SURNAME  
@ K,KS SAY FIRSTNAM  
@ K,KF SAY MIDNAME  
@ K,53 SAY INITIALS  
@ K,58 SAY '|'  
@ K,60 SAY SEX  
@ K,62 SAY '|'  
@ K,63 SAY DBIRTH  
@ K,73 SAY '|'  
@ K,74 SAY QUALIF  
@ K,104 SAY '|'  
@ K,106 SAY DFAPPT  
@ K,115 SAY '|'  
@ K,117 SAY DPAPPT  
@ K,127 SAY '|'  
@ K,128 SAY RANK  
@ K,158 SAY '|'  
@ K,159 SAY GL  
@ K,161 SAY '|'  
@ K,162 SAY USS  
@ K,165 SAY '|'  
@ K,166 SAY STATORIG  
@ K,177 SAY '|'  
@ K,178 SAY PSTATION  
@ K,191 SAY '|'  
*@ K,192 SAY DEPTFILE
```

```
*@ K,207 SAY '|  
@ K,208 SAY HQRFILE  
@ K,222 SAY '|  
*@ K,224 SAY IDCARDNO  
*@ K,233 SAY '|  
@ K,234 SAY PDEPTCOD  
@ K,239 SAY '|  
*@ K,240 SAY UNITCODE  
@ K,244 SAY '|  
@ K,245 SAY REMARKS  
@ L,9 SAY '|  
@ L,58 SAY '|  
@ L,62 SAY '|  
@ L,73 SAY '|  
@ L,104 SAY '|  
@ L,115 SAY '|  
@ L,127 SAY '|  
@ L,158 SAY '|  
@ L,161 SAY '|  
@ L,165 SAY '|  
@ L,177 SAY '|  
@ L,191 SAY '|  
@ L,207 SAY '|  
@ L,222 SAY '|  
@ L,233 SAY '|  
@ L,239 SAY '|  
@ L,244 SAY '|  
REC = REC + 1  
IF REC = 22 .OR. EOF()  
  L = L + 1  
  @ L,1 SAY REPLICATE('-',250)  
ENDIF  
SREC = SREC + 1  
SKIP  
ENDDO  
ENDDO  
SREC = SREC + 1  
SKIP  
ENDDO  
SET DEVICE TO SCREEN  
RETURN
```