



# **Preservation of, and access to, legal deposit materials at the Msunduzi Municipal Library, Pietermaritzburg**

by

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## **Declaration**

The author declares that the contents of this dissertation, unless specifically indicated to the contrary, are her own work and that the dissertation has not been submitted simultaneously, or at any other time, for another degree.

Zawedde Barlow Nsibirwa

## **Dedication**

This thesis is dedicated to my parents, Mary and Hugo Barlow, who have always encouraged me to continue studying. To my husband, Martin, who has supported me in various ways and to my children, Nantale and Kasalina who accepted that I had to spend lots of time away from them.

## **Abstract**

The study investigated preservation of, and access to, legal deposit materials at the Msunduzi Municipal Library. Constant access to legal deposit materials will depend on proper preservation methods from the time they are first produced. The focus was to identify how the different materials are preserved and stored, especially because every institution has unique needs, especially with regard to the climatic conditions of the area. The study also examined challenges faced by the depository, skills and knowledge of the depository staff about preventative preservation methods, resources for conservation and collection management strategies. The methods to help make materials accessible were established by examining the means and processes used.

Methodological triangulation was used to look at the study in different ways and this included a questionnaire, interviews, observation and collection of graphic data. The units of analysis were the staff of the legal deposit department and the whole population was surveyed. In this study, quantitative and qualitative techniques were employed. The results of the self-administered question and observation schedule were analysed using SPSS. Data collected using the interview schedule was analysed qualitatively.

The results of the study show that there are inadequate preservation activities and strategies for legal deposit materials at the Msunduzi Municipal Library. The legal deposit collection was at risk of being lost and inaccessible to present and future generations. This was mostly due to lack of preservation activities and strategies as a result of lack of knowledge in preservation, adequate funding, staff training, preservation policies, environmental control of stack rooms and the proper handling and storage of materials.

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## List of acronyms and abbreviations

ALA	American Library Association
CATNIP	Cataloguing Network in Pietermaritzburg
HRC	South African Human Rights Commission
IFLA	International Federation of Library Associations and Institutions
HVAC	Heating, ventilation and air conditioning system
LIASA	Library and Information Association of South Africa
NEPI	National Education Policy Investigation
OPDs	Official publications depositories
RH	Relative humidity
SACat	South African Catalogue
SANB	South African National Bibliography
SASA	South African Society of Archivists
UBC	Universal bibliographic control
UKZN	University of KwaZulu-Natal
UNESCO	United Nations Education, Scientific and Cultural Organisation
URICA	Universal Real-time Information Control Administration
UCSD	University of California, San Diego
UV	Ultraviolet

## **Chapter 1: Introduction**

Little has been written about the preservation problems that legal deposit libraries face and how they are treated, although it is clear they do have problems and various constraints on action. It is a multifaceted task to measure the value of having the published heritage of a country collected, preserved and accessible to people through a statutory requirement known as legal deposit. All over the world, libraries and archives are faced with deterioration of collections, so this is not new (Foot, 1997). Ngulube (2003:1) states that “most of mankind’s documentary heritage is recorded on materials subject to the ravages of unstable environments, biological factors, careless handling, natural and human made disasters, inferior paper, impermanent and acidic inks ... that render information inaccessible”. The rights of access to information, the new technology used to make multiple copies and the increase in air pollution have all contributed to the increase in the rate of chemical and mechanical damage to cultural heritage collections. These issues, coupled with the economic situation that leads to poor funding or lack of funding for library collections, cause a threat of deterioration and loss of printed national and international heritage and forces libraries to make the best use of scarce resources (Foot, 1997). To gain awareness of some of these issues that may impact on planning for legal deposit materials, this study investigates preservation of, and access to, legal deposit materials at a public library.

### **1.1 The research problem**

This section deals with the background to the study, statement of the problem and rationale of the study.

#### **1.1.1 Background to and outline of the problem**

The Legal Deposit Act was introduced in South Africa in 1842, when the parliament at the time implemented the British Copyright Act, with slight amendments (Tuckett, 2003). The law states that all publishers in the country must deposit free copies of their publications in selected legal depositories. In South Africa, these legal depositories are the National Library (in both Pretoria and Cape Town), the Mangaung Library Services (formerly Bloemfontein Public Library), the Library of Parliament in Cape Town, the

Msunduzi Municipal Library (formerly the Natal Society Library)<sup>1</sup> in Pietermaritzburg and the National Film, Video and Sound Archives in Pretoria (Tuckett, 2003). In addition to legal depositories, there are selected official publications depositories (OPDs), which are entitled to every official government publication, including any parastatal or public body publication. According to Tuckett (2003), “the existing places of legal deposit may also serve as OPDs”. There are two OPDs, namely the Constitutional Court Library and the Puthaditjhaba Public Library in the Free State, which was officially launched on 11 March 2006 (Jordan, 2006). The Msunduzi Municipal Library is the oldest library in KwaZulu-Natal. It was established in 1850 and became a legal deposit library in 1916 (Willemse, 1963b:76). Legal depositories in South Africa ensure that the sources of a country’s heritage are collected, controlled bibliographically, preserved and made accessible for present and future generations (Behrens, 2000:132).

### **1.1.2 Statement of the problem**

Africa has many challenges with regard to its library and information services and many libraries are not functioning properly, due to lack of finances, lack of full support from the government and policy-makers and lack of proper training of library staff (Rosenberg, 2001:13). Ngulube (2003:18) quotes Oliver (1999:10), who stated that “the preservation of public records and archives, in general, and vulnerable records, particularly in South Africa has been greatly neglected”. Yet, in the post-apartheid South Africa the Bill of Rights of the Constitution of the Republic of South Africa Act 108 of 1996 gives everyone the right of the access to information. Other regulations are putting more strain on records in whatever form. Preservation thus becomes very important. Tuckett (2003) says that:

legal deposit libraries form an integral part of the library and information service structure of South Africa as their resources are freely utilised by countless numbers of people throughout the country from all levels on the information needs scale.

Apart from the Bill of Rights there is legislation regulating training, development and

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<sup>1</sup> The Msunduzi Municipal Library was officially re-named the Bessie Head Library on the 12<sup>th</sup> July 2007.

education, namely the South African Qualifications Authority Act (Meyer and Kirsten, 2005). This Act is part of the South African skills development strategy that intends to connect learning with workplace demands and to facilitate employees to become creative and competitive. This legislation has led to change in the educational curriculum as a whole. South Africa has moved from the traditional ways of learning, which was teacher-centred, to 'outcomes based education and training', which emphasizes the end result of competence and is a more practical way of learning. This has led to an increase in the number of tertiary students going to public libraries to access information. It is every citizen's democratic right to access legal deposit materials, but these materials have to be preserved for future use. The Victoria Electronic Records Strategy, quoted in Ngulube (2002:27), states that "we know the past by records people have left us". Without preservation, people will not be able to access the publications for posterity and future generations will lose parts of their national heritage. These issues and challenges have not been properly addressed in South Africa (Ngulube, 2002:28). Ngulube (2003:335) found that:

for South Africa to overcome the impending preservation crisis there is need for adequate funding, staff training, environmental control in records storage places, standards for preservation and access, research and development, and preservation planning.

Fenn and Muir (2003) state that "the purpose of a collection is a determining factor in its preservation needs". The primary purpose of the Msunduzi Municipal Library legal deposit collection is to provide access to materials published and produced years ago, because these materials were deposited and need to be properly preserved for future generations.

The Msunduzi Municipal Library has been faced with a number of disasters over the years, including recent flooding with water on 19 February 2007, caused by a tap that was left running on the first floor. Legal deposit has associated problems. The large volume of different materials received cause storage difficulties and there are often no means of weeding materials due to governing regulations that insist that all materials should be permanently stored.

### **1.1.3 Rationale for the study**

According to the University of KwaZulu-Natal (UKZN), School of Education, Training and Development (2004:55), “research questions arise from things we are curious about, the things we don’t know, but would like to know”. The present researcher was interested in establishing how the legal deposit materials were kept and preserved, since these holdings are the priceless heritage of South Africa. The same principles, related to the saying ‘prevention is better than cure’, apply to preservation. The study was also concerned with the collection management policies and strategies with regard to preservation and access of legal deposit materials for posterity. The focus was to identify how the different materials are preserved and stored, especially because every institution has unique needs, particularly with regard to the climatic conditions of the area. The study should assist in underscoring the importance of the preservation of legal deposit materials and the challenges faced by depositories. The researcher assumed from personal observation that there was a lack of awareness amongst members of the public and depository staff about preventative preservation methods, limited resources for conservation and lack of collection management strategies. The Msunduzi Municipal Library is one of the five legal deposit libraries in South Africa and serves as an OPD for KwaZulu-Natal. This library is regulated by laws governing legal deposit, which include ensuring freedom of access to materials (Legal Deposit Act 54 of 1997). The study will highlight the need to strike a balance between access to, and preservation of, legal deposit collections in South Africa. Legal deposit materials can serve as a country’s memory only if they are well preserved.

## **1.2 The study**

This segment of the study is about the objectives, research questions, the definitions of terms and concepts, the conceptual framework and the delimitations and structure of the study, including a summary of the chapter.

### **1.2.1 The objectives of the study**

The objectives of this study were to achieve the goals mentioned in the rationale of the study, which were:

- I. To establish the activities and strategies used to preserve legal deposit materials;
- II. To determine the level of staff skills and training in preservation;
- III. To determine what procedures are in place to safeguard the collection;
- IV. To discover the challenges faced with preserving legal deposit materials;
- V. To determine what means and processes are used to help make materials accessible; and
- VI. To make recommendations based on the findings.

### **1.2.2 Research questions**

From the objectives, rationale and research problem the following research questions were posed:

- I. What are the activities and strategies used to preserve legal deposit materials?
- II. How knowledgeable are the staff about the preservation of legal deposit materials?
- III. What procedures are in place to safeguard the collection?
- IV. What challenges are the staff faced with in preserving legal deposit materials?
- V. What means and processes are used to help make materials accessible?

### **1.2.3 Definition of terms and concepts**

In the context of this study:

- I. Legal deposit is the requirement, enforceable by law, to deposit with a specified institution a specific number of copies of publications produced within the limits of the jurisdiction. Legal deposit is applicable to all forms and media of publications, but reference will be made mainly to traditional printed matter, the most commonly deposited (Lunn, 1978:1).
- II. Preservation refers to maintaining the original structure of the material, or until they deteriorate to the point that their content needs to be transferred to some more durable form. Legal deposit libraries preserve their collections not for

preservation's sake but to facilitate future access to these resources. According to Sahoo (2007:110), "preservation is the process in which all actions are taken to check retardation and deterioration". Van Garderen (2007) states that "preservation implies that the long term value of the information object has been recognized and that steps, however minimal, have been taken to maintain and protect the information object". This includes preventative measures "good house-keeping" and curative measures (reversing the effects of time). Smith (1999) explains that:

Although the process of preservation is frequently seen to be retarding or reversing the effects of time, in fact much of the work of preservation involves forecasting how something will age and taking steps to mitigate the aging.

Preservation, in the past, was shaped by the notion of permanence. However, no matter how well protected and cared for, materials cannot last forever, because of internal processes of decay that defy the most sophisticated intervention (Harris, 2000:46). Current preservation strategies in South Africa make use of a combination of some or all of the four elements:

- Restoration;
- Media conversion or preservation reprography;
- Preventative preservation; and
- Pre-archival intervention (Harris, 2000:48).

III. Access refers to the way a document may be found. In this study, it will refer to access for posterity that is used in the future or long term. Legal deposit materials are preserved with the intention of providing access for future use. With no preservation there is no access. For example, one cannot access a newspaper if it was not preserved properly, due to various factors that can cause it to deteriorate badly, causing it to crumble into pieces when handled. Access is referred to in the context of a verb. According to Reitz (2007) access is:

- The right or opportunity to use a resource that may not be openly and freely available to everyone, because the resource is part of a special collection or a rare book; and
- In computing terms, the ability of a user to reach data stored on a computer or computer system.

#### **1.2.4 Conceptual framework**

A *conceptual framework* is a statement that captures the fundamental nature and helps to clarify concepts in research, in order to draw meaningful conclusions about them (Babbie and Mouton, 2001:99). It sheds more light on the concepts to be investigated namely preservation and access, by depicting the various elements that bear on them.

Only after the discovery of printing in 1450 had the development of legal deposit become clearly visible (Willemse, 1963a:6). One of the problems that developed from printing was the rapid dissemination of heretical and revolutionary ideas; in order to control this, the authorities compelled publishers to submit a copy of every book published for censorship (Willemse, 1963a:6). Today the main purpose of legal deposit is to make sure that a country's intellectual and cultural heritage is collected, controlled bibliographically, preserved and made accessible for present and, mainly, future generations (Behrens, 2000:132).

The current Legal Deposit Act No. 54 of 1997 states that it provides for:

The preservation of the national documentary heritage through legal deposit of published documents; to ensure the preservation and cataloguing of, and access to, published documents emanating from, or adapted for, South Africa; to provide for access to government information; to provide for a Legal Deposit Committee; and to provide for matters connected there-with (Butterworth's Statues of South Africa, 2007:241).

According to Ngulube (2003:1), “preservation as a collection management strategy is key to long-term access to records and archives”. Most legal deposit libraries and archives seek to keep materials in the collection in a usable condition, but are faced with diverse materials and variations in chemical and physical structure (Morrow, 2000:1). Preservation of library collections is also often a challenge, due to the constant obstacles of limited funding, insufficient staffing and lack of expertise. Yet, the Constitution of the Republic of South Africa Act, 1996 (Act no 108) states that everyone has the right of access to:

- (a) any information held by the state; and
- (b) any information that is held by another person and that is required for the exercise or protection of any rights (National Library of South Africa, 2004).

Access to information is a basic human right, enshrined by the Constitution in the Bill of Rights. Kekana (1999) states that:

ever since the installation of a democratic order in South Africa, government implemented numerous steps in law and practice that lend themselves to greater openness and transparency and allow citizens greater access to information.

For legal deposit this means unrestricted access to all materials, even though the Legal Deposit Act No. 54 of 1997 section 7(5) (d) points out that “the head of a place of legal deposit may, on the recommendation of the Committee, can impose restrictions on certain categories of documents ...”. However, the Constitutional Court of South Africa states that the South African Human Rights Commission (HRC) can help anyone to assert their rights to access of information and the HRC is to make people aware of their rights to use this information (Constitutional Court of South Africa, 2007).

Highlighting the access dimension, Ngulube (2003:4) stresses that “continued access to public records and archives in South Africa will largely depend on how they are preserved, from creation right through their entire life cycle”. Legal deposit

materials can serve as a country's intellectual and cultural memory only if these materials are preserved. Without preservation there is no access. Access hinges on adequate preservation measures.

### **1.2.5 Delimitations of the study**

The study was confined to paper-based materials. Although the Legal Deposit Act 54 of 1997 includes electronic material and audiovisual material, these materials are a very small fraction of what is being deposited. The study population was limited to the legal deposit department of the Msunduzi Municipal Library, omitting members of the lending, music, children's and some members of the cataloguing department, who do not deal with legal deposit. The study also excluded members of the public who use the collection. The study of these categories of users could have provided a different perspective on the preservation of, and access to, legal deposit materials.

### **1.2.6 Structure of the study**

Chapter 1 outlined the core research problem, objectives and parameters of the study. Chapter 2 will review literature relevant to the study. Chapter 3 will discuss the research methods used for the study and the results will be explained in Chapter 4. Interpretation of the results will be given in Chapter 5 and the final Chapter draws conclusions and recommendations based on the findings of the study. Appendices follow the list of works cited.

### **1.2.7 Summary**

In this preliminary chapter, the study problem is presented, including the objectives and the rationale for the study, the assumptions on which it is based and its limits. Definition of terms used in the study are provided, including the conceptual framework which helps to shed more light on the terms to be investigated by depicting the various elements that relate to them.

## **Chapter 2: Literature review**

Investigating issues relating to the preservation of, and access to, legal deposit materials will involve scrutiny of existing literature produced for similar activities. Literature consulted for this study includes books, dissertations, theses, research papers, journal articles about preservation, access, legal deposit, archives, public records and national libraries. Very few empirical studies directly related to preservation and access of legal deposit materials at a public library have been conducted. A few studies have been done on the preservation of public records and archives (Ngulube, 2003) and also about publishers and the problems they experience concerning legal deposit (Tibane, 2005). Various reports and papers have been written about legal deposit (Lunn, 1981; Larivihre, 2000; International Federation of Library Association and Institutions (IFLA), 2000a; IFLA, 2000b; Library Association, 2001) and others about preservation (Khayundi, 1995; Mazikana, 1995; Abid, 1998; Smith, 1999; Harris, 2000; Sahoo, 2007). It has been necessary to examine these studies because they relate to various aspects of the topic of this thesis and help contribute to a better understanding of the issues involved. In this chapter legal deposit and preservation are discussed in more detail.

### **2.1 Legal deposit**

This subsection discusses the history, access, nature and role of legal deposit. It also looks at legal deposit in South Africa.

#### **2.1.1 History of legal deposit**

The origins of legal deposit are credited to France, when King Francois I introduced legal deposit with the Ordonnance de Montpellier in 1537 (Library Association, 2001; Larivihre, 2000:11; IFLA, 2000a; IFLA, 2000b; Lunn, 1981; Willemse, 1963a:9). Larivihre (2000:11) and IFLA (2000b) state that:

The king wanted to collect and gather the current and the future production of all editions of the books which deserve to be seen in order to ensure

that it would always be possible to refer to the original work as first published and not modified.

This decree had its flaws, but its main aim was to collect books to ensure that a permanent and tangible record of the literary output was preserved (Willemse, 1963a:10; IFLA, 2000b). The principle was established and was adopted by Germany, Britain, Denmark, Sweden and Finland in the seventeenth century (Larivihre, 2000:11-12; IFLA, 2000b). Legal deposit was also used for surveillance and censorship of publications (Willemse, 1963a:6; IFLA, 2000b; Larivihre, 2000:12). According to Larivihre (2000:11), “in 1617, deposit became a prerequisite to obtaining trading privileges”. The purpose of legal deposit has thus changed over time. Initially it was used to develop royal collections, but was also used as a censorship tool and a way to gain trade privileges.

### **2.1.2 Nature and role of legal deposit**

The laws governing legal deposit vary from country to country. Some are covered by acts of parliament and others by copyright law or library related acts. The Netherlands has a voluntary deposit agreement between the publishers and the Koninklijke Bibliotheek (national library) (IFLA, 2000a; Library Association, 2001). Other countries, namely Belgium, the Dominican Republic, France, Greece, Indonesia, Iran, Latvia, Norway, Peru, South Africa and Sweden, have a legal deposit act. Australia, Great Britain, Ireland and the United States have it as part of the copyright act, Canada, China, Japan, Nigeria, Venezuela as part of a national libraries act and Chile, Cuba, Ivory Coast, Lebanon, Lithuania and the Philippines as a decree or ordinance (IFLA, 2000a; Larivihre, 2000:15-16; Library Association, 2001). The Library Association (2001) states that “legal deposit provisions in all countries cover print based materials”. These print based materials include books, periodicals, newspapers, microforms, maps, brochures and pamphlets. Some countries are a step ahead, in that they are making sure that some of their heritage is not lost and have amended their legislation to cover electronic (digital) material. The countries that have amended their legal deposit laws to cover digital material are Germany, Indonesia and Norway in 1990; France

in 1992; Sweden in 1994; Canada in 1995; South Africa in 1997; Japan and Finland in 2000 (Larivihre, 2000:6). Knusten (2005:7) points out that Denmark has the newest law amongst the Nordic countries (Denmark, Sweden, Norway, Iceland and Finland), that came into effect on 1 July 2005. The Danish law includes electronic media to be collected on the Danish internet domain and materials aimed at a Danish audience made on public domains (Knusten, 2005:7). According to the Library Association (2001), "while South Africa's legislation would allow to collect all sorts of materials in practice, not all types of material are collected", especially electronic materials.

The legal deposit law organizations and individuals that produce materials are obliged to deposit one or more copies in a particular institution, except for the Netherlands, where deposit is voluntary. In most countries, materials are often deposited at the national library of the country (Canada, China, Estonia, France, Kuwait, Lithuania, New Zealand, the United Kingdom), although it could be a parliamentary library (Israel, Japan, United States), the national archives (Antigua, Bahamas, Senegal), a government library (Chad, Ghana, Hong Kong) or a university library (Liberia) (IFLA, 2000a; Larivihre, 2000:9).

Legal deposit has a number of functions. These include:

- The preservation of the nation's cultural heritage;
- Copyright protection;
- Censorship;
- Provision of exchange material;
- Bibliographic control;
- Provision of statistical information;
- Provision of library stock;
- Provision of government and legal publications; and
- Provision of universal access to published information (IFLA, 2000a; Larivihre, 2000:10; Lor, 1995:96; Lunn, 1981).

The most mentioned purpose of legal deposit is to preserve a nation's heritage. This, according to Lor (1995:96), implies that:

Legal deposit is not merely a question of preserving heritage so that some unknown scholars may gain access to it in the future. It also has to be made available in the present.

Vattulainen (1994) points out a problem faced by many libraries, which is that "the funds for acquisitions have substantially decreased, and libraries claim that legal deposit is an economic necessity for maintaining services".

### **2.1.3 Access to legal deposit**

In the past, one of the purposes of legal deposit was censorship (Library Association, 2001; Larivihre, 2000:12; IFLA, 2000b; Lor, 1995:95; Lunn, 1981; Willemse, 1963a:6). Today, a legal deposit scheme usually stipulates that materials deposited are made available for present and future generations. Manzoni (1994:82), quoted in Tibane (2005:14), emphasizes that access is central to the purpose of legal deposit. This objective should be included in a country's legal deposit legislation. Lor (1995:97) states that "few legal deposit acts stipulate that the public has a right of access to the legal deposit collection". According to Larivihre (2000:22):

It is also a means for a country to commit itself to article 19 of the Universal Declaration of Human Rights, which gives to everyone "the right to freedom of opinion and expression, including the right to seek, receive and impart information through any media, regardless of frontiers".

It is a great challenge to preserve materials and, at the same time, make them accessible. Lor (1995:96) warns that "the conflicting demands of preservation and access create a certain tension in legal deposit legislation, as well as in its implementation in various countries of the world". Legal deposit requires exceptions from copyright legislation to preservation, for example a depository

may need to make a copy of a document that is deteriorating or is damaged. Legal deposit needs to be excluded from copyright for the purposes of access. A library may need to make a copy of a document for a researcher. Access to legal deposit collections is affected by:

- Whether or not publishers and individuals deposit materials;
- The materials being properly preserved;
- The order of storage arrangements for the materials;
- Finding-aids to locate the materials; and
- Different pieces of legislation.

(Lor, 1995:110).

According to the Bibliographic Section of IFLA (1998), quoted in Knusten (2005:5):

Bibliographic control requires the development and maintenance of a system of descriptions of documents that are arranged according to accepted standards within cataloguing, indexing and classification, retrieval of, and access to, the documents.

