

# ARCHIVAL PRESERVATION PRACTICES AT THE RECORDS AND ARCHIVES MANAGEMENT DEPARTMENT IN TANZANIA

**PENDO JOSEPH OWERU**

School of Public Administration and Management  
Mzumbe University  
Morogoro, Tanzania  
pendooweru@yahoo.com

**NATHAN MNJAMA**

Department of Library and Information Studies  
University of Botswana  
Gaborone, Botswana  
mnjamanm@mopipi.ub.bw

## **ABSTRACT**

The aim of this study was to assess preservation practices at the Records and Archives Management Department (RAMD) in Tanzania and to make recommendations aimed at ensuring the long-term preservation and accessibility of archives held at RAMD. The population of the study consisted of the Director of RAMD, two Assistant Directors, ten Senior Records Officers, two Records Officers, three Senior Records Management Assistants, three Principal Records Management Assistants and one Records Management Assistant. The data collection instruments included questionnaires, interviews, observation and content analysis. Qualitative data analysis was used to gain a better understanding of the issues under investigation. The findings indicated that legislation relating to the preservation of archives in Tanzania is not comprehensive enough and that RAMD lacks a preservation policy; preserves only paper-based materials; experiences a shortage of storage equipment; holds records under poor environmental conditions; lacks proper archival handling; carries out inadequate housekeeping practices; lacks adequate security and disaster preparedness measures; has inadequate conservation and restoration facilities; is underfunded; and lacks trained and experienced conservators. The study recommends amendments to the Records and Archives Management Act No. 3 of 2002; the formulation of a conservation policy; improvements in housekeeping practices and handling practices; and effective monitoring of temperature and relative humidity.

## KEYWORDS

preservation, archives and records management, Records and Archives Management Department, Tanzania

## 1 BACKGROUND TO THE STUDY

Most of humankind's documentary heritage is recorded on materials that are subject to the ravages of unstable environments; biological factors; careless handling; natural and human-made disasters; inferior paper; impermanent and acidic inks; and technological obsolescence resulting from outdated hardware and software formats that render information inaccessible (Jones & Ritzenthaler 1989; Ngulube 2003). According to Harvey (1993), preservation includes 'all managerial and financial considerations including storage and accommodation provision, staffing levels, policies, techniques, and methods involved in preserving library and archive materials and the information contained in them'. Harvey (1994:6) further defines conservation as 'those specific policies and practices involved in protecting library and archive materials from deterioration, damage and decay, including the methods and techniques devised by technical staff'. According to the National Preservation Office (2001),

libraries and archives contain an irreplaceable accumulation of human knowledge and experience. The written and documentary heritage which they house provides the raw material that allows us to try and understand, explain, order and enjoy the visible and invisible world. Access to the past enables us to understand and locate ourselves in the present and gives us the opportunity to inform the future . . . in preserving our shared past we are preserving the collective memory for future generation.

Conway (1990) argues that preservation consists of the acquisition, organisation and distribution of the human, physical and financial resources directed towards preserving records and archives from deterioration and damage so that they can be retained in their useable state.

The primary goal of preservation is to prolong the life of documentary heritage and to ensure the long-term accessibility of such collections by government agencies, institutions, business organisations and the public at large (Forde 2007; Millar & Roper 1999; Ngulube 2003). The importance of preserving library collections is perhaps best summed up by Cloonan (2001:235) when he writes that 'preservation allows for the continuity of the past with the present and the future'. Similarly, it would be useless and a waste of resources if, after institutions have devoted considerable sums of money acquiring and processing the collections, they remain inaccessible to scholars and other bona fide users.

Preservation is a core function of any archival institution. Preserved records and archives provide continuity and evidence of legal and administrative transactions and obligations and act as a source of information through which decisions are made; plans developed;

control exercised; policies pursued; objectives met; obligations discharged; resources employed; the interests of the organisation and stakeholders protected; and the legislative and regulatory requirements of the organisation are met (Bradsher & Pacifico 1989; McCausland 1993; Ngulube 2003; Shepherd & Yeo 2003). Moreover, archives provide evidence of past experiences, knowledge and expertise as well as communicating socio-cultural, economical and political values of the society. Furthermore, archives provide the public with a sense of national identity, establishing and protecting individual and property rights and privileges, educate, entertain, and supplement people's lives by providing interesting and tangible manifestation of history, among others (Bradsher 1989; McCausland 1993).

Feather and Sturges (1997 in Ngulube 2003) identify preservation as one of the important 'sub-domains' of information science. Millar (1997) identifies preservation as a fundamental practice in archival management. Schellenberg (1971) asserts that preservation of records is the core activity which should constitute a great deal of the archivist's efforts. Ngulube (2003) argues that at the practical level, preservation is concerned with the maintenance, examination, conservation and restoration of the archives and records; whereas, at the ordinary level, it is concerned with the conditions of such records and how they are stored and used. The need to preserve records and archives from chemical and physical deterioration and damage by the information centres is of paramount importance and has been acknowledged by different practitioners in the field of records and archives management.

Mazikana (1999) states that less attention is being given by archival institutions to the preservation of archival materials. Ngulube (2003) observes that preservation management is not a central concern in developing countries and that preservation and conservation prospects are in a dismal state, particularly in Africa. Ngulube (2003) observes that records and archives are in great danger of being lost and becoming inaccessible. Studies by Kemoni (1996) and Eden and Feather (1997) identified the shortage of funds; lack of training in preservation management as well as inadequate storage facilities and poor environmental conditions as some of the key problems facing preservation activities in libraries and archival institutions in developing countries. The same problems are acknowledged by Eden and Feather (1997), Forde (2007), and Jones and Ritzenthaler (1989). Southeast Asia (2010) highlights the problem of lack of awareness on the importance of preservation among the staff and the general public in the Southeast Asia region. Eden and Feather (1997) draw the conclusion that only few archival institutions in the world have written preservation policies and strategies.

Poor infrastructure; lack of expertise in preservation and conservation; poor storage facilities; poor environmental control; lack of proper preservation policies and strategies; and lack of funding were reported as the major preservation challenges facing most archival institutions in Africa (RAMD 2007; Ramokate 2006). Observations by Ngulube and Tafor (2006) indicate that little has been done by countries in the East and

Southern African region to deal with preservation problems faced by national archival institutions.

Preservation of electronic records has also brought many challenges to the national archives. Such challenges range from shortage of personnel in managing such records; loss of e-records; limited technological tools and strategies in preserving e-records; software and hardware dependencies; obsolescence and ageing of storage media; and massive volumes of e-records, among others (Ngulube & Tafor 2006; US General Accounting Office 2002). However, Eden and Feather (1997) aver that preservation is a thread that runs through all activities of the archives. Ngulube and Tafor (2006) assert that such a service needs to be guided professionally by regulatory and legislative frameworks. This study, therefore, sought to assess preservation practices at the Records and Archives Management Department (RAMD) in Tanzania and to make recommendations aimed at ensuring the long-term preservation and accessibility of the archives held there.

## **2 RECORDS AND ARCHIVES MANAGEMENT DEPARTMENT**

The history of RAMD can be traced back to 1920 when secret instructions of the last German Governor in 1916 were discovered by a British officer among a 'mass of German rat and ant eaten documents' indicating that valuable government records were buried in Tabora and other places to avoid being accessed by the British (RNAD 2011:1). The discovery led to negotiations between the British administration in Tanganyika and the German Government which led to the secondment of German representatives to Tanganyika in 1921 to help in the digging up of said records. Those that were successfully recovered form the base of German records held in Tanzania. In 1950, Mr V W Hiller, who was the Chief Archivist of the then Central African Federation, was appointed by the British Government to assess and report on the likelihood of establishing an archive service for the three East African countries, namely, Kenya, Uganda and Tanzania. Though Hiller recommended the establishment of an East African Archives Service in his report to the British Government, no action was taken to establish a centralised archival service in East Africa.

A report by Miss Marcia Wright in 1962 to the newly independent Government of Tanganyika made it recognise the need for having a proper archives service (Musembi 1986). The report indicated that 'secretariat archives were in immediate danger of destruction and were stored in a virtually roofless warehouse' (Musembi 1986:122). Thus, in 1963, the Government appointed a professional archivist, J R Ede, to establish and run an archive service for the proper preservation of records and archives.

