

**LAND ALLOCATION:
A COMPUTER APPROACH**
(A CASE STUDY OF THE FEDERAL CAPITAL TERRITORY)

BY

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PGD/MCS/2001/1113

**DEPARTMENT OF MATHEMETICS/COMPUTER SCIENCE
FEDERAL UNIVERSITY OF TECHNOLOGY
MINNA**

NOVEMBER, 2003

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A PROJECT SUBMITTED TO THE DEPARTMENT OF
MATHEMATICS/COMPUTER SCIENCE FEDERAL UNIVERSITY OF
TECHNOLOGY, MINNA IN PARTIAL FULFILMENT FOR THE AWARD OF THE
POST GRADUATE DIPLOMA IN COMPUTER SCIENCE.

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CERTIFICATION

This project work has been read and certified by the undersigned as meeting the requirement of Mathematics/Computer Science, Federal University of Technology, Minna

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External Examiner

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DEDICATION

This Project work is dedicated to my mother Mrs. D.M Ajani which her educational inspiration and support I am still building upon today.

ACKNOWLEDGEMENT

I give thanks and Glory to Almighty God, whose Love and support have actually seen me through the course of my academic pursuit.

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Finally, My special thanks to all colleague

My God Bless you all AMEN.

ABSTRACT

The registration of Land application is prone to mistakes especially in the duplication of numbers. This occurs frequently with manual system, most problem seemingly encountered seems to have emanated from recording of data at Land Registry which often manifest the duplication of numbers in the registry, which are not often noticed until the collection stages or at the stage when Right of Occupancy (R of O) or Certificate of Occupancy (C of O) are to be issued. This Further delay the collection of the aforementioned documents. These can easily be got rid of with the application of computers to land allocation.

To achieve this, a Visual Basic programming Language is used, through which the authority will be able to achieve a good personal need of information, which is important for management decision.

TABLE OF CONTENTS

CONTENTS	PAGES
Title page	i
Certification	ii
Dedication	iii
Acknowledgement	iv-v
Abstract	vi

TITLE

CHAPTER ONE

1.0 Introduction	1-3
1.1 Statement of the project	3
1.2 Abuja (an overview)	3-4
1.3 Scope and limitation of the project	4
1.4 Methodology	4-5
1.5 Record Inspection	5-6
1.6 Observation	6-7
Interview	7-

CHAPTER TWO

2.0 Literature review of Land/Land Administration	9
2.1 Geographical location of Federal Capital	9
2.2 Land	9-11
2.3 Land Administration	11-13
2.4 Organization Structure	13-14
2.5 A Land Administrator	14-17
2.6 Master Plan	18
2.7 Residential District	19
2.8 The objective of Land Planning and Survey	19-20
2.9 Guideline for Plot Allocation	20-21
2.10 Qualification required for Allocation	21-22
2.11 Condition of Grant	22
2.12 Land Record	23
2.13 Land Use Policy and Planning	24
2.14 Land Registry and Deed Registry	25
2.15 Computer Review	25-27
2.16 Impact of Computerization	27-28
2.17 Objective of Study	28-29

CHAPTER THREE

3.0 System Analysis and Design	30
3.1 Problem Definition	30-33

3.2 The Manual System Analysis	34
3.3 Mode of Data Storage	34
3.4 Retrieval of File Number	35
3.5 Movement of Files	35
3.6 Procedure for Plot Allocation	36
3.7 Data Flow Diagram	36-37
3.8 The Cartography Unit	37
3.9 Capability of Manual System	37-38
3.10 System Design	38-40
3.11 Advantages of the Computerized System	40

CHAPTER FOUR

4.0 System Implementation	41
4.1 Introduction	41
4.2 Choice of Programming Language	41-45
4.3 Feature of Language Chosen	45
4.4 Writing the Code	46
4.5 Testing and Debugging of Program	46
4.6 Hardware and Software Requirement	46-47
4.7 Documentation	47-48

CHAPTER FIVE

5.1 Summary	49
5.2 Recommendation	50
5.3 Conclusion	51
5.4 Reference	52-53
Appendix.	

CHAPTER ONE

1.0 INTRODUCTION

Computer is an electronic device, which can accept data, store the data and supply the output under the control of a program.

The idea behind the use of computer is to assist in recoding, filling and communicating data and information. It increases efficiency, speeds up record handling, and quick response to the needs of the customer than may be possible under manual system. In the world of business, early knowledge is power.

Introducing computer in the office can also be described as office automation, which is often used to describe the application of computers and other electronic office equipment processing techniques to task normally associated with office work.

There are a variety of human dominated tasks in either a business or government environment, which traditionally are done by specially trained staff. One such activity is typing, using a conventional manual type-writer requires a high degree of hand and eye co-ordination in order to achieve a reasonable rate of output. Error correction in typed text is time consuming and laborious. In order to achieve a high

degree of efficiency, the computer was introduced. In the field of communication; techniques such as electronic mail have made conventional system of inter office memoranda obsolete. Facsimile reproductions of documents is yet another advancement which has reduced the physical handling of documents. In using computers in the office or computing an office work, some of the mode of operation that are normally changed are word processing, communicating facilities, record keeping and some managing tasks such as scheduling, project management. In fact, Computerization is the use of technology to increase and achieve goals in the office environment. Instituting computer system in the office improved the sufficiency of the business, because the computer instantly retrieved and matched job order with applicants. A second result was speedier input of job descriptions. A job order logged in the system by a counselor at the North office at say 10.05am became available, a counselor at metro office later. A third result was the organization which could now monitor its placement by counselor work order, thus if management notice that the South office was swapped with data processing work orders, it could quickly transfer a counselor those who specialized in Data Processing (DP) applicants.

Eventually such as trend would also be spotted under a manual system, but much later. Like an army, the business that can deploy its people where they are most needed has a better chance of success.

1.1 STATEMENT OF THE PROJECT

The computer can if properly used or programmed and installed in the office takes care of several important matters in the office environment, such as storage, calculation, updating, editing and reformatting. In the past, computers have mainly been used for computation, but in recent years, a great recognition has been given to their logic abilities, and this later can turn the computer into competent and efficient copy producer and editor for the office.

One most gradually come to grip with the fact that an electronic record though invisible to eye, is nonetheless a permanent type of record which is, in fact, considerably easier to store, retrieve and protect record than vast files of paper records.

1.2 ABUJA (AN OVERVIEW)

Abuja the new federal Capital territory is situated right in the centre of the country, in the savannah region with it's park-land scenery and wild life. It is a most attractive place to live in. its central position makes it easy for accessibility from all parts of the country. Its healthy

climatic condition low population density availability of land for future expansion and physical planning are all part of its attribute.

Its existence is by Decree No.6 of 1979. it assumed the status of the Nations Capital on the 12th December, 1979.

1.3. SCOPE AND LIMITATION OF THE PROJECT

This covers land division and the method of processing land application to the approval of Certificate of Occupancy (C of O) with land division and it covers 36 state in Nigeria and miscellaneous application (Commercial applications).

1.4. METHODOLOGY

This study covers all the units concerned with data collection about any applicant during registration of landforms up to approval of Certificate of Occupancy. Especially in the land Registry, Data was sorted from individual application form, such data are: Name, Address, Status, Local Government, State, Purpose etc. then the index number which the registry staff give at the point of payment of processing fee. It is only when the aforementioned information are sorted that an applicant is entitled to a piece of plot.

