

## AN ARCHIVES FOR A UNIVERSITY IN SUB-SAHARAN AFRICA: THE CASE FOR THE UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

Mrs Helena R. Asamoah-Hassan, BLS MA  
University Library

University of Science and Technology, Kumasi, Ghana

### ABSTRACT

*Types of archival institutions are enumerated. The need for and usefulness of an archival collection for a university are stated. Materials which should be kept in the archival institution, preliminary decisions to be taken and facilities to be provided like storage facilities, policy, funding, staffing, record centres and preservation methods are then stated. The strategy for setting up an archives for the University of Science and Technology, Kumasi is discussed. Ways to be used for processing the materials and finding aids to be provided are further discussed. Basic rules to be obeyed for the conservation of archival materials as well as methods like lamination, reprography, repair by paper and by leather among others are described. Some major agents which militate against the successful preservation of archival documents are enumerated. The means through which they destroy documents are stated. Likely remedies are then preferred to counteract the operations of these agents.*

**Keywords:** archives; records centre; parchment; backing; framing; gauzing; sizing; preservation; conservation.

### INTRODUCTION

Archival institutions in universities in sub-saharan Africa are almost non-existent. In Nigeria, the Ahmadu Bello University is the only university which has embarked on setting up an archives; universities in Lagos and Ibadan have record centres.<sup>1</sup> In Ghana, none of the five universities has any such well organised collection, but in actual essence it is the archives which should be the only repository storing documents reflecting the history and developmental successes and failures of these universities.

An archives may be defined as "a repository of public records or of records and monuments generally"<sup>2</sup>,

or a place in which public records or historic documents are kept or a historical record or document so preserved. Schellenberg defines archival documents as "those records of any public or private institution which are adjudged worthy of permanent preservation for reference and research purposes and which have been deposited or have been selected for deposit in an archival institution."<sup>3</sup> From the above one can conveniently deduce that an archives is the records created or received by an individual, group of persons or an organisation. It is a joint memory in document or photographic form, of the experiences of an organisation or institution. Also it is the institution which keeps these documents.

An archives constitutes a primary source information on the history and has relationship with the current functions and objectives of the institution. Archival documents assist in evaluating activities of parent organisations and also for the planning of its future activities. It is in this light that libraries and archival institutions are not poles apart. Their functions interrelate, that is, they both acquire materials, process and store them for use. Hepworth said that "the acquisition of archives and manuscripts is a legitimate purpose of libraries serving the interests of scholarship and research."<sup>4</sup> To this end, many useful manuscripts are preserved in libraries of different types today.

An archival collection is an asset to any institution. It presents an impartial body of information because one cannot carve out some parts of the document for exclusion. It is also authentic since it is a primary source of information. It has come out through the day to day activities of the office.

A document becomes an archival material when it is not in current use. The age at which an organisation's document moves from current to archival and from archival use to uselessness is a matter of policy, resting solely on the institution; but the reference and research values of such a document must always be borne in mind because the documents are proofs of the organisation's policies, functions, decisions and other activities. A guideline to assist in such deci-



Helena Asamoah-Hassan

sion making is to practise selective preservation, where only some very important documents are selected for permanent archival purpose, and the rest destroyed after a decided period of time.

An archive is therefore necessary for any organization, big or small, private or government, old or new and for universities in sub-saharan Africa. Archival institutions existed in ancient times and still exist today because they are invaluable repositories of our yesteryears. Shipton stressed the importance of university archives as being "... historical treasure that can be exploited..."<sup>5</sup>

#### Types of Archival Institutions

Archival institutions vary by the type of materials and documents they keep, but they all serve the same purpose of keeping very important documents and materials for future use. These include

1. **National Archives** which keeps the nation's most treasured documents and materials of historical and developmental value for future retrieval and use. The Ghana National Archives is an example.
2. **Business or Company Archives** usually consisting of records of business organisations which are of research and administrative value.
3. **Religious Archives** serving their parent institutions like Churches, Convents, Seminaries and Islamic Centres.
4. **Government Archives** comprising mainly files and documents which have value for administrative and financial future reference.
5. **Private Archives** set up by individuals and consist of their personal documents and manuscripts, family history and other documents acquired through correspondence or at the work place. These are usually kept for the use of their children and grandchildren and may be opened for public use after the death of the owner.
6. **University Archives**  
Universities have their individual life histories. Records which are generated daily through activities of administrators, faculty members and students move from current to semi-current and to non-current and to inactive. When they become inactive, they become of archival value. The university archive will therefore consist of:

1. Speeches, papers of key officers of the univer-

sity, like Visitors, Chancellors, Vice-Chancellors and other principal officers of the University as well as those of the Deans of Faculties and Heads of Departments.

