Abstract
This paper reviews the state of the audio-visual collections held by different government institutions in Botswana. The rationale of such review rests on the observation that although audiovisual materials constitute a vital information resource in such institutions, they are often not adequately managed after they are created. The paper identifies the types of audiovisual materials found in the public sector and the challenges in the management of the materials. The paper shows that many of the problems related to the management of audiovisual materials in the country emanate from weak legislative framework, lack of trained personnel in the management of audiovisual materials, technological challenges, inadequate storage facilities and the perception by users that audiovisual materials are not as valuable as records in other formats. The paper proffers strategies for dealing with the challenges of preserving and improving the use of audiovisual materials in Botswana.

Keywords
Audiovisual materials, records management, preservation, National Archives, Botswana.
The major objective of archival and library services is to facilitate access to collections in their care so that the collections are accessible for education and research purposes. A second and also very important objective of such services is the preservation of materials in the collections so that they can be available to future generations. Strategies to attain these two objectives often conflict with one another as there is no way collections can be used without them being damaged accidentally or intentionally during use.

According to Harvey (1994) 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 them.” He further define 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.” The importance of preserving library collections was summed up by Cloonan (2001) when he stated “preservation allows for the continuity of the past with the present and the future.” Nevertheless, it would be a waste of resources if after institutions have devoted considerable sums of money in acquiring and processing the collections if these remain inaccessible to scholars and other bona fide users.

Although preservation challenges are known throughout the world, many experts in the field have gradually begun to realised that there are specific problems faced by conservators in different parts of the world. Teygeler et al. (2001) have noted that the problems encountered by conservationists in many developing countries are “often more complex than those in developed countries. There is therefore need to undertake studies that relate to specific areas and suggest solutions that address these issues. A preservation strategy involves three aspects; assessment, planning and action. A preservation assessment is usually undertaken to determine the preservation requirements for the collection and to evaluate the strengths and weaknesses of the building, policies and guidelines, storage environment, archives’ holdings (collection media), holdings maintenance and disaster management.

Audiovisual materials are usually described as “non-print” documents, in the sense that they convey their information in some way other than text on a printed page. They have also been called “non-book” or “special formats” and sometimes require equipment to use. It is for this reason that audiovisual materials are sometimes classified into two groups - “projected materials” and “non-projected materials”. Audiovisual materials include sound recordings, film and video, graphic materials, electronic resources, three-dimensional objects, maps, and microforms. Some audiovisual formats, like film loops, have become obsolete, while others such as gramophone records are in the process of becoming obsolete. Yet, others are new and are still being tried in the market place to see if they will receive wide acceptance. Edmondson (2004) proposes a wider definition of audiovisual heritage which he suggests ought to include:

(a) Recorded sound, radio, film, television, video or other productions comprising moving images and/or recorded sounds, whether or not primarily intended for distribution to the public,

(b) Objects, materials, works and intangibles relating to audiovisual documents, whether seen from a technical, industrial, cultural, historical or other viewpoint, this shall include material relating to the film, broadcasting and recording industries, such as literature, scripts, stills, posters, advertising materials, manuscripts, and artefacts such as technical equipment or costumes,

(c) Concepts such as the perpetuation of obsolescent skills and environments associated with the reproduction and presentation of this media,

(d) Non-literary or graphical material such as photographs, maps, manuscripts, slides, and other visual works selected in their own right.
As can be seen from the above definition, audiovisual materials encompass different materials. Generally audiovisual materials may be divided into four major groupings: (i) visual materials (still and motion pictures); (ii) audio materials (discs and tape recordings); (iii) objects and manipulative materials (realia and game models); and (iv) machine readable data files (magnetic tapes, punched cards and aperture cards). The focus in this paper is however on the first two categories, i.e. visual and audio materials in Botswana.