In the Deed registry, the data collected was about application which allocation of land had favoured, such data are:

- (i) File awaiting payment.
- (ii) Bill preparation
- (iii) Consent of Assign
- (iv) Mortgage files
- (v) Power of Attorney.

The methods used in data collection are:

- (i) Record Inspection
- (ii) Observation
- (iii) Interview

1.5. RECORD INSPECTION

During data collection, it was noted that most of all recordings are done manually especially in the Land registry where the data is first noted, the land registry staff are not much to handle all the recordings in the aspect of registration of land forms for application.

Some staff of the department of other jobs or works assigned to them by the Head of the Department and at the same time interfere with work of the registry staff which they know nothing about, for example, the recording and storage of files. The registry staff not

being able to handle or cope with pressure of work causes some of the interference. This interference by non-registry staff brings a lot of problems for the department and the whole ministry at large.

1.6. OBSERVATION

It was observed that data storage is also done manually. The data collected are stored first in the registry and then the form is stored in the cabinet. All the forms are stored according to their states and in serial numbers. In as much as data stored to state serial, a lot of data and important records usually get missing as time goes on. It was also observed that form and files opened for applicants can be misplaced because different people handle these forms and files at different time without keeping proper records of them. Also one was made to understand that files do not move in stages as they are supposed to, which is usually the reason for data and files missing easily during processing.

Equally observed is the fact that some applicants misplaced obtained receipts and acknowledgement letters obtained after payment of processing fees. These often contain file numbers, which are needed for processing of land files. This eventually makes the job more tedious and cumbersome for the registry staff. Applicants a times

forget the year and month such files are open, and because there are no special means of tracing file numbers. Locating the files become a problem, since one would have to go through all the files in the past months and years to locate the file using the applicants name.

All the problems enumerated above could have been take care of adequately if the computer were provided. Detailed information could be so programmed to enable easy tracing of applicants file number using such information as the applicants' name and the state of origin with other salient information that might be of immense assistance.

1.7. INTERVIEW

To achieve the data and fact collection exercise in this project, elaborate efforts were made to interview quite a large number of staff on the mode of land allocation to applicants and to identify those who actually work in the land department, their duties and the various stages involved in the issuance of Certificate of Occupancy to land allottee.

Most problems seemingly encountered seem to have enumerated from recording of data at Land Registry which often manifest in duplication of numbers in the registry which are not often noticed until the collection stages or at the stage when the right of Occupancy (R of O)

or Certificate of occupancy (C of O) are to be issued. This further delays the collection of the aforementioned documents. Their problems can easily be got rid of with the application of computers to land allocation.

CHAPTER TWO

2.0. LITERATURE REVIEW OF LAND/LAND ADMINISTRATION

2.1, GEOGRAPHICAL LOCATION OF FEDERAL CAPITAL

It is located at the geographical centre of the country, it is bounded in the North by Kaduna state, in the East and South-east by Nassarawa State, in the West by Niger State and in the South-west by Kogi state, it falls within latitude 25 degree N.920'N and longitude.

The development of the city is planned in four phases.

2.2. LAND

The term 'Land' connotes different meanings to different people depending upon their outlook and their interest or purpose at anytime.

Land is the solid part of the earth's surface (contrasted with sea and water). And according to Bwarlore (1958) he defined 'Land' as it could apply to a nation, a people or a political division of the earth's surface. Land may also be considered as portion to the earth's surface over which ownership rights may be exercised. These rights relates not just to surface area but also things such as trees which have been attached to the surface by nature, to build and other purpose which lie

either above or below the surface. In this project, 'land' is seen as a conglomerate comprising mainly of rocks, minerals ground/sufficient water and soil. When one views land this way, it becomes evident that it is one of the valuable gifts of God because it more or less constitute the zones of life.

Everybody needs it directly or indirectly because it forms the basis of livelihood in an agricultural economy and the platform upon which labour and capital interact in developed economies.

Land also can be said to be the stage upon which all human act their lives because man is born on the land, he lives on the land and form land that he obtains things that he uses; be it shelter, mineral resources, clothing, fuel and food etc. and when a man dies, his body is buried on land, infact no wonder therefore that individuals, communities and nations defend their rights over land with all their strength and might, sometimes up to the extent of making supreme sacrifice of laying down their lives in the process. National government also defends vigorously their territorial boundaries to ensure that their neighbours do not encroach on these most expensive assets. Since there cannot be a people without land. International boundaries are increasingly becoming sensitive issues in international and community relations as the human population continues to grow

for instance, Egypt and Sudan are at their lowest ebb because of the these countries claim or counter claim of the Halaib Triangle, Nigeria and Cameroun over Bakkasi Peninsula, Somalia and Eritrea over the orgaden region. So do most community conflicts in Nigeria emanate as a result of land interest. Land is a continuum; it's not discrete in the natural setting, it has not got natural boundaries suitable for human occupation; consequently, it has got to be demarcated artificially, parcels of land must be properly defined in industry agriculture since people will spend very much time and energy quarrelling over rights on land. Here, boundaries and their associated problems arise and the land surveying profession is born. An essential working feature of land administration is land surveying.

2.3. LAND ADMINISTRATION

Land administration as a subject can be defined as the study of the relationship of man to land and that of man in relation to land. It is empirical from one country to another. As a function, land administration can be conceived as the exercise of Executive and authority over the land resources of a nation or providing the facilities for the fulfillment of the legitimate needs of a community. Land administration is often characterized by its practical, institutional and problem solving approach.

Apart from function in an executive capacity (which is the case in Abuja) land administration can also function in the following capacities: -

In the field of land administration, such a man is the land administrator. A land administrator is one who mobilizes or facilitates the mobilization of nations' resources or communities land resources, he does this by ensuring that land and its resources are concerned and allocated in most advantages manner both socially and economically.

More specifically, the land administrator:-

- i. Classifies or facilitates the classification of actual land use;
- ii. Assesses potential land use or land capability from such classification and assessment;
- iii. Provide basic information to enable new land development plans of policies to be satisfactory drawn or framed.
- iv. Studies the concepts and implication of land tenure.
- v. Provides means by which sufficient degree of performance and in such a manner as to dissatisfy development requirement with regards to both their physical and abstract qualities.

The work of the land administrators is therefore a very important one because failure to mobilize a nation or community, land resource, especially in countries where agricultural production is still basic to

economic growth and social development. These other functions include co-coordinating, supervisory and advisory.

- i. Co-coordinating: land administration exists to co-ordinate the activities of other technical or executive bodies within the governmental structures to co-ordinate the activities of private institutions dealing with land.
- ii. Supervisory: - Land administration function just like public administration. It is concerned mainly with the maintenance of law and order with the maintenance of law and order with respect to land.
- iii. Advisory: Land administration function in this capacity where rights in land have crystallized, where other institutions dealing with land exist.

2.4. ORGANISATION STRUCTURE

To facilitate the effective and efficient performance of land administration as an institution, it should be grouped along with related institutions or departments within the government. Figure 1 illustrates this, here departments are in one Ministry and technical problems arising from differences in professional perceptions can be reconciled or resolved without getting to the top administrative level,

(the level of Minister). In addition, logistic problems associated with fieldwork can be minimized since some instruments like compass and levels can be shared or placed in a common pool for use by different departments.

2.6 A LAND ADMINISTRATOR

There is a common saying mainly military circles, that "it is not the gun but the soldier behind the gun that makes the difference in a battle field".