2. Minutes of meetings of the Council, Senate and its Committees, Congregation, Faculty Boards, etc.
3. Official publications, like Journals, Occasional Papers, Research reports, Bulletins, Newsletters, Annual reports, Annual financial statements, Calendars, Handbooks, Regulations etc.
4. Photographs, albums, video and audiotapes, slides, film reels with the University as the subject.
5. Papers and books relating to the University, like historical books, bibliographies, Newspaper clippings and Campus Magazines.
6. Legal documents, such as Deeds, Indentures, Copyrights, Contracts and Agreements.
7. Marked examination scripts of students.
8. Staff and Student (alumni) records
9. Theses and Dissertations
10. Any other documents emanating from the day to day administration and from the Faculties and Departments which will be of archival value.

#### Need for an Archives in a University

The university is a huge organisation which needs a well organised archival institution which will serve as a reference tool for its meaningful progress. Denial of access to researchers and scholars of its documents generated over the years, which if not organised cannot be effectively used, means the university is not seriously bent on development, based on past experiences.

When researchers have little or no access to such documents, their research is most often based on secondary sources, which usually produce substandard research. An archival institution in a university will combat this problem.

When records are kept for use in places other than archival institutions they are most often cramped in storage rooms where deterioration easily takes place due to the practice of bad storage methods. The university therefore loses these documents which should have been the research success of a socio-cultural or economic researcher or a historian.

Research assists in improved teaching in the univer-

sity. Archival records assist greatly in research especially at graduate level.

A central university archives ensures that all administrative records are kept properly and in one place. This ensures prompt retrieval for decision making and continuity. Also keeping all legal and highly sensitive documents in one place ensures their security.

### PRELIMINARY DECISIONS

Some major steps however have to be taken before a university can have a good archives.

#### 1. Policy Decisions

Some major decisions will have to be made like the following:

- a. The statutory law establishing the university will have to be amended to include the provision of a University Archives. This provision should state its functions clearly.
- b. The type of records to be collected must be identified. Here it will be necessary to include all types of records, including historical manuscripts, to ensure that no vital information is left out.
- c. A decision on the accessibility to the materials, that is who should and should not gain access to them, should be taken.
- d. An advisory committee made up of the Registrar, the Finance Officer, Deans of Faculties, University Librarian, Student representatives and the Archivist will from time to time determine records to be retained in the archives or disposed off as having outlived their usefulness (eg. marked scripts of students) based on laid down criteria evolved by it. The representative of the Vice-Chancellor chairs the Committee.
- e. Whom the Archives Department should be responsible to, which should preferably be the Vice-Chancellor.
- f. The method of arrangement to be used for the materials.

#### 2. Space and Environment

Archival materials are of a special nature so they need special storage facilities. Care must be taken that nothing destroys the documents. Agents of destruction like water, fire, theft, light, dampness, atmospheric pollution, insect and rodent infestation could

make an archive lose its valuable collection.

The space made available must be divided into three sections, namely, Documents Room, where all documents and records will be kept; Reading/Viewing or Search Room where the public can sit to use the document; and an Office/Document Repair Room where the officer in charge of the archives can stay and also do some minor repairs to documents. Movement from the Document Room to the Office and Reading/Viewing Room must be very easy to ensure prompt service to users. The Reading Room must be big enough to accommodate at least 15 users sitting around a large table at a time. In addition there must be a section for Microfilm reading, Computers and Slide Transparency use. The space must be sound-proof and fully air-conditioned at all times to ensure a longer life span for documents.

The above are the simple precautions and specifications needed to have a good environment and useful space to store archival materials and administer them effectively. Ideally, a purpose built space is preferred.