Though Omwekwu (2003) points out that:

Accessing documents published in developing countries is always difficult because of lack of bibliographic tools and control framework, low awareness of legal deposit legislation, and sub-standard nature of the publications.

The legal deposit legislation of a country serves as the major mechanism to make sure that the different published documents are collected. The national bibliographies are the tools used to keep a record of the national heritage and make them accessible to the public.

## **2.1.4 Legal deposit in South Africa**

This subsection examines the nature, role and access to legal deposit in South Africa.

### **2.1.4.1 The nature and role of legal deposit in South Africa**

The Legal Deposit Act No. 54 of 1997 governs legal deposit in South Africa (Tuckett, 2003; Library Association, 2001; South African Constitution, 1997). The legislation has evolved from its commencement in 1842 as the British Copyright Act to the Legal Deposit Act No. 54 of 1997 that includes electronic and audio visual materials (Tuckett, 2003; Lor and Geustyn, 2003:102; Lor and Letshela, 2002; Larivihre, 2000:14). This Act was strongly influenced by the Norwegian law, which catered for the legal deposit of all kinds of media (Lor and Geustyn, 2003:102). According to the Library Association (2001) the Act is one of the few that spells out the objectives and purpose of legal deposit. The Act also specifies and states that the public has a right of access to the legal deposit collection. The definitions of the terms used are clearly described and terms like “document” and “publication” are described appropriately to cover all types of materials, for both now and in the future (Tuckett, 2003; Lor and Geustyn, 2003:103; Library Association, 2001; Behrens, 2000:133). The Act covers all print materials, audiovisual materials and electronic publications. The Legal Deposit Act enables libraries to collect a variety of materials but, in practice, electronic, especially online materials, are not collected (Library Association, 2001; Lor and Letshela, 2002).

There are a number of reasons for the partial implementation of the Act, including the lack of technological, financial and staffing capacity (Lor and Letshela, 2002). Lor and Letshela (2002) point out that South African libraries do not, at present, have the technological capacity to fully put into practice the legal deposit act, which includes technology required to capture, store and make accessible online electronic documents, nor properly trained staff to do this.

The South African legal deposit legislation stipulates that publishers should deposit five copies in the legal depositories. These depositories include the two branches of the national library, two public libraries and one parliamentary library (Tuckett, 2003; Behrens, 2000:133). Audio-visual materials are deposited at the National Film, Video and Sound Archives (Tuckett, 2003; Behrens, 2000:133). Apart from these places of deposit, there are designated official publications depositories (OPDs) that are permitted to receive a copy of every official government publication (Tuckett, 2003; Behrens, 2000:133). Some of the existing places of legal deposit serve as OPDs, such as the Msunduzi Municipal Library. According to Behrens (2000:133), “the places of legal deposit have to receive, accession, retain and preserve these documents; this is done by cataloguing them and providing access to their collections”.

#### **2.1.4.2 Access to legal deposit in South Africa**

Access can be looked at in two ways. First of all, there is access to the material itself and, in the case of most deposit libraries, this involves paying a visit to the library and consulting the material on the premises. The second aspect concerns access to the records of the material held by the use of a catalogue or bibliographic list and not by direct access to the material. Many libraries today have moved from using the traditional card catalogue and are using computerized catalogues, including web online public access catalogues which, on one hand, increases access to materials and, on the other hand, restricts access to those affected by the digital divide.

South Africa is emerging from a society that was strictly censored, to a country that has legislation in its Bill of Rights which grants its people basic rights. One of the basic rights is ‘access to information’ and is found in section 32 of the Constitution (Constitutional Court of South Africa, 2007; Harris, 2000:25). Kekana (1999) states:

*The Bill gives everyone the right of access to any information held by the state, and any information that is held by another person and that is required*

for exercise or protection of any rights. Ever since the installation of democratic order in South Africa, government implemented numerous steps in law and practice that lend themselves to greater openness and transparency and allows citizens greater access to information.

These rights are supported by the African Charter of Human Rights and other international conferences, including IFLA, as a result of violation of free expression and the flow of information, leading to libraries not being able to serve the needs and interests of their users (Kekana, 1999). The right of access to information includes the right to receive and impart information. The Constitutional Court of South Africa (2007) states that:

The Bill of Rights is arguably the part of the Constitution that has had the greatest impact on life in this country... This Bill of Rights is a cornerstone of democracy in South Africa. It enshrines the rights of all people in our country and affirms the democratic values of human dignity, equality and freedom.

A general national bibliography lists the deposited materials in a country. In section 7(2) of the Legal Deposit Act, the duties of the National Library of South Africa include compiling a national bibliography. Behrens (2000:67) points out that:

By undertaking the bibliographic activities necessary to compile and maintain national bibliographies and by making the bibliographies available worldwide, bibliographers and other information workers in South Africa contribute not only towards universal bibliographic control (UBC), but also towards empowerment.

In South Africa it is called the South African National Bibliography (SANB) and it empowers people by providing lists of the legal deposit materials so that they can locate and identify these materials for use.

The SANB's purpose is also to preserve the information heritage of South Africa (Behrens, 2000:66). South Africa has quite a well-established national bibliographic control system. However, it suffers from difficulties faced by other less-developed countries, namely gaps within the bibliography, lack of properly trained staff, a poorly developed publishing industry and lack of sufficient funds for libraries (Behrens, 2000:70; Lor, van Helden and Bothma, 2005:268). The Index to South African Periodicals was started in 1940, but does not reflect all legal deposit periodicals for South Africa. It consists of a wide range of mainly scholarly journals which are technical and subject general periodicals (Fourie, 2007:8). The hard copy of SANB ceased publication in 1999 and is now available electronically on the South African Catalogue (SACat) (Behrens, 2000:137; Fourie, 2007:8). This makes the SANB more accessible, but one must bear in mind that many people all over the world are affected by the digital divide, including many South Africans.

Apart from the SANB, deposit materials are listed in the catalogues of the legal deposit libraries. These catalogues are accessible on the web.

## **2.2 Public libraries**

The history of public libraries is unique to each country and has developed from varying degrees of government support, citizen involvement, structure and mechanisms for funding, including philanthropists such as Andrew Carnegie (McCook, 2004:266; Shera, 1974:200). Public libraries have existed since the 19<sup>th</sup> century and can be defined as a tax-supported community agency enabled by law (McCook, 2004:2). The range of services offered by public libraries worldwide varies considerably, due to the fact that the public library serves everyone (McCook, 2004:274; Kinnell and Sturges, 1996:x; Robbins-Carter, 1982:91).

Robbins-Carter (1982:91) states that "since the time of the founding of the public library in the 19<sup>th</sup> century, its role in society has changed". The main role of the public library has evolved from being there to develop mainly education, to a cultural role and then to a recreational one (Brophy, 2001:26; Kinnell and Sturges, 1996:29; Robbins-Carter, 1982:91). Brophy (2001:26) added that "by the second

half of the 20<sup>th</sup> century there was general agreement concerning the proposition that the public library fulfilled three interconnected roles: education, information and entertainment". As budgetary cuts were felt and buildings started to age, the tripartite role of the public library was faced with issues of having to prioritize their activities, but had little guidance to do so (Brophy, 2001:26; Rosenberg, 2001:13). Public libraries all over the world are under financial pressure, mainly due to a decline in government funding (Leach, 2006:125). Kinnell and Sturges (1996:xii) caution that "the environment within which public libraries function is complex, threatening and challenging". Africa has its own special problem, in that libraries were developed for the educated urban population and are not suitable for those with oral traditions (McCook, 2004:275; Aina, 2004).

Today the role of the public library in countries such as Chad, Ghana, Hong Kong and South Africa includes the function of a legal depository (Larivihre, 2000:9). The precise role of the public library is still unclear, because public libraries often lack a clear focus for their activities and priorities (Brophy, 2001:30; Kinnell and Sturges, 1996:xiv). In 1995 the United Nations Education, Scientific and Cultural Organisation (UNESCO) issued a public library manifesto, together with IFLA, that states:

The public library, the local gateway to knowledge, provides a basic condition for lifelong learning, independent decision-making and cultural development of individual and social groups (McCook, 2004:278; Brophy, 2001:27-28).

Brophy (2001:30) emphasizes that public libraries in the past responded to external change, but they may not be able to keep up with changes due to the information age.

### **2.2.1 Public libraries in South Africa**

As early as 1838, subscription libraries existed in South Africa. They were later developed into public libraries (McCook, 2004:268). The monetary support that

used to be provided by subscribers, with the assistance of provincial and municipal grants, started coming in from national and provincial taxes, including municipal rates (Friis, 1962:19). In a way, the history of the public library started in 1761, when Joachim von Dessin's book collection legacy was left to the community of Cape Town under the control of the Dutch Reformed Church (Mostert, 1999; Sturges and Neil, 1998:80; Friis, 1962:70). This book collection later formed the foundation of the South African Public Library (Friis, 1962:70).

In comparison with most other African countries south of the Sahara, South Africa has a comparatively long public library history (McCook, 2004:268; Mostert, 1999). However, public libraries in South Africa have always been affected by politics (Lor, van Helden and Bothma, 2005:268; Mostert, 1999). The public library is regarded as a social phenomenon and it needs to reflect this (Stilwell, 1995:12; Friis, 1962:7). Friis (1962:13) argues that "the library provides means to an end and invites people, pleads with them, entices them to make use of those means". South Africa has more libraries than other African countries south of the Sahara, yet the distribution is uneven due to the apartheid system (Lor, van Helden and Bothma, 2005:268; Mostert, 1999). The affluent white suburbs are well served by branch libraries of the public library system, but the black townships, informal settlements and rural areas were not taken care of (Stilwell, 2006:3; Lor, van Helden and Bothma, 2005:268; Sturges and Neil, 1998:134; National Education Policy Investigation (NEPI), 1992:21). The Zaaiman Report of 1988 also pointed this out. Lor, van Helden and Bothma (2005:271) conducted a survey to show the spatial distribution of public and community libraries in South Africa. They found that there were disparities and imbalances in public library provision. According to a survey carried out by Stabbins in 1988, access to public libraries for black South Africans was gradually granted in 1970s and accelerated in the 1980s (NEPI, 1992:21). Access was still a problem, in that non-residents were charged membership fees and people had to travel large distances which involved transport costs to get to the public libraries.

In Africa, public libraries are faced with dreadful financial constraints. In some cases buildings and the librarian's salary remains, while books and other

resources are no longer bought (McCook, 2004:277; Rosenberg, 2001:13). In South Africa, as in many other African countries, public libraries are facing many problems, including lack of funding, and yet there is increased handling (Ngulube and Magazi 2006a:113). Leach (2006:125) emphasizes that “public libraries, both in South Africa and internationally, are under financial pressure owing, in large part, to a decline in public (or government) funding”. Although the provision of public libraries in South Africa is supposed to be the primary responsibility of local authorities, the governance and financing arrangements are complex, because they involve both second-tier and third-tier government, provincial and municipal authorities (NEPI, 1992:20). As far back as 1988, when Zaaiman (1988:10) conducted an investigation into ‘The use of libraries for the development of South Africa’, he pointed out that many high-level government officials doubted that public libraries can contribute to development. Zaaiman (1988:11) pointed out that:

Good intentions and general philosophies are no longer an acceptable basis for the allocation of funds, when the need to combat poverty, starvation, unemployment and a lack of housing and schools compete with libraries for government support.

Findings of a survey of public libraries, conducted by Leach (1998) and quoted in Leach (2006:127), were that inadequate funding had a significant negative impact on important facets of public library provision and was the most frequently mentioned problem.

Many libraries are dependent on donor agencies such as the Carnegie Corporation, the Mellon Foundation and the Bill and Melinda Gates Foundation. This problem has been recognised by librarians in Africa and by the donor agencies, but nothing has prompted these libraries to sustain themselves, because most are still dependent on outside funding (Rosenberg, 2001:14).

## 2.3 Preservation

In the past, the term 'preservation' in archives and libraries was used synonymously with 'conservation' and books plus paper repairs were left to the craftsmen and artisans, namely bookbinders, artists and printers (Jordan, 2003:2352; Harris, 2000:48; Swartzburg, 1980:8). According to Cloonan (1994:2), "techniques for conservation have grown out of methods used for creating artefacts". By the 12<sup>th</sup> century, scholars became involved in helping curators and conservators in museums and libraries look at the causes of deterioration (Jordan, 2003:2352). This involved a long history of practices and techniques used to deal with problems of decay and damage to materials. These are the traditional, convenient ways of ensuring long-term access, by simply protecting the integrity of the medium by repairing and rebinding the books and replacing of reprints and facsimiles, in the case of rare books (Smith, 1999). This approach changed noticeably during the 1970s and 1980s, with the identification of mass embrittlement of books in stacks affecting a huge percentage of holdings at various institutions (Smith, 1999; Whiffin and Havermans, 1998). No professional definition of the term preservation was in use at the time. This only surfaced in the 1980s, when Susan Swartzburg (In Jordan, 2003:2352) provided a functional definition:

Preservation concerns not only the conservation of a book, or other object in its original format but also, quite literally, the preservation of the intellectual content of library materials and the maintenance of the physical plant where library materials are housed.

According to the University of California, San Diego (UCSD) (2007), preservation is "activities associated with maintaining library and archival materials for use in their original physical form or in some usable way". Today, preservation includes conservation, reformatting, collection development activities and disaster prevention (UCSD, 2007; Jordan, 2003:2352; Harris, 2000:49). It includes transferring information from one format to another. Conservation is therefore an integral part of a comprehensive preservation programme. Ngulube (2003:39)

states that “preservation has shifted from being item oriented to being collection aligned”.

Library materials can be preserved successfully by slowing the process of deterioration and by preventing incidental and catastrophic damage (Harvard College, 2001; Reed-Scott, 2000:82; Smith, 1999). Smith (1999) argues that “although the process of preservation is frequently seen to be retarding or reversing the effects of time, in fact much of the work of preservation involves forecasting how something will age and taking steps to mitigate the aging”. For example, in the 19<sup>th</sup> century, few people would have known that the production of cheaper paper would threaten collections of those libraries within a century (Smith, 1999; Swartzburg, 1980:7).

Traditional archivists and librarians believe that preservation activities ensure everlasting life for materials, but Sahoo (2007:105), Akussah (2006:4) and Harris (2000:46) state that materials, however well cared for, cannot last forever, due to the fact that the basic constituents of these materials are organic and are inclined to decay and deteriorate. Sahoo (2007:105) explains that:

In books, apart from paper, the other materials used are board, cloth, leather, thread, ink, adhesive, etc. All these materials used are nutrition to some living organisms.

In addition Harris (2000:47) says that a number of external processes accelerate decay, including:

- Rough handling by human hands;
- Ravaging pests, ranging from rats to mould;
- Exposure to light, particularly direct sunlight;
- Fire;
- Flooding and other direct exposure to water;
- Exposure to dust and otherwise polluted air; and
- Extreme or unstable climatic conditions.

Hunter (1997:133) emphasizes that “modern paper, it turns out, contains the seeds of its own destruction; the very production of paper introduces elements, particularly sources of acid, which lead to deterioration”. Over the years many researchers have examined preservation in connection with the use of permanent paper, paper deacidification and reformatting. There remains much which is unknown and all these precautions will still not reverse damage that has already been done. Therefore libraries and archives need to approach preservation in a number of different ways, including preventative preservation, which involves looking at deterioration, disaster management and security; restoration; media conversion or preservation reprography (Harris, 2000:48-49).

### **2.3.1 Preservation and access**

The balance between preservation and access has always been uncertain in those items that rely on the stability of the carrier, be it printed on vellum, emulsion on wood-pulp paper or grooves on acetate disks (Smith, 1999). One of UNESCO’s main missions is to help sustain, increase and disseminate knowledge, by assuring the world’s heritage and making it accessible to as many people as possible (Abid, 1998:122). To ensure that the world’s documentary memory did not deteriorate at an alarming rate UNESCO initiated the ‘Memory of the world’ in 1992, to protect and promote the world’s cultural heritage (Abid, 1998: 122). This was a result of the terrifying state of preservation and the bad conditions of access to cultural heritage in different parts of the world.

According to de Stefano (2000:317), quoted in Ngulube (2003:35):

*Preservation and access share a relationship. In that sense, one entails the other while, on the other hand, the need for access to information necessitates the need of preserving the intellectual content of documentary materials. These two are reciprocal.*

The ‘Memory of the world’ programme was designed to democratize access to the documentary heritage and raise awareness of its importance and the need to preserve it (Abid, 1998:123). Without an organized preservation programme, the

ability of libraries and archives to maintain access will eventually become impossible. According to Abid (1998:123), the 'Memory of the world' has four main objectives:

- To facilitate preservation by the most appropriate techniques of the world's documentary heritage;
- To assist in enabling access to it, without discrimination against any users;
- To increase awareness, world-wide, of its existence and significance; and
- To promote the programme and its products to the widest possible public.

As soon as the programme was launched, UNESCO received many requests for help and funding. Abid (1998:132) says it requires new approaches to funding which should involve co-operation with the private sector. Smith (1999) states that strategies have emerged to manage and preserve print media. These include:

- Controlling storage environments to keep temperature and humidity consistent and at optimal settings that retard the natural processes of decay;
- Instructing staff and patrons to handle fragile items in a way that minimizes damage;
- Removing items from service and providing surrogates such as microfilm and photocopies;
- Rehousing items in acid-free containers or inert mylar sleeves; and
- Implementing emergency preparedness strategies by equipping storage areas with water damage protection and training staff in how to respond, urgently, to catastrophes, human-made and natural.

### **2.3.2 Factors of deterioration**

Deterioration occurs when any material becomes inferior in quality or condition. The various types of deterioration of paper-based materials include wear and tear, shrinkage, cracks, brittleness, warping, bioinfestation, discolouration,

abrasion, holes, dust and dirt buildup. In general, library materials are prone to deteriorate when subjected to the following:

- Environment factors such as light, temperature, humidity and moisture, dust and dirt, water;
- Biological factors such as bacteria, insects and rodents;
- Chemical factors such as acid and lignin;
- Human factors, including building design, handling and care; and
- Disasters, including floods, tsunamis, tropical cyclones, tornadoes, volcanoes and fires.

(Sahoo, 2007:105-106; Ngulube, 2003:84; Harris, 2000:47; Banks, 2000:114).

### **2.3.2.1 Environmental factors**

The proper environment will prolong the life of the library and archival materials. In this subsection, environmental factors such as light, temperature, humidity and moisture, water, dust and dirt are discussed.

#### **2.3.2.1.1 Light**

Sunlight or artificial light is detrimental to paper. Light speeds up oxidation of paper, leading to its chemical breakdown and loss of strength of the paper (Sahoo, 2007:106; Ngulube, 2003:91; Hunter, 1997:144). Light also bleaches paper, causing some papers to whiten and some inks to fade (Hunter, 1997:144). White paper exposed to light over time becomes yellowish/brown.

Library and archival materials should be protected from ultraviolet rays produced by light; in particular, ultraviolet light accelerates photochemical decay (Sahoo, 2007:106; Ngulube, 2003:91; Hunter, 1997:144). Ultraviolet (UV) filters should be used to cover the artificial light and UV glazes or films should be used on windows to filter natural light coming through (Sahoo, 2007:106; Ngulube, 2003:91; Hunter, 1997:144). Shades, blinds and curtains can be used to stop light from coming into the library. The amount of damage caused by light depends on the intensity of light, duration of exposure and the distance from the source of

light. This means the greater the distance the less light and damage (Sahoo, 2007:106; Ngulube, 2003:91). Banks (2000:142) states that it is difficult to monitor UV radiation and the practical instrument available has a number of limitations. Therefore lights should be turned off after staff leave the stack rooms.

### **2.3.2.1.2 Temperature and relative humidity**

Controlling the temperature and relative humidity is extremely important, because heat and high humidity speed up chemical reactions (Akussah, 2006:5; Baird, 2003:1; Ngulube, 2003:84; Hunter, 1997:140). The other issue concerning temperature and relative humidity is that the warmer the air the more moist the air becomes. Hunter (1997:141) emphasizes that “high humidity encourages the growth of mold and mildew; it also creates a resort environment preferred by some variety of insects”. Baird (2003:1) states that “as a general rule, colder is better for library materials”. It is important to avoid high temperatures and humidity, but it is also vital to maintain a constant temperature and relative humidity, as great fluctuations are not good for the materials (Akussah, 2006:5; Ngulube, 2003:85; Hunter, 1997:141).

The temperature and relative humidity depend on the geographical climatic conditions of the area in which the archive or library is situated. Baird (2003:1) and Hunter (1997:141) agree that temperature should be around 70 degrees Fahrenheit and the relative humidity between 40% and 50%. It is difficult to control temperature and relative humidity (Ngulube, 2003:86). Baird (2003:2) states that monitoring these conditions can be done easily, using data loggers. Though, the problem of control remains just as difficult.

*Maintaining a library's environmental conditions means trying to keep the most suitable environment possible. A heating, ventilation and air conditioning system (HVAC) can be used to control the climatic conditions within the library (Ngulube, 2003:86). Banks (2000:125) cautions that:*

Although we may think of the environment of a library or archives being controlled primarily by HVAC systems, in fact, the indoor environment is a product of interaction among the outdoor environment (reflecting the local climate), the building envelope, internally generated thermal and pollution loads and, finally, HVAC systems.

There are various tools that can be used to monitor temperature and relative humidity in libraries, namely thermometers, barometers, data loggers, humidity indicator strips, thermohydrographs, hygrometers and humidifiers/dehumidifiers (Ngulube, 2003:88; Higginbotham and Wild; 2001:22; Banks, 2000:139).

#### **2.3.2.1.3 Air quality and chemical factors**

Atmospheric pollutants cause damage to library and archival materials by forming acids on paper (Banks, 2000:123; Hunter, 1997:143). Some of the pollutants are sulphur dioxide, nitrogen dioxide, acetic acid, sulphides and particles of dust and dirt (Banks, 2000:123; Hunter, 1997:143). Dust and dirt are highly hazardous for library and archival collections as they are composed of soil, tar, metallic substances, fungus spores and moisture (Sahoo, 2007:107). Dust and dirt settles on objects and bring the components to the material. This causes damage and abrasion on the surface of the paper. Filters in the HVAC system can be used to remove the air pollutants (Higginbotham and Wild; 2001:22; Banks, 2000:123). Banks (2000:141), however, states that it is not easy to monitor pollutants, particularly gaseous pollutants, because little is known about the efficiency of the different pollutant removal systems.

#### **2.3.2.1.4 Water**

Water is another factor in deterioration. Sahoo (2007:107) explains that “it acts as a physical agent of deterioration by causing hygroscopic materials to undergo dimensional changes”. Water which can damage library materials may come from natural disasters, human error, leaking of rain through the roof or windows and defective plumbing. Moisture from water encourages the growth of fungus and mildew (Sahoo, 2007:107). Therefore it is necessary to inspect the building and

make sure that there are no leakages, especially in cases where buildings have been adapted to become archives and depositories.