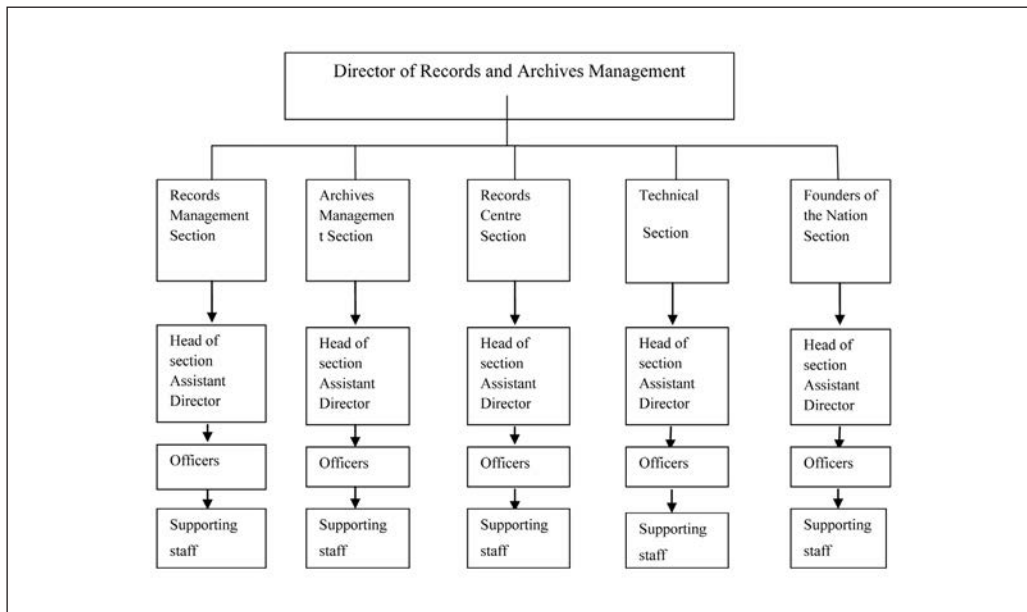
The issuance of Presidential Circular No. 7 of 2 December 1963 by the late Mwalimu Julius Kambarage Nyerere, the first President of Tanganyika, announced the formation

of the National Archives under the Ministry of National Culture and Youth and provided for effective control over the preservation and disposal of public records. In 1965, the circular was replaced by the National Archives Act of 1965 (hereafter the National Archives Act). In 2002, the Government of Tanzania enacted the Records and Archives Management Act No. 3 of 2002 (hereafter the RAM Act) to provide for the proper administration and better management of public records and archives throughout their life cycle; thereby repealing the National Archives Act and establishing RAMD (Musembi 1986:123).

Among the duties that RAMD performs as per the RAM Act include:

- a. preservation and conservation of both paper and electronic records of long-term value to ensure their long-term survival by providing them with suitable environmental conditions as required;
- b. advising the Government and ensuring that best practices and standards are followed as far as public record keeping in public service is concerned; and
- c. developing vital records protection programme and records disaster preparedness plan, among others.

In order to execute its responsibilities, RAMD is divided into five sections, which are: the Records Management Section, Archives Management Section, Records Centre Section, Technical Section, and the Founders of the Nation Section (RAMD 2007), as shown in Figure 1.



**Figure 1: Organisational structure of RAMD**  
 Source: RAMD, *Three Years Report 2005–2007*

The National Archives of Tanzania has not escaped the ongoing Public Service Reforms Programme (PSRP) aimed at improving operations of ministries, departments and agencies service delivery and regulatory functions (URT-PO-PSM 2011:1). Records Management Reforms (RMR) is one among the reforms that have impacted RAMD on issues of records management to support the ongoing PSRP in Tanzania unlike Preservation Management which seems to have lagged behind (IRMT 2007; RAMD 2007). Under RMR, the National Archives of Tanzania was moved from the Ministry of Education and Culture and was merged with the Records Management Section in the President's Office Public Service Management (PO-PSM) to form RAMD under the PO-PSM in 1999. The Tanzania Records Management Project (TRMP) being part of the PSRP has reformed records management practices through the introduction of a new file classification system; appraisal and retention schedules; rehabilitation of record keeping systems; revised the procedures for the registries; and conducted staff and user training and education, among others (IRMT 2011; Tough 2007). Moreover, a new policy, the National Records and Archives Management Policy (NRAMP), and Standards and Guidelines for the management of personnel records have been issued. These are some of the notable changes under the RMR that have been introduced to improve record keeping in the country.

Ever since its establishment, RAMD has managed and preserved the records and archives of the United Republic of Tanzania covering formats ranging from paper-based materials, to cartographic materials, microfilms and photographic materials, among others. It has also advised on records created, received and maintained by public corporations, parastatal organisations or any other private body as per schedules 1, 2 and 4 of the RAM Act. Archival holdings that are under the custody of RAMD include: German Records (1890–1918); Tanganyika Secretariat Records (1919–1960); Provincial (Regional) and District Administrative Archives (post-independence era); Church Archives and Private Papers (1885–1980s); Post Independence Archives; Gazettes and Newspapers (1919 to date); Maps and Plans (from German, British and post-independence era); Photographs; Stamps (1963–2000); Historical and Important Books (RNAD 2011). The study was motivated by the fact that while major reforms have been undertaken to improve current record keeping practices in Tanzania, there is no evidence to suggest that record management improvements have been undertaken in preserving and conserving the records held at RAMD.

### **3 PROBLEM STATEMENT**

As discussed above, the National Archives of Tanzania has undergone major administrative reforms since its formation in 1963. Various policies and procedures have been put into place, and the Department itself transferred from the Ministry of Education and Culture to the PO-PSM through Government Notice Number 289 of 1999. Moreover, in 2002, the RAM Act was passed establishing RAMD. Among other

things, the RAM Act provides for the identification and safeguarding of records having enduring value to be preserved as archives and made available for public consultation.

In 2007, the RAMD report indicated that the Department had broadened its scope to include the preservation and conservation of paper and electronic records. The Technical Section of the Department is responsible for conserving and restoring archival materials. A review of the literature indicated that most archival institutions in the East and Southern African region have inadequate preservation and conservation facilities; limited implementation of standard archival preservation practices; and that preservation management is not their central concern (Ngulube 2003; Ramokate 2006). The study, therefore, sought to examine the extent to which the Department is undertaking the operation of preserving archival materials – both paper and electronic. The study also sought to assess preservation practices at RAMD in Tanzania and to make recommendations aimed at ensuring the long-term preservation of, and accessibility to the archives held there.

## **4 AIM OF THE STUDY**

The aim of the study was to assess archives preservation practices at RAMD and to make recommendations aimed at ensuring their long-term preservation and access. The specific objectives of the study were to:

1. Identify the legislative, regulatory and policy framework for preservation activities at RAMD.
2. Assess the storage and environmental conditions under which archives are held at RAMD.
3. Determine the security and disaster management measures available at RAMD.
4. Determine the availability of preservation and conservation resources required by RAMD.
5. Determine the level of involvement of RAMD in the preservation of electronic records.
6. Identify the challenges faced by RAMD in preserving archives.
7. Suggest ways of improving preservation practices at RAMD.

## **5 METHODOLOGY**

The study was carried out at RAMD located in Dar es Salaam, Tanzania. The target population consisted of 34 employees of RAMD based at the headquarters in Dar-es Salaam. The study population consisted of one Director, two Assistant Directors, ten Senior Records Officers, two Records Officers, three Senior Records Management Assistants, three Principal Records Management Assistants and one Records

Management Assistant. These respondents were chosen because they are charged with the responsibility of ensuring that the archives are well preserved for long-term accessibility by the public as articulated in the RAM Act. The study collected qualitative data using interviews, personal observations and documentary review. Sixteen questionnaires were distributed to nine Senior Records Officers, two Records Officers, one Senior Records Management Assistant, three Principal Records Management Assistants and one Records Management Assistant. The questionnaire sought to collect data on: preservation strategies and activities such as preservation policies; archival storage conditions; environmental control, pest control, cleanliness and housekeeping; handling of materials; disaster preparedness and management; fire detection and control; conservation treatments; security of archives; availability and allocation of funds for preservation activities; challenges experienced in preserving archives; and suggestions for rectifying the situation. Non-participant observation was used to collect data on the types of archival records held and their formats; the availability of a preservation policy and preservation strategies; the storage areas and the general building of RAMD; industrial or natural hazards close to RAMD; issues of pollution; and security systems installed, among others. Different instruments were employed, such as the use of a digital camera in capturing different aspects at RAMD.