Zinyengere (2008) avers that “audiovisual records are vital elements of our collective memory, determining our achievements over the years, documenting our past, present and determining our future.” They are major information carriers comparable to books and other well known archival documents. Materials such as audiotapes, compact discs, videos, films etc are very useful for entertainment purposes. Some of these materials are readily found in homes and social centres where communities often gather to enjoy listening to them. Others are used purely for educational and research purposes. For instance, it is common practice these days to find audio-visual materials such as documentary films, audiotapes and photographs being used in educational establishments as teaching aids. The fact that some of them such as videos and films appeal to both sight and hearing senses makes them ideal for educational purposes.

Other audio-visual materials such as photographs, maps and painting are used as decorations in homes and in offices. Maps and plans are more often used for planning purposes and land utilisations. In the past, maps have also been used for legal purposes or in conflict resolution between individuals or among nations. For instance, not so long ago, archival maps from Botswana National Archives proved very valuable in determining a boundary dispute between Botswana and Namibia which had been referred to the International Tribunal at The Hague in February 1999 (Al-Essawi and Nthuli, 2007; Lekaukau, 1993).

Within African societies, many audio-visual materials especially music, photographs and films are useful for the transmission of culture. As cultural norms and values are constantly changing, one of the best ways of looking at the past is through the use of audio-visual materials. The other way in which audio-visual materials have been found to be very useful is in the study of history. Photographs and films as well as audio recordings of major historical events have been captured and preserved in audiovisual formats (Setshwane, 2004).

**Objectives**

As explained above, audio-visual materials constitute part of the cultural heritage of any nation. Yet, despite the critical role played by audiovisual materials in documenting societal memory, they are rarely accorded the same treatment as other documentary materials. This study therefore sought to answer three basic questions:

1. What is the legal and regulatory framework for managing audiovisual materials in Botswana?
2. What are the major challenges facing the management, preservation and use of audiovisual materials in Botswana?
3. What recommendations are needed for the effective management and utilisation of audiovisual materials in Botswana?

The findings of this study will be very valuable in charting the way forward for the improved management of audiovisual materials in Botswana.

**Methodology**

A substantial part of the data for this paper had been collected over many years through this author’s personal visits and interaction with librarians responsible for managing audiovisual materials in Botswana. Over the last thirteen years, the author has supervised students on industrial attachments at various records offices and audio-visual centres in Botswana. This has provided the author with numerous opportunities to inspect records storage facilities and discuss various records and audiovisual management issues with the host records officers and librarians. The author has also supervised two graduate dissertations on the management of sound records at Radio Botswana and the preservation of photographic materials at the Department of Surveying and Mapping. A review of literature on audiovisual materials, especially empirical literature emanating from the Southern African region has also been undertaken. Furthermore, the ongoing compilation of *A Guide to the Contents of Botswana National Archives*
has enabled the author to experience, first hand, the challenges of managing audiovisual materials at the Botswana National Archives and Records Services.

**Managing Audio-Visual Materials in Botswana**

Botswana as a nation has a rich and varied collection of audiovisual materials. Photographic materials are held by the Department of Information and Broadcasting while Radio Botswana holds an extensive collection of phonographic and compact discs and lately DVD’s (Setshwane, 2004). Botswana Television has an excellent video library and the Department of Surveying and Mapping has an equally good collection of ordinance survey maps and other aerial photographic materials (Tamulha, 2001). Botswana National Archives holds private, as well as public photographic collections and videos and also serves as a depository for selected Radio Botswana and Botswana Television programmes (Mnjama et al., 2009). Various departmental, ministerial, educational, and private and non-governmental organisations also collect and maintain their own audio-visual collections which support their organisational needs.

Virtually all the different formats of audio-visual materials are found in Botswana. The Botswana National Archives, which is the overall department charged with the responsibility for managing public records in the country, has been involved in the collection of some of these materials and has a small audiovisual section within the Archives Administration Division (Mnjama et al., 2009). The National Archives has also made arrangements with the Botswana Television and Radio Botswana for the acquisition and permanent storage of audiovisual materials considered to be of national interest. According to Keakopa (1998), the National Archives have also been engaged in the collection of oral history and a reasonable amount of audio recordings has been acquired through this programme. Despite these efforts, a recent study conducted by Kalusopa (2008) indicates that only 28.6 percent of organisations in Botswana had a programme for the digitisation of audio-visual materials.