However, their task though an important one, is also difficult and delicate. This is because it concerns, apart from the things mentioned above, there are other difficulties encountered during processing of land document hence the decision to write on this type: computerization of land allocation. It is to ease matters to whom ever is concerned with land processing and the method used

ORGANISATION CHART

MINISTRY OF FEDERAL CAPITAL TERRITORY

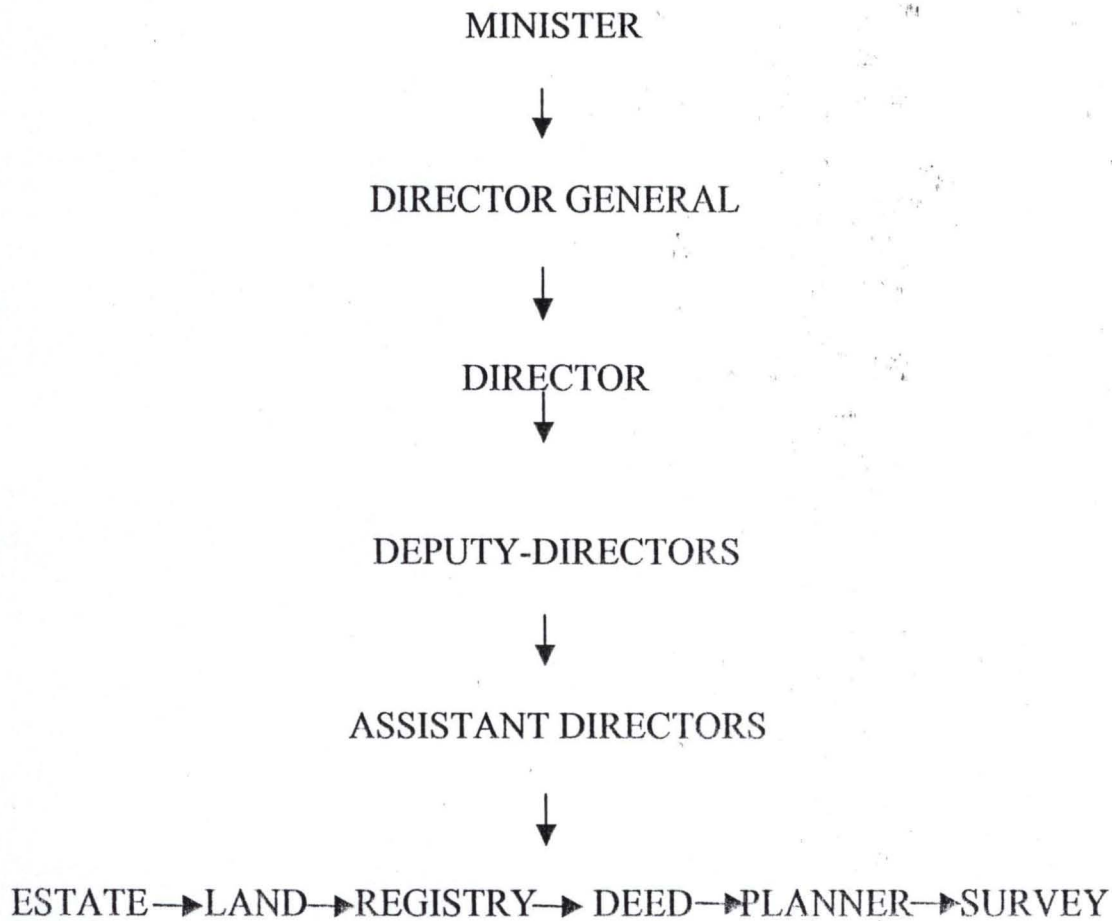


Fig 1.

This Ministry has system of functional department. Related sections are under one administrative head and also conflict can be resolved at departmental level. The main functions as it relate to the above diagram is this: -

MINISTER

Supervision and co-ordination of all policy matters in the Ministry.

DIRECTOR GENERAL

The day-to-day running of the administration of the Ministry and co-ordination of the various departments.

DIRECTORS

Responsible to the D.G and assists in co-ordinating each department in the day-to-day running of the department.

DEPUTY/ASSISTANT DIRECTORS

Assists the Directors in the co-ordination of the various departments they represent. The Honourable Minister of Federal Capital Territory on assumption of office received several complaints from concerned members of the public who had applied for plots of land for almost 15-20years and yet to be allocated a piece of land. Among the allocation noted were: -

- i. Deliberate delays and dishonesty in handling land matters, which was the order of the day.
- ii. Duplication of numbers from registers,
- iii. Some outright illegal allocations had been made;
- iv. Case of one plot being allocated to two or more applications.
- v. No appropriate land management records had been effectively maintained by the department of land, planning and survey.

The most terrible situation had been the absence of proper coordination between the department of land, planning and survey.

Specially the study seek to answer the following questions:-

- i. What role do planners play in land allocation?
- ii. What is the role of land registry staff?
- iii. What does cartography division do in land allocation?
- iv. What is the role of deed registry in Record Keeping after allocation of plot?

The project is aimed at identifying the major factors and find ways of educating and integrating computer into land information system. Thus this will help to defuse people minds against the normal method of record keeping. To effectively do this, data was sourced by the use of designed question like above and interview of some staff of the department. The finding is expected to serve various purpose. The finding will help to fill the gaps in the area of Deed registry and land registry and thus the project also intensifies the integration of modern method of record keeping through computerization will help the management.

2.6. MASTER PLAN

To achieve a more orderly growth such that the target population of 3 million is achieved, the city was divided into four developmental phases as follows: -

PHASES PROJECTED LARGEST POPULATION

Phase 1	230,000	inhabitants
Phase 2	585,000	inhabitants
Phase 3	640,000	inhabitants
Phase 4	1700,000	inhabitants

The phase 1, which comprised the most important and glamorous function of the city, is made up of six districts, which includes: -

Maitama District	-	Residential
Wuse District	-	Residential
Garki District 1&2	-	Residential
Asokoro District	-	Residential
General Business District	-	Business

These are areas of intense activities with the exception of the Central Business District, all the other areas, are meant to be residential. But due to office accommodation contracts, many residential quarters have been temporarily converted to offices.

2.7. RESIDENTIAL DISTRICT

Each residential district is broken into smaller unit called Neighbourhoods. The Garki districts 1 and 2, have eight Neighbourhoods in the residential district of phase 1 of the plan. Each district is served by a district center, while each neighbourhood is served by a neighbourhood center. The district and neighbourhood centers are designed for the distribution of goods and services to the residents.

2.8. THE OBJECTIVE OF LAND, PLANNING AND SURVEY

The objective of land planning and survey department in the Federal Capital Territory, is to ensure not only the proper use of land but also to make sure that the land is equally distributed among Nigerians from different parts of the country and from all works of life. The decision is based on the equality of states and on the ability of the individuals to develop the land allocated to them. They also give advise on the matters and policies connected with the management of land as earlier mentioned. More so, they see to the signature, registering, planning, surveying, mapping and releasing the certificate of occupancy, approving application to mortgage promoters and deed of assignments and collection of land revenue for the ministry.

The Ministry of Federal Capital Territory, through the department of Land, planning and survey liberated procedures for property development in the territory. Right of Occupancy (R of O) is now issued immediately payment for the land is made and Certificate of Occupancy (C of O) is now automatic.