The researchers also reviewed several documents held at RAMD in order to identify provisions that address the preservation of archives with the aim of determining their impact on preservation practices at RAMD. These included the:

- a. Records and Archives Management Act No. 3 of 2002;
- b. Founders of the Nation (Honouring Procedures) Act of 2004;
- c. National Records and Archives Management Policy of 2011;
- d. Records and Archives Management Regulations of 2007;
- e. Records and Archives Management Division Search Room Rules;
- f. United Republic of Tanzania Presidents Office Public Service Management: Records Retention/Disposal Schedules of 2005;
- g. Records and Archives Management Department, Three Years Report 2005–2007;
- h. Registry Procedures Manual of 2007; and
- i. Desk Instructions for Registry Staff and Users of 2009, among others.

Thematic analysis technique was used to analyse the data gathered from the open-ended questions in the questionnaires, personal observations and interviews from which different themes and concepts were highlighted. A framework developed by the National Centre for Social Research in United Kingdom which provides a ‘matrix based method for ordering and synthesizing data’ was used (Ritchie et al 2003:219). The matrix assisted the researchers to develop an ‘index of central themes and sub themes’



after a thorough reading and re-reading of the transcripts and field notes which were then applied to the collected data (Bryman 2008:554).

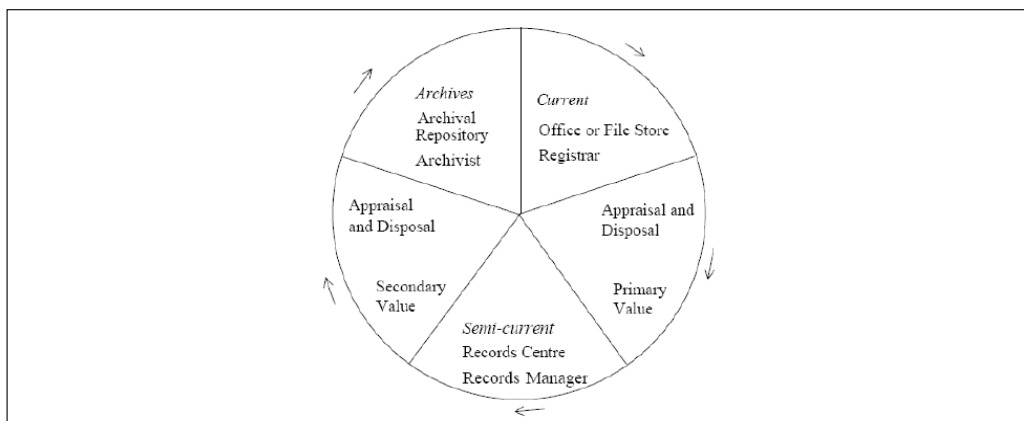
## 6 THEORETICAL FRAMEWORK

The study was guided by the Records Life Cycle Model and the Records Continuum Model. These two models are further discussed below.

### 6.1 THE RECORDS LIFE CYCLE MODEL

The Records Life Cycle Model was developed in 1956 in North America by Schellenberg who argued that records have a life comparable to biological organisms as they are born (creation stage), live (maintenance and usage stage) and die (disposition phase) (Shepherd & Yeo 2003). Ever since the 1950s, different models of the records life cycle have been witnessed. Discussed by different authors, the Records Life Cycle Model can either have three stages, five stages or even more.

Adopting the three-phased records life cycle, records undergo the: current stage (where records are used by the organisation or creator of the record); semi-current stage (where their business value is reduced); and non-current stage (where records have little or no business value but can cater for research or historical purposes). The model asserts that, when records cease to have business value to record creators, those having archival value are moved to an archival institution for long-term preservation after the appraisal process (Couture & Rousseau 1987). In most cases, such records constitute 5 per cent of the whole records (Bantin n.d). It also stipulates responsibilities for managing records at each stage of the life cycle where archivists are responsible for preservation, description and provision of access to records at the inactive stage (Bantin n.d). Figure 2 recapitulates the concept of the Records Life Cycle Model.



**Figure 2: The Records Life Cycle Model**

Source: Millar & Roper (1999:19)

However, the Records Life Cycle Model has been criticised for relying on physical entities (custody of paper) and leaving out the logical entities to which electronic records are subscribed (Shepherd & Yeo 2003). This threatens the management of electronic records. Despite the critique, Duranti (1996) observes the applicability of this model to the management of electronic records. The model controls the creation of reliable records; maintains the authentic-active and semi-active records; and preserves authentic-inactive records as far as e-records are concerned (Duranti 1996).

The following variables from the Records Life Cycle Model, as articulated by Duranti (1996), justify the link between the model and preservation management. The same variables inform the study as far as preservation practices at RAMD are concerned:

- a. Compliance monitoring: trained archivists are entrusted to ensure that archival materials transferred to the archives are subjected to the required archival practices, among them, being acceptable preservation practices.
- b. Transparency of records/archives preservation: records are taken from those with vested interest in either corrupting or neglecting records and put under a transparent third party for example the National Archives.
- c. Cost: preserving records and archives transferred at the archive is affordable compared to when records are still with their creators.
- d. Mission competency: archivists are trained in the preservation arena; hence, they are more competent in managing and preserving records and archives in their custody.

This study used the Records Life Cycle Model because RAMD has the sole responsibility of administering and managing public records and archives from creation throughout their entire life cycle.

## 6.2 THE RECORDS CONTINUUM MODEL

According to Part 1: Clause 4.22 of the Australia Records Management Standard-AS4390 (1996), records continuum refers to ‘consistent and coherent regime of management processes from the time of the creation of records (and before creation, in the design of recordkeeping system) through to the preservation and use of records as archives’. The evolution of the Records Continuum Model can be traced to three periods (An 2001), including: the origins of the continuum concept; wide use of the word continuum; and the formulation and implementation of the Records Continuum Model to both paper and electronic based formats (An 2001). In the first period, the continuum concept came from the national archivist Ian Maclean in the 1950s, who asserted that records managers were the true archivists and that archival science should be directed to studying the characteristics of recorded information, recordkeeping systems and classification processes (Upward 2000:118). In the second period, the Canadian archivist Jay Atherton promoted the use of the word continuum at the Annual Conference of the

Association of Canadian Archivists in 1985 after articulating the fact that all stages of the records are interrelated. According to Atherton, such an interrelationship forms a continuum where records managers and archivists are involved in the management of recorded information (An 2001). In the third period, records continuum as a model was developed by Australian archivists in the 1980s and 1990s in response to criticism posed against the Records Life Cycle Model (An 2001; Shepherd & Yeo 2003).

The Records Continuum Model stipulates that records do not necessarily pass through three phases, instead ‘managing records is seen as a continuous process where one element of the continuum passes seamlessly into another’ (Shepherd & Yeo 2003:9). This is depicted from the four dimensions of the Records Continuum Model provided by Upward (2001:123), which are: document creation; records capture; the organisation of corporate and personal memory; and the pluralisation of collective memory (see Figure 3).