### **2.3.2.2 Biological factors**

Biological factors contribute to the deterioration of materials. This is called bio-deterioration (Sahoo, 2007:107). Most of the book components are organic material, that is paper, leather and cloth, which are prone to attack by biological agents. Most of these biological agents thrive in hot and humid climates and their growth and multiplication is accelerated in these conditions (Sahoo, 2007:107; Ngulube, 2003:95; Hunter, 1997:144). Many libraries and archives have been infested and affected by the following organisms:

#### ➤ **Insects**

The most common insects that damage library and archival materials are silverfish, cockroaches, booklice, bookworms, moths and termites (Sahoo, 2007:108; Ngulube, 2003:93; Hunter, 1997:145).

##### ○ **Silverfish**

Silverfish are silver/grey in colour, have a carrot-shaped body, short legs, long slender antennae and no wings (Sahoo, 2007:108; Ngulube, 2003:94). They thrive in warm, dark places and feed on the surface of paper and on gum and paste (Sahoo, 2007:108; Ngulube, 2003:94; Hunter, 1997:145).

##### ○ **Cockroaches**

Cockroaches are found all over the world and can thrive in different climates. They eat all sorts of organic materials, including paper and fabrics. Their watery faeces are brown in colour and they stain paper and the stains are not easy to remove (Sahoo, 2007:108).

- **Booklice**

Booklice are small grey or white insects that cause serious damage to materials by feeding on microscopic moulds that grow on paper stored in damp conditions (Ngulube, 2003:96).

- **Bookworms**

As the name implies, bookworms eat paper and damage it extensively. Sahoo (2007:108) explains that “they make tunnels in the pages and boards of the books”.

- **Termites**

Termites eat wood and paper and things that contain cellulose (Sahoo, 2007:108). Ngulube (2003:97) says that termites even attack the structure of the building, as well as eat paper. According to Sahoo (2007:108), “they leave mud encrustation on the attacked materials”.

- **Rodents**

There are different types of rodents, including mice, rats and many other species such as squirrels. Ngulube (2003:96) names the house mouse as one of the most common pests in archives and depositories. Mice and rats destroy different paper-based materials and use strips of paper for their nests. They also urinate and leave their corrosive droppings on materials.

- **Micro-organisms**

These include fungi and bacteria. Fungus is commonly known as mould and mildew and appears as a blackish growth on different things, especially paper, leather, textiles, walls and ceilings. According to Sahoo (2007:107):

Fungus are a large heterogenous group of plant organisms. The fungal spores are present in the earth, water, air and remain in a dormant state for long periods. These spores sprout and grow when they have the required moisture and heat.

Sahoo (2007:107) and Ngulube (2003:95) agree that fungi and bacteria grow in temperatures of between 15°C and 35°C. Ngulube (2003:95) points out, however, that some fungi can grow at freezing point and other types thrive at very high temperatures. Fungi feed on cellulose, starch, adhesive, sizing and gelatin. Fungi weaken, stain, discolour and obliterate materials (Sahoo, 2007:108; Hunter, 1997:145).

### **2.3.2.2.1 Environmental control of biological agents**

Libraries and archives require their storage rooms to be free of biological agents. In reality this is a difficult status to achieve. Hunter (1997:144) says that many of the above problems can be solved by stabilizing the temperature and humidity and engaging in good house-keeping practices. Higginbotham and Wild (2001:24) say that good house-keeping should be combined with traps and non-toxic deterrents. Hunter (1997:144) advises that archives should adopt the following practices:

- Prohibit smoking, eating, or drinking in or near archival storage, processing or reference areas;
- Remove garbage from the building on a daily basis;
- Keep stack and storage areas free of debris;
- Prohibit plants in areas where records are stored and used;
- Damp-mop or vacuum floors at least once a week; and
- Dust shelves, boxes and the exteriors of bound volumes on a regular basis.

Ngulube (2003:97) emphasizes that large amounts of money are spent on over-the-counter products, professional services and restricted-use pesticides. It is important to ensure that the pesticides are not harmful to human beings and should not be placed directly on library and archival materials. It is also important to monitor stack rooms on a regular basis for mould, insect damage and eggs and droppings from rats, cockroaches and other biological agents. Another

preventative measure is to examine materials for biological agents, eggs and droppings before they are added to the collections in the stack rooms.

### **2.3.2.3 Human factors**

Apart from environmental, biological and chemical factors, it is clear that the building in which materials are stored affects the preservation and storage of materials. This includes the way people handle the materials.

#### **2.3.2.3.1 Handling and care**

Sahoo (2007:109) stresses that “a serious cause of deterioration often is the casual attitude of the library staff, as well as the users of the library, towards books as physical objects”. It is important, as a preventative preservation measure, to make sure that staff and researchers understand how to handle various materials (Baird, 2003:91; Ngulube, 2003:83). Paper records require support and protection when moved, for example one must not lean or write on top of books or other materials (Hunter, 1997:146). Sahoo (2007:109) points out that:

The standard of care and handling of books by their custodians and users is often pretty low. Improper storage, faulty repairment, rough handling, deliberate abuse, folding the fore-edges of pages as a mark of reading, marking by ball pen, mutilation, vandalism are all examples of deterioration of books by human beings.

Ngulube (2003:106) emphasizes the fact that proper handling and care reduces damage and therefore saves resources that would have been used to repair the item. Materials should be shelved properly and not over-packed (Sahoo, 2007:112; Baird, 2003:93). Sahoo (2007:112) says materials should not be shelved too loosely, either. According to Baird (2003:93), “a walk through the stacks of many libraries will reveal areas that are badly over-packed and then areas that have plenty of growth space”. Although it requires time and effort, the careful shifting of items on stacks can eliminate this problem.

In addition to training staff, it is crucial to train users to treat materials well. Signs, posters and book-marks can be used to promote preservation efforts (Baird, 2003:95). These signs and posters should include the risks of consuming food and drink in the library.

### **2.3.2.3.2 The building**

The building is the collection's most important source of security; it is fundamental and affects preservation and access in various ways. Higginbotham and Wild (2001:19) state that "for this reason, its mechanical systems, maintenance, and other protective qualities are key to the preservation mission". Alegbeleye (1999) in Ngulube (2003:101), says:

as a result, a number of experts in Africa believe that preservation efforts should lay more emphasis on proper storage of documentary materials than on expensive reformatting and deacidification projects.

Banks (2000:125) draws attention to the fact that:

in recent years, the bright, open, people-oriented designs that are attractive for public and school libraries have unfortunately been applied to research libraries, for which long-term preservation is a fundamental part of their mission.

Banks (2000:125) reasons that unless collection storage is confined and away from human activities it is not viable and impossible to provide a reasonable preservation environment.

A building that has been specifically designed to store and preserve library and archival materials can be called a purpose-built building. Many libraries have been adapted from different buildings (especially old ones) and converted into libraries. One of the problems faced in Britain is that some libraries housed in historic buildings face limitations, because these buildings are protected by a

statute and may not be changed (Fenn and Muir, 2003). When dealing with an older building, which might not have been designed to be a library, staff must do their best to optimize the environment (Baird, 2003:4).

A purpose-built building has a number of advantages. Ngulube (2003:102) says selected building materials, which are appropriate for preserving materials, can be used. This reduces the impact of climatic factors (Banks, 2000: 126). It is advisable that the site selected for building should not be near bodies of water or in the vicinity of industrial areas or military installations (Ngulube, 2003:103). Sahoo (2007:110) emphasizes that even the soil on which the building is constructed has an impact on the environmental conditions inside the library building. Baird (2003:4) points out providing good environmental conditions in a new facility is relatively inexpensive. If it is well designed for preservation, it will have all the features installed during construction that affect environmental conditions, for example a HVAC system, proper insulation and well-designed windows. Sahoo (2007:110) adds that “it is important to choose the best architectural design for the library, having cross ventilation facilities for free air circulation within the building”. Library and archival management should work hand in hand with architects and engineers, to have a suitable structure built (Baird, 2003:4).

### **2.3.2.3.3 The storage equipment**

Shelving must meet the standards and guidelines, because storage furniture can contribute to the deterioration of library and archival materials (Higginbotham and Wild, 2001:23; Ngulube, 2003: 104).

Wooden furniture, especially shelving, was popular because it was easy to construct. Ngulube (2003:105) says that wooden shelves are no longer popular, today, and metal shelves are preferred. Wooden shelves may attract insects such as termites or may release chemicals that have been used to preserve the wood and which are harmful to materials (Higginbotham and Wild, 2001:23; Ngulube, 2003: 105). According to Higginbotham and Wild (2001:23), “...even metal

shelving can be problematic when it does not meet guidelines for stress, seismic responsiveness, and finishes. Stack finishes should be noninteractive”. There are debates concerning what type of shelving is best for preservation purposes; baked enamel or uncoated anodized aluminum (Higginbotham and Wild, 2001:23; Ngulube, 2003:105). Other shelving issues relate to compact or high-density shelving. If compact shelving is chosen, Higginbotham and Wild (2001:24) warn that:

If compact shelving is closed too rapidly, if ranges are too tall or lurch along their tracks, there is real danger that volumes or other items may be thrown to the floor (perhaps striking a reader or a staff member on the way down).

The library needs, therefore, to make careful decisions before wasting valuable resources in purchasing equipment that may not be suitable or right for preservation.

### **2.3.3 Disaster preparedness and security**

There is no library that is free from possible devastation that can occur as a result of human-made or natural disasters. Many librarians and archivists prefer to think that a disaster cannot strike their collection (Buchanan, 2000: 159; Hunter, 1997:155). Ngulube and Magazi (2006a:110) stress that:

Disaster management techniques assist in determining the likelihood of hazards and lessening the consequences of risks to library materials. However, librarians often overlook disaster preparedness, yet it is key to preservation management and protection of collections.

Sahoo (2007:113) states that “disasters are generally unexpected events with destructive consequences to a collection”. There are two kinds of disasters, natural and human-made disasters. Disasters include insects, rodents, mould, humidity, hurricanes, tornadoes, flash floods, tsunamis, earthquakes, fires,

volcanic eruptions, power cuts, leaking roofs and pipes, chemical spills, arson, bombs and acts of war or terrorism (Ngulube, 2003:109). The weather around the world has been extreme in the recent past, resulting in natural disasters such as the floods in Peru and Bangladesh in July 2007. These happen more in some parts of the world than others. For example, the tsunami that hit parts of eastern and southern Africa and Asia, affected Asia more than the other parts. Examples of human-made disasters are chemical spills, power cuts, arson, bombs and acts of war or terrorism. Large or small, natural or human-made disasters put institutions' staff and collections in danger.

A disaster can be defined as unexpected events which have destructive consequences to the collection and to human beings (Sahoo, 2007:113; Ngulube and Magazi, 2006a:111; Ngulube, 2003:109; Hunter, 1997:160). Disasters, at times, cannot be prevented, though there is a need to be prepared for them, to minimize their effects (Sahoo, 2007:113; Ngulube and Magazi, 2006a:111; Baird, 2003:97; Higginbotham and Wild, 2001:9; Buchanan, 2000:159). Disaster planning helps librarians and archivists to respond systematically and quickly to an emergency. Sahoo (2007:113) stresses that "it is also necessary to identify any external and internal threats that might cause problems for the collection and measures to meet those threats". For example, an internal threat could be related to the building's defences against fire, flood, earthquake and lightning. Librarians need to find out about the area their library is built in. Is it a low-lying area that can be easily affected by floods? What sort of natural disasters happen in the area? Is it an area that is affected by political conflict? (Ngulube and Magazi, 2006b:186).

Higginbotham and Wild (2001:10) emphasize that "a detailed and written plan will save the lives of many library materials when disaster strikes and confusion reigns". According to Ngulube (2003:110), disaster plans are essential for:

- Minimizing the disruption of normal operations;
- Minimizing the economic impact of the disaster;
- Training personnel in emergency procedures; and

- Providing for the rapid and smooth restoration of services.

Disaster planning is not an easy task; the written plan is a result of preliminary activities. Baird (2003:97) advises librarians and archivists not to reinvent the wheel, in that there are many good disaster management plans in print or on the web. Disaster management guidelines and procedures in a written disaster control plan should include prevention, preparedness, reaction and recovery (Ngulube, 2003:110; Feather and Eden, 1997:81). Every library should have a disaster preparedness and response plan, which should contain a description of emergency procedures, an emergency supplies list, a disaster response outline, conservation experts, a list of staff volunteers and a list of external contacts of personnel with emergency responsibilities (Sahoo, 2007:113). Ngulube and Magazi (2006a:112) mention that disaster preparedness is not a chief concern in public libraries. This is reinforced by the reality that many library schools in Africa do not offer a module on the topic. Buchanan (2000:160) says that a number of organizations such as the American Library Association (ALA), UNESCO, IFLA and the International Council of Museums are trying to educate members about the wisdom of emergency planning and disaster preparedness. Training in disaster management should include familiarization with the lay-out of buildings, salvage priorities and techniques, handling wet books and documents, fire safety (including using a fire extinguisher), health and safety, use of emergency equipment, alarm response and location of keys (Feather and Eden, 1997:47). Ngulube (2005:2) says that research has shown that many institutions with disaster plans rarely review, update or test them and also that staff are not adequately trained in emergency procedures.

In order to cope effectively with a disaster, one needs to know the effects of water, fire and smoke on materials. Almost all disaster situations involve water of some type, for example floods, fires, tornadoes, earthquakes and hurricanes can lead to water damage of the collection (Baird, 2003:99). Water damage can be a consequence of efforts to control a fire. Hunter (1997:165) warns that archivists and librarians should be ready to handle water damage after almost every sort of disaster. Ngulube (2003:115) advises that, in order to prevent certain types of

water damage, “materials should always be stored at least four inches above the floor, never directly on the floor”. Libraries and archives should not be built in areas prone to flooding and librarians should always inspect the building for leaking pipes, dirty gutters and blocked drains, to avoid some of the controllable disasters by making sure that leaking pipes are fixed and gutters and drains are clean.

In the case of a fire, smoke and flames are causes of damage. Smoke causes more damage than fire (Baird, 2003:99; Hunter, 1997:165). Smoke easily moves through the entire collection and leaves a smell on the materials, including a thick, dark, oily film that can be hard to remove (Baird, 2003:99). The flames leave materials charred, brittle from heat and warped. Ngulube (2003:112) states that “fire causes paper records to be unstable”. In order to prevent this, libraries and archives should install smoke detectors, sprinkling systems and have working fire extinguishers at hand.

In South Africa and many other African countries, public libraries are faced with limited or no funding and increased handling of materials, so preventive preservation strategies such as disaster management become vital to the public library’s ability to offer proper services to all (Ngulube and Magazi, 2006a:112). Due to lack of or limited funds libraries may not be able to insure their collections against disasters.

Apart from disasters, librarians should be aware of the dangers of theft and vandalism. Higginbotham and Wild (2001:39) warn that “it is sometimes easy to forget that protecting the collections from theft is a component of any preservation program”. A well-maintained library or archive should have noticeable signs of good security practice, including security-conscious staff, to discourage theft and vandalism, and materials with magnetic strips that interact with library security gates (Higginbotham and Wild, 2001:39). Shuman (1999:14), in Ngulube (2005:19), says that security should bear building security, equipment security, materials security, electronic security and personal security in mind.

### **2.3.4 Conservation and restoration**

According to Matthews (1990), quoted in Ngulube (2003:50), conservation and restoration are the central activities of preservation; they deal with the physical maintenance and repair of documentary materials. Harris (2000:48) says restoration was a core activity in the past and institutions committed a substantial amount of resources to this activity. Feather and Eden (1997:13) say that conservation is very expensive and should be seen as a last resort. Archivists and librarians need to practise preventative preservation to minimize the need for conservation. Harris (2000:49) states that conservation and restoration are:

Reliant on specialist expertise, expensive equipment and materials, and highly labour intensive techniques, it drains resources and, in all but the smallest repositories, cannot keep pace with the processes of deterioration.

There are various definitions of conservation; it entails a rigorous respect for the integrity of the material and appreciation of its role as cultural heritage (Stewart, 2000:288). Conservation, in general, is a field of knowledge concerned with the management of and planning for the practical application of the techniques of binding, restoration, paper chemistry and other material technology, as well as other knowledge relevant to the preservation of archival resources (Roberts and Etherington, n.d in Ngulube, 2003:50). Ngulube (2003:50) explains:

Conservation can be further characterized as both preventive and remedial. Preventive conservation consists of indirect action to retard deterioration and prevent damage by creating conditions optimal for the preservation of materials. On the other side of the coin, there is remedial conservation, which consists mainly of direct action carried out on documents in order to retard further deterioration. It is akin to restoration.

Stewart (2000:288) says conservation's obligation is to lengthen the life of the material through preventative action and appropriate techniques of treatment.

According to the Collections Conservation Task Force of the Research Libraries Group, collections conservation is part of a broader programme and is based on the following principles:

- Resources are focused on materials with the highest preservation priority;
- The useful life of materials in their original format is maximized, thus enhancing access;
- The scale of the collections conservation programme is linked to the scale of the problems in the collections; emphasis may shift as needs change;
- Special collections materials are included as appropriate to the collections approach; and
- Other preservation options are considered when feasible, acceptable and more cost effective than conservation treatment (Merrill-Oldham and Schrock, 2000:229).

Merrill-Oldham and Schrock (2000:234) feel that in collections conservation it is practical to maximize the life and usability of the text at a reasonable cost and time frame. They argue that it is different from the conservation of artifacts that can cost much time and money to restore. The conservation programme used will depend on the nature and scope of the collection and may include book repair, mending, deacidification, leaf casting, encapsulation and lamination.

#### **2.3.4.1 Deacidification**

Acidity is the major cause of the deterioration of non-alkaline permanent paper. Acidity attacks the cellulose in paper, breaks down the fibre and weakens the paper (Ngulube, 2003:51; Hunter, 1997:150). According to Smith (1999), “most deacidification methods work to retard significantly the natural deterioration of paper by depositing an alkaline buffer to neutralize the acid”. Ngulube (2003:51) cautions that:

While brittle materials could be reformatted for preservation, there is also the troubling question of what to do about the millions of acidic but not yet

brittle records and archives inexorably deteriorating in repositories.

Smith (1999) and Hunter (1997:151) state that deacidification cannot restore what has already been damaged by 'the Lazarus effect', in that paper can be stabilized by deacidification but cannot be strengthened or reverse any damage that has already occurred. Deacidification is a means that many archivists and librarians had anticipated could be used to help combat the serious problem of the acidic library and archival holdings but millions had already been embrittled. Therefore deacidification would offer no relief and other methods need to be used (Ngulube, 2003:54; Smith, 1999).

#### **2.3.4.2 Reformatting**

Many librarians and archivists do simple repairs, but extensive repairs and strengthening of paper is left to the professional conservators (Merrill-Oldham and Schrock, 2000:239; Higginbotham and Wild, 2001:90; Hunter, 1997:151). In every library there are materials that are so embrittled that handling would destroy them. Smith (1999) states that the only option for these books is to reformat them or transfer the information they contain onto another medium such as photocopies or microfilm. Ward (2000:58) explains:

Reformatting may be carried out for two purposes: preservation of the original, which can then be retired from active use, or preservation of information in a record of no intrinsic value, which may be destroyed after the film is certified to meet technical and legal requirements.

Microfilming is most commonly used in archives. In the information age, digitization is being used for preservation (Ward, 2000:58; Harris, 2000:49). Reformatting is also called media conversion or preservation reprography. Harris (2000:49) states that reformatting was:

resisted for many years by archivists wedded to the sanctity of 'the original' and schooled in the centrality of restoration in archival endeavour, media

conversion is now used widely to facilitate access to records which are fragile or in heavy demand.

Ngulube (2003:77) feels that reformatting is a way of dealing with the conflict between preservation and access.

## **2.4 Preservation education and training**

Preservation advocacy is a key part of protecting collections by involving and convincing staff to think about how their actions affect the collections (Drewes, 2006; Feather and Eden, 1997:19). Ngulube (2003:124) explains that:

Education and training are concerned with the development of knowledge, skills, and attributes necessary for individuals to live meaningfully and to contribute positively to society. Training relates to specific processes and procedures. It should provide people with techniques in how to apply rules and standards. It covers how principles are applied, in a practical programme.

After decades of library schools not offering courses in library preservation, today there are excellent opportunities in a number of the developed countries such as America, Britain, Germany and France (Swartzburg, 1998:139). Feather and Eden (1997:20) stress that:

Staff must be made aware of the need for particular environmental conditions to be maintained, especially in storage areas, and the need to report any deviations from normal or acceptable conditions.

Drewes (2006) recommends that the preservation of library collections and archives is not the field for one but for everyone. She suggests that a successful step for many institutions would be to make preservation a part of every job description. This would reinforce, from day one, the importance of each individual to the well-being of the collection. The preservation of materials, irrespective of

their format and media that they are captured on, to a great extent hinges on librarians and archivists with necessary skills and knowledge to deal with the records at every stage of their use by society (Ngulube, 2003:124).

## **2.5 Preservation challenges in public libraries in Africa**

Africa has many challenges with regard to its library and information services. Social, economic, political and cultural factors play a role in this and are reflected in the condition of the library and archives facilities in that country (Mazikana, 1995:21; Rosenberg, 2001: 13). Many libraries are not functioning properly due to some of the following reasons.

### **2.5.1 Lack of funds**

The situation in African libraries is rather depressing and is worsening (Rosenberg, 2001:13). The infrastructures for conservation and reprographic units were developed during the colonial period, or soon after independence, but have deteriorated in the past years (Mazikana, 1995:23). There is a need for resources to adequately maintain the proper infrastructure for preservation in order to receive and adequately store materials. Mazikana (1995:25) says this implies that “materials are continuing on their path to eventual disintegration and destruction”. Ngulube (2003:125) emphasizes that knowledgeable and trained staff are more likely to use limited resources on projects that reflect the greatest preservation need.

Lack of full support from government and policy-makers creates problems in Africa. African governments still need to understand the importance of libraries and how they play an important role in the development of the continent. In countries where governments realize their importance, libraries and archives flourish (Rosenberg, 2001:14; Khayundi, 1995:33).

### **2.5.2 Staffing**

In Africa there is a lack of proper training of information professionals for preservation and conservation programmes. There is a shortage of skilled and

experienced preservationists and conservators (Mazikana, 1995:25; Mbaye, 1995:43). As a result of the lack of considerable archival training in Africa, many archivists and conservationists have received training from overseas (Khayundi, 1995:34; Mazikana, 1995:26; Rosenberg, 2001:17). Most of the training offered is of high quality, but does not always suit African conditions, although it does produce highly able archivists and other information professionals (Ngulube, 2003:126). The economic, political, climatic and technological environments in Africa are very different from those in the developed world.