2.9. GUIDELINE FOR PLOT ALLOCATION

As mentioned earlier, the Federal Capital City is divided into four phases. Since the entire land with the Federal Capital is subject to the provision of the land use Decree 1978, it follows that all citizens of Nigeria must have equal right to use and occupy all the lands within the FCT. Allocation of plot is made by the MFCT on the land use allocation committee (LUAC). All recommendations of plot are sent to the Honourable Minister of FCT who signs all the Certificates of Occupancy issued to grantees. All applications for plots within the Federal Capital city must be made to the Ministry on the prescribed forms. It therefore means that only applications for land by individuals and organization made on the prescribed forms will be considered by the Ministry. Each application for plots must be accompanied by an application fee of N20, 000.00 for residential

N150, 000 for commercial and industrial purposes, N5, 500 for place of worship, agriculture, school and two passport photographs, age declaration, three years tax clearance for residential purpose.

Then, if commercial, it has to be accompanied by Certificate of Registration, feasibility study of the project, systematic design of the project, tax clearance, memoranda and article of association of the project.

2.10. QUALIFICATION REQUIRED FOR ALLOCATION

The qualification for allocation of plots within the Federal Capital Territory is that applicants must:-

- i. Be a Nigerian and not below 25 years of age.
- ii. The need to reflect Federal character of the country is also essential to ensure the promotion of unity of the country, which is one of the objectives of establishing the new Federal Capital Territory.
- iii. There is a “one person one plot for residential use” policy. This recognizes the need to control the number of plots which can be allocated to a person within the FCT in order to prevent land “grabbing” for speculative purpose.

- iv. Allottee must show ability to develop within a given period, otherwise the plot will be revoked and given out to other applicants. This will be determined from the detailed form completed application forms.
- v. Application from companies for residential plots to develop housing estates for their workers will also be considered.

2.11. CONDITION OF GRANT

Allottee of plots will be required to comply with conditions of grants as contained in their Certificate of Occupancy (C of O) which must be issued in evidence of such grants. In particular, minimum amount of improvements will be imposed on all categories of users in order to ensure that grantees of plots develop them to reasonable standard befitting the status of the nation capital. An after for a Right of Occupancy (R of O) of allocated plot will be subject to the following conditions.

- i. The offer must be accepted by the allottee within 30 days of the grant;
- ii. Plots allocated must be fully developed within 2 years.
- iii. Rents fixed are subject to revisions from time to time.
- iv. The term of each grant is 99 years maximum for residents.

2.12. LAND RECORD

A land record contains data about land, it contains item such as: -

- i. The soil type (area of the surveyors) and town planners in the write-up.
- ii. Its topographic characteristic such as hill lands, tablelands, plains, foot lopes, channeled drainage floors also this concerns the surveyors and town planners.
- iii. What it is being used for e.g. commercial, agriculture, school, and place of worship EST.
- iv. The total amount of land that is available, this mainly the concern of cartographic unit of land, planning and survey department.
- v. Information on the ownership of the land, the deed registry has the required data.

The importance of a land record cannot be over emphasized because one cannot efficiently and effectively manage something whose size, and other characteristics one does not know. And an essential feature of land, planning and survey department therefore is land record.

2.13. LAND USE POLICY AND PLANNING

From data available in land record, the following use policies and action can be framed: -

- i. Land can be classified according to its intrinsic properties and the various categories. It can be relatively easier to say how much of land group "B" is equal to land group "A".
- ii. Physical planners can provide consultancy services with greater precision, if for instance an investor walk into the office and says, he wants land for a particular purpose, planners will be able to once tell the area where the suitable land can be found and whether or not such land is vacant.
- iii. The objective of land use policy and planning is to ensure national allocation of land among competing uses and users and to guarantee highest and best use, but it is to be noted, that this objective is unlikely to be achieved in the absence of reliable land statistics and method used for allocation of plots. It is however to be further noted that although land records are very important in decision making with respect to land, many problems are encountered in the compilation of reliable land record.

2.14. LAND REGISTRY AND DEED REGISTRY

An important feature of land, planning and survey of MFCT is land Registry and Deed Registry. They are where records about an applicant are kept, such as the rights and interest over land and the nature and boundaries of such titles and rights. These two units takes care of all the transactions that take place in the land. The Deed Registry takes care of preparation of Certificate of Occupancy, Power of Attorney, and Appropriate to Assign, Mortgage. It is the most sensitive unit in land transactions.

2.15 COMPUTER REVIEW

Donald D. Spencer (Third Edition) "INFORMATION PROCESSING", considered computer implementation in office organization. The writer noted that some organizations have different reasons for computerizing, which mostly depend on their jobs or activities, but major reasons are:

- (i) It is a working tool management information system.
- (ii) It handles personnel activities and records as well as organizations' registration services.
- (iii) The cost per unit of output is low if we are to compare it with the manual system.

(iv) The computers' degree of speed and accuracy in the processing of data is beyond human capability.

(v) The computer can work our optimum solution to a problem.

The views, opinions or contributions of other workers in considering the importance of records keeping and database management in land allocation is very much appreciated.

Reason for this can be considered under three sub-headings.

(i) Manual Procedure.

(ii) Mechanised Procedure

(iii) Computerised Procedure

EDWARD J. LAUNE in his write-up "COMPUTER AND SOCIETY", manual procedures is defined as a system, where all organizational recordings are done by hand and stored in the database management (Usually in cabinets).

Computerized procedure is a system that makes use of electronic devices for collecting, analysis, and recording, storing retrieval of data.

ROBERT H. BILISMAR and RONARD H. ALDEN (1980) noted that with computerization of office proceedings it will eliminate the previous manual and mechanized system such as: -

(ii) Mis-filing/lost records, personnel turnover, job boredom.

- (iii) Duplication of Numbers.
- (iv) Mis-spelling of names.
- (v) Calculation of numbers of applicant on monthly basis.
- (vi) Entry of data at wrong places.

The computer will thus:

- (i) Check for misspellings
- (ii) Check for number duplicated
- (iii) Store the data for future use with out lost of records or important data.

Now some of the tasks performed by the two or more registry staff with computerization available will be carried out by the computer system thereby creating room for professional decision making.

2.16. IMPACT OF COMPUTERISATION

Robert Bilismer and Ronard H. Alden in their book "WORKING WITH COMPUTER", highlighted some advantages or benefits of computerization. There main points noted were to increase efficiency and effectiveness.

Every organization succeeds through proper records keeping. The use of computer database system and computer aided microfiche system not only ensure proper and accurate record keeping but also ensures

the security of the data and its integrity. To keep in line with the faster moving rate of organizational activities, one needs a "helper", that can ensure prompt release of information when needed since "time is money". This "helper", can only be found in computers. The computers have the ability to store quantity of data in a very large area, the computer can maintain very old records and quickly gain access to them.

Computers are said to assist man in his business and many works of life. They reduce our complicated problems to simple level. Computers do not suffer human beings of tiredness and lack of concentration as compared with the manual method.

The aforementioned writers above have clearly shown the impact of computerization of organizational operations, which has improved the quality and accelerated the speed of services rendered to people.

2.17. OBJECTIVES OF STUDY

The objective of this project is to identify the degree to which public face problem in processing of their application for land especially in areas of duplication of numbers, bottleneck in some offices where application are being processed. The objective of this project is to identify processes involved in land allocation and factors that affect

plot allocation. In an attempt therefore to identify these processes, the following were taken into consideration:-

- i. Study the existing procedure in handling of matters relating to land allocation.
- ii. Study areas of obstacle militating against speedy processing of application for land and recommending appropriate measure aimed at eliminating such problems.
- iii. Recommend a suitable system of proper keeping of land matter records with a view of ensuring an efficient and effective information system.