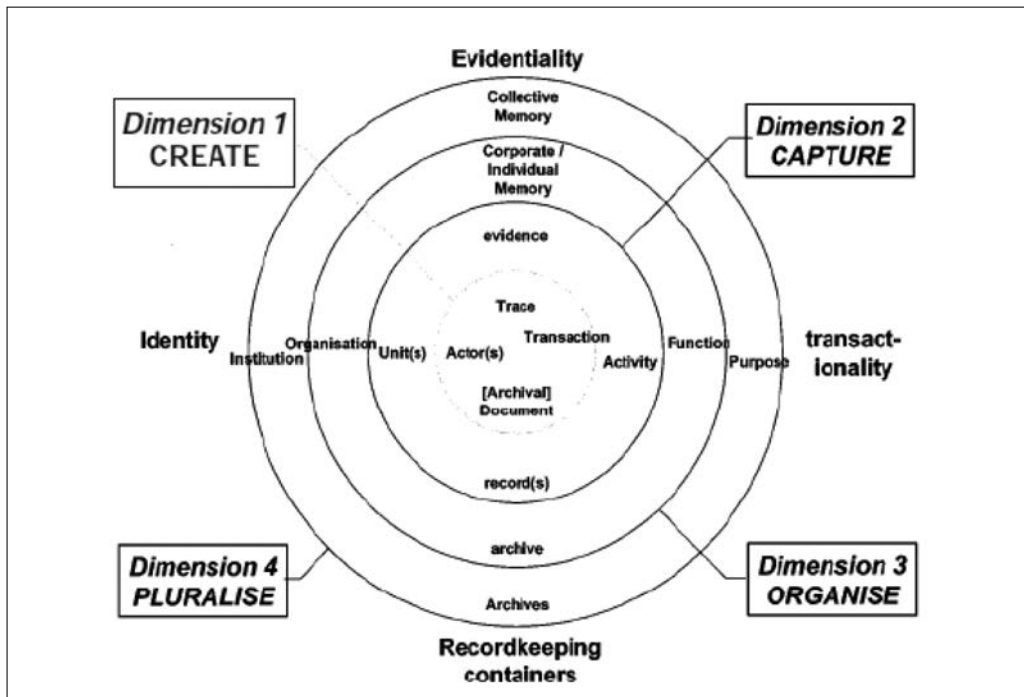


Figure 3: The Records Continuum Model

Source: Upward (2001:123)

Thus, records of business activities are created; then captured as evidence by the recordkeeping systems; afterwards encompassed in the formal systems for managing records which serves the entire documentary needs (ie, business, regulatory, cultural, educational and historical needs); and accommodates the need of the society for collective memory, its functions and the entities that service them (Upward 2001).

The driving force behind the formulation of the Records Continuum Model was the concern for a missing strategy for archivists to intervene in the records management process from the creation stage given the prevailing electronic environment (Bantin n.d.; McKemmish 1997). Therefore, this model provides a mechanism for the best practice of managing records and archives through an integrated approach where records managers and archivists are brought together with the goal of ensuring the reliability, authenticity, and completeness of records (An 2001).

Upward (1996:275–277) justifies the use of the Records Continuum Model based on these four stated principles of the model that provide:

- a. a concept of ‘record’ which is inclusive of records of continuing value (archives), which stresses their uses for transactional, evidentiary and memory purposes, and which unifies approaches to archiving/recordkeeping whether records are kept for a split second or a millennium;
- b. a focus on records as logical rather than physical entities, regardless of whether they are in paper or electronic form;
- c. institutionalisation of the recordkeeping profession’s role (that) requires a particular emphasis on the need to integrate recordkeeping into business and societal processes and purposes;
- d. archival science (to be) the foundation for organising knowledge about recordkeeping ... Such knowledge is revisable but can be structured and can be explored in terms of the operation of principles for action in the past, the present and the future.

The model is of the view that records function simultaneously as organisational and collective memory from the time of their creation (McKemmish 1997). However, Bantin (n.d.) questions the practical aspect of the records being continuous without any breaks from their creation to disposition. He suggests the need for a distinction between the phases and the responsibilities in each phase.

Among the strengths of the model is that of carrying out the appraisal, description and preservation of records at the creation stage. This makes it possible for those records having a long-term value to be readily identified and preserved. It also supports a ‘post-custody’ or ‘distributed-custody’ as a strategy that minimises costs and loss of records; controls the effects of technological changes; and provides the skills required by the archivist to render the required expertise for the management of e-records (Bantin n.d.).

The following advantages of the Records Continuum Model justify the link between this model and preservation management:

The model has a built-in record keeping capability which captures and assesses the value of records to ensure they are complete, accurate, usable and reliable; hence,

archival records are identified earlier at the creation stage and captured for preservation (An 2003).

- a. The model provides reliable standards, best-practice criteria, and interdisciplinary approaches and collaborations in recordkeeping and archiving processes for both paper and e-records (McKemmish 2001).
- b. The Records Continuum Model was not utilised in the study since RAMD is yet to embark on the preservation of electronic records. Among the two explored models, the Records Life Cycle Model is more appropriate to the preservation of records and archives under the custody of RAMD since RAMD manages records and archives throughout their entire life cycle.

## **7 FINDINGS**

The results of the study are presented according to the objectives of the study.

### **7.1 LEGISLATIVE, REGULATORY AND POLICY FRAMEWORK FOR PRESERVATION ACTIVITIES AT RAMD**

The findings revealed that RAMD's preservation activities are regulated by the following Acts of Parliament and approved policies and regulations, namely the:

- a. Records and Archives Management Act No. 3 of 2002;
- b. Founders of the Nation (Honouring Procedures) Act of 2004;
- c. National Records and Archives Management Policy of 2011; and
- d. Records and Archives Management Regulations of 2007.

The RAM Act provides for: the acquisition of records of enduring value for preservation; provision of suitable conditions for preservation and consultation of records and archives under RAMD's custody; provision of facilities for public inspection; prescription of access rules to be observed by users of records and archives; prescription of conditions to be observed when exhibiting public records; collaboration with other institutions on the areas of conservation and restoration, reprographic or other technical facilities; and occupation and utilisation of buildings necessary for the discharge of RAMD's functions. The RAM Act also addresses the issue of penalties for any person caught mutilating records and archival materials except as provided for in sections 9–13 of the Act. The study further revealed that, the RAM Act empowers the Minister to declare other institutions as places of deposit for archives.

With regard to the Founders of the Nation (Honouring Procedures) Act of 2004, the findings of the study indicated that there is no reference to any preservation activities that are articulated in the Founders of the Nation Section at RAMD. The Founders of the

Nation Act is mainly concerned with the collection of the records covering the activities of the founders of the nation (Kiyabo 2011).

The study also established that the NRAMP provides the framework for the management of records and archives of the United Republic of Tanzania. Part 3.3 of the policy indicates that the objectives of the NRAMP are:

- a. to acquire and preserve records of enduring value to the nation from public offices, private institutions and individuals;
- b. to optimise public participation in preservation of records and archives for the development of the nation; and
- c. to acquire and preserve public and private records that are of national importance.

Part 4.11 of the NRAMP provides for the ‘acquisition and preservation of archives’ as one of the policy issues. The policy recognises that records of enduring value can be identified and selected if they are kept within a ‘well-managed record keeping systems, safeguarded from damage, destruction, deletion or alteration, and transferred to the care of the department responsible for records and archives management at the appropriate time as determined by retention and disposal schedules’ (NRAMP 2011:18, Part 4.11). Part 4.11 of the NRAMP further identifies the types of records that can be acquired and preserved which range from ‘personal records of statesmen, politicians, public servants, community, religious and business leaders, academics, campaigners, writers, artists, researchers and individuals who have made substantial contribution to the nation’.

With regard to the availability of an archives preservation policy, the study noted that the institution lacks a preservation policy to guide its operations. This finding is similar to that reported by Kootshabe (2011) who investigated the preservation of records in selected Government Ministries and Departments in Botswana using a survey research approach and questionnaires, observation, interviews and documentary analysis as data collection methods. Her study revealed that the surveyed departments were committed to the preservation of their records even though they lacked preservation policies and procedures; guidelines for handling and use of materials; disaster preparedness and management plans; standards for storage of records; and did not carry out preservation surveys.

## **7.2 TYPES AND FORMATS OF MATERIALS HELD AT RAMD**

The second objective of the study sought to identify the types and formats of materials that are held at RAMD. The findings indicated that RAMD preserves paper-based materials, cartographic materials (such as maps and plans), microfilms and photographic materials. Currently, RAMD does not acquire e-records or sound recordings.