#### 3. Shelving and Packaging

Archival materials consist of various types of materials with various sizes. Some cannot stand erect on shelves so they are kept in boxes or wrapped up in manilla paper and tied up with strings. Boxes containing materials are labelled and put on the shelves. Shelves must be rigid and strong, fire resistant, preferably steel, and easily adjustable to take all heights of materials. If steel shelving cannot be provided then wooden shelves made with teak wood may be used.

#### 4. Funding

Proper budgeting has to be made for the purchasing and maintenance of equipment. Funds will also be needed to acquire materials for the preservation and conservation of the documents and the day to day running of the office.

#### 5. Staffing

A trained archivist will have to be employed. In the alternative, a librarian can be retrained. The latter is preferable because some of the functions of an archivist stray into the realm of librarianship and vice versa. In most library schools, in recent times, archival studies is taught at both the undergraduate and graduate levels to enable Librarians who wish to become Archivists to cope by undergoing only a short training. For the type of archives envisaged, a graduate Archivist/Librarian, a Diploma holder in Archival Studies,

a clerk/typist and a messenger/cleaner are the personnel needed for the take off.

The Head and his assistant should have the ability to perceive documents as indispensable and so keep them intact and in good condition, ready for use. The additional ability of an enquiring mind seeking to know a user's real need is important.

#### 6. Records Centres

There must be a designated depot or collecting point in each department of the university where the archivist will collect documents for selection and preservation in the archives. A schedule officer should be earmarked for each depot.

#### 7. Preservation

Constant preservation is needed to ensure that materials are not lost. This means deteriorating ones will have to be chemically treated, microfilmed or photocopied right from when the material arrives in the archives.

Most audio visual materials are costly to preserve and even to store. Constant rolling of tapes make them to curl. As a result of the chemicals used in their production, the images may turn brown due to humidity, there will be 'silvering or mirroring' due to oxidation and images will be lost due to atmospheric contamination. For photographs, acidic mounting materials, unsealed wood frames and reflective glass which traps dirt, and increasing fluctuations in temperatures destroy them fast. Photographs may therefore be copied for use while the original may be stored in silver safe or melinex (mylar). They should also be removed from acidic mounts and wrappers which contaminate them. Storage away from light and in a cool temperature 15-25 degrees C and a not too dry atmosphere, 30% - 50% relative humidity is advisable<sup>6</sup>

It may be necessary to enclose documents in protective coverings to lengthen their lives. At all times, materials meant for enclosure, photocopied documents and the enclosing medium, boxes or files, should be of low acid or acid-free to forestall embrittlement with time, and also protect the documents from dirt, air pollution and dust.

#### STRATEGY FOR SETTING UP THE UNIVERSITY OF SCIENCE AND TECHNOLOGY ARCHIVES

From the foregoing one can visualise how a university archives should be. Long term planning requires some pre-information to eliminate repetition, wast-

age of time, energy and money. One also needs records in an archives for information on what has existed before, and also an archives to transfer information on current services to, for future use.

The University of Science and Technology, Kumasi, has been in existence since 1951 as a College of Technology and became a fully fledged University in 1961. One needs not say that a lot of records have been generated in all sectors of the University. As at now, there is a room in the Central Administration block which is called an archives. It is a stackroom, not an archives, because the practices expected of a good archival institution are lacking.

#### Criteria for Selection

The criteria for the selection of materials into the university archives should include the following:

- a. Primary source material
- b. Age
- c. Rarity
- d. Usefulness

These are necessary because the university has a lot of records of age value but which are not necessarily of archival use. This is where proper management comes in. Proper management will ensure that only very useful materials are brought in for archival purpose, in a central place. This in turn will save the university some funds since faculties/departments will not have to ask for more space, furniture and equipment to store their materials individually; users will spend little time in research because all records are kept in a central place; duplication of work and employment of staff by various faculties to do the same work will be avoided; and there will be avoidance of duplication of research since one will know of what has already been done many years ago. This proper records management will have to be on-going. Current documents, with time have to be taken to the archives and proper documentation made for easy accessibility.

#### Phasing of Work

This is to ensure that a thorough job is done. A method can be adopted whereby the non active records will be collected and organised in phases like the following:

**First phase:-** Records from the Vice-Chancellor's office including those of the Visitors, Chancellors and Pro-Vice-Chancellors.