CHAPTER THREE

3.0 SYSTEM ANALYSIS AND DESIGN

3.1 PROBLEM DEFINITION

There are a number of problems identified with the manual system of land allocation or method of processing applications for land allocation.

These are: -

- (i) The registration of land application is prone to mistakes especially in the duplication number. This occurs frequently with manual system. But this can be solved by writing a program that will check numbers entered at any moment the operation of registration is being done.
- (ii) Lost Records:- Land, planning and survey have enormous quantities of chart, maps and other vital documents on paper to handle especially the land registry, deed registry, and cartography unit. The result is that files can grow large and complex or chart, maps may grow old and worn-out. The size and complexity alone will cause record to get lost. It is not even necessary that records be misfiled, only that the person searching for the record is not aware of all the possible classification under which the record could have been filed. The

more staff performing the filling function, the more likely there natural differences are to occur.

The rate of turn over can materially affect the result the higher the turnover the more often the errors are likely to occur and the more difficult the task of clearing up filing problem on that part of the long-term regular personnel. The problem can be solved by computerizing the whole files in the land registry and deed registry and other sections that deal with paper to enable the computer to retrieve, or gain access to data and up date record as the case may be within a give time.

(iii). Performance of labour Extensive job:- the performance of labour extensive jobs in the manual system involved the filling.

- A. Registration of application form
- B. Storing the file in the cabinet as the database
- C. Retrieving of file processing
- D. Receiving back file non-availability of plot.
- E. Tracing movement of files from one office to another.

A lot of time is involved. To eliminate these problems, all the aforementioned procedures should be computerized and this will make the work enjoyable and also increase the rate of turnover.

(IV) Paper is the most expensive medium of land, planning and survey used for storing information or data. This can be solved by using

office system with electronic storage and retrieval capabilities as electronic filing cabinets, as well as work processors, with this method one can see that electronic filing gives 80-90% better access to store documents than do traditional filing methods and at lower costs.

(V) Bottlenecks:

Land planning and survey department runs into problem of bottleneck in the communication lines, for example, the minister may write a memo requesting for a file but the memo is put in an 'in' register somewhere, and there it sits as the hours tick by and days march along to months, no action takes place because of the important document left alone and unattended. There is no automatic monitoring system to do a follow-up and a check on precisely where the document is and whether someone is doing something about it, because of the largeness of the office, there are varieties in the types of documents and more staff is involved in processing these documents. So they are prone to bottlenecks that is where the work stops and time and money are being wasted.

Bottleneck may be either accident or deliberate.

In many groups of people, there are bound to be difficulties from time to time in matters of interpersonal relations.

It is not rare that someone sitting at control position in a paper net work/that single point where a document must pass before it is spread out through the other offices), can sabotage who has become an 'enemy', real or imaginary.

The deliberate bottleneck is harder to deal with but fortunately makes up the smaller amount of the problem. The inadvertent bottleneck one discovered, can be and quickly cured. The most typical case is over working some officers' encounter when a critical person at a desk is receiving more actual work than can be properly dealt with. In such a case, a backlog piles up and an automatic and continually increased delay system is set up. The aim is to divide the work properly after determining just how much of load each critical point desk can actually handle.

This problem can be eliminated by computerizing just how much of load each critical point desk can actually handle.

This problem can be eliminated by computerizing all offices concerned and they should be linked in a network so that officers can Internet with one without moving from office to office.

3.2 THE MANUAL SYSTEM ANALYSIS.

At this stage, is a general description of the manual operation in the land, planning and survey department. Especially the area that deals with record keeping, or data storage (land registry and deed registry) is our concern here.

The first point where data are recorded is at the land registry, everything is done manually, first, the applicant collects application from the revenue at the rate of N1, 000 for residential or 2,000 for commercial firm, then supply all the necessary information needed, submit the form with N15, 000, for commercial which is the processing fee.

Before the payment, a number is given by the registry staffs that are in charge of any form before payment is made. This is to ensure that the number obtained at the registry is accurate before payment, after, payment, acknowledgment letter is issued to accompany the payment receipt.

3.3 MODE OF DATA STORAGE

After payment, the file or form is being stored manually in the cabinet room where files are kept until they are required for by the Director, Deputy Director or even the Minister.

3.4 RETRIEVAL OF FILE NUMBER

Occasionally, most applicants who by share carelessness or misfortune misplace receipt or number given to them at point of payment now com for tracing of their file number sometimes many may not remember the month or year file was open or even in which state it was registered, thereby creating tedious work for the registry staff or the tracing of the number using only name of the applicant, all there takes time, energy, resulting in slowing down department work.

3.5 MOVEMENT OF FILES

Sometimes an officer many refuse a file and the file is being recorded against him or but as time passes by, another officer may request for that particular file because its been long the file went act, it cannot be located at the cabinet nor at the out going register, not the incoming register for returned files, this creates a lot of work for the person in charge sometimes, the staff who may happen to be there at the time the file is being requested for, may not be at the department or even at the Ministry.

When this file is previously sent out or the old register is no where to be found or it is from. This create a lot of problems in the whole department, often people mis-interpret it negatively, thereby given the department an ugly lineage.

3.6 PROCEDURE FOR PLOT ALLOCATION

The under listed procedures are necessary for plot allocation:-

- (1) Application made
- (2) Processing of plots
- (3) Earning of plots
- (4) Compilation of list of applicants
- (5) Recommendation
- (6) Forwarding to Minister for approval
- (7) Ministers approval
- (8) Approved list from Minister
- (9) Issuing of letter of grant (R of O) to allottee
- (10) Acceptance of letter of letter of grant.
- (11) Charting
- (12) Printing
- (13) Preparation of initial bill and Certificate of occupancy (C of O)
- (14) Forwarding of C of O for Ministers approval
- (15) Issuing of C of O to allottee (Certificate of Occupancy)

3.7 DATA FLOW DIAGRAM

In all these procedures, files pass from one file to another and as files pass from one desk, records are being kept about them to make it easy for future use or reference.

During the interview carried out, some officers confessed that they have nothing to use to keep records about files they treat. In this case data or file can easily be misplaced.

The planners also keep records about the plots or district or phases as was mentioned before that Abuja city is made up of different phases which is in maps, sometimes, those maps get so old or worn out that cannot read anything from them. The surveyors both regional surveyors and cadastral surveyors all keep records about areas surveyed such as plots in the city centre which is about 2000 plots, Garki 1 and 2 about 2,500, 1800 is Asokoro, the are Maitama.

3.8 THE CARTOGRAPHY UNIT

This unit keeps records about the preparation of Title of Deed plans, file during and administrative revision maps. More than 30,000 chart and reports, title deeds, plans and varying TDP were done for state, Federal Government and others. It is the duty of the cartography unit to keep records about plot allocated applicant to avoid double allocation.

3.9 CAPABILITY OF MANUAL SYSTEM

- (i) In spite of the fact that the method employed in the handling of information about applicant-files was tedious and cumbersome,

the information then selves are accurate and in some situation they are not.

- (ii) The manual system enables the spilt to interact with each other especially between junior and senior staff and even the Minister and Director.
- (iii) The manual system also enables the spilt to meet people face to face. That is people of all categories.