Audiovisual materials, just like other information resources, have not received the attention they deserve. In many of the institutions surveyed, audiovisual materials are not fully processed and are not easily accessible. At the National Archives of Botswana, the photographs have been catalogued while at Radio Botswana CDS-ISIS software is used to access the materials (Setshwane, 2004). In some other institutions, there are still heaps of unprocessed or partially processed collections. In many of the institutions surveyed the collections are stored in environments that are not conducive for the storage of such materials.

Many of the challenges facing the management and preservation of audiovisual materials are not unique to Botswana, but are common to many developing countries. As Zinyengere (2008) has rightly observed that “audiovisual recordings in many African countries are endangered because of various factors including but not limited to political and economic factors,, legal statutes towards audiovisual materials, staffing, lack of training and funding, obsolescence of playback equipment, perception of society towards archives, climatic issues, technological awareness and the preservation and access of recordings.”

**Inadequate Collection Acquisition Policies**

The collection and preservation of audiovisual materials must be supported by the law, clearly defined policies and procedures, well equipped building and storage facilities, a well trained team of audio-visual specialists, and well educated and informed users on the value and importance of audio-visual materials. Unfortunately, in the case of Botswana, the law is silent on the audiovisual materials. Neither the National Archives Act, nor the Library Act makes mandatory for creators of audiovisual records to deposit their works with the National Archives or the National Library. For this reason, the creators of audiovisual materials have no legal obligations or contractual arrangement with these national institutions to deposit their works with them. As a result of this apparent weakness in the legislative framework, major gaps exist in audiovisual holdings held by the Botswana National Archives and Records Services.
Moreover, one of the greatest challenges facing Botswana today is inadequate or lack of a comprehensive and uniform national collection policy for audiovisual materials. Whereas, there are well defined policies and procedures for the transfer of paper based collections to the national archives, the same can not be said of audiovisual materials. For instance, the Botswana Broadcasting Act stipulates that broadcasters are required to “keep and store sound and video recordings of all programmes broadcast or re-broadcast for a minimum period of three months after the date of transmission of the broadcast or re-broadcast, or for such further period as may be directed by the Board”. The provision of this Act while demanding that sound and video recordings be preserved for up to three months, is silent on the long term retention period and disposition of such recordings (Republic of Botswana, 1998).

Although it is assumed that audio-visual materials are part and parcel of archival materials and therefore are included in the archival legislation, presently there seems to be greater emphasis on the acquisition of paper based materials at the expense of audio-visual materials. An examination by the author of the holdings of Botswana National Archives reveals that initially the institution focused its efforts towards the collection of public records, but of late it has began to collect photographic materials, videos, compact discs, DVD’s and audiotapes. But the focus still remains on the collection of paper based records.

Discussions with the Director of Botswana National Archives and Records Service revealed that an arrangement between Botswana Television and Radio Botswana to transfer to the National Archives selected televised and broadcast programmes exists and through this activity a sizeable portion of audio-visual materials have been deposited with the National Archives. This arrangement does make sense for as Derges (1998) has rightly observed “it would be unrealistic to attempt to preserve all broadcasts, so the archivist has to decide which broadcast will have historical value. How to obtain these broadcasts can be problematic since state run broadcast authorities can be reluctant to relinquish “control” over their productions. Some way of purchasing the broadcasts has to be found either by buying them outright or by making copies”.

Moreover, even if the Botswana National Archives was to acquire all audiovisual materials in the country created by government agencies, the national archives building would not be adequate to store these items and neither would the building be able to meet the different environmental conditions for all the different media formats of the items.

Accordingly, this article suggests the formulation of a national policy clearly defining which institutions should be charged with the responsibility for the collection and preservation of specific audiovisual formats. The National Archives Act Chapter 50:04 provides for such an arrangement under section 4 where it is clearly stated that:

If it appears to the Minister that facilities exists for the safekeeping and preservation of public records and their inspection by the public in some place other than the National Archives and that convenience so requires, he may with the agreement of the authority or person responsible for that place declare that place to be a place of deposit for public records of any category.