### **2.5.3 Dependency of library development on donor agencies**

This problem has been recognised by librarians in Africa and donor agencies, but nothing has led these libraries to sustain themselves because most are still dependent on outside funding and are donor-led, which increases their dependence on the donors (Rosenberg, 2001:14). As soon as the donors stop the funding, the programme usually deteriorates.

### **2.5.4 Adopting a Western library model that is not totally suitable for Africa**

Many institutions were established during periods of colonial domination and, in the context of preservation programmes in Africa, many programmes were initiated and have either thrived or collapsed (Mazikana, 1995:22). Khayundi (1995:31) states that "...colonial administrations had little regard to the establishment of national institutions to cater for libraries and archives". This failure of colonial administrations to lay foundations has led to the lack of, or weak, preservation programmes in eastern and southern African regions (Khayundi, 1995:31). After independence many countries found themselves with other issues to deal with, such as health, education, poverty and many others, which they believed were of higher priority than preservation and conservation programmes (Khayundi, 1995:31).

### **2.5.5 Buildings and equipment**

Architectural protection plays an important role in preservation and securing materials with regard to the site of the building and the choice of construction materials and technical equipment that conform to preservation standards (Mbaye, 1995:43). Many libraries and archives are adapted and not originally built for the purpose of preservation, for example the National Archives of Kenya (Matwale, 1995:49). Khayundi (1995:32) elaborates:

Obviously archives and/or library materials housed in such premises will not receive adequate protection against loss, and decay or destruction through humidity, light, dust, insects, fire, theft... Adapted buildings are normally old and sometimes dilapidated structures, which do not easily lend themselves to being fitted with modern facilities for the protection of archival or library material.

In most African countries, adapting a building is usually due to the lack of financial resources. It is not likely that these libraries and archives are able to buy expensive equipment for preservation and conservation. Khayundi (1995:33) points out that if an institution has facilities it does not imply that preservation is being undertaken. He continues to point out that these facilities can only be utilized by qualified staff and when the equipment is maintained on a regular basis. A lot of equipment is imported and is expensive. In some cases it is donated, but whether purchased or donated the equipment needs to be maintained. There are often problems to solve and, at times, lack of spare parts (Khayundi, 1995:34).

### **2.5.6 Environmental control**

Climatic conditions in Africa vary. The prevalence of tropical temperatures leads to temperatures and humidity being rather high, accelerating chemical and biological activities. High temperatures provide a favourable environment for insects, rodents and micro-organisms (Khayundi, 1995:31; Mbaye, 1995:41; Ngulube, 2003:133). These can be detrimental to material if not controlled.

According to Ngulube (2003:133), however, "... most archival institutions are ill equipped to fight due to lack of funds". According to a survey carried out by Mbaye (1995:42), out of ten responses the researcher received, only the National Library of Togo during that time confirmed it followed the climatic standards for preservation. To maintain suitable conditions, libraries and archives require HVAC systems, which still require finances to purchase and install (Khayundi, 1995:32).

### **2.5.7 Other factors**

Many countries in Africa are politically unstable and this does not help the establishment of preservation programmes. Khayundi (1995:35) states that "the resultant civil strife and displacement of populations creates a situation where personal survival is paramount to the survival of a nation's heritage". Due to these instabilities, some libraries and archives have been destroyed by bombs, bullets and have even been looted.

According to Mbaye (1995:42), "many archivists and librarians complain about the absence of organized national preservation programmes but nevertheless abstain from organizing specific programmes in their institution". Insufficient resources are not the only factors affecting preservation, but also unrealistic attitudes, which include waiting for other people to take the initiative. The picture painted above is rather depressing, is very serious and requires urgent solutions (Mazikana, 1995:28).

## **2.6 Preservation challenges in South Africa**

There are a number of factors that reveal the preservation and access challenges in South Africa. Like many other African countries, these are related to economic, social and political issues. Most of these issues have already been discussed in section 2.5, especially issues related to lack of funds, staffing, donors and adopting a Western model library.

### **2.6.1 Paper used in South Africa**

Preservation has always had severe challenges, because materials accumulate more rapidly than ever before and are used more extensively. Changes in manufacturing have led to the production of poor paper, with more chemicals and less strength (Harris, 2000:47; Ngulube, 2003:171). To prove that paper today is of poor quality, Harris (2000:48) states that one needs to compare the physical condition of materials in the Cape Archives from the 12<sup>th</sup> century, with those from the 17<sup>th</sup> century. The latter are falling apart. Westra (1987:6) elucidates:

In South Africa as elsewhere, the deterioration of archival library collections is mainly due to the poor quality of paper used for writing and printing. The process of deterioration can be reduced by controlling the environment in which the collections are stored, but the obvious way of ensuring that the book of today will be preserved for the future is by using durable, acid-free alkaline paper.

### **2.6.2 Environmental control and the South African climate**

South Africa has a temperate, sub-tropical climate, with considerable regional variations caused by differences in elevation, wind systems and ocean currents. Westra (1987:3) explains that the western interior of South Africa is the driest, compared to the hot and humid KwaZulu-Natal, which is problematic from a preservation point of view. Environmental and climatic controls are important in the preservation of materials. Ngulube (2003:173) examined the preservation index of six towns in South Africa, namely Bloemfontein, Cape Town, Durban, Johannesburg, Kimberley and Pretoria, and observed from the towns' temperatures and relative humidity that the preservation index ranged from three years to thirteen years. Durban has a preservation index of three years, meaning that if materials were kept in natural temperatures and relative humidities they would degrade in three years.

### **2.6.3 Preservation facilities in South Africa**

Khayundi (1995:32) states that “the availability of a suitable building for archive or library operations must be regarded as the first prerequisite in the preservation and conservation of library and archive materials”. As per discussion in section 2.5.5, subsection buildings and equipment, the building is an important aspect in preservation. Ngulube (2003:173) points out that many archival institutions in South Africa are not purpose-built but adapted. Westra (1987:7) says that most of the modern buildings in South Africa are air-conditioned but this was often lacking in the older ones. Westra (1987:7) stresses that “environmental control through air-conditioning is essential for institutions in hot and humid coastal regions”, such as KwaZulu-Natal. Ngulube (2003:174) explains that repositories in Cape Town, Bloemfontein, Pietermaritzburg and Pretoria are in custom-designed buildings, but repositories in Gauteng, Limpopo, Mpumalanga, the Eastern Cape, the Northern Cape and North West provinces do not have good facilities. Materials are housed in rented premises and some repositories share with other organizations, making preservation more complicated.

### **2.7 Summary**

Various facets related to the preservation of, and access to, legal deposit materials have been reviewed. These include the history, nature and access to legal deposit; public libraries; and preservation and preservation challenges in Africa and South Africa. The relevant significant points in the literature review will be used to help interpret the results of this study.

## **Chapter 3: Research methodology**

In this chapter, the research methods selected to examine the preservation of, and access to, legal deposit materials at the Msunduzi Municipal Library are explained and evaluated.

### **3.1 Research design**

A research design is a plan or blueprint of how a researcher systematically collects and examines the data required to answer the research questions (Terreblanche, Durrheim and Painter, 2006:34; Babbie and Mouton, 2001:74). The study is an in-depth analysis of a single unit, in this case the legal deposit collection of the Msunduzi Municipal Library. To establish the collection management policies and strategies, with regard to preservation and access of legal deposit materials, various methods were used to carry out this empirical investigation.

A three-pronged method of data collection was used. This included both quantitative and qualitative methods to collect data. Methodological triangulation was used to look at the study in different ways, rather than just one way. White (2002:42) states that “using a number of methods allows you to triangulate the research and this makes it more robust and valid”. Methodological triangulation refers to the use of a number of methods to study a single problem, with different sources (Terreblanche, Durrheim and Painter, 2006:380). By using different methods the researcher is able to overcome factors lacking, especially when using one method of research. Babbie and Mouton (2001:275) state that “triangulation is generally considered to be one of the best ways to enhance the validity and reliability of research done...”. The different methods used in the study were the following:

- Literature search and review;
- A survey using a self-administered questionnaire;
- In-depth interviews;
- Observation; and
- Collecting graphic data.

### **3.1.1 Literature search and review**

Analyzing accumulated knowledge about a subject is a necessary component of social science research, for several reasons (Neuman, 2006:110; Terreblanche, Durrheim and Painter, 2006:19). The review of the literature enables the researcher to find out what is already known in relation to the research question, thus avoiding “reinventing the wheel” and duplication of existing literature (Neuman, 2006:111). The researcher learns to build on what others have done. Neuman (2006:111) emphasizes “today’s studies build on those of yesterday”. In addition, the purpose of a literature review includes:

- Demonstrating a familiarity with the research topic;
- Explaining the prior path of research and how this study is linked to it; and
- Learning from others and stimulating new ideas. (Neuman, 2006:111; Terreblanche, Durrheim and Painter, 2006:20).

A literature review is important, in that it shows that the researcher knows the major issues concerning the topic. This will help with the interpretation of the results, as they can be discussed in the light of what had been done before.

### **3.1.2 Size and characteristics of the population**

The population includes all the elements that make up the unit of analysis. The units of analysis in this study are the staff of the legal deposit department at the Msunduzi Municipal Library. According to the UKZN, School of Education, Training and Development (2004:64), “there is no clear-cut answer to the question of sample size, since it depends on the purpose of the study”. The size also depends on the style of the research. The present research is a descriptive study which could involve an individual, group of people or an institution. Babbie and Mouton (2001:173) state that “a population is the theoretically specified aggregation of study elements”. In this study the population is small and the population of nineteen members of staff in the legal deposit department was studied using a self-administered questionnaire and a semi-structured interview. The population included professional and non-professional library staff, namely one library manager, four

principal librarians, three senior librarians, one librarian, three senior library assistants and seven library assistants. The small size of the population made sampling unnecessary for the questionnaire. However, purposive sampling was used to select a sample of the population for the in-depth interviews. This was based on the researcher's knowledge of the population.

### **3.2 Data collection techniques and procedures**

The survey helped gather data to portray the existing conditions of the legal deposit materials. Surveys vary in terms of their scope; there are large-scale surveys such as a national census and smaller-scale surveys that examine a particular community (UKZN, School of Education, Training and Development, 2004:60). A descriptive survey was used in this study. This type of survey describes the nature of existing conditions. The researcher considered the survey design suitable, because a number of related studies (Ngulube, 2003; Astle and Muir, 2002; Ayre and Muir, 2004; Tibane, 2005) used the survey design to gather their data. The other reason is that a survey gathers data on a once-off basis and is convenient in terms of time and is economical for a coursework Masters thesis.

#### **3.2.1 The questionnaire**

A questionnaire is one of the methods used to measure variables. Use of a questionnaire involves asking respondents questions and soliciting information from them. Berdie and Anderson (1974) state that "a questionnaire is not just a list of questions or a form to be filled out; it is essentially a scientific instrument for measurement and for collection of particular kinds of data". A self-administered questionnaire (see Appendix 2) was used to collect data from all legal deposit staff. The questionnaire was seven pages long and consisted of 57 questions. Although the researcher aimed to keep the questionnaire as short as possible this was not possible due to the broad issues related to the preservation of, and access to, materials. This questionnaire was adapted from two studies, Feather and Eden's instrument for the 'National preservation policy: policies and practices in archives and records offices' of the United Kingdom and Ngulube's instrument for the 'Preservation and access to public records and archives of South Africa' (Feather

and Eden, 1997:101-107; Ngulube, 2003:445-461). Schutt (1996:278) emphasizes that:

If another researcher already has designed a set of questions to measure a key concept in your study (an instrument), and evidence from previous survey indicates that these questions provide a good measure of the concept, then by all means use that instrument.

The questionnaire was used to elicit both quantitative and qualitative data about the preservation of, and access to, legal deposit at the Msunduzi Municipal Library.

### **3.2.1.1 The structure of the questionnaire**

The questionnaire had a covering letter attached to the first page. This letter introduced the researcher and briefly explained the purpose of the study. The letter included issues of confidentiality, instructions on where to put the completed questionnaire and the researcher's contact details. Instructions on how to fill in the questionnaire were included at the top of the first page. The questionnaire was divided into seven main sections in order to collect the different categories of information. These were:

➤ **Demographic data**

This section solicited background information and respondents were asked questions about their age, gender and education;

➤ **Preservation policies and means**

The questions asked in this section were about preservation policies, including policies to do with preservation conditions, conservation facilities, training and recruitment of qualified staff;

➤ **The environmental conditions of stack rooms**

The respondents were asked questions about the environmental conditions of the stack rooms with regard to temperature, relative humidity, light and pest management;

➤ Storage and handling

This section solicited questions about the cleanliness of the stack rooms, the handling of materials and whether or not there is enough storage space to accommodate materials;

➤ Disaster preparedness and management

Questions about disaster and emergency planning were asked in this section. This included emergency recovery procedures, security, fire detection and suppression systems;

➤ Condition and care of materials in general

To find out about the overall condition of materials various question were asked, including ones that queried the different causes of deterioration and whether or not the general physical condition was a result of the various factors; and

➤ Access to information

This section consisted of questions concerning finding aids, copyright legislation and access conditions. Respondents were asked to rank priorities for improving the management of the legal deposit collection. The last question was an open-ended question and asked for additional comments or concerns related to the management, care and use of legal deposit materials.

### **3.2.1.2 Types of questions**

At the broadest level there are two types of questions, open-ended and closed questions. Open-ended questions let the respondents communicate their experiences or views in their own words and closed questions compel the respondent to select one or more choices from a fixed list of answers provided (Terreblanche, Durrheim and Painter, 2006:486). The open-ended questions gather qualitative responses. The questionnaire included mainly closed-ended, with some open-ended questions. With mainly closed-ended questions it was used to collect mainly quantitative data. According to the UKZN, School of Education (2004:81), “a very structured questionnaire which has closed questions collects numerical data

which can be analysed using statistical methods”. The respondents were asked nine open-ended questions to allow them to express themselves about specific issues without being prompted.

Most of the questions in the data gathering instrument were closed-ended questions, because the researcher wanted to save the respondents’ time and collect mainly quantitative data. Neuman (2006:287) argues that the different forms of question have advantages and disadvantages, but “a researcher’s choice to use an open or closed-ended question depends on the purpose and the practical limitations of a research project”. These structured questions, that limit the responses from the respondents, made coding easier. The population studied was adequately literate and was able to answer a self-administered questionnaire (Babbie and Mouton 2001:258). The closed questions included:

- Dichotomous questions – these offered two fixed alternatives, for example, Question 1 gives two options, either male or female;
  - Multiple-choice questions with single answers, for example, Question 55, in which the respondent needs to indicate when the users are made aware of copyright legislation and access conditions;
  - Multiple-choice questions with multiple answers, for example, Questions 37 and 50, in which the respondent can select more than one answer;
  - Checklist – involving respondents selecting from a list;
  - Ranking formats – involving respondents ranking a whole set of items in terms of a given set of criteria; and
  - Scaled questions - the respondent is expected to mark a point on a scale, for example, Question 42, which uses the Likert scale of measurement.
- (Terreblanche, Durrheim and Painter, 2006:487-489).

### **3.2.2 The interview schedule**

A semi-structured interview (see Appendix 3) was adapted from Feather and Eden’s instrument for the ‘National preservation policy: policies and practices in archives and records offices’ of the United Kingdom and Ngulube’s instrument for the

'Preservation and access to public records and archives of South Africa' (Feather and Eden, 1997:101-107; Ngulube, 2003:445-461). The interview schedule contained 73 questions and was ten pages long.

### **3.2.2.1 Types of questions**

Some of the questions in the semi-structured interview were closed-ended, but the respondents were asked more open-ended questions than in the questionnaire. The semi-structured interviews enabled the researcher to gather data that would not be answered by the legal deposit staff, such as questions about the budget for the library and legal deposit function and also in-depth information about issues that needed more clarity.

### **3.2.3 Peer review and pre-testing the instruments**

According to Neuman (2006:277), "a good questionnaire forms an integrated whole". It is important for the questionnaire and interview schedule to be clear, relevant and meaningful to the respondent. To identify possible problems with the research instruments, the researcher selected a number of people in the Discipline of Sociology and Information Studies Programme to scrutinize and review it. The research instrument was pre-tested on two Information Studies records and archives management students, to assess whether or not the line of questioning and instructions were appropriate and the instruments were understandable. This helped the researcher correct spellings, format layout and clarify terms like 'preservation' and 'conservation', which many people think are synonymous.

### **3.2.4 The observation schedule**

An observation check list (see Appendix 4) was used to focus the observations and facilitate methodical recordings of observations. The main advantage of observation is that it is another way of finding out what is happening. The UKZN School of Education, Training and Development (2004:95) states that "this method means that the researcher does not have to rely on the opinions or perceptions of others". The researcher also made simple observations of the legal deposit storage (stack rooms), such as:

- The physical appearance of the stack room;
- The arrangement of the materials; and
- The room temperature, lighting and cleanliness.

The observations of the stack rooms were carried out on 17, 24 and 26 September 2007. The researcher collected graphic data by taking photographs of the various sections of the legal deposit departments, with the permission of the head of the legal deposit section.

### **3.2.5 Validity and reliability of instruments**

Validity and reliability are vital issues in social research (Neuman, 2006:188). Validity can be defined as the degree to which the research findings are sound (UKZN, School of Education, Training and Development, 2004:70; Terreblanche, Durrheim and Painter, 2006:90). Neuman (2006:188) says “reliability means dependability or consistency”. This means that, if the instruments are reliable, similar results should be collected when administered to a similar group of people in the same context.

There are various types of validity and different ways of measuring it. With regard to the validity of the contents of the instruments, validity addresses the question how the data collection instruments cover the area of research they are supposed to cover (UKZN, School of Education, Training and Development, 2004:71; Neuman, 2006:193).

The instruments used were adapted from Feather and Eden’s (1997:101-107) instrument for the ‘National preservation policy: policies and practices in archives and records offices’ of the United Kingdom and were developed by the United Kingdom Preservation Administrators group. This ensured a level of validity and reliability. Neuman (2006:188) stresses that “perfect reliability and validity are virtually impossible to achieve”. The UKZN School of Education, Training and Development (2004:72) agree with Neuman (2006) and say that:

Validity and reliability are continuous concepts. We don't judge research to be valid or invalid, or reliable or not reliable. Rather we ask to what extent is research valid or reliable?

By peer reviewing and pre-testing the instruments the researcher was able to improve on the validity and reliability of the study.

### **3.2.6 Administering the questionnaire**

After adapting the questionnaire, pre-testing it, having it peer reviewed and altering it accordingly, the questionnaire (see Appendix 2) was delivered by hand on 14 September 2007 to the respondents at the Msunduzi Municipal Library. A covering letter (see Appendix 1) was attached to the questionnaire to explain briefly the purpose of the study and request respondents to complete the questionnaire and place it in a special box placed at the Adult Reference Department of the legal deposit section of the Msunduzi Municipal Library. Seventeen questionnaires were handed out and the researcher received thirteen back, a response rate of 76.5%.

### **3.2.7 Administering the interviews**

Appointments were made a couple of days before the interviews. The library manager and the head of legal deposit were interviewed (face- to-face) on 17 September and 27 September 2007, respectively, to obtain their opinion on the preservation of, and access to, legal deposit materials. During the interviews the respondents were given a copy of the interview schedules, because a number of questions contained lists and a number of options had to be chosen. The interviews lasted for approximately an hour and fifteen minutes, each.

### **3.2.8 Data analysis**

In this study, quantitative and qualitative techniques were utilised. Statistical analysis using SPSS was employed to organise data and analyze data collected from the self-administered questionnaire and observation schedule. Organising data included analysing the raw data, by checking for missing data, ambiguity and errors.

The data collected was coded and cleaned to identify any errors from incorrect coding (Babbie and Mouton 2001:417).

According to Neuman (2006:44), “content analysis is a technique for examining the content, or information and symbols, contained in written documents or other communication medium”. There are two types of content analysis, namely relational analysis and conceptual analysis (Colorado State University, 2007); the latter was used for this study. In conceptual analysis, a concept will be chosen for examination and the analysis will involve quantifying and tallying its presence (Colorado State University, 2007). It was used to organise, describe and analyze data collected from the observations made and open questions in the questionnaire. Neuman (2006:325) states that “measurement in content analysis uses structured observation: systematic, careful observation based on written rules”. Through coding, themes and concepts will be quantified. Data collected using the interview schedule was analysed qualitatively.

### **3.3 Summary**

The need to obtain significant information about the preservation and access to legal deposit at a public library resulted in a multifaceted design and method of data collection, consisting of a literature search, questionnaires, interviews and observation schedules. The design of the study, data collection techniques and procedures were described in this chapter.

## **Chapter 4: The research results**

This chapter presents the data collected from the study, which was conducted by means of a self-administered questionnaire, interviews and observation schedule.

### **4.1 The response rate**

Out of seventeen questionnaires distributed, thirteen questionnaires were returned, yielding a response rate of 76.5%. According to Babbie and Mouton (2001:261), a response rate of 50% is sufficient for analysis and reporting, 60% is good and 70% is very good. Schutt (1996:289) believes that even a response rate of 70% is not high enough and is simply acceptable. Babbie and Mouton (2001:261) emphasize that these percentages are rough guides and have no statistical basis and an established lack of response bias is more important than a high response rate. The response rate is relatively high, possibly due to the fact that the researcher is known by the population and worked at the Msunduzi Municipal Library for nine months. Babbie and Mouton (2001:259) stated that “generally, questionnaires that are delivered or collected or both seem to have higher completion rates than straightforward mail surveys”.

### **4.2 The questionnaire results**

The results of the questionnaire are reported according to the main sections of the questionnaire, namely demographic data, preservation policies and means, environmental conditions of stack rooms, storage and handling, disaster preparedness and management, condition and care of materials and access to information. All percentages were rounded off to one decimal place.

#### **4.2.1 Demographic data**

The demographic information was asked for purposes of discovering the respondents' background. This information was necessary to find out whether or not the respondents background had an effect on how questions were answered.

In this section, questions were asked to establish the respondents' gender, age and highest level of education reached. Table 1 shows the count distribution of the gender of respondents.