**Second phase:-** Records from Administration including the Academic Office and Public Relations

**Third phase:-** Records from the Finance Office and Audit.

**Fourth phase:** Records from Faculties, Schools, Institutes and Centres in that order and within each group in alphabetical order.

**Fifth phase:-** Records from the Main and Faculty Libraries

**Sixth phase:** Records from the Estate Office and Maintenance Office, Hospital, Bookshop, Printing Press and Photocopying Unit in that order.

**Seventh phase:-** Records from Students Halls of residence in alphabetical order by hall and the Student Union Offices.

This phasing can achieve the desired results of a good archives if the records collected are organised, appraised and described appropriately to facilitate easy retrieval. The records have to be arranged according to their source of origin. Which means records produced by each department will have to be arranged together, that is, in the order of provenance.

#### Processing of the Materials

Records and documents received will have to be processed for storage. Records for archives cannot be processed as for libraries. They are classified by office or department. Most times archival materials have no author, title, imprint or index, so they cannot be catalogued like books. Archives therefore use special methods to describe and provide finding aids for their materials.

#### Accessioning

It is an important source of knowing the archives collection especially in terms of numbers and the dates they arrived in the archival institution. An accessions register which must be made mainly for archival use, or at least a strongly bound notebook can be prepared for such use. At this stage documents which need repair are identified for further treatment after accessioning. The Accession Register should provide the following information: date received, accession number, source description (books, document, journal, file, etc.) and quantity. All documents dealing with the same topic which cannot be contained in one box or envelope must all have the same accession number but differentiated by sub numbers for example, accession number 2246/1, 2246/2, 2246/3, etc.

#### Classification

Materials can be arranged broadly by office or faculty and subdivided by sub-offices or departments in order to ensure some order in the collection. For example, Administration may be subdivided by departments i.e. Personnel, Academic and General, or Faculty of Agriculture into departments of Horticulture, Agricultural Economics, etc. In addition to the offices and sub-offices should be dates written on the file or box containing the documents, that is, from when the records in there began to when they ended.

The materials can then, be arranged by office like as collected (in phases) and within each office alphabetically by sub-office. Within each sub-office, the arrangement should then be chronological. Cards can then be made for them and filed in a cabinet. Cards are better, for they allow for additional records to be inserted without having to adjust or force more information on an already full sheet.

#### Finding Aids

The archivist will have to provide finding aids like checklists, guides, inventories, calendars, indexes, catalogues, descriptive lists, and registers. These must be mainly for internal use and consist of the title, inclusive dates, quantity and composition of material.

There is also the need for a good retrieval system, which means the materials should be classified properly. A database can be developed for the collection, to ensure speedy searching and retrieval. This saves time and the life of the materials.

At regular intervals too, a bibliography should be compiled to assist the archivist to give quick service to users, who are usually researchers with little time to waste.

#### Conservation/Repair of Archival Materials

Conservation is the art of preventing attacking agents from damaging the documents. Restoration is the art of repairing damaged documents. When you have Conservation and Restoration successfully together, then one has Preservation. The repair of archival materials is an on-going job. To restore you need to have the repairers as well as paper mechanics and chemical agents. Repairs can be carried out from the day the document is received and during its life in the archives. It is preferable to carry out simple but may be tedious repairs when the document is first received in the archives. This is especially neces-

sary to guarantee its longevity. If the documents are cleaned regularly, pamphlets are restitched and restapled, photo albums are rebound and very fragile documents microfilmed when they are initially received, most archival materials will be in use for a very long time.

Repairs to documents in an archives is indispensable because most of them are very old. Stages of handling and exposure to atmospheric and other conditions have weakened the paper and made the documents weak so conservation and restoration are inseparable and necessary in an archival institution. However repairs have to obey basic rules and some of them are discussed below:

1. Lost material must be replaced with material of the same kind, that is leather for leather, paper for paper, otherwise unagreeable materials may bring about contamination of the other pages or the material will not hold together.
2. Original material should not be removed or destroyed. Repair must be carried out whatever the state of disrepair, instead of replacing it.
3. Repair materials which are durable and which have been tested must be used.
4. Amount of repair materials introduced into the original material must be limited.
5. Consideration must be made of the following before deciding on the method to apply for repair:
  - a. The type of material of the document, if it is paper or leather.
  - b. The extent of damage and what the cause of the damage is, whether water, fire, insect or fungi.
  - c. If the document is single or double sided.