Section 6.1 of the same Act further stipulates that “the director shall have access to every place of deposit, and may exercise, in relation to any place of deposit and to the public archives therein, the functions and powers conferred on him by this Act in relation to the National Archives and the public archives therein, and may delegate to the custodian of the public archives in any such place any of such functions and powers other than the power of affixing the seal of the national archives.” This arrangement is informally in place with the Department of Surveying and Mapping focusing on the collection and preservation of maps and plans, Radio Botswana currently involved in the collection of music, Botswana Television collecting video materials and film, and the Department of Information collecting photographic materials. Time has now come for this informal arrangement to be incorporated into a national collection and preservation policy for audio-visual materials (Republic of Botswana, 1998).
Inadequate Storage Facilities

A major challenge facing the collection of audiovisual materials in the country pertains to storage. In virtually all the repositories visited over several years by the author, it was established that audiovisual materials are kept under the same environmental conditions as traditional archives. These observations are similar to those of Kukubo (1986), Matangira (2003) and Abankwah (2007). Botswana as a country has two climatic extremes. The summers are very hot and dry with temperatures rising up to 40 degrees Celsius, while winters are dry and very cold with temperatures falling to zero in the evenings and in the early morning (Botswana Review, 2002). These fluctuations in temperature are not ideal for the management of audiovisual materials. An earlier study carried out by the Standing Committee on Preservation and Conservation revealed inadequate storage conditions in most of the information centres surveyed (Monageng, 1997). Apart from the National Archives, Radio Botswana and Botswana Television Station that have purpose-built buildings, many of the other information centres are currently housed in buildings not designed for the storage of audiovisual materials. It is advisable to store audiovisual materials in institutions where appropriate storage and handling equipment is available. Indeed experience gained in Mozambique indicates that it makes economic sense for national archival institutions to relinquish any attempts to bring its custody audio-visual materials. This is a view supported by Derges (1998:64) who argued that “film was not stored at the National archives, but at the National Film Institute. This was a good use of resources because the Film Institute had a laboratory and it had cold rooms and all editing and viewing equipment. If the National Archives had taken upon itself to store film, they would have had to duplicate all these resources at great cost.” This article suggests that Botswana should follow suit and allow Botswana Television and Radio Botswana to retain audiovisual materials as these institutions have cold rooms and the equipment that is needed. However, as the department charged with the responsibility for collecting and preserving records, the National Archives should set standards and guidelines which should be regularly monitored for compliance.

Apart from inadequate storage facilities for audio-visual recordings, there is also a lack of restoration of such facilities in the Nation Archives. Restoration of damaged audio-visual materials requires specialist equipment and trained personnel, both of which are not available locally. For instance, up to now Botswana National Archives has only one trained conservator. The second conservator is currently undergoing training in the UK.

Access to Audio-Visual Materials

A survey of retrieval tools at the Botswana National Archives and at the Radio Botswana audiovisual materials indicates that many of these materials are partially processed or not processed at all. This is particularly true for photographs which tend to occupy large areas. In the absence of detailed descriptive catalogues, indexes and registers, access to these to these materials is hampered. Moreover, as many of these materials are machine dependent, the absence of playback equipment may hinder access to the information contained in these records. Financial constraints have also hampered the libraries from converting their holdings to modern storage media.

Lack of Skilled Manpower in Audiovisual Materials

The nation also faces the challenge of lack of trained personnel in audio-visual archiving. While Botswana has well established programmes for the training of librarians, archivists and other information providers, the same can not be said of audio-visual archivists. The training of such professionals requires special facilities which are currently lacking in the country. Currently, many of the institutions holding audiovisual collections are headed by librarians seconded from the Botswana National Library Services (Tamulha, 2001). These librarians are doing a commendable job in the area of processing and accessing the materials, but due to their limited technical expertise in restoration of audio-visual materials, they are unable to deal with the repair of damaged materials. The need for training in the management of audiovisual materials has been compounded by the emergence of new media such as compact disks and DVD’s and the need to
migrate materials from older formats such as phonographic collections into digital formats.