### **7.3 STORAGE AND ENVIRONMENTAL CONDITIONS UNDER WHICH ARCHIVES ARE HELD AT RAMD**

The findings showed that:

- a. RAMD has been occupying its present purpose-built building since 1984. The building is divided into different areas, such as: the repository, search room, administrative area, technical area, loading area, fumigation area, conference area and records centre. Furthermore, the RAMD building is surrounded by vegetations which help to regulate the temperature and to reduce dust coming from the surroundings. At the time of the research, RAMD's building was undergoing some renovations under Saro Builders contractors whereas the Ministry of Works, Tanzania Buildings Agency is the Architect.
- b. RAMD uses fire-resistant mobile shelves, acid-free archival boxes and file folders as storage equipments for records and archives.
- c. The RAMD building was purposely built and constructed using concrete materials which are recommended for the construction of archival institutions (Ngulube 2003). The roof was constructed using tarmac material to prevent water from getting into the building. Moreover, RAMD is located in an area surrounded by government offices and international agencies such as AMREF, UNICEF, National Housing Corporation and Kisutu Magistrate Court, among others. The area is also prone to considerable air pollution such as smoke and dust resulting from vehicles and construction activities close to RAMD.
- d. RAMD uses archival boxes for the storage of its materials. It was, however, observed that some of the archival boxes are torn and need replacement.
- e. Moreover, some of the archival boxes are kept on the floor because of the inappropriate shelving equipment. Such boxes contain archives from the Ministry of Foreign Affairs and International Co-operation, Ministry of Health and the President's Office-Public Service Management. Consequently, such boxes are covered with dust and are prone to damage caused by the handling of cleaners when conducting cleaning operations, among other things. Some files are also left on the floor at the repository by the archives staff after being consulted by the researchers. Such actions expose the archives to abrasion, dust and misplacement. It is also worth noting that mobile shelving provides secure storage environment for the Records Centre materials but in most cases it is not ideal for archival storage where the formats and sizes of materials vary greatly.

### **7.4 ENVIRONMENTAL CONDITIONS UNDER WHICH THE RECORDS ARE HELD AT RAMD**

Archival materials deteriorate over time due to several factors, such as: chemical and physical composition themselves; unfavourable environmental conditions ranging

from temperature, relative humidity, light and pollutants, abuse or mishandling; microbiological and insecticidal environment; inadequate storage; and human or natural disasters (Cunha 1988; Wachter 1989).

#### **7.4.1 Temperature and relative humidity**

The study revealed that RAMD's repository is not ventilated to allow free circulation of air as one of the measures in controlling the temperature and relative humidity. This situation makes archival materials at RAMD prone to the effects of high temperature and relative humidity. The observed effects of high temperatures on archival materials at RAMD include ageing of paper materials and acceleration of chemical reactions such as oxidation and acid hydrolysis. As for the high levels of relative humidity at RAMD, archival materials are dehydrated, brittle and crack or split in the course of use or handling and some are decomposing through hydrolysis. Both the temperature and relative humidity at RAMD cause the archives to be tense and strained, and destroys their structural links. They also accelerate chemical reactions such as oxidation and acid hydrolysis; and stimulate the growth of biological pests such as bacteria, insects and rodents. High temperature and relative humidity at RAMD are partially attributed to the location of the Department itself. RAMD (Headquarters) is located in Dar-es-Salaam which is closely situated to the Indian Ocean. Thus, the city experiences hot and humid weather throughout the year. The study revealed that in order to address some of the challenges of temperature and relative humidity, RAMD had instituted the following measures to control them:

- a. installing air conditioning machines at the repository (where 8 machines are installed); at the microfilming room (where 1 machine is installed); and at the microfilm processing and storage room (where 1 machine is installed);
- b. installing a mobile humidifier called Dantherm CDT 85 donated by the German aid agency GTZ (currently known as GiZ) at the repository containing German records, although it was switched off by the time the researcher went into that repository. No reason was given for switching off such equipment though it was within the working hours which are 09:00 to 15:00;
- c. storing records far from the outside walls to allow circulation of air at the repository. This has been done by stationing mobile shelves containing archival boxes at a reasonable distance from the walls; and
- d. packing archival materials into archival boxes according to the size of the boxes. However, there were some oversize items that could not be stored in the boxes.

Despite these efforts, more air conditioning machines and humidifiers need to be installed in the repository in order to attain the required standards needed for the creation of suitable environmental conditions.



### **7.4.2 Light aspects at RAMD**

The findings indicated that:

- a. In the repository, tube lights are used as the source of light and are kept on at all times until the end of the working hours when they are switched off. The tube lights are not covered with UV filtering sleeves to reduce their intensity on archival materials as some are left on the floor.
- b. In the search room area, tube lights and natural light (sunlight) are used as sources of light. Tube lights are kept on until the end of the working hours. As for sunlight, it comes through the windows into the search room.
- c. In the exhibition area, sunlight is present at all times until the end of the working hours when the building is closed. Such light enters the area through the open doors that are located in the exhibition area.

The study further indicated that RAMD has instituted measures to reduce the impact of light on archival materials under its custody, such as: constructing the repository without windows; and storing archival materials in files, archival boxes, folders and storing them in mobile shelves. In the exhibition area, materials or photographs are exhibited only for two months at the gallery before they are replaced. Original archival materials are not exhibited at RAMD. Instead, only copies of original materials are exhibited. Exposure of the collections to light will in the long run lead to discolouration of the documents unless appropriate measures are put in place to regulate the intensity of light falling on to the documents or limiting the duration of time when collections are exposed to light.

### **7.4.3 Air quality/pollution at RAMD**

The findings revealed that RAMD was aware of some of the problems associated with air pollution and had instituted some measures to control the damaging effects from these pollutants by:

- a. locating photocopying machines far from the storage, exhibition and search room areas which reduces pollutants resulting from chemical and sulphurous substances from fixers and toners;
- b. storing archival materials in files, acid-free boxes, glass-like display cases and mobile cabinets to control dust and dirt; and
- c. cleaning the archival building regularly.

### **7.4.4 Micro-biological and insecticidal environment at RAMD (pest control)**

The findings revealed the presence of the following pests: rodents, cockroaches, silverfish, mould and termites, among others. RAMD has taken some steps to deal

with these agents by carrying out the following measures: fumigating the building every six months using specialist pest service providers and cleaning the building regularly. However, the researchers observed that, despite the fact that food and drinks are prohibited in the search room, some of the staff members were taking their lunch there. Moreover, there is no common room where staff could sit and consume drinks and foods. The observed effects of biological agents on archival materials at RAMD include: archives discolouration and disfiguration leading to physical damage and loss of information; presence of holes to archival materials; bite or faeces marks on materials; and enzymatic decomposition of material substances.

## **7.5 ARCHIVAL HANDLING PRACTICES AT RAMD**

The findings indicated that handling of archival materials by users and staff at RAMD is poor. Moreover, RAMD lacks handling aids, such as book supports, easels, flat carts, stack folders, trays or shallow boxes covered with acid-free paper, book cushions or foam wedges, cotton gloves and trucks, among others (Forde 2007). Furthermore, education programmes on the handling of archives by staff and users is not provided by RAMD. The study further indicated that, while RAMD has Search Room Rules regulating the use of archives by the researchers, nonetheless, some of the researchers entered the reading room carrying water contrary to these rules.

In addition, RAMD lacks staff and user education programmes, such as refresher sessions, seminars, training or conferences directed towards instilling awareness on issues of fragility and the irreplaceable nature of archival materials.

## **7.6 HOUSEKEEPING PRACTICES AT RAMD**

The findings of the study indicated that: cleaning in the repository is done once a week while the rest of the RAMD building is cleaned on a regular basis; and cleaning agents such as soap, furniture polish, mop, brooms and Hoover machines are used by the cleaners. However, the presence of dust on the floor of the repository and on the files and boxes containing archival materials indicates that cleaning is not thoroughly supervised.

## **7.7 SECURITY AND DISASTER MANAGEMENT MEASURES AVAILABLE AT RAMD**

The findings revealed that RAMD has instituted security guard services for 24 hours a day by contracting out a company called 'Full Time Company' where two security guards are stationed at the RAMD building day and night. Fire extinguishers are also stationed at different locations of the building. However, the fire extinguishers have not been serviced since 2006. In addition, RAMD's employees are not trained in the use of such equipment. Access to the repository is restricted to staff only. In the search room, users consult the archives under supervision. Moreover, RAMD has allocated a

place for researchers to leave their personal effects in order to control theft of archival materials. The windows at RAMD are also grilled. Despite the above security measures, the study revealed that RAMD lacks:

- a. a compliance certificate regarding fire alarms, exit routes and emergency lighting;
- b. emergency exit routes;
- c. smoke detectors and sprinkler suppression system;
- d. a fire alarm system;
- e. an anti-theft electronic system at the main entrance door;
- f. intrusion detectors and alarm system;
- g. a CCTV camera or other surveillance instruments; and
- h. notices prohibiting smoking or eating within the building.