**Table 1: Gender of respondents  
N=13**

Gender	Count	%
Female	9	69.2
Male	4	30.8
Total	13	100

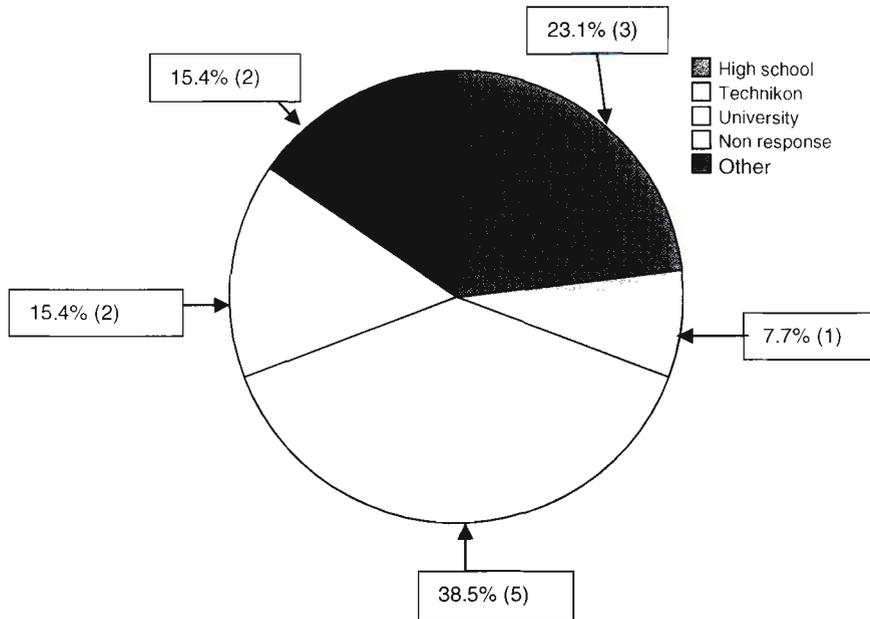
There were substantially more female respondents, nine (69.2%), than male respondents, four (30.8%). The second question was asked to ascertain the age of respondents. The majority of the respondents, six (46.1%), were within the age bracket of 41-50 years, followed by five (38.5%) in the age bracket of 31-40 years. One respondent was over 60 years old and another did not respond to the question. Table 2 below shows these statistics.

**Table 2: Age of respondents  
N=13**

Age	Count	%
41-50	6	46.1
31-40	5	38.5
Over 60	1	7.7
Non-response	1	7.7
Total	13	100

The level of education attained by respondents is shown in Figure 1. The majority of the respondents, 11 (84.5%), had received some form of education, with three (23.1%) having high school education, one (7.7%) with technikon, five (38.5%) with university, two (15.4%) with other qualifications, including a college, as well as a teacher training college qualification. Two (15.4%) did not indicate their level of education.

**Figure 1: Education of respondents**  
N=13



**Table 3: Crosstabulation of Age of respondents and Education of respondents**  
N=13

Age of respondents	Education of respondents				Other education of respondents		Row total	%
	High school	Technikon	University	Non-response	College	Teacher training college		
31-40	0	1	2	1	1	0	5	38.5
41-50	3	0	3	0	0	0	6	46.1
Over 60	0	0	0	0	0	1	1	7.7
Non response	0	0	0	1	0	0	1	7.7
Column Total	3	1	5	2	1	1	13	100
%	23.1	7.7	38.5	15.4	7.7	7.7	100	

Column totals in Table 3 do not necessarily add up to exactly 100% because percentages have been rounded of to one decimal place.

This comparison of age and education of respondents shows that three respondents who are within the age group of 41-50 years are university graduates and two respondents in the age group of 31-40 years have a university degree. Three respondents in the age group of 41-50 years highest level of education was high school and one respondent within the age group of 31-40 was a college graduate and another over 60 years highest level of education was teacher training college.

## 4.2.2 Preservation policy and means

The questions asked in this section were to establish whether or not the Msunduzi Municipal Library had policies relating to improving preservation conditions, development of conservation facilities, and training and recruitment of qualified staff. Five of the respondents (38.5%), stated that there was no policy to improve preservation conditions, yet four respondents (30.8%) stated that there was a policy. Seven respondents (53.8%) said there was no policy to develop conservation facilities and 46.1% (six) stated the library had no policy to train and recruit staff, while four respondents were not sure if there was a training and recruitment policy. The results are shown in Table 4.

**Table 4: Library policies  
N=13**

Response	To improve preservation conditions		To develop conservation facilities		To train & recruit staff	
	Count	%	Count	%	Count	%
No	5	38.5	7	53.8	6	46.1
Yes	4	30.8	1	7.7	0	0
Unsure	2	15.4	2	15.4	4	30.8
Non response	2	15.4	3	23.1	3	23.1
Total	13	100	13	100	13	100

## 4.2.3 The environmental conditions of stack rooms

This section presents results concerning the environmental conditions of the stack rooms, with regard to temperature, relative humidity, light and pest management, to determine how paper-based materials were preserved. Questions 6 to 15 solicited information about climate control, especially in relation to the temperature of the stack rooms and relative humidity.

### 4.2.3.1 Temperature and relative humidity

Question 13a, an open-ended question, sought information about the average temperature of the building. Five respondents (38.5%) said that the average temperature in the building was about 20° to 23°C, although the majority of the respondents, 53.8% (seven), were not sure about this. The second part of question 13b asked for the average temperature of the stack room and the results in Table 5 show

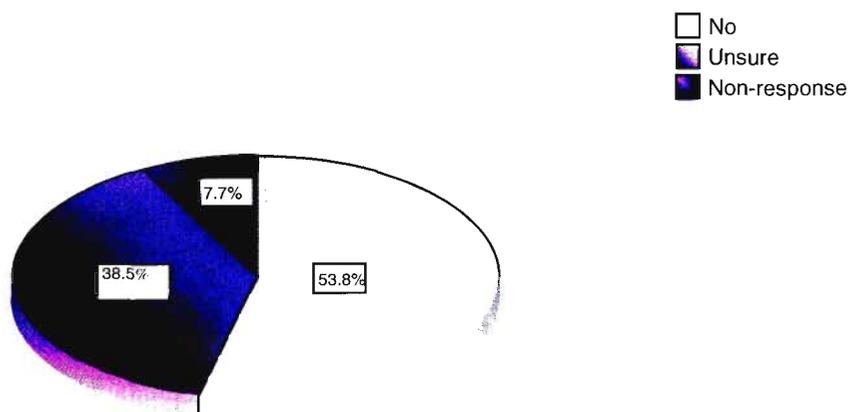
that most respondents, 76.9% (10), were unsure about the average temperature in the stack rooms. One respondent said it was 27°C and another reported 28°C.

**Table 5: Average stack room temperature  
N=13**

Response	Count	%
Unsure	10	76.9
Non-response	1	7.7
27°C	1	7.7
28°C	1	7.7
Total	13	100

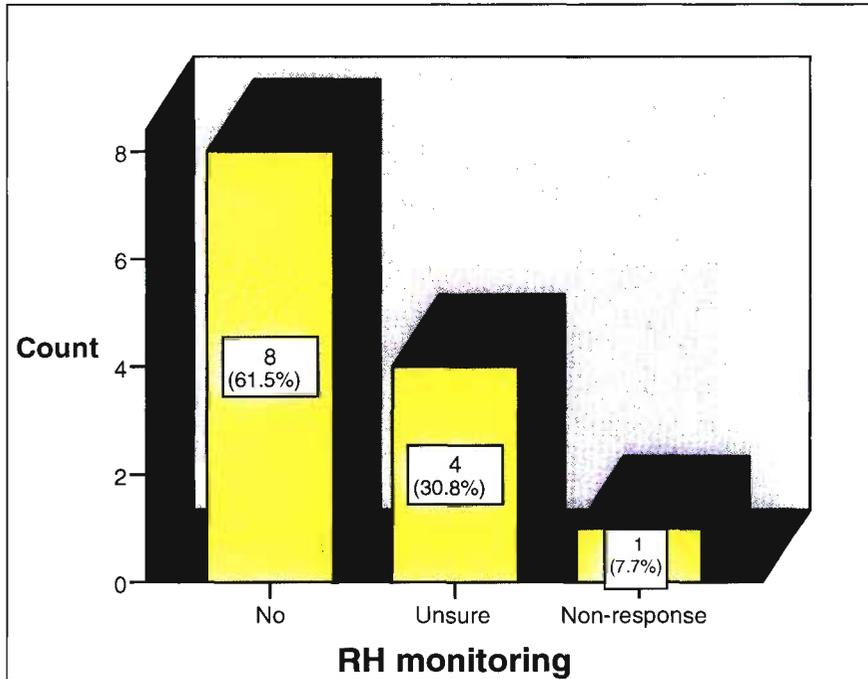
Question 14 asked whether or not the temperatures in the stack rooms were monitored closely. Seven respondents (53.8%) confirmed that the temperature was not monitored constantly. This is shown in Figure 2.

**Figure 2: Stack room temperature monitoring  
N=13**



More than half of the respondents, eight (61.5%), indicated that the relative humidity is not constantly monitored in the stack rooms. This is shown in Figure 3.

**Figure 3: Relative humidity (RH) monitoring  
N=13**



**4.2.3.2 Light**

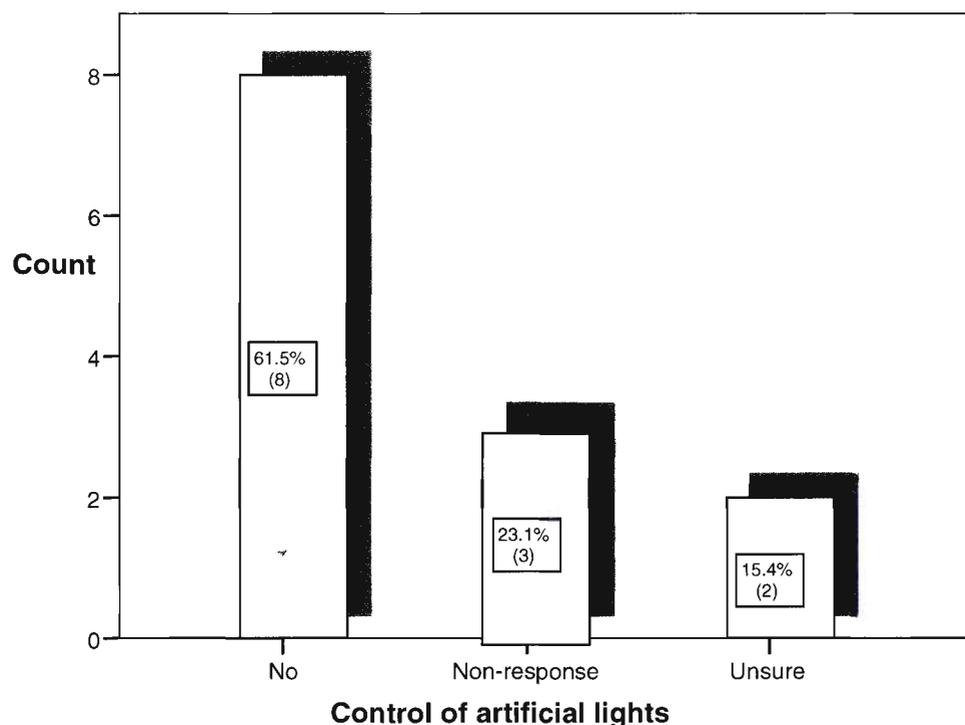
Respondents were asked (question 16) how many hours materials were exposed to light during the day. This question was an open-ended question. In Table 6 five respondents (38.5%) were unsure about the number of hours, one respondent (7.7%) specified that materials are exposed to light all day, two respondents indicated eight hours and eight and a half hours, respectively. Three respondents (23.1%) stated approximately ten hours.

**Table 6: Records exposure to light  
N=13**

Number of hours	Count	%
Unsure	5	38.5
Plus/minus ten hours	2	15.4
Non-response	2	15.4
All day	1	7.7
Eight and a half hours	1	7.7
Eight hours	1	7.7
Ten hours	1	7.7
Total	13	100

Question 18 solicited information about the control of artificial lighting in the storage areas. More than half of the respondents, 61.5% (eight), said that artificial lighting in the storage areas was not controlled, while 15.4% (two) were unsure and 23.1% (three) did not respond to the question. This is shown in Figure 4.

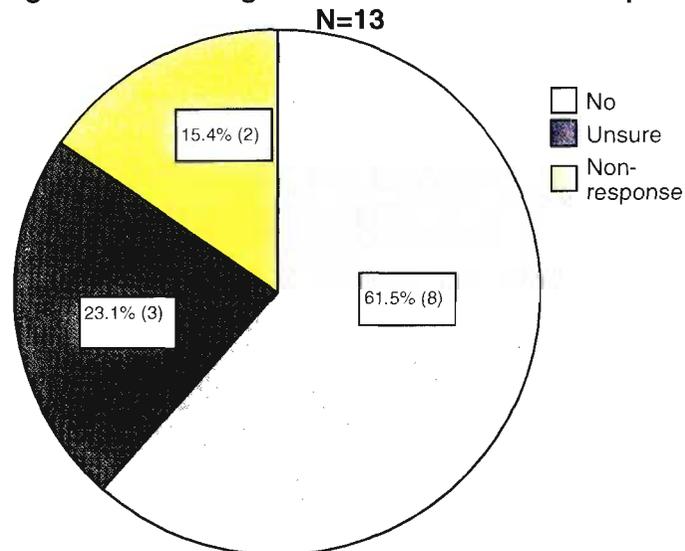
**Figure 4: Control of artificial lights**  
N=13



#### 4.2.3.3 Pest management

Question 19 asked whether all materials accessioned were checked for insects/vermin before they were placed in the stack rooms. Figure 5 indicates that eight respondents (61.5%) said that materials were not checked for pests, three respondents (23.1%) were unsure and two respondents did not answer the question. Questions 20 and 21 sought information about insect invasion and vermin infestation in the building. The answers provided for question 21, an open-ended question, included five respondents stating that cockroaches, bookworms, spiders, fleas and dustmites were found in the stack rooms. One respondent did not know what type of invasions and infestations they had faced in the building and seven respondents did not answer the question.

**Figure 5: Checking accessioned materials for pests**

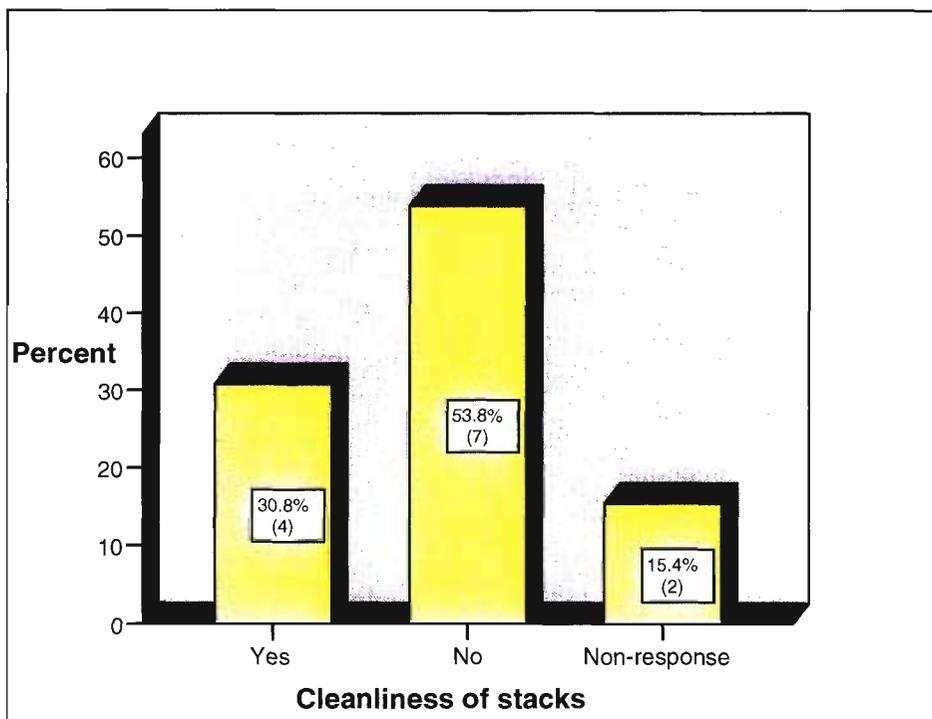


#### 4.2.4 Storage and handling

This section solicited information about the cleanliness of the stack rooms, the handling of materials and information about storage space to accommodate materials. The cleanliness of stacks is displayed in Figure 6.

**Figure 6: Cleanliness of stack room**

**N=13**



A majority of the respondent, 53.8% (seven), said that the stack rooms were not clean, while 30.8% (four) said they were clean. Five different respondents' comments were received with regard to question 23, an open-ended question, about how often the stack rooms were cleaned. The comments included "hardly", "maybe once a month", "never", "once every two months" and "only when very dirty". This is shown in Photographs 1 and 2. Six respondents were unsure and two did not answer the question.

**Photograph 1: Cleanliness of stack rooms**



This is a photograph of the fourth floor stack room.

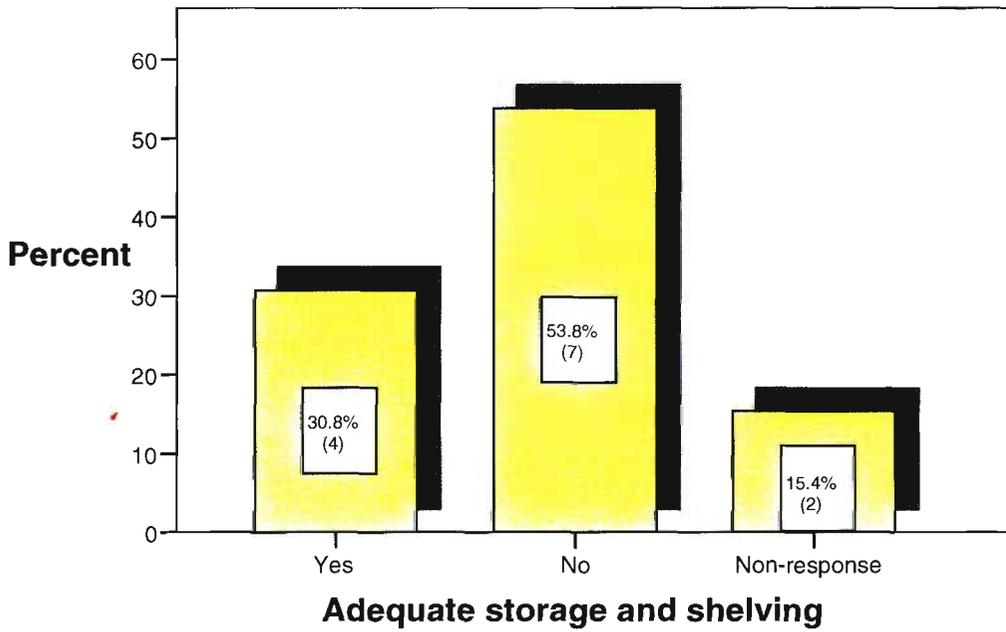
**Photograph 2: Cleanliness of stack rooms**



This is a photograph of the maps stack room.

Question 24 asked for information about storage space and shelving for materials. This is displayed in Figure 7 below. Seven respondents (53.8%) stated that the space for storage and shelving was not adequate. This is shown in Photographs 1, 3 and 4. Four respondents (30.8%) believe it was adequate.

**Figure 7: Adequate storage and shelving**  
N=13

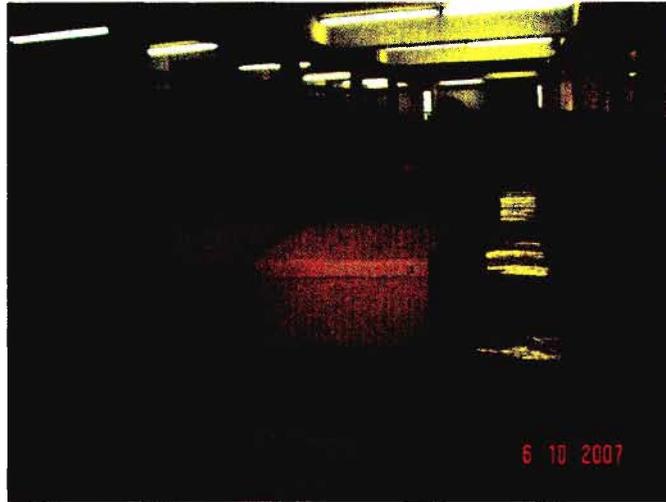


**Photograph 3: Storage**



This is a photograph of the periodicals stack room.

**Photograph 4: Storage**



Photograph 4 is of the fourth floor stack room.

A total of 10 respondents (76.9%) said only staff have access to the stack rooms and one respondent stated that both staff and users have access to the stack rooms. Table 7 reflects these results.

**Table 7: Staff access to stack rooms  
N=13**

<b>Access to stacks</b>	<b>Count</b>	<b>%</b>
Staff only	10	76.9
Non-response	2	15.4
Staff and users	1	7.7
Total	13	100

The respondents were asked to indicate in questions 26 and 27 whether or not users and staff are trained in handling materials. The results are displayed in Table 8. A high percentage of respondents, 61.5% (eight), said users were not trained in handling materials and six respondents (46.1%) stated that staff were trained. Four respondents (30.8%) said staff were not trained to handle materials.

**Table 8: Training and guidelines for handling of materials**

**N= 13**

Response set	Staff training		User training		Staff guidelines		User guidelines	
	Count	%	Count	%	Count	%	Count	%
Yes	6	46.1	0	0	0	0	2	15.4
No	4	30.8	8	61.5	10	76.9	8	61.5
Unsure	1	7.7	2	15.4	1	7.7	1	7.7
Non-response	2	15.4	3	23.1	2	15.4	2	15.4
Total	13	100	13	100	13	100	13	100

Questions 28 and 29 asked respondents if there were guidelines for the handling of materials for staff and users. A large number of respondents, 76.9% (10), indicated that there were no guidelines for staff and a large number, 61.5% (eight), said there were no guidelines for users, either. The last question in this section, question 30, was open-ended and was asked to establish who determined what can be safely copied. Four respondents (30.8%) indicated “staff”, another four (30.8%) were unsure, one respondent (7.7%) said “heads of departments and staff”, another one said “heads of departments and the director”, and three respondents (23.1%) chose not to answer the question.

#### **4.2.5 Disaster preparedness and management**

An inquiry about disaster and emergency planning was made in this section. This incorporated emergency recovery procedures, security, fire detection and suppression systems. Table 9 shows statistics for questions 31, 32 and 34, with regard to disaster preparedness. A large percentage 69.2% (nine) stated that the Msunduzi Municipal Library did not have a disaster planning team, a few respondents, three (23.1%), said that staff had been instructed in emergency planning and a slightly larger number, four (30.8%), indicated that they had not been instructed in emergency planning. A further

four respondents (30.8%) were not sure whether or not staff had been trained in emergency planning. Seven respondents (53.8%) said that staff had not been instructed in emergency recovery procedures to respond to a disaster.