As the country lacks the facilities for the training of audiovisual archivists, it is suggested that the country explores various options in order to train audiovisual archivists. One option would be to invite an expert from the West who can come and deliver a specialist in-house course to librarians who are engaged in the management of audiovisual materials. This option would enable a larger team to be trained and the costs involved will be less. For this to work, proper arrangements would need to be made with institutions such as Botswana Television and Radio Botswana for all materials needed for the training so that they are ordered in advance. The second option would be through placing identified personnel on attachments with audiovisual centres in South Africa or outside the Southern African region as currently there is no known institution in the African continent offering training in audiovisual archiving (Zinyengere, 2008). The main disadvantage with this option is that financial resources may not permit more than one employee to be sent on attachment. The third option is to send audiovisual librarians for formal training in the West. The last option is to provide the specialist training in audiovisual materials either at the Department of Library and Information Studies or the Department of Media Studies at the University of Botswana. The Department of Library and Information Studies at the University of Botswana has been offering courses in library studies since 1979 and in archives and records management since 1996 (Mnjama, 2002). The Department of Media Studies was established in 2000 and provides training to mass media specialists. It has some basic recording and playback equipment which can be used for training of audiovisual archivists. Training in these two departments could be supplemented with practical sessions at the Botswana Television and at the Radio Botswana. If this option was to be adopted, there would be need for one of the lecturers from either department to pursue some additional training in audiovisual archiving.

Inadequate Funding
Funding of archives and records management programmes in Botswana has been very good and the government must be commended for its continued support to the national archives. The government has also been very supportive in the acquisition of audiovisual materials and equipment (Lekaukau, 1993). However, financial support for training of audiovisual archivists and the acquisition of specialist storage equipment for the storage of audiovisual materials have been limited. Many of the audiovisual centres visited lack a line budget for audiovisual resources. The problem of funding was highlighted by Modise (1998) in her study of Radio Botswana Gramophone and Tape Library.

Lack of a National Register on Audiovisual Materials
One of the greatest challenges facing the collection and preservation of audiovisual materials in the country is lack of sufficient information on what materials exist locally. To date, no surveys have been carried out to establish the nature, volume and content of audio-visual materials and the conditions under which they are held. Neither is there a national register indicating the institutions currently holding audio-visual collections. Apart from Botswana Television, Radio Botswana, the Department of Mapping and Surveying, and the Department of Information, very little is known on what exists locally (Tamulha, 2001). The need to compile such information in the form of a register can not be overstated. The information will not only assist in the formulation of collection policies, but will also be useful in the formulation of preservation strategies and establishing priorities on materials to be restored. The question which arises is who should compile such a register. This responsibility lies with the National Archives, but the Department of Library and Information Studies at the University of Botswana may also consider carrying out this task as part of its research agenda. Once compiled the register will need to be updated regularly as the locations of where these holdings are liable to change from time to time.

Technological Challenges
Many audiovisual materials with the exception of photographs and maps are machine dependent. This can present challenges when users are not familiar with the use of the equipment. Apart from familiarity with technology, changes in recording and playback
equipment very often results in inability to access information created in some models. The need to constantly migrate information from one storage medium to another is major challenge to developing countries such as Botswana where resources are limited for the acquisition of each new version or model of equipment. In order to avoid audiovisual centres being converted into museums of outdated audio-visual equipment, it is suggested that each audiovisual centre restricts the brands of equipment it purchases. The challenge posed by changing technologies and obsolete equipment is not unique to Botswana alone. Lihoma (2008) recently reported that “for a long period of time, up to 2006, National Archives of Malawi’s film archive collection was inaccessible because of the lack of playback equipment (i.e. film projectors). Spare parts for the equipment were scarce on the local market due to the phasing out of the equipment by the manufacturers.

Copyright Law and Infringements
Copyright is a major concern for most audiovisual materials as they can easily be copied or the information migrated into newer formats and mediums. Moreover, more than one copyright may exist side by side for recordings. Librarians and archivists managing audio-visual materials need to familiarise themselves with copyright requirements. A new Copyright and Neighbouring Rights Act was passed in Botswana in 2000 repealing the old copyright Act of 1911 (Republic of Botswana, 2000).