The study also sought to determine the existence of disaster management measures at RAMD. The findings of the study indicated that RAMD does not have a disaster preparedness plan despite being on high risk due to lack of most of the security systems. Thus, issues of potential areas for disaster; potential threats; collections that are at major risk; the likelihood of disaster occurrence; chances of the collections being destroyed; and the preventive measures that can be instituted to mitigate the effects of unforeseen factors as articulated by the National Library of Australia (2010), are not in place. Furthermore, the findings showed that RAMD does not have a disaster preparedness policy which addresses the following issues: procedures; activities involved before, during and after the disaster; the type of archival materials and records that the archives holds; the methods of storage to be used during the disaster; the supplies for the disaster; the responsibilities during the disaster (disaster management team); and a list of specialists who can be contacted after the outbreak of the disaster.

## **7.8 PRESERVATION OF ELECTRONIC RECORDS AT RAMD**

The findings indicated that RAMD manages and preserves paper-based materials only. In addition, the findings revealed that RAMD is faced with many challenges in its efforts to preserve electronic records. The challenges include unreliable software, server problems and unreliable power supply. A shortage of qualified staff with information technology (IT) skills is yet another challenge facing RAMD since the Department has only one employee with IT skills while the rest of employees have the general knowledge of computer applications. Other challenges include: limited technological tools and strategies in preserving e-records; software and hardware dependencies; and obsolescence and ageing of storage media, among others.

In 1999, RAMD designed and piloted the KoVIS software to help researchers at RAMD to search for archival materials in the search room but it is not yet fully operational. Nevertheless, the KoVIS software is still a challenge to RAMD since the software was developed from the open source which needs regular updates for its use. Considering the problem of unreliable Internet service and power supply that is facing RAMD, it is likely that the reliability of the KoVIS software is still questionable.

The findings of the study also revealed that the Management Information Systems and e-Government (MIS & e-Gov) being one of the PO-PSM directorates, deals with the 'planning, implementation, monitoring and evaluation of all matters pertaining to the use of information communication technologies (ICTs) in the government and the overall implementation of e-government initiatives in the country' (Kilasi 2010:14–15). Therefore, RAMD's role in the management of e-records is seen at the policy level leaving MIS & e-Gov to manage the implementation of e-records management as far as ICT skills are concerned.

## **7.9 CHALLENGES FACED BY RAMD IN PRESERVING RECORDS**

The study identified the following challenges as impacting upon preservation activities at RAMD:

- a. Poor environmental conditions in terms of temperature, relative humidity and air pollution. Temperature and relative humidity at RAMD is very high making most of the archival materials brittle. Lots of dust and smoke are also generated from the environment close to RAMD which affects archival holdings under its custody.
- b. Poor handling of archival materials by users and staff at RAMD. This damages archival materials, hence hinders their long-term accessibility.
- c. Inadequate security of archival holdings under RAMD's custody.
- d. High rate of employee turnover because of poor motivation and unattractive salaries is another challenge. In addition to that, there is poor employee capacity in terms of the required skills for conservation and restoration of archives. All these retard RAMD's preservation efforts.
- e. Unreliable electricity. This affects the temperature and relative humidity in areas that are installed with equipment to regulate such conditions like air conditioning machines and humidifiers. Although RAMD has purchased a standby generator to operate when electricity is off, the operating costs are too high for RAMD to accommodate. For instance, the generator uses 40 litres of diesel per hour while the electricity can sometimes be off for the whole day.
- f. Budget deficit. In most cases the funds allocated to RAMD by the government are not in accordance with the estimated budget for RAMD. This makes some of the operations at RAMD suffer as they resort to prioritisation.

- g. Shortages of storage equipment. Most of the mobile shelves at RAMD's repository are full despite the fact that records at the Records Centre within RAMD need to be appraised. This is still a challenge to RAMD because of shortages of funds.
- h. Shortages of chemicals for conservation activities have also been highlighted as one of the challenges facing RAMD towards its preservation efforts. The reason for such shortages has been attributed to the funds deficit that is facing RAMD.
- i. Digital preservation. This is one of RAMD's challenges as it has not yet embarked on the preservation of digital materials due to a number of reasons as discussed above.
- j. Misplacement of archival materials at RAMD's repository results in problems of retrieval and denying access of such materials to researchers if they cannot be located.

## 8 DISCUSSION OF FINDINGS

The findings revealed that RAMD is facing major challenges in preserving the nation's archival heritage. The findings further indicated that legislation relating to the preservation of archives in Tanzania consists of the:

- a. Records and Archives Management Act No. 3 of 2002;
- b. Founders of the Nation (Honouring Procedures) Act, 2004;
- c. National Records and Archives Management Policy, 2011; and
- d. Records and Archives Management Regulations, 2007.

However, the Founders of the Nation (Honouring Procedures) Act, 2004; the National Records and Archives Management Policy, 2011; and the Records and Archives Management Regulations, 2007 do not provide clear, comprehensive and adequate provisions for the preservation activities at RAMD. Moreover, the findings have shown that RAMD lacks a preservation policy. This finding is similar to other findings in Africa which have also shown that archival legislation in many African countries operating under inadequate legislation and are dire need of major reforms (Mnjama 2014).

The findings of the study revealed that RAMD manages and preserves paper-based materials only. RAMD's failure to preserve e-records has been attributed to challenges such as unreliable software, server problems, unreliable power supply and shortage of qualified staff with IT skills. Other challenges include: limited technological tools and strategies in preserving e-records; software and hardware dependencies; technological obsolescence; and the ageing of storage media. This finding is also similar to other studies conducted in the region which show that most archival institutions in Africa

are not accessioning e-electronic records into their custodies (Katjiveri, Mnjama & Oladokun 2013).

Moreover, the study revealed that RAMD faces a shortage of storage equipment; operates under poor environmental conditions; practises poor archival handling practices by both staff and users; housekeeping practices are not conducted in a satisfactory manner; security is inadequate, disaster preparedness measures are lacking; storage facilities for maps and photographs are inadequate; conservation and restoration facilities are underdeveloped, funding for preservation and conservation is inadequate and that it lacks trained and experienced conservators. These findings are not unique to Tanzania alone but a reflection of the state of preservation and conservation activities among archival institutions in the East and Southern African region (Ngulube & Tafor 2006; Ramokate 2006).

## **9 RECOMMENDATIONS**

Based on the above findings, the study recommends the following measures be put in place.

### **9.1 LEGISLATIVE PROVISIONS RELATING TO PRESERVATION**

The study recommends the merging of the Records and Archives Management Act No. 3 of 2002 and the Founders of the Nation (Honouring Procedures) Act of 2004 so as to accommodate the shortcomings observed in the Founders of the Nation Act. This can be done by the Tanzanian Parliament since the two Acts focus on ensuring that Tanzanian documentary heritage is well managed and preserved for its long-term accessibility by the present and future generations. As for the NRAMP, the findings revealed that the preservation provisions contained in the policy are not broad enough to cater for preservation requirements at RAMD. As regards the RAMP, the study showed that the preservation provisions made in section 14 of the regulations inadequately address preservation needs for the records and archives of the United Republic of Tanzania. Thus, the study recommends for the review and amendment of these regulations to include specific clauses addressing the preservation of records and archives in Tanzania.

### **9.2 TYPES AND FORMATS OF MATERIALS HELD AT RAMD**

Since RAMD is charged with the preservation of the nation's archives irrespective of the media in which they are created, the study recommends that as a matter of urgency, the Department takes practical steps to ensure that records born digital in the public sector are collected and preserved at RAMD. Alternatively, RAMD may wish to designate or

declare the MIS and e-Gov Directorate under the PO-PSM to be the place of deposit for e-records, while remaining responsible for setting standards and guidelines for their preservation as provided for in section 15 (1) (a) (b) of the RAM Act. Similar steps can be taken to declare the Tanzania Broadcasting Corporation (TBC) as a place of deposit for the preservation of sound recordings especially those created by government agencies.