3.10 SYSTEM DESIGN

An information system design is the solution to a business organization. Problem design demands the translation of the required problem uncovered in analysis into possible ways of meeting them.

The design of this section will amount from existing system such as the method of registration of application, tracing of files, processing method, storage of files or data about an applicant.

Everything is done manually thereby creating problems to the system.

They include the followings.

- (i) Using register to trace movement of files
- (ii) Storage of charts, maps for plots, which had been allocated.
- (iii) Checking for double allocation manually
- (iv) Accessing whether all the methods are met.

Nevertheless, the system developed is very friendly in that will prompt you to select an option in the menu specification. The main menu option gives a numbered list of options (work to be carried out). The option listed drives to a procedure within a completion of every selected task; the user is returned to the application menu. If not correct, the appropriate message or query is displayed such as file numbers already or does not exist, double numbering, file had been sent out, not authorized to use the system and so on this will give room for correction before harm is done to the department.

The first thing to expect when the system is switch on is the "PASSWORD" to be entered. The user may be hogged out after may attempts to log into the system. But if the password is entered then it will now give access to whoever that enters such password and processing of files begins. In the case of registering of form for application, it hill first check for curtness of numbers entered whether it amount to double entry or in the case of allocation of plot it will check to make sure that this piece of land is not given to low applicants. After making sure that the number to an applicant is not duplicated, it will then refutes for the first name, surname, Address, State of origin and status.

In the case of processing a file, it may request for a number and name, if the file is still in the cabinet or database, the appropriate information is given like, file impact, but if sent out, the system gives message like file not form or please check director's office and with date it was sent there.

In the case of checking for a particular number, the system will give a message such as "please enter the name of applicant and state", the system should responded as, the applicant number or otherwise file number not existing or not fund.

For allocation the system gives the rightful owner of a particular plot when a wrong one is entered by given a message like plot belongs to a particular person or plot already committed.

3.11 ADVANTAGES OF THE COMPUTERISED SYSTEM

- (i) The problem of duplication of number and double allocation in the land processing will automatically stop.
- (iii) The time required to trace files is reduced.
- (iv) Expenses are also reduced, since most of the manual operation involve like writing in registers of different kind. Also in the movement of register a lot of money is involved.
- (v) More job Opportunity for the unemployed

CHAPTER FOUR

4.0 SYSTEM IMPLEMENTATION

4.1. INTRODUCTION

The development of land allocation processing system used the modular approach to get solution to the difficulties met.

The system design is divided into modules meeting one problem. Any module can be executed by user through choosing from the main program only. There are modules in all. The main program displays the choice from where to choose for the system, that is the system program is menu driven.

4.2 CHOICE OF PROGRAMMING LANGUAGE

The module takes care of activities of program. Initially the module request normal beginning (Norm-begin) for the user to enter password. After required attempts and the password is incorrect, the program will continue type or enter password. After required attempts and the password is incorrect, the program will continue to the next step to accept number for registration of land from and land accordingly.

Any period the computer is booted or started, it should check the day's date against the previous date the program was run. The series

number is check for any state that is being processed before entering another number.

After the beginning booting had been run, the main menu is displayed and the user selects any option which he or she wants to process or deal with at a particular time. The main menu is made up of the following choice which could be chosen by the user to solve the save situation.

(a) APPLICATION RECORD

Choice of choosing if a new record is to be recorded for any applicant for any state and this as the first choice of the main menu. This selection allows user to enter data or create a new record for new applicant, series number is first typed in the space provided for the purpose if the number typed is in existence, the program will be able to give message and prompt the user to enter or type a number that is non existing before any particular state typed or entered.

(b) FILE MOVEMENT

This stage confirm that the file is in existence, is still intact where files are stored or at the database processing further. The program should be able to check for the state number is typed to be sure that the number is correct, and if the file had been

sent out it should be able to say where, when and at what stage, whether plot had been allocated to it or not and what area and size. But if the file is not out, it should be able to display appropriate message tell the user no action on the file.

(c) INQUIRING

One is prone to mistake or carelessness when one lost his or her number, this state or step should make it possible that when one entered or typed the name and state, the program should be able to display appropriate number corresponding to the number and state typed.

(d) UPDATE

This stage has many submenus when chosen, this stage should reflect the submenu where all information needed about a particular file or individual record can be carried out.

(e) PLOT ALLOCATED

Whenever an applicant is allocated a piece of land this state is used to hold the information so that the program can be displayed.

(ii) COLLECTED CERTIFICATE OF OCCUPANCY

Whenever applicant collect C of O this option is used to display the appropriate information needed for instance, the program should be able to display who collected it, payment, or what date.

(iii) DOUBLE ALLOCATION

Anytime two applicants happened to be given the same piece of land, this option should be able to display it and whether alternative is issued to one person or not.

(vi) REPORTS

This state is to give or state output. It leads to a submenu options, which in turn leads to another submenu that is screen or paper. The screen option is selected to new output result from the passed menu on screen and paper option to print the result from printer.

(a) REPORT BASED STATE

This option will give detailed information about each state, the number of application received so far in each state.

(b) REPORT ON PLOT ALLOCATION

This option will give all information about plot allocated to applicant, as well as district and phase.

(c) REPORT ON STATISTICS

To print or view the statistics of number of applicant on monthly basis or yearly or weekly, for management decision.

(d) EXIT

The user may want rest for the day's work or to close for the day, this stage will stop execution of any program, it will close all files opened, remove program from main memory and operating system takes control.

4.3 FEATURES OF LANGUAGE CHOSEN

The language chosen is Visual Basic, which is the most widely used object, oriented programming language. The Microsoft windows operating system provides the user with a simple graphical users interface (G.U.I). In this GUI, a user controls the computer operations by moving a pointer and selecting icons.

Visual Basic provides the programmer with tool box of user interface design interfaces with point-and-click, quickly design interfaces with point-and -click, drag-and-drop-ease. In order to create a user interface, the programmer needs only to select the desired control from the toolbox and place them in the program, so Visual Basic is designed as a language for rapid application development (RAD) under the window operating system. It allows a programmer to easily design a user interface that satisfies the customers' requirements.

DISK DRIVE: Detached 3.5 MC Disk drive of 1.44MB Capacity

KEYBOARD: Detached typewriter style

PRINTER: Laser printer desk jet 640C and above with and adaptor or a laser jet 1100 series.

UPS: Uninterruptible Power Supply

STABILIZER: 250 Voltage accumulator and above

SOFTWARE: This refers to programs written to solve users problem.

These includes system software and application software

O.S - DOS, MS-DOS, Windows 98, window 2000, window XP etc.

PACKAGE - Visual Basic Package

4.7 DOCUMENTATION

This is necessary to keep user abreast of the importance and implementation of the system. The final report covering the entire designed system must be documented showing every aspect of the actions. An operating system like PC-DOS, MS-DOS, Windows 98 etc are essential to start up the computer the application is then installed on the hard disk or load from a floppy diskette 3.5inch each time its needed. The disk is however protected from virus attack. For security of the software to be maintained from unauthorized users, the package has a built in security system called PASSWORD which only

the operators has acknowledge of and until such is entered the
package cannot be used.