The new act is more elaborate and seeks to protect the intellectual property rights of creators of original works, many of which include audiovisual works. Botswana is a signatory to the Berne Convention since April 1998, and is also a signatory to WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty since January 2005. The Ministry of Trade and Industry has overall responsibility for monitoring compliance with the Copyright and Neighbouring Rights Act, but just like other developing countries in the region there is strong evidence to suggest that copyright infringements, in as far as audiovisual materials are concerned, are rampant.

Overcoming the Challenges
In order to overcome the challenges discussed above, there is a need for new and effective strategies for managing audiovisual materials that take into account the unique challenges faced by developing countries, including Botswana.

In the case of Botswana, a beginning has already been made through the construction of a new mass media complex of the Department of Information Services where both the Music Library and the video collection are now housed under suitable climatic conditions. Efforts have also been made at the CD Library and the Music Library to organise the collection. The Botswana National Archives has also made efforts to organise its video and photographic collections, and efforts are ongoing to repair and maintain the air conditioner at the National Archives building. Although attempts are being made to provide cold storage facilities in the new extension to the National Archives building, any attempt to bring all audiovisual materials together would be futile as it would be impractical to meet the environmental storage conditions for each type of media. It is for this reason that this paper suggests that the Director of Botswana National Archives identifies specific institutions which have adequate storage facilities and declares them places of deposit for specific audiovisual materials as provided for in Sect 4(i) of the Botswana National Archives Act. The responsibility of the National Archives would then be limited to setting standards and monitoring for compliance of those institutions designated as places of deposit for public records. The other recommendations of this paper are as follows:

1. The Botswana National Archives, in collaboration with the institutions holding these materials, should develop collection policies which will assist in the systematic collection and preservation of valuable audiovisual materials. Consideration should be given to the establishment of a national coordinating office or agency for the preservation and restoration of audiovisual materials.

2. Earlier efforts to establish a vibrant standing committee on preservation and conservation seem not to have worked out well and there is a need to examine why the committee has not been functioning. The Standing Committee on
Preservation and Conversion should be revived or in its place a new office be established charged with the mandate of establishing and setting of standards for audio-visual centres in the country. Whether such an office should be housed at the National Archives or at the Department of Information Services is a subject that should be discussed by the parties involved.

3. The Department of Library and Information Studies at the University of Botswana should launch a specialist short course for the training of audiovisual archivists. Such a course should be geared to training librarians who currently manage audiovisual centres. Alternatively, efforts should be made to send on attachments librarians responsible for managing audiovisual archives to other institutions outside the country where they can experience and learn best methods for managing such archives.

4. A nationwide survey should be carried out to establish the extent of audiovisual archiving in the country and measures should be put in place to rescue any audiovisual materials that might be endangered. Risk assessments should also be undertaken and disaster preparedness plans assessed or prepared in the institutions where audiovisual materials are currently being stored.

5. There is also need to adhere to basic archival standards in as far as the acquisition of audiovisual materials is concerned. The acquisition of low quality audiovisual materials should be avoided in all information centres as this will only result in major preservation problems in the not too distant future. As new technologies are being introduced in the country, new ways of migrating information into new media and formats be explored.

6. In order to minimise incidents of copyright infringement, it is suggested that the Ministry of Trade and Industry works closely with law enforcement agencies in order to deal with the problem.

7. The funding of archival programmes including the preservation of audio-visual materials will always be a challenge. The burden cannot be borne by the government alone and there is an urgent need to explore funding from other sources particularly from the private sector.

Conclusion

This paper has reviewed the state of audio-visual materials in Botswana. It has identified the major challenges facing the collection and management of audiovisual materials to be inadequate collection/acquisition policies, lack of a national register, and infringement of copyright laws, inadequate storage facilities, inadequate funding and lack of specialist training. The article recommends that certain institutions can be designated as repositories under the provisions of the Botswana National Archives Act, specialist training be organised, a national register on manuscripts be compiled and that new methods for persevering and increasing access to the collections through digitisation be investigated.

References


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