### **9.3 ENVIRONMENTAL CONDITIONS**

The study recommends that the following measures be instituted by RAMD so as to control poor environmental conditions:

- a. Install more air conditioning machines and dehumidifiers in all places where records and archives are stored and used.
- b. Proper ventilation systems and controls be put into place in storage areas to allow circulation of air.
- c. Employ thermo-hygrograph or a whirling hygrometer to monitor the temperature and relative humidity levels.
- d. Install ultraviolet filters on exhibition cases and wrap all the tube lights at the repository and search room with the UV filtering sleeves.
- e. Switch off of lights in the repository at all times when they are not in use so as to control the effects of light on archival materials.
- f. Institute the following measures to control pullutants at the building, such as
  - installing air filtering systems to filter polluted air particles coming from within and outside RAMD's environment;
  - lining the exhibition display cases at RAMD with aluminium foil which is impermeable to all gases and vapours;
  - storing materials in boxes, containers or filing cabinets to control dust and dirt;
  - reviewing and examining building maintenance, repair plans, cleaning processes and waste disposition in order to identify sources of pollution so that alternatives can be devised and instituted to control pollution; and
  - cleaning and dusting the archival building regularly.

These recommendations are similar to those supported by Pascoe (1988), Millar and Roper (1999), and Clements (1987). Furthermore, the study recommends that all incoming collections should be quarantined and inspected thoroughly to ensure that no pests are present before they are brought into the archives.

## 9.4 DEALING WITH MICROBIOLOGICAL AND INSECTICIDAL ENVIRONMENT

The study recommends that RAMD should undertake the following steps:

- a. Decongest the records centre which is located within RAMD (Headquarters) through the appraisal of records and transfer semi-current records currently held there to the recent newly opened Records Centre in Dodoma.
- b. Replace damaged archival boxes forthwith.

## 9.5 DOCUMENT HANDLING AT RAMD

The study recommends that RAMD staff members and users of archival materials should avoid the following archival damaging activities:

- a. folding archival papers in files;
- b. putting files on the floor at the repository after being consulted by researchers;
- c. failing to clip well some of the archival papers in the files which poses a risk of losing some of the folios in such files;
- d. rough handling; and
- e. handling of archival materials with dirty hands.

RAMD should provide archival handling aids, such as book supports, easels, flat carts, stack folders, trays or shallow boxes covered with acid-free paper, book cushions or foam wedges, cotton gloves and trucks among others to search room staff and researchers (Forde 2007). RAMD should conduct regular in-house training sessions, seminars and conferences on handling practices for its staff and users.

## 9.6 IMPROVING HOUSEKEEPING PRACTICES AT RAMD

The study recommends that RAMD should adopt cleaning procedures as recommended by Ritzenthaler (1993:63), which are:

- a. The floor should be damp-mopped or vacuumed at least once a week.
- b. Dusting shelves and boxes should be carried out using a clean, soft and non-treated cloth or brush.
- c. Cleaning of storage, processing or areas containing records should be done within working hours when archival staff are present to supervise.
- d. Cleaning supplies or solvents used in the archive should be ascertained to pose no threat to collections.
- e. Smoking, eating and drinking should be strictly prohibited from the archives storage, processing and reading room areas and staff offices.



- f. Chemicals used for cleaning shelves and floors should be non-damaging to record materials and should not be placed in direct contact with archival materials, nor stored in archival boxes.

## **9.7 SECURITY AND DISASTER PREPAREDNESS AT RAMD**

The study recommends that RAMD should:

- a. Develop both a disaster preparedness plan and a disaster management policy to be modelled on the same lines as provided for in the National Library of Australia (2010).
- b. Institute disaster preventive measures.
- c. Raise staff awareness on disaster management issues for the Department.
- d. Draw up a budget for disasters.

## **9.8 PRESERVING ELECTRONIC RECORDS**

Section 15(1)(a) and (b) of the RAM Act allows the Minister to declare certain institutions as places of deposit for records of permanent value for their safekeeping and preservation. Therefore, as a short-term plan, the study recommends that the mandate of managing and preserving e-records be given to the MIS and e-Gov Directorate which is under the PO-PSM. The Directorate has the capacity both in terms of staff with requisite ICT skills and facilities for managing digital information. Close cooperation between RAMD and MIS and e-Gov can not be overstated in the whole process of e-records management and preservation. RAMD should, however, remain the agency responsible for setting standards and guidelines for the preservation of both paper and e-records and for monitoring compliance to such standards and guidelines.

Given the new trends of preserving records and archives which has been necessitated by the development of science and technology worldwide, this study recommends that as a long-term plan, RAMD should invest in digitisation strategy so that records born digital in Tanzanian public sector can be preserved within the confinements of RAMD along with other paper-based record formats. The adoption of a digital strategy will also enable RAMD to embark on a digitisation programme aimed at migrating damaged and fragile records into newer mediums, and hence increase their accessibility.

## **9.9 OTHER PRESERVATION ISSUES REQUIRING IMPROVEMENT AT RAMD**

The study findings have also shown that maps are inappropriately stored at RAMD. Since it is virtually impossible for RAMD to provide appropriate equipment for all

formats of records, the study recommends that the Department of Lands and Surveys in Tanzania be declared a place of deposit for maps and other cartographic materials as provided for in section 15(1)(a) and (b) of the RAM Act. RAMD is also encouraged to explore the possibility of digitising its map and photographic collections in order to increase access to these materials.

Moreover, the findings have indicated that RAMD is inadequately funded and this impacts negatively on its operations. Hence, the study recommends that the Government should invest more in the preservation of records and archives by allocating adequate funds to this area to ensure the long-term accessibility of such records and archives by the general public. It further suggested that awareness at all levels of government should be created on the importance of preserving documentary materials at RAMD. This is necessary for the Government to realise the value of its archives more and hence allocate adequate funds for their preservation. A study conducted by Amehame-Addo (1993) at the National Archives of Ghana indicated that one of the factors that contributed to deterioration of the archives was the lack of training and awareness on the part of staff and users. The study recommended staff education through in-house training, seminars, workshops and formal training; implementing intensive orientation programmes that equip users with skills for caring and handling the collections. This, therefore, supports the recommendation that training of staff on preservation issues must be given attention.

It cannot be overstated that the advent of information communication technology has revolutionised the manner in which information is collected, stored and accessed. The study, therefore, recommends that the Government should invest in a digitisation programme so that RAMD can go digital in its endeavours of managing and administering records and archives of the United Republic of Tanzania. Above all, the study recommended that there is a need to strengthen the conservation laboratory at RAMD through the provision of modern conservation equipment and the formal training of conservators at suitable training institutions such as Camberwell College of Arts or through attachment at well established conservation laboratories.

## **10 AREAS FOR FURTHER RESEARCH**

Studies on records and archives preservation in Tanzania are limited. The current study has added up the literature on the preservation arena as far as the management and administration of public records and archives is concerned. Thus, more studies should be conducted to cover the preservation of e-records and audio-visual materials in Tanzania. Additional studies are also needed to assess the issues relating to the preservation of private archives of national importance held outside the national archives.