#### The Repair Room

The repair room must be big in size with different sections for repair by lamination, paper, parchment and leather, for binding, reprography and for maps and drawings; and still have enough space to store repair materials. The room must be well ventilated and illuminated by natural and artificial lighting. It must be well wired and have many electrical points, to enable the use of different equipment at the same time. It must have a good multipurpose repair bench or table where the repairer can stand or sit behind to work. Basic equipment and consumables like presses, tools, sink, waterheater, gluepots, kettle, dry-

ing rack, cotton mull, thin paper, wheat flour paste must also be provided. The room must be in a place removed from active human traffic to avoid dust and tampering.

#### Repair Methodology

##### 1. Repair by lamination

This entails insertion of the document between two sheets consisting of plastic materials and then passing the document through a machine which applies heat to seal the edges. This method can only be used for materials which can pass through the machine and these are usually small-size documents.

##### 2. Repair of paper documents

First and foremost the document needing repair and the paper to be used in the repair must both be wet, to ensure a uniform expansion and contraction to keep the proper size of material needed. If it is a one-sided document then paper is fixed to the whole back to strengthen it. This method is called backing. If it is a doublesided document but consists of only half a page of information on one side, paper is pasted at the whole back and a hole is cut in the place with information written on it to expose it. It is then covered with a silk gauze. This method is called framing. If it is a doublesided document with full writing (information) on both sides, then a silk gauze is used to cover both sides, since the margin left will be too small for paper to be used effectively. This method is called gauzing. The document backed, framed or gauzed is then placed between waxed paper and cartridge paper and put under pressure for about a day to dry. It is then pressed between another set of cartridge paper and then trimmed, sized and dried on a rack.<sup>9</sup>

##### Repair of parchment (leather) documents

Parchments are often damaged through excessive dryness or heat so they need to be folded around a soft damped cloth, page by page so that they do not stick together. The repair kit or leather is roughened so that it can stick firmly to the document when fixed. After this, the method is like in the paper repair mentioned above - backing, framing or gauzing. Care must however be taken not to press too hard when it is wet and also not to wet it too much if the document has coloured inks.<sup>10</sup>

##### Repair by binding

With most documents it is important to keep the original covers when repairing, as well as the old spine which will then have to be reinforced. This means rebinding is necessary. New sewing will have to use

the holes of the old sewing to avoid extra holing. Much of the original material should as much as possible be retained in its original form once it is not damaged.<sup>11</sup>

#### Repair by reprography

This is done in various ways like typing, duplicating, microfilming, photographing or photostating<sup>12</sup> the original document to ensure that a copy is available for public use, while the original is retired temporarily for proper repair. Photography, though slow, expensive and wet, ensures a high quality and versatile result.

Repair by reprography also has several advantages. It enables the archival institution to fill in gaps of documents by getting copies from another place; the acquisition of a mastercopy of a document for keeps; users gain access to documents when the original is weak to be put for public use; certified copies of legal documents which cannot be lent to the public in its original form to be made available.

#### Repair of maps, drawings and plans

If the material used here is parchment then repair is as for parchment documents. For paper, sheets of repair paper as well as the back of the map/drawing/plan to be repaired are dampened. Then the repair linen is also dampened and pasted to the back of the map/drawing or plan. This process is known as boning. The map or drawing is then framed with the dampened repair paper to keep the edges flat. It is then kept under cartridge papers to dry. Later on it is trimmed and pressed for about two days under much pressure. If the repair is not the first time, then the materials used in the previous repair should all be removed and cleaned before the new repair is made. If some parts of the map/drawing/plan are lost then equal type and weight of parchment or paper used for the document must be used to fill the holes or gaps.

Conservation of archival materials is important. Preservation is however the best alternative because the methods of conservation may not be able to restore the document to its original quality. It is therefore relevant to discuss some of the agents of deterioration of documents so that precautionary measures could be taken.