**Table 9: Disaster preparedness**

**N=13**

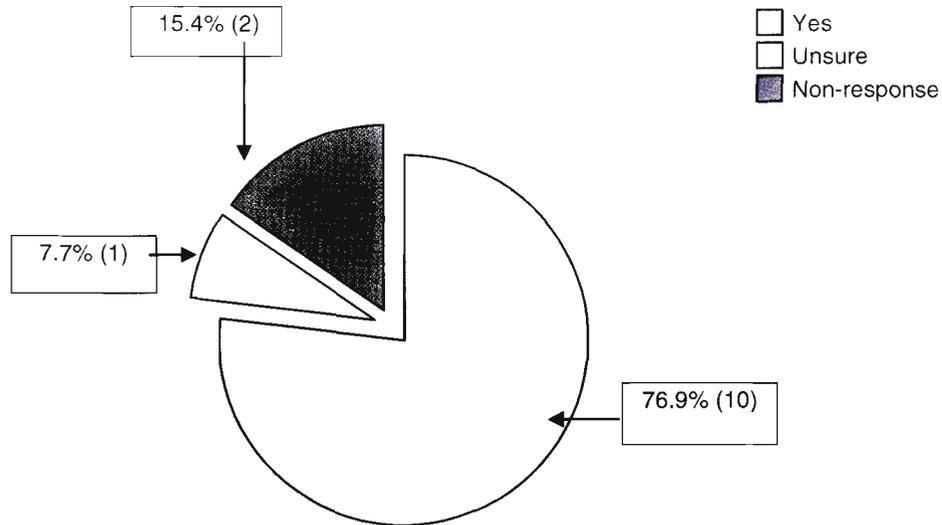
Response	Disaster planning team		Staff instruction of emergency planning		Staff instruction of emergency recovery	
	Count	%	Count	%	Count	%
No	9	69.2	4	30.8	7	53.8
Unsure	2	15.4	4	30.8	4	30.8
Non-response	2	15.4	2	15.4	2	15.4
Yes	0	0	3	23.1	0	0
Total	13	100	13	100	13	100

Only two respondents (15.4%) responded to question 33, an open-ended question, which asked for more details of staff who had been instructed in emergency planning. Their responses were as follows: “staff have been instructed in emergency for fires only by the Pietermaritzburg Fire Department and the library has a fire marshal for each department” and “the library has a committee on safety issues, with floor representatives for each floor”.

#### **4.2.5.1 Fire detection and suppression**

Figure 8 clearly shows that nearly all respondents, 10 (76.9%), indicated that the library has a fire detection system in the stack rooms.

**Figure 8: The presence of a fire detection system in the stack rooms  
N=13**



#### 4.2.5.2 Security

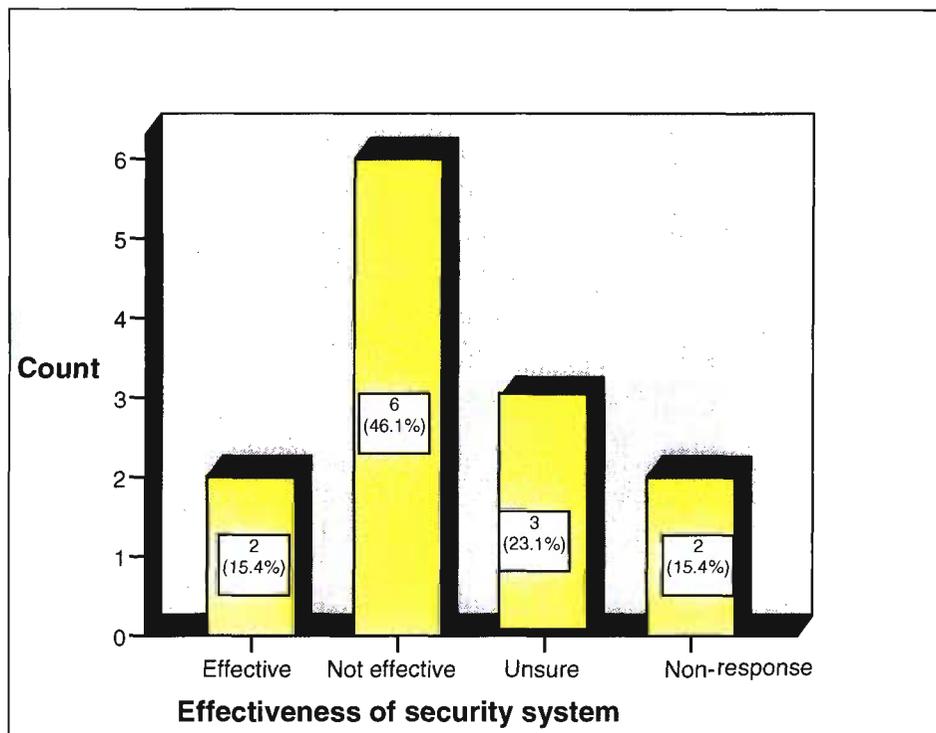
Question 37 solicited information about the security systems in the library. Respondents were prompted for all applicable options and allowed to select more than one answer for the question. Hence the number of responses will not equal 13 and the total percentage will exceed 100%. The security systems indicated by the respondents are shown in Table 10. Eleven respondents (84.6%) indicated that the library has security personnel, 10 respondents (76.9%) indicated there was an electronic security system and four (30.8%) an intruder alarm system.

**Table 10: Security systems  
N=13**

Security systems	Responses	
	Yes	%
Employ security personnel	11	84.6
Electronic security system	10	76.9
Intruder alarm system	4	30.8

Question 38 enquired whether or not the security systems were effective. The bar chart (Figure 9) shows that six (46.1%) felt that the security system was not effective and two (15.4%) stated it was effective.

**Figure 9: Effectiveness of security system  
N=13**



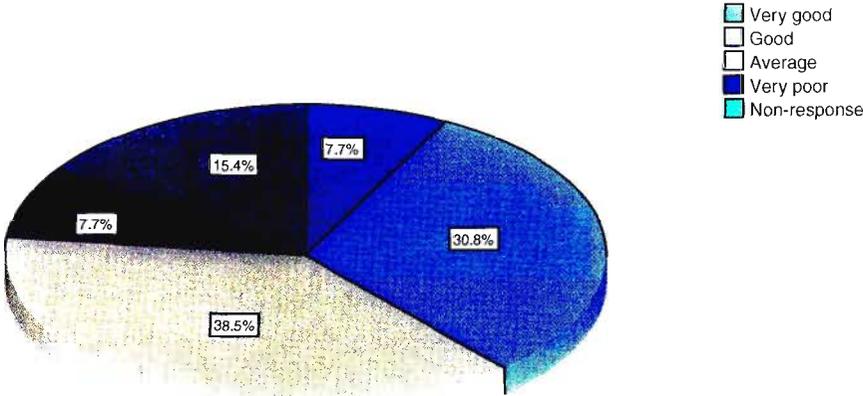
Question 39, an open-ended question, was a follow-up to question 38 and asked for more details if the answer to question 38 was “not effective”. Five respondents (38.5%) stated that books were stolen, despite having a security system and security staff in place. One respondent said the system was ineffective because there had been a break-in and another said “the security guard is not always on duty and often ignores the alarm of the electronic security system”.

#### **4.2.6 Condition and care of materials in general**

To glean information about the overall condition of materials, different questions were asked, including ones that queried the different causes of deterioration and if the general physical condition was a result of a variety of factors. Figure 10 shows the views of the respondents about the condition of materials. Five respondents (38.5%) indicated that

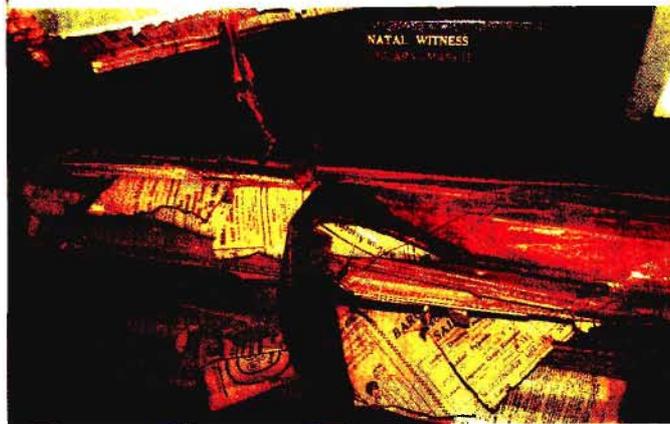
the general condition of materials was average, four respondents (30.8%) said it was good, one respondent (7.7%) said it was very good and another respondent (7.7%) stated that the condition was very poor.

**Figure 10: Overall condition of materials**  
N=13



To obtain more details about the general condition of the materials an open-ended question (question 41) was posed. Respondents were asked to answer the question to determine which types of records were in a bad condition, if their answer to question 40 was “poor” or “very poor”. One respondent (7.7%) indicated that the very old newspapers were in a bad condition. This is illustrated in Photographs 5 and 6.

**Photograph 5: Condition of newspapers**



Photograph 5 is of the periodicals stack room

**Photograph 6: Condition of newspapers**



Photograph 6 is of the fourth floor stack room

Question 42 was used to probe further and determine perceptions of the general physical condition of the materials in the stack room. Respondents were asked, using a Likert scale, to state the extent of agreement or disagreement about the overall physical condition of the materials. The results are reflected in Table 11.

**Table 11: General physical condition of materials  
N=13**

Condition of materials	They are dirty (soiled & stained)		Deteriorating through wear and tear		Condition of paper is poor (acidic & brittle)		Conditions generally poor due to mould attack	
	Count	%	Count	%	Count	%	Count	%
Strongly agree	1	7.7	1	7.7	1	7.7	0	0
Agree	1	7.7	6	46.1	2	15.4	3	23.1
Disagree	4	30.8	1	7.7	3	23.1	4	30.8
Strongly disagree	3	23.1	2	15.4	1	7.7	2	15.4
Undecided	1	7.7	0	0	3	23.1	1	7.7
Non-response	3	23.1	3	23.1	3	23.1	3	23.1
Total	13	100	13	100	13	100	13	100

Four respondents (30.8%) disagreed that materials were generally soiled and stained; three respondents (23.1%) strongly disagreed. One respondent (7.7%) strongly agreed and another (7.7%) agreed that materials were dirty.

With regard to deterioration through wear and tear, six respondents (46.1%) agreed and another respondent (7.7%) strongly agreed, two respondents (15.4%) strongly disagreed and one (7.7%) disagreed.

Generally, only a few respondents, two (15.4%), agreed and one respondent (7.7%) strongly agreed that the general physical condition of materials was due to poor paper. Three respondents (23.1%) disagreed and another three respondents (23.1%) were undecided.

Three respondents (23.1%) agreed that the physical condition of materials was poor due to mould attack, four respondents (30.8%) disagreed and two respondents (15.4%) strongly disagreed.

In order to further investigate the overall physical condition of materials, question 43 asked whether or not respondents observed deterioration to be a result of document use. Table 12 shows that more than half the respondents, 69.2 % (nine), answered “yes” and only two respondents (15.4%) said “no”.

**Table 12: Deterioration from use  
N=13**

<b>Response</b>	<b>Count</b>	<b>%</b>
Yes	9	69.2
No	2	15.4
Non-response	2	15.4
Total	13	100

Respondents were probed further, if their answer to question 43 was “yes”, to state what method of use caused deterioration. Respondents were prompted for all applicable options and were allowed to select more than one answer to the question. Thus the number of responses will not equal 13 (the total number of respondents) and the total percentage will exceed 100%. This is illustrated in Table 13. Seven respondents (53.8%) believed that deterioration was due to frequent use, two respondents (15.4%) from inadequate supervision and six respondents (46.1%) from photocopying.

**Table 13: Method of deterioration  
N=13**

<b>Method of deterioration</b>	<b>Responses</b>	
	<b>Yes</b>	<b>%</b>
Deterioration from frequent use	7	53.8
Deterioration from photocopying	6	46.1
Deterioration from inadequate supervision	2	15.4
Total	15	115.4

Question 44 encouraged respondents to select all applicable options with regard to who was responsible for conservation treatment. Three respondents (23.1%) indicated it was done in-house, two (15.4%) stated it was done commercially and another two respondents (15.4%) said it was not done.

#### **4.2.7 Access to information**

This section consisted of questions about finding aids, copyright legislation and access conditions. Nearly all respondents (10) indicated that all legal deposit records were open to use. One respondent was not sure about this and two did not answer question 46. Five respondents (38.5%) were unsure about question 48, which solicited information about users being made aware of their access rights and their responsibility to comply with the policies and regulations of the Library. Three respondents (23.1%) stated they were made aware of their rights and another three (23.1%) said they were not. In order to gain more information (question 49) respondents were prompted further, if their answer to question 48 was “yes”. Question 49 was an open-ended question and three respondents (23.1%) answered that users were made aware of their access rights through “signage”, “word of mouth and notices on the walls” and “word of mouth and interaction with staff”.

In question 50, respondents were asked how users were able to locate descriptions of the legal deposit collection. For questions 50, 51 and 52 respondents were encouraged to select all applicable options for the question and therefore the number of responses may not equal 13 (the total number of respondents) and the total percentage may exceed 100%.

**Table 14: Types of finding aids  
N=13**

Types of finding aids	Responses	
	Yes	%
Card catalogue	5	38.5
In-house computer catalogue	4	30.8
Remote computer catalogue	2	15.4
Word processed registers/inventories	1	7.7
Printed guide to whole collection	1	7.7
Total	13	100

In Table 14, five respondents (38.5%) reported that users were able to locate descriptions of the legal deposit collection on a card catalogue, four respondents (30.8%) indicated that users could locate materials using an in-house computer catalogue and two respondents (15.4%) said by remote computer catalogue. One respondent (7.7%) answered by word processed registries and inventories.

Four respondents (30.8%) in Table 15 said one of the impediments to use of legal deposit was not being able to physically locate the materials. Three respondents (23.1%) indicated that this was due to lack of the necessary equipment, two respondents (15.4%) said it was because of processing backlogs and one respondent (7.7%) said it was due to a lack of finding aids, because materials had not been processed.

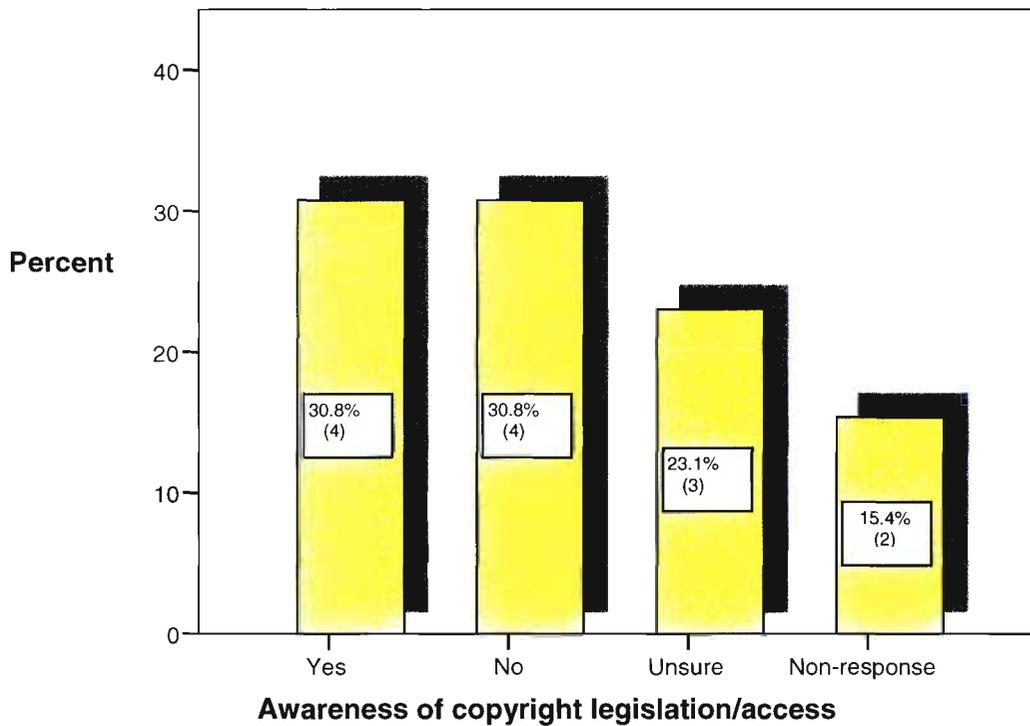
**Table 15: Impediments to use of legal deposit  
N=8**

Types of impediments	Responses	
	Yes	Percent
Cannot physically locate materials	4	30.8
Necessary equipment not available	3	23.1
Processing backlog	2	15.4
Lack of indexes/finding aids (because materials have not been processed)	1	7.7
Records have deteriorated beyond use	0	0
Total	10	77

The respondents were asked in question 52 what equipment the organization possessed to make legal deposit materials available. Ten respondents (76.9%) stated the library has photocopiers, three respondents (23.1%) stated document scanners and five respondents (38.5%) stated computers.

Figure 11 illustrates respondents' perceptions with regard to users being made aware of their obligation to comply with copyright legislation and access conditions. Four respondents (30.8%) said users were made aware of these obligations. An equal number of respondents said they were not made aware of these obligations and three respondents (23.1%) were not sure about this. The four respondents that said users were made aware had to answer question 54, an open-ended question, to describe mechanisms used to make users aware of copyright legislation and access conditions. Respondents gave the following mechanisms: "signage" (three respondents; 23.1%), and "users are informed of copyright legislation when requesting photocopies" (two respondents; 15.4%).

**Figure 11: Awareness of copyright legislation/access**  
N=13



In question 54 respondents were asked to rank priorities for improving the management of the legal deposit collection (Table 16). In general, a majority of the respondents indicated that there was a need to increase funding and capacity of storage, to improve storage conditions, finding aids and staff training, to automate descriptive systems, to reformat collections, to develop policies, procedures and disaster plans and to process the backlog of acquired collections.

**Table 16: Priorities for improving the management of the legal deposit collection**

Major priority=4, moderate=3, minor=2, not a priority=1, undecided=0

Priorities for improving management	Level of the priority					Total score	Rank
	Major priority	Moderate	Minor	Not a priority	Undecided		
Raw score	4	3	2	1	0		
	Count	Count	Count	Count	Count		
Increase storage capacity	10	3	0	0	0	49	1
Develop disaster plan	10	2	1	0	0	48	2
Process backlog of acquired collections	10	2	1	0	0	48	2
Increase funding	10	2	0	1	0	47	3
Preservation/conservation of collections	9	3	1	0	0	47	3
Improve staff training and expertise	9	3	0	1	0	46	4
Develop policies & procedures for handling new materials	8	3	1	1	0	44	5
Improve storage conditions	8	3	0	1	1	42	6
Improve finding aids	6	5	1	1	0	42	6
Reformat collections	7	4	0	1	1	41	7
Automate description systems	8	3	1	1	0	36	8

Table 16 shows the priorities for improving the management of the legal deposit collection. It is clear that to increase storage capacity, to develop disaster plan, to process backlog of acquired collections and to increase funding are on top of the list of priorities of the respondents.

The last question was an open-ended question. It asked for additional comments or concerns related to the management, care and use of legal deposit materials. Only four respondents (30.8%) stated their concerns, which were about storage space, shelving materials, finding aids and policies. The following are the different comments or concerns related to management care, or use of legal deposit materials, that respondents gave (each respondent [7.7%] gave one comment or concern):

- “They should have more space for storage of books and books should be put back in right places”;
- “Storage areas should be cleaned periodically, materials are very dusty. Gazette binding comes apart and covers split along the spine”;
- “The legal deposit is managed to the best ability of the legal deposit team. However the library is in desperate need for policies to be developed and managed”; and
- “Legal deposit should be put online with resources from Department of Arts and Culture. The heads of legal deposit departments from the various institutions should have the same electronic resources so they can share information especially policies such as a conservation plan and disaster management plan”.

### **4.3 Observation**

The results of the observation are reported according to the main sections of the observation checklist, namely the environmental condition of the stack rooms, physical appearance, security and preservation.

#### **4.3.1 Environmental conditions**

In this section the check list included:

- Whether or not the stack rooms had a heating, ventilation and air conditioning (HVAC) system;
- If the system was on;
- The temperature of the room;
- What is used to measure humidity?;
- The type of lights used; and
- Whether or not the lights were turned off when not in use.

Table 17 shows that two stack rooms (40%) have HVAC systems and the other three stack rooms (60%) do not have HVAC systems.

**Table 17: Presence of heating, ventilation and air conditioning (HVAC) system**

**N=5**

<b>Existence of HVAC system</b>	<b>Count</b>	<b>%</b>
Do not have HVAC	3	60
Have a HVAC	2	40
Total	5	100

Both of the stack rooms that had HVAC systems, namely the periodicals stack room and the maps stack room, had the HVAC on during the researcher's visit. The periodicals stack room was hot and the HVAC was set at 26°C, but the map stack room was cold and the HVAC was set at 18°C. The three other stack rooms that did not have HVACs were hot.

All five stack rooms did not have instruments to measure the relative humidity. The periodicals stack room has one dehumidifier. All the stack rooms had fluorescent strip lights and they were not turned off when not in use. The lights for the whole building were switched off at 17.00 every evening.

#### **4.3.2 Physical appearance of the stack room**

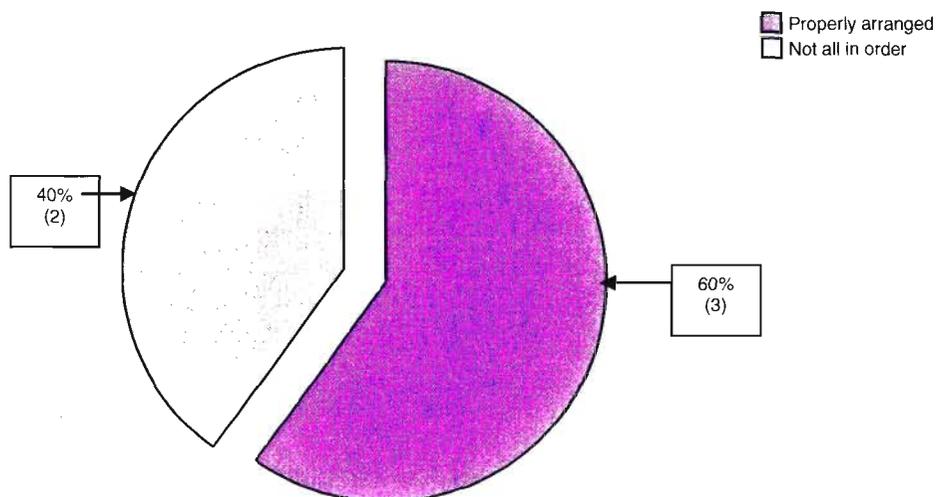
This section concerning the observation check list was used to collect information about how materials were arranged, whether or not they were labelled and in the right order, the type of shelving used, cleanliness of the stack room and whether or not there was sufficient storage space. Table 18 shows that different stack rooms had various ways of arranging materials and this depended on the type of material stored in the stack room. In all stack rooms more than one method of arrangement was used.

**Table 18: Crosstabulation of name of stack room and arrangement of materials**

Name of stack room	Methods of arrangement of materials				Type of materials stored
	Alphabetical order	By year of publication	Dewey decimal classification	Systematic numbering	
Maps stack room	-	-	1	1	Maps
Periodicals stack room	1	1	-	1	Newspapers & journals
Second floor stack room		-	1	-	Books
Third floor stack room	1	-	1	-	Government publications, books & pamphlets
Fourth floor stack room	1	1	-	-	Newspapers & journals
Total	3	2	3	2	

Sixty percent of all materials in the stack rooms were in the right order and 40% were not in the proper order. This is shown in Figure 11 and Photographs 7 and 8.