## REFERENCES

- Ameahame-Addo, J. 1993. An evaluation of preservation practices in archives: a case study of the National Archives of Ghana, Accra. Graduate Diploma Project presented to the Department of Library and Archival Studies, University of Ghana, Legon. *Archives and Information Science* 12(2):155–165.
- An, X. 2001. A Chinese view of records continuum methodology and implications for managing electronic records. <http://caldeson.com/old-site/RIMOS/xanuum.html> (Accessed 18 February 2012).
- An, X. 2003. Integrated approach to records management: the records continuum model's purpose-oriented approach to records management changes the role of recordkeeping from reactive to proactive. *Information Management Journal* (July/August):24–29. <http://www.thefreelibrary.com/An+integrated+approach+to+records+management%3A+the+records+continuum...-a0105768177> (Accessed 10 April 2011).
- Bantin, PC. n.d. Strategies for managing electronic records: a new archival paradigm? An affirmation of our archival traditions? <http://www.indiana.edu/~libarch/ER/macpaper12.pdf> (Accessed 27 October 2010).
- Bradsher, JG. 1989. An introduction to archives, in *Managing archives and archival institutions*, ed. JG Bradsher. Chicago, IL: University of Chicago Press.
- Bradsher, JG & Pacifico, MF. 1989. History of archives administration, in *Managing archives and archival institutions*, ed. JG Bradsher. Chicago, IL: University of Chicago Press.
- Bryman, A. 2008. *Social research methods*. Oxford: Oxford University Press.
- Clements, DWG. 1987. *Preservation and conservation of library and archival documents: a UNESCO/IFLA/ICA enquiry into the current state of the world's patrimony*. Paris: UNESCO.
- Cloonan MV. 2001. W(h)ither preservation. *Library Quarterly* 71(2):231–242.
- Conway, PL. 1990. Archival preservation practice in a nationwide context. *American Archivist* 53(2):204–222.
- Couture, C & Rousseau, J. 1987. *The life of a document: a global approach to archives and records management*, trans. D Homel. Montreal: Véhicule.
- Cunha, MG. 1988. *Methods of evaluation to determine the preservation needs in libraries and archives: a RAMP study with guidelines, general information programme and UNISIST*. Paris: UNESCO.
- Duranti, L. 1996. Archives as a place. *Archives and Manuscripts* 24(2):242–255.
- Eden, P & Feather, J. 1997. Preservation policies and strategies in British archives and record offices: a survey. *Journal of the Society of the Archivists* 18(1):59–70. <http://www.tandfonline.com/doi/abs/10.1080/00379819709511812> (Accessed 10 March 2011).
- Forde, H. 2007. *Preserving archives*. London: Facet.
- Harvey, DR. 2002. *Preservation in libraries: principles, strategies and practices for librarians*. West Sussex: Bowker-Saur.
- International Records Management Trust. 2007. Tanzania case study: fostering trust and transparency in governance. Investigating and addressing the requirements for building integrity in public sector information systems in the ICT environment. London: IRMT. <http://>

[www.irmt.org/documents/building\\_integrity/case\\_studies/IRMT\\_Case\\_Study\\_Tanzania.pdf](http://www.irmt.org/documents/building_integrity/case_studies/IRMT_Case_Study_Tanzania.pdf)  
(Accessed 20 September 2011).

IRMT *see* International Records Management Trust.

Jones, NMM & Ritzenthaler, ML. 1989. Implementing an archival preservation programme, in *Managing archives and archival institutions*, ed. JG Bradsher. Chicago, IL: University of Chicago Press.

Katjiveri, M, Mnjama, N & Oladokun, S. 2013. Management of semi-current records in Namibia. *Zambia Library Association Journal* 28(1&2):124–137.

Kemoni, HN. 1996. Preservation and conservation of archive materials: the case of Kenya. *African Journal of Library, Archives and Information Science* 6(1):46–51.

Kilasi, M. 2010. An assessment of disaster preparedness for public sector records management in Tanzania: a case of President's Office Public Service Management and Prime Minister's Office, MARM Dissertation, University of Botswana, Gaborone.

Kiyabo, HK. 2011. Managing presidential records and archives in Tanzania. MARM dissertation, University of Botswana, Gaborone.

Kootshabe, TG. 2011. Preservation of records in selected government ministries and departments in Botswana. MARM dissertation, University of Botswana, Gaborone.

Mazikana, PC. 1999. Access to records: conditions and constraints, in *Proceedings of the 15th Biennial General Conference of the Eastern and Southern Africa Regional Branch of the International Council on Archives and the Protection of People's Rights*, ed. V Harris. Pretoria: National Archives of South Africa: 74–81.

McCausland, S. 1993. Access and reference services, in *Keeping archives*, ed. J Ellis. Melbourne: Thorpe: 273–305.

McKemmish, S. 1997. A review of the RMAA Annual Conference, September 14-17, 1997, in Perth WA. The Caldeson Consultancy. <http://www.caldeson.com/confidnt.html> (Accessed November 2010).

McKemmish, S. 2001. Placing records continuum theory and practice. *Archival Science* 4:333–359.

Millar, L. 1997. *Principles of records and archives management*. London: International Council on Archives/IRMT.

Millar, L & Roper, M. 1999. *Managing public sector records: preserving records*. London: IRMT.

Mnjama, N. 2014. Archival legislation in Africa, in *Digital access and e-government: perspectives from developing and emerging countries*, ed. KH Moahi, PM Sebina & KJ Bwalya. [S.l.]: IGI-Global: 27–47.

Musembi, M. 1986. Development of archives services in East Africa, in *Proceedings of the 9th Biennial General Conference and Regional Seminar on Archives Administration and Regional Planning Meeting: Guide to the Sources of African History: Eastern and Southern Africa Region, Mbabane, Swaziland, 3–8 November*, ed. RJ Kukubo. Maseru: University Press of Lesotho, National University of Lesotho: 115–134.

National Library of Australia. 2010. Community heritage grants: preservation needs assessments. <http://www.nla.gov.au/chg/assess.html> (Accessed 10 October 2010).

- Ngulube, P. 2003. Preservation and access to public records and archives in South Africa. PhD thesis, University of KwaZulu-Natal, Pietermaritzburg.
- Ngulube, P. 2006. Knowledge and skills: nexus between funding and preservation of documentary materials. Paper presented at the South African Preservation and Conservation Group (SAPCON) Conference on Preservation on a Shoe-String, Kimberley, South Africa, 25–27 July. <http://www.sapcon.org.za/docs/conf06-p2.pdf> (Accessed 4 April 2011).
- Ngulube, P & Tafor, VF. 2006. The management of public records and archives in the member countries of ESARBICA. *Journal of the Society of Archivists* 27(1):57–83.
- Pascoe, MW. 1988. *Impact of environmental pollution on the preservation of archives and records: a RAMP study: general information programme and UNISIST*. Paris: UNESCO.
- RAMD *see* Tanzania: Records and Archives Management Department.
- Ramokate, K. 2006. Preserving the African memory: critical challenges for ESARBICA archival organizations. *ESARBICA Journal* 25:84–93.
- Ritchie, J, Spencer, L & O'Connor, W. 2003. Carrying out qualitative analysis, in *Qualitative research practice: a guide for social science students and researchers*, ed. J Ritchie & J Lewis. London: Sage.
- Ritzenthaler, ML. 1993. Preserving archives and manuscripts. <http://babel.hathitrust.org/cgi/pt?view=image;size=125;id=mdp.39015071452380;page=root;seq=78;num=64> (Accessed 18 February 2012).
- RNAD *see* Tanzania: Records and National Archives Division.
- Schellenberg, TR. 1971. *Modern archives: principles and techniques*. 5th Impression. Chicago, IL: University of Chicago Press.
- Shepherd, E & Yeo, G. 2003. *Managing records: a handbook of principles and practice*. London: Facet.
- Southeast Asia. 2010. Management review and analysis: the planning process. [http://www.librarypreservation.org/support\\_effort/management1.htm](http://www.librarypreservation.org/support_effort/management1.htm) (Accessed 27 November 2010).
- Tanzania: Records and Archives Management Department. 2007. *Three years report 2005–2007*. Dar es Salaam: Government Printer.
- Tanzania: Records and National Archives Division. 2011. History. <http://tanzania.ninabosanac.com/221> (Accessed 25 September 2011).
- Tough, AG. 2007. Tanzania Records Management Project. <http://www.gla.ac.uk/services/archives/news/dunaskinnews200207/tanzaniarecordsmanagementproject/> (Accessed 23 September 2011).
- Upward, F. 1996. Structuring the records continuum, Part One: post-custodial principles and properties. *Archives and Manuscripts* 24(2):268–285. <http://www.infotech.monash.edu.au/research/groups/rcrg/publications/recordscontinuum-fupp1.html> (Accessed 21 November 2014).
- Upward, F. 2000. Modelling the continuum as paradigm shift in recordkeeping and archiving processes, and beyond: a personal reflection. *Records Management Journal* 10(3):115–139.
- Upward, F. 2001. Modelling the continuum as paradigm shift in recordkeeping and archiving processes, and beyond: a personal reflection. <http://infotech.monash.edu/research/groups/rcrg/publications/frank-u-rmj-2001.pdf> (Accessed 10 May 2011).

United States General Accounting Office. 2002. Information management: challenges in managing and preserving electronic records: report to congressional requesters. <http://www.gao.gov/new.items/d02586.pdf> (Accessed 10 September 2011).

US General Accounting Office *see* United States General Accounting Office.

Wachter, W. 1989. *Study on mass conservation techniques for treatment of library and archives material, general information programme and UNISIST*. Paris: UNESCO.