PROGRAM OUTPUT

INTRO FORM

Document 4 WordPad

File Edit View Insert Format Help

1 2 3 4 5 6 7

**LAND
ALLOCATION
SYSTEM**

BY: ADANI OLABISI MICHEAL
Ecc/Mes/sssE/2001/2002/1113

For Help, press F1

Start Project... Microso... Docum... VisData... CAP NUM 12:31 PM

APPLICATION FORM

FILE REPORTS

APPLICATION FORM

SURNAME AYESIMI

FIRST NAME YOMI

OTHER NAMES

STATE OF ORIGIN YOGI

DATE OPENED 11/27/2000

STATUS MARRIED

SEX MALE

POSTAL ADDRESS P. O. BOX 2, MINNA, NIGER STATE

HOME ADDRESS IUTA ROAD, MINNA

OK CANCEL

Start Project... Microso... Docu... VisD... 12:35 PM

FILE REGISTRATION FORM

FILE REPORTS _ | 5 | x |

FILE REGISTRATION

SU	FILE NUMBER	0003
FIF	DISTRICT	MAITAMA
OT	AREA	GAHA
ST	PLOT NUMBER	730
DA	<input type="button" value="SUBMIT"/> <input type="button" value="CANCEL"/>	
SE		
PO		

HOME ADDRESS

Start | Pr... | W/M... | Do... | Vis... | 12:36 PM

CERTIFICATE OF OCCUPANCY

FILE REPORTS _ | 5 | x |

Start | Pr... | W/M... | Do... | Vis... | 12:36 PM

ENQUIRY FORM

FILE REPORTS

ENQUIRY FORM

FILE NUMBER

DISTRICT

AREA

PLOT NUMBER

AMOUNT PAID

DATE OF PAYMENT

SURNAME

FIRSTNAME

POSTAL ADDRESS

HOME ADDRESS

CLEAR

SUMMARY OF STATE ALLOCATION

DataReport2

Zoom 100%

SUMMARY OF STATE ALLOCATION

STATE NAME	FILE NUMBER	DISTRICT	AREA	PLOT
KOGI	78	BUKURU	PAIKO	46-B
SUNDAY	SUNDAY			
KWARA	90	MAITAMA	QANA	76-B
AWOYOYE	YINKA			
	22	XZ	ZX	87

Pages: 1/1

Start | Proj... | Micr... | Docu... | VisD... | Data... 12:58 PM

REPORT OF CERTIFICATE OF OCCUPANCY ISSUED

DataReport1

Zoom 100%

CERTIFICATE OF OCCUPANCY

FILE NUMBER	DATE	DISTRICT	AREA	SURNAME	PAYMENT
90	10/29/2003	MAITAMA	QANA	AWOYOYE	5000000
0001	30/10/03	MAITAMA	QANA	AJANI	5000000
0003	20/11/2003	MAITAMA	QANA	DR. AIYESIMI	5000000

Pages: 1/1

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CHAPTER FIVE

5.1. SUMMARY

In general, the computerization of land, planning and survey department is very labourious. The computerization can be done with much investigations and study of operations done in the department to sort out the management and the department requirements and needs. The goal of this techniques task will no doubt diffuse people's minds about computerization. The investigation has revealed that the computerization system brings about vast changes in the way the department or organization concerned conduct their day to day activities which occur too rapidly and also frequently. Despite the rapid and frequent nature in which activities are to conduct people are not disoriented or alienated rather new jobs are continuously being created. On the part of the management carder of operations, computerization reduces operational cost and fasten the processing of file due to time by retrieval of information required.

5.2. RECOMMENDATIONS

The department should organize seminars and symposia to let staff see and acknowledge the significance of computerization and its profound effect on efficient and effective development in the modern world of science and technology. It believe that this will go a long way in educating users of computers that efficient and effective processing will not be achieved without the use of knowledgeable hand/expert in the domain of computer. This will enhance efficient allocation and speedy processing of land now and in the next millennium too.

5.3. CONCLUSION

In conclusion, computerization in any organization is a function of the volume of activities on the ground for processing. The availability of the resources on the ground to enhance computerization, also the cost benefit analysis of the activities and resources available are of immense significance. It is therefore pertinent that for effective and efficient decision making on land, planning, and the survey departments, experts in land management, planners, surveyors and those knowledgeable in land administration should be highly proficient in the field of computer.

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PROGRAM CODES

CODE FOR FORM2

```
Dim fnum, st, dis, are, plot As Variant  
Dim flag1 As Integer
```

```
Private Sub cmdcancel_Click()  
Unload Me
```

```
Form1.txtsname = ""  
Form1.txtfname = ""  
Form1.txtname = ""  
Form1.txtsoorigin = ""  
Form1.txtdate = ""  
Form1.cbostatus = ""  
Form1.cbosex = ""  
Form1.txtaddress = ""  
Form1.txtthaddress = ""
```

```
End Sub
```

```
Private Sub cmdsubmit_Click()
```

```
flag1 = 0
```

```
fnum = UCase(Trim(txtfnum.Text))
```

```
If fnum = "" Then
```

```
MsgBox "FILE NUMBER CANNOT BE BLANK!", vbInformation
```

```
Exit Sub
```

```
End If
```

```
dis = UCase(Trim(txtdistrict.Text))
```

```
are = UCase(Trim(txtarea.Text))
```

```
plot = UCase(Trim(txtpnum.Text))
```

```
With Data1.Recordset
```

```
.MoveFirst
```

```
5 If .EOF Then: GoTo 10
```

```
If ((dis = !district) And (are = !area) And (plot = !plotno)) Then
```

```
MsgBox "PLOT HAS ALREADY BEEN ALLOCATED", vbOKOnly
```

```
flag1 = 1
```

```
Form1.txtsname = ""
```

```
Form1.txtfname = ""
```

```
Form1.txtname = ""
```

```
Form1.txtsoorigin = ""
```

```
Form1.txtdate = ""
```

```
Form1.cbostatus = ""
```

```
Form1.cbosex = ""
```

```

Form1.txtaddress = ""
Form1.txthaddress = ""
txtfnum = ""
txtdistrict = ""
txtarea = ""
txtpnum = ""
Exit Sub
Elseif ((UCase(!surname) = UCase(Trim(Form1.txtsname.Text))) And _
(UCase(!fname) = UCase(Trim(Form1.txtfname.Text))) And _
(UCase(!onames) = UCase(Trim(Form1.txtoname.Text)))) Then
MsgBox "A PLOT HAS ALREADY BEEN ALLOCATED TO THIS
INDIVIDUAL" & _
vbCrLf & "DOUBLE ALLOCATION IS NOT ALLOWED",
vbInformation
Form1.txtsname = ""
Form1.txtfname = ""
Form1.txtoname = ""
Form1.txtsoorigin = ""
Form1.txtdate = ""
Form1.cbostatus = ""
Form1.cbosex = ""
Form1.txtaddress = ""
Form1.txthaddress = ""
txtfnum = ""
txtdistrict = ""
txtarea = ""
txtpnum = ""
Exit Sub
Else
.MoveNext
GoTo 5
End If
End With

10 If flag1 = 0 Then
With Data1.Recordset
.MoveLast
.AddNew
!surname = UCase(Trim(Form1.txtsname.Text))
!fname = UCase(Trim(Form1.txtfname.Text))
!onames = UCase(Trim(Form1.txtoname.Text))
!soo = UCase(Trim(Form1.txtsoorigin.Text))
!ldate = UCase(Trim(Form1.txtdate.Text))
!mstatus = UCase(Trim(Form1.cbostatus.Text))
!sex = UCase(Trim(Form1.cbosex.Text))