#### Agents of deterioration and their remedies

Every archive must determine its own preservation needs from which to develop its own conservation programme, because it is impossible for conditions in any two archives to be the same.<sup>13</sup>

There are several agents of deterioration. Some are naturally caused, others are man inflicted. Darling, dwelling on the preservation of materials, stated that the environment of materials meant for permanent preservation must be well controlled.<sup>14</sup> The documents room which is the heart of the archival institution must be well protected against the following hazards:

1. **Water:** This can get into the archives through rain and subsequent flooding. The archives should not be sited near flood prone areas which might be activated by excessive rainfall, major pipelines which may burst or water hydrants used for the fighting of fires. Leaking roofs must be mended promptly. Bad plumbing must be avoided. Water will make the ink and colours used in writing on paper to run, make pages to stick permanently together and encourage fast growth of fungi.

2. **Fires:** Destruction of valuable records can be carried out in seconds by fire so it is a danger to archives. The archival institution must not be sited near highly inflammable materials. Electric wiring must be perfect with no loose or exposed ends of wires. Conduit wiring system is preferred for archives. Fire proof cabinets and shelves must be considered for use in archives. As much as possible steel or metal shelving should be used, fire proof walls and doors are added advantages. Smoking should be banned in the archives. Provision of a fire detector with an alarm system is without compromise. One needs not mention fire fighting equipment and fire extinguishers since they are a must. The staff should also be familiar with basic fire fighting methods.

3. **Theft:** The public should not have direct access to the documents room. In addition windows should have burglar proof iron bars and the door must always be locked.

4. **Light:** Ultra violet rays of the sun destroy paper by bleaching it. As much as possible the sun must not reach the documents directly. Stained glass, venetian blinds, or other materials must be used on the windows to prevent sun rays from penetrating directly into the room. Fluorescent lights also damage paper; incandescent bulbs are preferable since they do not have any ultra violet energy properties. If fluorescent lights must be used then ultra violet filtering sleeves are needed to cover the tubes.

#### 5. Chemical Agents:

a. **Oxidation** - This is the change for the worse in a material when it comes into contact with

oxygen in the air. There is little that one can do to prevent this.

b. **Acid** - The alum/resin sizing used in the manufacture of machine-made paper reacts with the moisture in the paper to produce sulphuric acid, which splits the cellulose bonds thereby damaging the fibres. Destruction is by making paper to lose its strength, becoming brown stained and eventually embrittling it. Also atmospheric pollution, like carbon aerosols, nitric oxides from automobile exhausts, sulphur dioxide let off by industries which turns into sulphuric acid when in contact with paper, all destroy paper. Incidentally the acid problem does not occur in hand-made paper because gelatin or starch is used in the sizing.\* Most paper used these days contain acid. It is necessary that acid-free paper is used for producing archival material or acid-free photocopying paper used to produce a duplicate copy of such documents. Acid-paper should not be stored with other papers because most often there is acid migration. To save the document, one can microfilm for keeps or deacidify the paper or reinforce the fragile sheets.

## 6. Biological Agents

a. **Fungi** - Most materials used in paper and bookmaking and the methods used for their storage encourage fungi growth. The cellulose in paper, starch and gelatin sizing in paper, wood shelves and a host of others all attract fungi. Warmth encourages fungal growth, especially when the temperature is over 23 degrees centigrade and at the same time the relative humidity is above 65%.

Dampness can come about because of humidity caused by sudden changes in atmospheric temperature. Most times the quality of paper deteriorates with the rise and fall of humidity in the room. Paper absorbs or gives up moisture when there are excessive atmospheric changes. If much moisture is absorbed, paper grows mouldy and makes it soft and weak. To prevent this, temperature must be between 19-21 degrees centigrade and relative humidity also between 45% - 55%. Around the clock airconditioning must be maintained to ensure constant temperature in the room. Controlling atmospheric conditions will discourage the growth of fungi. Thymol or sodium pentachlorophenate or sodium orthophenylphenate may be used in treating paper with fungi growth. Affected documents not in very bad shape should not be dusted but removed and fumigated with fungicides. At regular intervals the documents room must be fumigated with fungicides.