**Figure 12: Order of materials**  
N=5

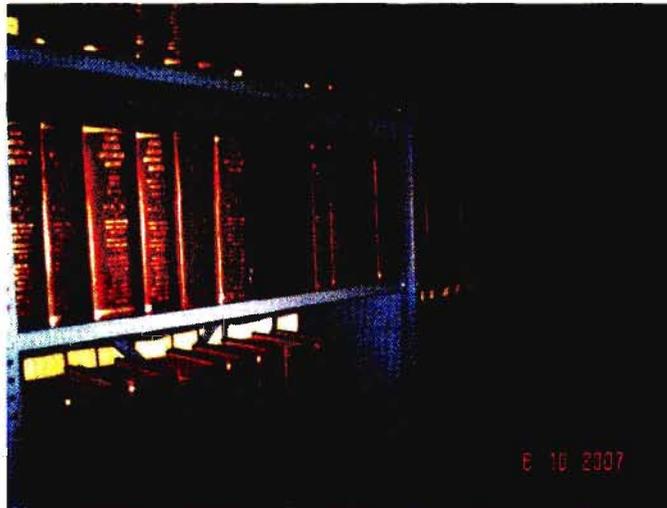


**Photograph 7: Order of materials**



This picture is a section of the periodicals stack room.

**Photograph 8: Order of materials**



This is a picture of a section of the third floor stack room

All the stack rooms were very dusty and two of the stack rooms were dirty. The shelving used was made of metal. The periodicals stack room has metal shelving and compact shelving. The maps stack room has metal cabinets.

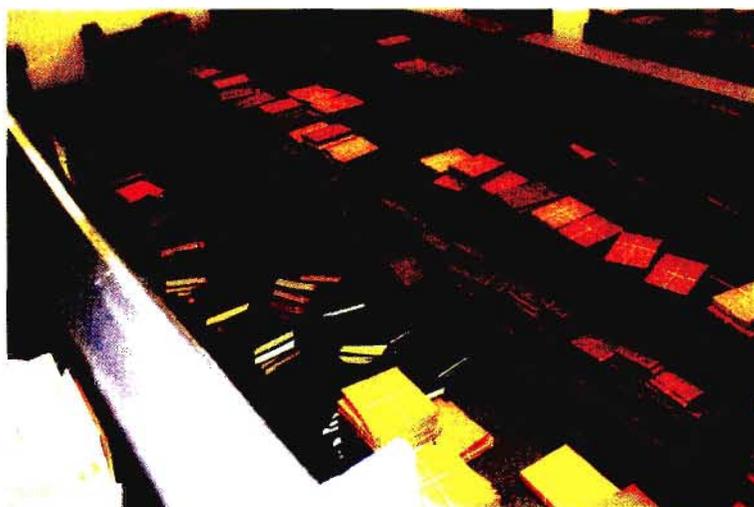
One of the questions on the check list for the observation guide concerned adequate shelving and storage, the results of which are shown in Table 19 and Photograph 9. Out

of the five stack rooms, only one stack room had adequate storage space. The remaining four did not have enough space.

**Table 19: Adequate space for shelving  
N=5**

<b>Storage space</b>	<b>Count</b>	<b>%</b>
Not enough storage space	4	80
Enough storage space	1	20
Total	5	100

**Photograph 9: Inadequate space for shelving**



This is a picture of the periodicals stack room

### **4.3.3 Security**

Out of the five stack rooms, only two rooms were kept locked at all times and it is thus not easy for anybody to walk into these two stack rooms. This is shown in Table 20.

**Table 20: Security**  
N=5

Security concerns	Yes		No	
	Count	%	Count	%
Is it easy for anyone to go into the stack room?	2	40	3	60
Are doors locked all the time?	2	40	3	60

#### 4.3.4 Finding aids

Both the periodicals and fourth floor stack rooms have a card catalogue (which Library staff call a speedex) as a finding aid to journals. Staff used a number of different aids to try to locate materials in the second floor, third floor and maps stack rooms. A small percentage of the materials can be found on the Millennium Webpacc (a web online public access catalogue) and written indexes on the shelves, otherwise staff used the Dewey Decimal Classification, edition 20, index to find materials.

#### 4.3.5 Preservation

In this section of the observation guide the researcher looked at the basic preservation methods used in each stack room. Table 21 shows the number of stack rooms that use the preservation measures. All applicable options for this question were selected and therefore the number of stacks will not equal five (the total number of stack rooms) and the total percentage will exceed 100%. Three stack rooms had materials in boxes and another three had materials wrapped in brown paper and in two stack rooms files were used as a basic preservation measure. No materials were kept in mylar (jiffy) bags.

**Table 21: Basic preservation measures  
N=5**

Preservation measures	Responses	
	No. of stacks that use this measure	%
Use of boxes	3	60
Use of brown paper	3	60
Use of files	2	40
Use of Mylar (jiffy) bags	0	0
Total	8	160

#### **4.4 Interview results**

The library manager and the head of legal deposit were interviewed (face-to-face), using a semi-structured interview schedule. The areas covered in the interviews included preservation policies and means, type of building, environmental conditions, pest management, disaster preparedness and management, general care of materials, staff skills and knowledge in preservation of, and access to, information.

##### **4.4.1 Demographic data**

Demographic information was sought to determine the background of the respondents. This data was essential to establish whether or not the respondents' background had an effect on how questions were answered and to establish from their age the type of education they had had. Both respondents were university graduates. One respondent had a post-graduate diploma in library science and the other had an honors degree in library science.

##### **4.4.2 Preservation policies and means**

This section discusses questions four to twenty five, which inquired about the questions about the mission statement, library policy, preservation methods and policy, including the budget allocation for preservation.

The Msunduzi Municipal Library's mission statement is as follows:

To improve the quality of life the people of the Msunduzi Municipal region by anticipating and meeting their informational needs and providing an appropriately substantial and supportive contribution towards their educational, cultural and recreational needs.

The respondents were asked whether or not the library has policies to improve preservation conditions, develop conservation facilities recruit and train qualified staff. Both respondents stated that the library does not have any of these policies. The head of legal deposit said, however, that they were currently working on a collection development policy.

The library does not have in-house conservation facilities and the preservation options used included boxing for less-known newspapers, binding of popular KwaZulu-Natal newspapers, wrapping of periodicals in brown paper and covering books using adhesive plastic.

Question nine was asked to establish the role the respondents play in preservation. The library manager said, due to lack of funds, there was no role played in preservation. The head of legal deposit said the role played was an administrative one. Both respondents stated that none of the staff carrying out preservation activities were trained in preservation techniques and the library does not have a micro-photographic or reprographic unit. The Msunduzi Municipal Library does not have a preservation policy and was not involved in co-operative preservation activities with other libraries, archives or museums. The head of legal deposit said that she did not see the emphasis of preservation policy/strategy shifting over the next five years. The library manager was unsure about this and stated that it would depend on funding. The study attempted to establish if the legal deposit department was allocated sufficient funds for preservation and access. The current total budget for the whole library was R15 406 555 per year and the current amount allocated to legal deposit was R1 932 958 per year (12.5% of the total budget). The library manager pointed out that this was not sufficient, because it covered only staff salaries and nothing more. The head of legal deposit stated that legal deposit money was supposed to come from the provincial library, but as the years had gone by this allowance has dwindled. The library had, however, received alternate funds

from donor agencies, namely the Mellon Foundation and the Carnegie Corporation. The funds from the Mellon Foundation have been used to buy computers and software (Millennium Webpacc) for cataloguing legal deposit materials. The grant from the Carnegie Corporation was used to renovate part (lending and children's departments on the first and second floors) of the library in 2006. The Msunduzi Municipal Library was in the process of receiving another grant, which will be used to renovate the periodicals section of the legal deposit department and to purchase equipment, for example document scanners.

#### **4.4.3 The building**

In this section three questions were asked to ascertain whether or not the building was constructed for its current purposes, since this plays a vital role in preservation and securing materials in regard to the site of the building. The choice of construction materials and technical equipment should conform to the preservation standards. The building was completed in 1975, for the purpose of its current use and the library has occupied it ever since. The building was constructed from brick and concrete and was partly renovated in 2006. Parts of the library were renovated, but not the stack rooms. Only some parts of the building had air conditioning and de-humidifiers. The HVAC system was a year old and was installed when the building was renovated in 2006. The HVAC system was maintained every six months. The periodicals stack room had a HVAC system and a de-humidifier, The other stack rooms did not have this equipment, except for the maps stack room, that also had a HVAC system. According to the library manager, the average temperature in the building and stack rooms was 22°C. The head of legal deposit was unsure and estimated that the temperature in the building was approximately 25°C. The library did not have any equipment to measure relative humidity and therefore it was not monitored at all. Fluorescent lights were used in the areas where legal deposit materials were stored and the natural light from the windows was not controlled.

#### **4.4.4 Pest management**

Questions 37 to 41 ascertained information about pest extermination, how often it was done, routine extermination methods and the chemicals used. Both respondents stated

that a routine extermination of vermin infestation, especially to kill cockroaches, was done every six months. The exterminators used were “Flick” and “Rentokil” who sprayed the building. Neither respondents knew what chemicals were used.

#### **4.4.5 Disaster preparedness and management**

In this section the researcher wanted to discover if the library has a written disaster preparedness and recovery plan. The library did not have a disaster preparedness and recovery plan and therefore the researcher had to omit questions 43 to 47, because they were about this plan.

Respondents were asked questions (48 to 56) which related to fire detection and suppression. The Msunduzi Municipal Library had fire extinguishers throughout the building. These extinguishers were serviced once a year. The type of extinguishers used were powder ones and both respondents were unsure of the numbers kept in the stack room and in the building as a whole. The interviewees confirmed that staff had been trained, by the municipal fire department, to use them. They stated that the other type of fire suppression system was the smoke detectors, which had been tested. The library manager said they had been tested a year ago, while the head of legal deposit could not remember when this had last been done. The third subsection under disaster preparedness and management solicited information about security. Respondents were asked about intruder alarm systems, the number of access points into the building and the number of staff with keys to the building. The respondents confirmed that there was an intruder alarm system that was linked to the municipal security system. There were two access points into the building, the front entrance, used by everyone, and a back entrance, used mainly by staff to get into the building from the library car park. The head of legal deposit said that senior staff had keys to enter the building and the library manager stated that twelve librarians had keys to access the building.

#### **4.4.6 Care of materials in general**

The interviewees verified that a holdings survey had not been done at the Msunduzi Municipal Library to discover possible preservation problems. They had observed damage caused by water, mould, insects, light, poor handling, vandalism and acidity.

#### **4.4.7 Level of skills and knowledge in preservation management**

The information solicited in this section was to establish the educational background of staff and whether or not any staff members had any qualifications in preservation management. None of the staff at the library had any training in preservation management. Two members of staff had an honours degree in library studies, another four had post-graduate diploma (PGDIS) in library studies. One of the PGDIS staff had studied abroad.

#### **4.4.8 Access to information**

Users' needs and interests were not analysed at regular intervals, to help adjust strategies and practices. Users were able to locate some of the collection using a computer catalogue remotely through Sabinet (Uniform resource Locator: <http://natlib1.sabinet.co.za>). The library manager said that less than 25% of the legal deposit collection could be found on the Millennium Webpacc. The head of legal deposit estimated between 50% and 74%. In question 68 the researcher asked whether or not the library had sufficient physical and technical equipment to facilitate easy and safe access to all types of legal deposit materials held. Both respondents said the library did not. According to the library manager, the library was short of shelving, staff and was suffering from a backlog of re-inputting materials onto a computer system, after the University of KwaZulu-Natal (UKZN) library changed its software from the Universal Real-time Information Control Administration (URICA) to Sirsi library system, which did not include Msunduzi Library materials<sup>2</sup>. The head of legal deposit stated that this will be remedied with the second Carnegie Corporation grant they would receive, to be used for renovation.

The library had adequate facilities for its disabled users. According to the head of legal deposit the standards governing the quality of service were dated. The head of legal deposit said that the current priority in terms of access to users was the second phase of renovation, when the periodicals section will be renovated.

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<sup>2</sup> Msunduzi Library was part of CATNIP (Cataloguing Network in Pietermaritzburg), which was administered by UKZN, using URICA. UKZN later changed to the Sirsi system.

The last question requested additional comments or concerns concerning the management, care and use of Msunduzi's legal deposit collection. The following were the comments from the two interviewees:

- “We have done the best with the funding we have”;
- “The library now has a safety committee who meet once a month to discuss issues”;
- “The Carnegie Corporation grant will cover the legal deposit stack rooms”;
- “An additional ramp for disabled people is going to be built soon”;
- “There is a need to advertise legal deposit, as well as the other library services on the web”; and
- “Shared cataloguing helps to streamline cataloguing and reduce the workload. It helps to reduce duplication of processes, especially when the National Library inputs the skeleton of the record and the various libraries have to input the extra details only”.

#### **4.5 Summary**

In Chapter 4 the rationale for each section of the instruments used was given. The results of the study, conducted by a self-administered questionnaire, two interviews and an observation check list, were presented.

## **Chapter 5: Interpretation and discussion of the results**

In this chapter, several findings of some importance are discussed in the light of the research problem. Literature is reviewed, especially with reference to other studies conducted in related fields. The objectives of the study are presented.

The research problem stated that public records and archives in South Africa have been greatly neglected. In the new South Africa the Bill of Rights of the Constitution of the Republic of South Africa, Act 108 of 1996, which gives everyone the right to access information and other regulations, are putting more strain on records, in whatever form. Preservation becomes very important because people will not be able to access the materials for posterity and therefore future generations will lose parts of their national heritage. Many libraries are not functioning properly due to lack of funds, lack of full support from the government and policy-makers and lack of proper training of library staff. Some libraries have additional functions such as the preservation of, and access to, legal deposit materials and laws that enforce these functions. The objectives of the study were therefore to:

- establish the activities and strategies used to preserve legal deposit materials;
- determine the level of staff skills and training in preservation;
- determine what procedures are in place to safeguard the collection;
- discover the challenges faced with preserving legal deposit materials;
- determine what means and processes are used to help make materials accessible; and
- make recommendations based on the findings of the study.

Chapter 5 discusses significant issues based on the data collected from the self-administered questionnaire, interviews, observation schedule, including the literature review, relating to preservation of, and access to, legal deposit materials.

### **5.1 Activities and strategies used to preserve legal deposit materials**

This section describes the findings of the preservation activities and strategies at the Msunduzi Municipal Library. Activities and strategies used to preserve materials include

issues relating to preservation policy and means; environmental conditions of the stack rooms; pest management; disaster management and preparedness; security of materials; standards related to storage and handling; and the condition and care of materials.

### **5.1.2 Preservation policy and means**

A preservation policy is important to support the development of a comprehensive preservation programme. According to Baird (2003:xii), staff can use an assessment-based approach to develop a preservation strategy to suit the specific needs of the Msunduzi Municipal Library.

The study shows that the Msunduzi Municipal Library does not have policies to improve preservation conditions and develop conservation facilities and no policies for the training and recruitment of qualified staff. Even though four respondents (30.8%) to the questionnaire stated there was a policy, the majority of the respondents, 38.5% (five), stated that there was no policy to improve preservation conditions. Seven respondents (53.8%) said there was no policy to develop conservation facilities and 46.1% (6) stated that the library had no policy to train and recruit staff (see Table 4). Morrow (2000:25) says:

The preservation of the library collection will be found within the mission statements of most libraries in recognition of the fact that libraries preserve their collections, not for preservation's sake, but to enable access and facilitate use and research.

The mission statement of the Msunduzi Municipal Library, solicited during the interviews, does not incorporate preservation policies at all. The library manager and the head of legal deposit both confirmed that the library did not have any preservation policies, although the legal deposit head mentioned that they are currently working on a collection development policy. Therefore, one may argue that the four respondents (30.8%) that stated that the library had a preservation policy may be unaware of what is contained in the library's mission statement and what a preservation policy or plan

entails. Without a preservation policy the staff have no guidance in terms of preservation and why they need to preserve. Ngulube (2003:285) stated, in his study of 'Preservation and access to public records and archives in South Africa', that South African archival professionals were ignorant about mission statements and provincial and national archival legislation. In another study, by Feather and Eden (1997:27), concerning policies and practices in archives and records offices in the United Kingdom, a large number of institutions (67 out of 200) institutions had no written policy.

One of the main reasons mentioned for not having a preservation policy was lack of, or inadequate, funding (Feather and Eden, 1997: 28-29). The library manager explained that, due to lack of funds, there was no role played by the manager in preservation. The head of legal deposit said the role played was an administrative one. Ngulube (2003:287) argues "how does one measure performance without a yard stick?" and "how could funds be allocated to a programme that is not clearly defined?" In order to get operational budgets and additional funding, libraries need to articulate preservation policies, strategies and priorities (Morrow, 2000:16). Akussah (2006:8) agrees with Morrow (2000), in the findings of a study on 'The state of document deterioration in the National Archives of Ghana' and recommends a need to draw up a comprehensive preservation policy to ensure that a more systematic and progressive approach to the preservation problem is achieved.

The present study established that the legal deposit department did not receive adequate funding, like many African libraries (section 2.5.1). This was shown when respondents were asked in the self-administered questionnaire to rank priorities for improving the management of the legal deposit collection. Increased funding emerged as one of the top priorities. Only 12.5% of the total budget of the Msunduzi Municipal Library is allocated to legal deposit. The library manager emphasized that this was not sufficient, because it covered staff salaries and nothing else. There was also lack of support from the government and policy-makers. Legal deposit funding came from the provincial library in the past, but as the years went by this funding had dwindled. This led to the Msunduzi Library increasingly depending on donors such as the Mellon Foundation and Carnegie Corporation.

The funds received from the Mellon Foundation have been used to buy computers and software (Millennium Webpacc) for cataloguing legal deposit materials and conversion of data from URICA to Millennium Library software, after the UKZN library changed its software from URICA to Sirsi and did not include Msunduzi Library legal deposit materials. The grant from the Carnegie Corporation, the larger of the two grants, was used to renovate part (the lending and children's departments on the first and second floors) of the Library in 2006. This indicates that preservation was not on top of the Library's priority list. The Msunduzi Municipal Library is in the process of receiving a second grant from Carnegie and when they receive this they hope to use it to renovate the periodicals section of the legal deposit department and to buy some equipment, for example document scanners. The lack of sufficient funds and increased dependency on donors leads to uncertainty, in that none of the interviewees could foresee the direction in which the preservation policy/strategy will move over the next five years. Rosenberg (2001:14) studied libraries in Africa and reached a similar conclusion. One of the respondents stated that the shift all depends on funding and they will have to wait and see what happens when the donors stop their funding.

### **5.1.3 The environmental conditions of stack rooms**

This section presents findings related to the environmental conditions of the library building and stack rooms, with regard to temperature, relative humidity, light and pest management, to determine how paper-based materials were preserved.

#### **5.1.3.1 The building**

Higginbotham and Wild (2001:19) emphasize that "the building is the collection's most fundamental source of security, its first line of defense". Therefore the way it was built, how it is maintained and other protective qualities are key to preservation. The present study revealed that the library building was custom-designed and built in 1975 for the purpose of its current use. It was built during the time when many institutions all over the world had just identified mass embrittlement of books and were starting to understand that preservation does not entail conservation only. The building was not designed for the preventative preservation of materials. A study by Westra (1987:7), which looked at the state of preservation of library and archival material in South Africa, found that most

modern buildings had HVAC systems and the older ones did not. Only some parts of the Msunduzi Municipal Library building had air conditioning and de-humidifiers. The HVAC system was a year old and was installed when parts of the building were renovated in 2006. The HVAC system was maintained every six months. The periodicals stack room had a HVAC system and a de-humidifier. The other stack rooms did not have this equipment, except for the maps stack room, that had a HVAC system. The building was made from brick and concrete and the building has only being partly renovated in 2006, since being built in 1975. Only parts of the library had been renovated and not the stack rooms. The researcher was unable to establish why the stack rooms were not given priority during the renovation. The researcher can only speculate that other departments and functions of the library were seen as priority when compared with the preservation of legal deposit.

### **5.1.3.2 Temperature and relative humidity**

The study found that the temperature at the Library was not monitored, as five respondents (38.5%) said that the average temperature in the building was about 20° to 23°C, although the majority of the respondents, 53.8% (seven), were not sure about this. The temperature of the stack rooms were not monitored either, since nearly all respondents, 76.9% (10), were unsure about the average temperature in the stack rooms. One respondent said it was 27°C, while another reported 28°C. Apart from the periodicals and map stack rooms, all the other stack rooms did not have HVAC systems. Both of the stack rooms that had HVAC systems, namely the periodicals stack room and the maps stack room, had the HVAC on during the researcher's visit. However, the periodicals stack room was hot and the HVAC was set at 26°C, but the map stack room was cold and the HVAC was set at 18°C. The three other stack rooms that did not have HVACs were hot. Westra (1987:7) stressed that "environmental control through air conditioning is essential for hot and humid coastal regions, such as Natal". The periodicals stack room has an upper area which is used as a work room for the periodicals staff and this could be the reason why the HVAC was set at 26°C, to accommodate the staff.

The study further revealed that the relative humidity was not monitored in the stack rooms. More than half of the respondents, eight (61.5%), indicated that the relative humidity was not constantly monitored in the stack rooms. The researcher observed that all five stack rooms did not have instruments to measure the relative humidity. The periodicals stack room had one dehumidifier. The interviewees confirmed that the library did not have any equipment to measure relative humidity and therefore it was not monitored at all. High humidity and high temperatures are hazardous to materials and it is vital to maintain a constant temperature and relative humidity, as great fluctuations are not good for the materials (Sahoo, 2007:111; Ngulube, 2003:85; Hunter, 1997:141). The temperature and relative humidity also depends on the geographical area and climatic conditions of the area in which the archive or library is situated. The Msunduzi Library is in Pietermaritzburg and is therefore faced with great fluctuations in temperature. It is rather humid because it is approximately 80kms from the Indian Ocean. Therefore there is a need to control the climatic conditions and monitor the temperature and relative humidity. Baird (2003:1) and Hunter (1997:141) agreed with this and state that the temperature should be around 70 degrees Fahrenheit (21°C) and the relative humidity between 40% and 50%.

### **5.1.3.3 Light**

It was clear from the results that most materials in the stack rooms were exposed to fluorescent light all day, as well as to natural light from the windows. Five respondents (38.5%) were unsure about the number of hours, one respondent (7.7%) specified that materials were exposed to light all day and two respondents indicated eight hours and eight and a half hours, respectively. Three respondents (23.1%) estimated approximately ten hours. Only one stack room, namely the periodicals stack room, was not affected by natural light, since it was located in the basement and had no windows. The lights were not fitted with ultraviolet (UV) filters, nor did the windows have UV film fitted to filter light that causes deterioration of paper. Sahoo (2007:111) emphasizes “sunlight should be prevented from falling directly on papers because the sun is a great emitter of ultraviolet light”.