```



```

!padd = UCase(Trim(Form1.txtpaddress.Text))
!hadd = UCase(Trim(Form1.txthaddress.Text))
!fnum = UCase(Trim(txtfnum.Text))
!district = UCase(Trim(txtdistrict.Text))
!area = UCase(Trim(txtarea.Text))
!plotno = UCase(Trim(txtpnum.Text))
.Update

End With
End If

Form1.txtsname = ""
Form1.txtfname = ""
Form1.txtoname = ""
Form1.txtsoorigin = ""
Form1.txtdate = ""
Form1.cbostatus = ""
Form1.cbosex = ""
Form1.txtpaddress = ""
Form1.txthaddress = ""
txtfnum = ""
txtstate = ""
txtdistrict = ""
txtarea = ""
txtpnum = ""
End Sub

Private Sub Form_Load()
Data1.DatabaseName = App.Path & "\appfrm.mdb"
Data1.RecordSource = "APPLICATION"
Form2.Height = 4440
Form2.Width = 5745
End Sub

```

CODE FOR FORM1

```

Private Sub cmdcancel_Click()
Unload Me
End Sub

Private Sub cmdok_Click()
Form2.Show
End Sub

Private Sub Form_Activate()

```

```
'txtsname = ""  
txtdate.Text = Date  
txtsname.SetFocus  
End Sub
```

```
Private Sub Form_Load()  
Form1.Height = 6375  
Form1.Width = 6660  
End Sub
```

CODE FOR FORM3

```
Dim flag1 As Integer
```

```
Private Sub cmdcancel_Click()  
Me.Hide  
End Sub
```

```
Private Sub cmdok_Click()
```

```
    If UCase(Trim(txtfnum.Text)) = "" Then  
        MsgBox "FILE NUMBER CANNOT BE BLANK PLEASE", vbInformation  
        Exit Sub  
    End If
```

```
    st = UCase(Trim(txtstate))  
    dist = UCase(Trim(txtdistrict.Text))  
    ar = UCase(Trim(txtarea.Text))  
    plot = UCase(Trim(txtplotnum.Text))
```

```
    With Data2.Recordset  
        .MoveFirst  
5    If .EOF Then  
        MsgBox "THIS PLOT HAS NOT BEEN ALLOCATED!", vbInformation  
        Exit Sub  
        ElseIf st = ![states] And dist = ![district] And ar = ![area] And plot = ![plotno] Then  
            flag1 = 1  
        Else  
            .MoveNext  
            GoTo 5  
        End If  
    End With
```

```
    If flag1 = 1 Then  
        With Data1.Recordset  
            .AddNew
```

```

        ![fnum] = UCase(Trim(txtfnum.Text))
        ![tdate] = Trim(txtdate.Text)
        ![district] = UCase(Trim(txtdistrict.Text))
        ![area] = UCase(Trim(txtarea.Text))
        ![surname] = UCase(Trim(txtsname.Text))
        ![fname] = UCase(Trim(txtfname.Text))
        ![payment] = UCase(Trim(txtpay.Text))
        ![tstate] = UCase(Trim(txtstate.Text))
        ![plotnum] = UCase(Trim(txtplotnum.Text))
        .Update
        MsgBox "CERTIFICATE HAS BEEN REGISTERED", vbInformation
    End With
    txtfnum.Text = ""
    txtdate.Text = ""
    txtdistrict.Text = ""
    txtarea.Text = ""
    txtsname.Text = ""
    txtfname.Text = ""
    txtpay.Text = ""
    txtstate.Text = ""
    txtplotnum.Text = ""
End If
End Sub

Private Sub Form_Activate()
    flag1 = 0
End Sub

Private Sub Form_Load()
    Data1.DatabaseName = App.Path & "\appfrm.mdb"
    Data1.RecordSource = "CERTIFICATE OF OCCUPANCY"
    Data2.DatabaseName = App.Path & "\appfrm.mdb"
    Data2.RecordSource = "APPLICATION"
    Me.Height = 5625
    Me.Width = 6480
End Sub

```

CODE FOR FORM4

```

Dim filenum As Variant
Dim flag1, flag2 As Integer
Dim cap As Variant

Private Sub cmdcancel_Click()
    Me.Hide
End Sub

```



```
Private Sub cmdclear_Click()
```

```
    txtfnum.Text = ""  
    txtdistrict.Text = ""  
    txtarea.Text = ""  
    txtpnum.Text = ""  
    txtsname.Text = ""  
    txtfname.Text = ""  
    txtpaddress.Text = ""  
    txthaddress.Text = ""  
    txtpay.Text = ""  
    txtdpay.Text = ""  
    cmdclear.SetFocus
```

```
End Sub
```

```
Private Sub Form_Activate()
```

```
    flag1 = 0  
    txtfnum.Text = ""  
    txtdistrict.Text = ""  
    txtarea.Text = ""  
    txtpnum.Text = ""  
    txtsname.Text = ""  
    txtfname.Text = ""  
    txtpaddress.Text = ""  
    txthaddress.Text = ""  
    txtpay.Text = ""  
    txtdpay.Text = ""  
    cmdclear.SetFocus
```

```
End Sub
```

```
Private Sub Form_Load()
```

```
    Data2.DatabaseName = App.Path & "\appfrm.mdb"  
    Data2.RecordSource = "CERTIFICATE OF OCCUPANCY"  
    Data1.DatabaseName = App.Path & "\appfrm.mdb"  
    Data1.RecordSource = "APPLICATION"
```

```
End Sub
```

```
Private Sub txtfnum_LostFocus()
```

```
    filenum = UCase(Trim(txtfnum.Text))
```

```
With Data1.Recordset
```

```
    .MoveFirst
```

```
5   If .EOF Then
```

```
        MsgBox "FILE NUMBER DOES NOT EXIST", vbOKOnly  
        txtfnum.Text = ""
```

```

cmdcancel.SetFocus
Exit Sub
ElseIf filenum = ![fnum] Then
txtdistrict.Text = ![district]
txtarea.Text = ![area]
txtpnum.Text = ![plotno]
txtsname.Text = ![surname]
txtfname.Text = ![fname]
txtpaddress.Text = ![padd]
txthaddress.Text = ![hadd]
flag1 = 1
Call datcoll
Else
.MoveNext
GoTo 5
End If
End With
End Sub

```

```

Private Sub datcoll()
With Data2.Recordset
.MoveFirst
10 If .EOF Then
MsgBox "FILE NUMBER DOES NOT EXIST", vbOKOnly
txtfnum.Text = ""
txtfnum.SetFocus
Exit Sub
ElseIf flag1 = 1 Then
!.MoveFirst
If filenum = ![fnum] Then
txtpay.Text = ![payment]
txtdpay.Text = ![tdate]
End If
Else
.MoveNext
GoTo 10
End If
End With
End Sub

```

CODE FOR FORM5

```
Dim pword As String
```

```
Private Sub Command1_Click()
```

```
pword = Text2.Text  
If pword = "land" Then  
Me.Hide  
MDIForm1.Show  
Else  
MsgBox "WRONG PASSWORD", vbCritical, "SECURITY ALERT"  
Text2.Text = ""  
Text2.SetFocus
```

```
End If
```

```
End Sub
```

```
Private Sub Command2_Click()
```

```
End
```

```
End Sub
```

```
Private Sub Form_Activate()
```

```
Text2.SetFocus
```

```
End Sub
```

CODE FOR FORM6

```
Private Sub Timer1_Timer()
```

```
Form5.Show
```

```
Unload Me
```

```
End Sub
```