b. Insect infestation occur often in archives

where the level of cleanliness is very low. Food leftovers encourage insects so as much as possible food must not be eaten in the archives except in areas carved out for such purposes. Dampness in a room often allows cockroaches, moths, silver fish, booklice (psosid) termites, woodworm, bookworm to destroy archival materials. These major insects work on the paper. Spacious shelving allows enough ventilation between materials and constant dusting of the documents also prevent such infestation. If however insect infestation occurs, various insecticides can be used to kill the different insects. For cockroaches, pyrethrum or lethane can be used; moths and bookworm can be exterminated with paradichlorobenzene or carbon disulphide or vacuum fumigation; silver fish infested documents can be treated with sodium fluoride or borax; and book-lice and woodworm killed with cuprinol.

c. **Rodent infestation** - Lack of netting on windows and careless opening and closing of doors can allow rats and mice into the document room. Rodents can destroy paper in a short time, especially those with plant bases. Fumigation can be used to flush them out but this means one will have to contend with polluted air for sometime since the dead rodents may not be seen and so will have to decay. Traps can also be set up with poisonous food substances at strategic points in the documents room at non-working hours. This will call for a floor which is not covered with documents, to enable proper situating of the traps. Documents which are partly destroyed by rodents may be repaired to forestall further destruction.

## CONCLUSION:

Increase in development brings about increased generation of information and documents. Archival documents are a people's, organisation's or a nation's history. Archives are needed to store such documents and information for future reference and research. The University of Science and Technology setting is no exception. Each office or department of the university needs to determine documents and records meant for conservation and preservation and then forward them to the central point for the purpose. The activities of the university, be they legal, administrative, financial, teaching and research, all generate information which will be required many more years later to assist in reshaping or remodelling new policies. It is in this light that a functional archives becomes an indispensable unit for the university. If the university wants to be ranked among the few in the world which treasure their past as necessary basis for the future then the earlier it set up an archives, the better it will be for it, especially in the



boosting of its image and the satisfaction of the demands of researchers. To begin with, some existing staff can be used to start it and existing structures renovated for space. However, the first step will be the setting up of a small Committee to ensure that the University of Science and Technology, Kumasi Archives takes off on a smooth and sound footing. The documents selected for preservation and future use have to be properly stored to ensure that such information are always available. Most agents of destruction of archival materials can be curtailed if not completely eliminated by ensuring or enforcing proper measures and standards for storage. The deterioration of archival materials is a very serious setback in the strive to make available and improve resources and facilities for research. Efforts made in the direction to set up an archival institution and to save the archival materials from deterioration and destruction are therefore positive efforts towards national development.

#### REFERENCES

1. Adamu, G. Archives in Nigeria: How to salvage the soul of the Nation. Paper delivered at the Department of Library Science Students Association lecture. May 1985, Zaria, Nigeria p.1
2. Chambers 20th Century Dictionary. Edited by A.M. Macdonald. W & R Chambers, London, 1972. p.66
3. Schellenberg, T.R. Modern archives principles and techniques. University of Chicago Press, Chicago, 1975.p.16
4. Hepworth, P. Archives and manuscripts in libraries. Library Association Pamphlet No. 18. The Library Association, London, 1958. p.29
5. Shipton, Clifford K. College archives and academic research *American Archivist* Vol.27, July 1964. pp. 396 - 97
6. Greenlag, Anna and Perkins, Veronica Davis. Developing and preserving a feminist collection for posterity in 'Women, Information and the Future; collecting and sharing resources worldwide' edited by Eva Steiner Moseley. Highsmith Press, Wisconsin, 1995. p.199.
7. Afolabi, M. Planning factors essential to the establishment of university archives. *Library Scientist*. Vol.13.1986. p.10.
8. Hodson, J.H. The administration of archives. Pergamon, Oxford, 1972. pp. 119-123
9. Mwiyerwa, Steve S. The development of archives in Africa: problems and prospects in *Aspects of African librarianship; a collection of writings* edited by Michael Wise. Mansell Publishing, London, 1985, p.259
10. Hodson *ibid*.p.217
11. Hodson *op cit*
12. Mwiyerwa *ibid* p.256
13. Cunha, George M. Methods of evaluation to determine the preservation needs in libraries and archives; a ramp study with guidelines. Unesco, Paris, 1988.p.1
14. Darling, Pamela W. A local preservation programme: where to start. *Library Journal*. No. 101, 1976. p.2343.