#### **5.1.4 Pest management**

The study found that materials accessioned were not checked for insects/vermin before they were placed in the stack rooms. Eight respondents (61.5%) said that materials were not checked for pests, three respondents (23.1%) were unsure and two respondents did not answer the question. The study revealed that the stack rooms had been infested with cockroaches, bookworms, spiders, fleas and dustmites. Hunter (1997:144) stresses that these unwanted visitors are attracted by warm and humid conditions. The temperatures in the stack rooms were relatively high.

The library had a routine extermination of vermin every six months, to remove infestations of pests, especially cockroaches. The exterminators used were 'Flick' and 'Rentokil', who sprayed and fumigated the building. The respondents did not know what chemicals were used. Chemicals are harmful to materials as well as human beings. Ngulube (2003:294) quotes the Chicora Foundation (1994) and Child (1999b), who suggest that the use of chemicals can create super-pests, with an increased resistance to pesticides. Sahoo (2007:112) suggests that insects should rather be repelled by using "dry neem leaves, neem seed powder and camphor tablets tied in muslin bags should be kept inside the racks for keeping the pests away". This should be combined with good house-keeping habits, including regular cleaning of the stack rooms.

#### **5.1.5 Storage and handling**

The present study revealed that the stack rooms were generally not clean. A majority of the respondents, 53.8% (seven), said that the stack rooms were not clean, while 30.8% (four) said they were clean. Five different respondents' comments were received with regard to question 23, an open-ended question, about how often the stack rooms were cleaned. The comments included "hardly", "maybe once a month", "never", "once every two months" and "only when very dirty". Six respondents were unsure and two did not answer the question, possibly because there was no routine cleaning done and the respondents had not seen any cleaning been done in the stack rooms. The researcher observed that all the stack rooms were very dusty and two of the stack rooms were dirty. This is shown in Photographs 1 and 2 in section 4.2.4.

The study found that of the five stack rooms only one stack room had adequate storage space. The remaining four did not have enough space. The respondents ranked 'increase capacity of storage space' as the top-most priority. There was also a problem with shelving, which is shown in Photograph 1 in section 4.2.4, where some boxes of newspapers are placed on the floor. This could lead to major damage to materials, especially in the case of a water disaster. This lack of adequate shelving is also shown in Photograph 9 in section 4.3.2, where materials are stored on top of the shelves due to lack of storage space.

A large number of respondents, 76.9% (10), revealed that there were no guidelines for staff in terms of handling of materials and a fairly large number, 61.5% (eight), said there were no guidelines for users either. This raises serious preservation issues, because much of the damage caused to materials is a result of bad handling (Ngulube, 2003:297). Drewes (2006) agrees with Ngulube (2003) and states "preservation advocacy is a key component to protecting collections by engaging and convincing staff to think about how their actions affect the collections". Materials should be shelved properly and not over-packed (Sahoo, 2007:112; Baird, 2003:93). According to Baird (2003:91), the most important preservation activities are the preventative ones and one of them is training staff and users to handle materials. A study carried out on archives and records offices in the United Kingdom by Feather and Eden (1997:55) found that "staff and users must be made aware of what they themselves can do to minimize the risk of damage". Training and awareness were recommended to be carried out thoroughly and systematically, rather than simply left to chance.

### **5.1.6 Disaster preparedness and management**

Disaster planning is considered a main component of preservation and no library is completely free from devastation that can happen as a result of human-made or natural disasters. Higginbotham and Wild (2001:9) state that it is "better to adopt the Girl Scout motto 'be prepared' because solid preplanning is the easiest way to survive a disaster and ensure smooth recovery". Ngulube and Magazi (2006a:110) stress the aphorism "a stitch in time saves nine". Nine respondents (69.2%), stated that the Msunduzi Municipal Library did not have a disaster planning team. Three respondents (23.1%), said that

staff had been instructed in emergency planning. A slightly larger number, four (30.8%), indicated that they had not been instructed in emergency planning. Another four respondents (30.8%) were not sure whether or not staff had been trained in emergency planning. Seven respondents (53.8%) said that staff also had not been instructed in emergency recovery procedures to respond to a disaster. The study revealed that the library did not have a disaster and recovery plan and this was confirmed by the interviewees. The respondents ranked 'develop disaster plan' as second on the list, to improve the management of the legal deposit collection. This is shown in Table 16 of Chapter 4.

The researcher observed that, due to lack of adequate shelving, a number of materials were stored on the floor, which is not safe in the case of any type of water disaster. This is shown in Photographs 1, 3 and 4 in section 4.2.4 of Chapter 4. This finding is quite worrying, since the library has been faced with a number of water disasters in the past.

#### **5.1.6.1 Fire detection and suppression**

In order to detect and suppress fires, libraries and archives need smoke detectors, fire extinguishers and sprinkler systems that are designed to discharge water only in the immediate area of the fire (Hunter, 1997:165). The Msunduzi Municipal Library had fire extinguishers throughout the building, that were serviced once a year. The type of extinguishers used were powder ones and the interviewees confirmed that staff had been trained to use them by the municipal fire department. They stated that the other type of fire suppression system were the smoke detectors, which had been tested. It is clear, however, that the respondents were uncertain of when the smoke detectors had last been tested.

#### **5.1.6.2 Security**

The study revealed that the library had security personnel, an electronic security system and an intruder alarm system, linked to the municipal security system. Strassberg (2000:169) emphasizes that "although proper design and electronic security are important to minimize theft, the attitude of the library staff to maintaining security is equally critical". The study found that the security systems especially the security

personnel, were not effective, because books were stolen, in spite of having security staff and a security system in place. The main comments from respondents were “the security guard is not always on duty and often ignores the alarm of the electronic security system”. The building has two access points, the front entrance used by everyone and a back entrance used mainly by staff. The back entrance is not manned by security staff, nor does it have an electronic security system. The other concern was that approximately 12 members of staff have keys to enter the building, making it difficult to tell when various employees accessed the building.

### **5.1.7 Condition and care of materials in general**

In any archival or library institution a holdings survey is done to discover possible preservation problems. It is clear that this had not been done at the Msunduzi Municipal Library. The study confirms that materials had been affected by damage caused by water, mould, insects, light, poor handling, vandalism and acidity.

Figure 10 in Chapter 4 illustrated the views of the respondents concerning the condition of materials and shows that five respondents (38.5%) indicated that the general condition of materials was average, four respondents (30.8%) said it was good, one respondent (7.7%) said it was very good and another respondent (7.7%) stated that the condition was very poor. The study revealed that the condition of books and periodicals was average, but the condition of most newspapers was very poor. This is illustrated in Photographs 5 and 6 in section 4.2.6 of Chapter 4.

When respondents were asked to rank priorities for improving the management of the legal deposit collection, ‘preservation/conservation of collections’ was ranked third and was therefore among the top priorities. Ward (2000:58) emphasizes that preservation of information is the information professionals’ principal concern and therefore “copying paper-based records to a more permanent medium can reduce bulk, while improving access”. The present study has revealed that there is an urgent need to reformat newspapers and transfer them to another medium in order to preserve them, because binding, boxing and filing does not seem to be a suitable option for their preservation. Astle and Muir (2002:67) stress:

Achieving a balance between preservation and access has long been a problem for those responsible for the management of library collections. Providing users with the acceptable alternative of 'surrogate' by re-formatting materials has become an acceptable method of addressing this issue for vulnerable and valuable material.

### **5.1.8 Level of skills and knowledge in preservation management**

The ability to carry out, and knowledge of, preservation are crucial in order to carry out preservation. Ward (2000:53) states "staff should receive training in preservation at whatever level is necessary, to ensure each person's understanding of, and commitment to, the preservation programme". The study found that none of the staff at the library had any training in preservation management. There is a lack of professionals trained in preservation and conservation in Sub-Saharan Africa (Khayundi, 1995:33; Mbaye, 1995:43). The cross-tabulation (Table 3 in section 4.2.1) of age and education reveals that the five respondents who answered the questionnaire had university education and are in the age categories of 31-40 and 41-50. The majority of these respondents studied their library science degrees approximately 20 years ago, when institutions in South Africa did not include preservation management in the curriculum. Due to lack of considerable archival training in Africa, most archivists and conservationists have received training abroad (Khayundi, 1995:34; Mazikana, 1995:26; Rosenberg, 2001:17). The interviewees had university qualifications and were in the age brackets of 51-60 and over 60. One of these two respondents had a PGDIS in library studies from Britain, but did not have any preservation training.

## **5.2 Access to information**

The Legal Deposit Act No.54 of 1997 of South Africa specifies and states that the public has a right to access the legal deposit collection. Lor (1995:110) said that access to the legal deposit collections is affected by whether or not publishers and individuals deposit materials, the materials are properly preserved, the order of storage arrangements for the materials and finding aids to locate the materials and different pieces of legislation.

In South Africa, the different pieces of legislation include the Bill of Rights, that grants people access to information.

The study found that all materials at the Msunduzi Municipal Library were open to use, Lack of finding aids made it difficult to locate various items especially the legal deposit books. In the past, the Msunduzi Library had a verbal agreement with the UKZN and all the legal deposit materials were described on the UKZN URICA catalogue. When UKZN library changed its software in 2006 from URICA to Sirsi it did not include Msunduzi materials. The Msunduzi Municipal Library managed to secure funding from the Mellon Foundation to buy computers and Millenium library software and were experiencing a backlog of materials that needed to be re-input on to a computer system. The researcher was not able to find out the exact percentage of books waiting re-inputting. The respondents ranked 'process backlog of acquired collections' as second on the list of priorities for improving management of the legal deposit collection.

Four respondents (30.8%) (Table 15, section 4.2.7) said one of the impediments to the use of legal deposit was not being able to physically locate the materials. Three respondents (23.1%) indicated that this was due to lack of the necessary equipment. Two (15.4%) said it was because of processing backlogs and one (7.7%) indicated this was due to a lack of finding aids, because materials had not been processed.

In general, other materials, including periodicals, newspapers and government publications, can be found using various methods. The newspapers and journals can be found using a card catalogue and government publications and maps can be found by using written indexes on the shelves; otherwise staff used the Dewey Decimal Classification 20 index to find materials. These systems are archaic and inadequate and are an impediment to accessing materials.

### **5.3 Summary**

Chapter 5 discussed the results of the study relating to the preservation of, and access to, legal deposit materials at the Msunduzi Municipal Library. The discussion included the activities and strategies used to preserve legal deposit materials; the level of staff

skills and training in preservation; the procedures that are in place to safeguard the collection; the challenges faced with preserving legal deposit materials and the means and processes used to make materials accessible. It is evident that there is a need to improve the management of legal deposit, although much depends on increased funding.

## **Chapter 6: Conclusion and recommendations**

The purpose of the study was to establish the collection management policies and strategies with regard to the preservation of, and access to, legal deposit materials for posterity at the Msunduzi Municipal Library. The focus was to identify how the different materials are preserved and stored, especially because every institution has unique needs, particularly with regard to the climatic conditions of the area. The study emphasized the importance of the preservation of legal deposit materials and the challenges faced by the depository. The researcher looked at the skills and knowledge of the depository staff concerning preventative preservation methods, resources for conservation and collection management strategies. The researcher established what means and processes are used to help make materials accessible. The purpose of these objectives was to help ascertain the strengths and weaknesses of the preservation programme and make recommendations based on the findings of the study.

### **6.1 Conclusions**

The results of the study show that there are inadequate preservation activities and strategies for legal deposit materials at the Msunduzi Municipal Library. The legal deposit collection was at risk of being lost and inaccessible to present and future generations. Ngulube (2003:335), in a similar study of public records and archives in South Africa, finds that "Public records and archives in South Africa are in grave danger of being lost and becoming inaccessible". This was mainly due to the lack of preservation activities and strategies, as a result of lack of knowledge in preservation, adequate funding, staff training, preservation policies, environmental control of stack rooms, proper handling and storage of materials. The conclusions for each concern are discussed according to the objectives of the study in the following sections.

#### **6.1.1 Activities and strategies used to preserve legal deposit materials**

The first objective of the study was to establish the activities and strategies used to preserve legal deposit materials. The study showed that legal deposit materials are not properly preserved, due to the lack of a library preservation policy, lack of monitoring and lack of the control of environmental conditions of the stack rooms. The library

building was custom-designed and built in 1975 for the purpose of its current use. However, it was built during the time when many institutions all over the world had just identified mass embrittlement of books and were starting to understand that preservation does not entail conservation only. Parts of the building had been renovated in 2006 but the stack rooms had not been renovated and are not up to standard, in that materials were not protected from light, temperature and relative humidity.

The stack rooms were not maintained optimally and were very dusty. Materials were not adequately protected from pests, especially cockroaches, and were exposed to chemicals used to spray and kill the vermin. The library did not have sufficient shelving and two of the stack rooms were used for storing furniture and other things that were no longer used in the library. There were no guidelines on how the staff should store and handle materials, nor on how users should handle materials. The staff had not been trained to be aware of what they themselves can do to minimize the risk of damage when handling materials, especially those that were already in poor condition.

The library did not have a disaster plan. Some staff had been instructed on how to deal with fire emergencies and each department had a fire marshal. The library and stack rooms were protected from fire by smoke detectors and had fire extinguishers on each floor. Staff had received training in the use of fire extinguishers, but had not been trained in water disaster recovery even though the library had been faced with a number of water disasters in the past.

### **6.1.2 Level of skills and knowledge in preservation management**

The second objective of the study was to investigate the level of staff skills and training in preservation. None of the staff at the Msunduzi Municipal Library had skills and training in preservation management. It was clear that the majority lacked general knowledge concerning the preservation of materials.

### **6.1.3 Security**

The third objective of the study was to determine what procedures are in place to safeguard the collection. The study revealed that the library had security personnel, an

electronic security system and an intruder alarm system, linked to the municipal security system, to protect the collection. The security systems are not adequate, in that only the main entrance is manned by security staff and has an electronic system. The other access point was not manned and did not have an electronic system. The security personnel were not vigilant and were not doing their jobs properly. The other concern was that too many members of staff had keys to access the building.

#### **6.1.4 Preservation challenges**

The fourth objective was to discover the challenges faced with preserving legal deposit materials. One of the main limitations faced by the Msunduzi Municipal Library was inadequate funding. It was clear that hardly any preservation activities were carried out, due to lack of funding. The library is thus dependent on outside funding and donors for development. This has led the library to plan for the present and near future only, as it is uncertain as to what would happen when the donations cease.

The library lacked skilled and trained staff and also equipment to help stabilize and monitor the fluctuating temperatures and relative humidity of the stack rooms, in hot and humid KwaZulu-Natal. Most materials were produced on poor quality paper and deteriorated quickly, especially the newspapers. The building was another challenge, in that it was not very old (32 years), but was not well equipped to conform to present preservation standards.

#### **6.1.5 Access to information**

The fifth objective was to determine what means and processes are used to help make materials accessible. The study found that all materials at the Msunduzi Municipal Library were open to use. The systems in place were inadequate and some were archaic. The newspapers and journals could be found using a card catalogue, the government publications and maps could be found by using written indexes on the shelves; otherwise staff used the Dewey Decimal Classification 20 index to help locate materials by finding the general classification number of the material. Access also depends on preservation. A number of the old newspapers were inaccessible, because they had deteriorated badly and some just crumbled when touched or handled. A

number of materials, especially books, were not accessible due to lack of finding aids. This made it difficult to locate various items. The backlog of materials waiting re-inputting onto an automated descriptive system led to inaccessibility of materials, since archaic methods were used to try to locate the materials.

### **6.1.6 Conclusions about the research problem**

In light of the findings of the study, preservation of, and access to, the legal deposit materials at the Msunduzi Municipal Library requires urgent attention. All the role-players in preservation, including the government and policy-makers, need to step in quickly to prevent further loss and damage to this South African cultural heritage collection. As mentioned earlier, without preservation there will be no access, since access hinges on adequate preservation methods.

## **6.2 Recommendations**

The sixth objective was to make recommendations to the Msunduzi Municipal Library based on the findings of the study. These are:

- The study showed that it is important to preserve legal deposit materials properly, for present and future use. It is recommended that the library should develop a preservation policy to initiate and support preservation efforts, at all levels. The library should incorporate preservation into their mission statement, to create a foundation for preservation. This strategy should be created to help meet the Msunduzi Municipal Library's specific needs to identify areas of concern, optimize all available resources towards preservation and establish goals for continual development, over time. The preservation policy could then be used to clearly define the preservation programme and to solicit an operational budget and additional funding for the library from the government and policy-makers.
  
- The study revealed that the stack rooms are not up to preservation standard. The stack rooms need to be upgraded to control the environment, to prolong the useful life of the materials, by protecting them from light, temperature, relative humidity and pests. All stacks require a HVAC system to help control the climate

and keep it consistent for the preservation of materials and not for the comfort of the staff. The staff of the periodicals stack room should be provided with another work area, outside the stack room, to prevent the HVAC system being regularly changed for staff comfort. The environment of the stack rooms should be monitored constantly, using data loggers, thermo-hydrographs and similar instruments, or by using simple instruments such as thermometers or humidity strips, that also provide useful information. This equipment needs to be bought and staff need to be trained how to use it and monitor the environment. The fluorescent lights should be covered with UV filters and staff should switch off the lights when the stacks are not being used. Natural light through the windows should be blocked out using UV filter film or even curtains, blinds or shades.

- The study revealed that the stack rooms were not generally clean. It revealed that the stack rooms had been infested with cockroaches, bookworms, spiders, fleas and dustmites. The stacks should be cleaned on a regular basis using a vacuum cleaner, which sucks up the dust rather than re-circulating it. Good house-keeping and maintenance of optimal storage conditions would help control the breeding of pests. Management needs to find out what chemicals were used to fumigate the library and stack rooms and whether or not they are harmful to the staff and the materials. The practice of using insect repellents such as naphthalene bricks, dry neem leaves and camphor tablets tied in muslin bags could keep the pests away. Staff need to be vigilant about checking new materials for signs of insects. Items should be treated before they are integrated with the existing collection.
  
- The study found that the library did not have a disaster plan. The library needs to draw up a disaster plan to devise a programme with concrete goals, identifiable resources and a schedule of activities for eliminating as many risks as possible. Apart from drawing up a plan, the staff need to be trained to implement the plan and to be prepared for any type of disaster, especially water disasters, which are the most common. This would help to reduce the effects of the disaster, by having the staff respond well to the situation by salvaging materials and handling them properly.

- Security can be improved by training the security personnel to be more vigilant and by making them understand the value of the cultural heritage.
- None of the staff at the Msunduzi Municipal Library had any training in preservation management. It is recommended that the library should be committed to ongoing training and staff development. All staff should receive training in preservation, to ensure that each person understands, and is committed to, the preservation programme. This can be done in a number of ways, including staff meetings and sending staff to conferences and seminars. The Msunduzi Library can also involve professional associations such as the Library and Information Association of South Africa (LIASA) and the South African Society of Archivists (SASA), to train staff, in-house. To reinforce the training, preservation should be made part of each employee's job description.
- The Msunduzi Municipal Library needs to re-examine its staff recruitment strategy, by taking cognizance of the importance of preservation and conservation.
- It is apparent that funding is a major challenge, but the findings of the study may influence the government and policy-makers to prioritizing funding for preservation. If the recommendations of the study are taken into consideration, especially with regard to the Msunduzi Municipal Library having a preservation policy, the library will be in a better position to solicit funds.
- The study concluded that finding aids are inadequate and archaic. These systems are tedious and contribute to the failure of users to access information promptly. For the library to provide a fast, effective service, it is recommended that extra staff be employed to process the backlog of materials that need to be entered on the Millennium library system and to hasten the process. To improve on access, the library should have a well-designed website with links to the Webpacc, that will serve as a gateway to all users.

- The Msunduzi Municipal Library should network with other legal deposit institutions and archives to create a consortium to support preservation efforts. The consortia may help negotiate funding for preservation from the government and other organizations. The consortium may be a good source of training resources and other preservation services. It may help to find a way forward by discussing challenges, concerns and ideas.

### **6.3 Further research agenda**

A study into the preservation of other legal depositories in South Africa needs to be conducted, in order to cause the policy-makers and the government to be aware of challenges, problems and concerns regarding the South African intellectual and cultural heritage.

It was the intention of the study to assess the preservation of, and access to, legal deposit materials at the Msunduzi Municipal Library, demonstrated by a need to change strategies and activities for the preservation of, and access to, materials. The purpose of the research, namely to carry out a descriptive study, to establish the collection management policies and strategies with regard to preservation and access, and to lay a basis for more conclusive research in the future, has been achieved. Areas for further research have been revealed.

### **6.4 Summary**

Chapter 6 discussed the conclusions, based on the findings of the study and on the literature reviewed. Recommendations were made, based on the findings and literature review. Further topics for research were identified.

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## **APPENDICES**

### **Appendix 1**

#### **Covering letter for the survey instrument for collecting information on preservation of, and access to, legal deposit materials at the Msunduzi Municipal Library, Pietermaritzburg**

Dear colleague

I am a student at the University of KwaZulu-Natal doing a Masters in Information Studies. I am seeking your assistance in my research project. The purpose of the study is to identify how legal deposit materials are preserved and accessed at Msunduzi Municipal Library, Pietermaritzburg.

The survey is designed to collect data about preservation policies and procedures, storage and handling of legal deposit materials, access to materials and education and training of staff for preservation of these materials. All replies will be treated in the strictest confidence and will not be attributed to particular respondents, organizations, or departments. I realise that there are many other demands on your time, but, the results will be beneficial to all those with responsibility for preserving legal deposit materials. The results of the survey based on the findings may be used as a proposal.

I will be grateful if you would put the completed questionnaire in the box provided at the Adult Reference section by 21 September 2007. Should you have any queries about the study, please do not hesitate to contact me.

Thank you for your time and cooperation.

Yours faithfully

Zawedde Nsibirwa

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E-mail: 204523916@ukzn.ac.za

## Appendix 2

Case Number .....

### Survey instrument for collecting information on the preservation of, and access to legal deposit materials at the Msunduzi Municipal Library, Pietermaritzburg

Instructions for filling in the questionnaire

- a) Tick the applicable answer(s).
- b) Use spaces provided to write your answers to the questions. Please print.
- c) Please, do not leave blank spaces. If the question does not apply please indicate "N/A".
- d) If you use additional sheets of paper for detailed answers, please, indicate in all cases the question number you are referring to.

#### Demographic Data

1. Are you:

Male                   Female

2. Which age group do you fall under?

Under 20    20 – 30    31 – 40    41 – 50    51-60    over 60

3. What is the highest level of education you have reached?

Primary school

High school

Technikon

University

Other.....

#### Preservation policies and means

Preservation is the process in which all actions are taken to check retardation and deterioration. This includes preventative measures (good house keeping) and conservation which is the curative measure of reversing the effects of time.

4. Does your library have a policy to:

- |  |                              |                             |                                 |
|--|------------------------------|-----------------------------|---------------------------------|
| a) Improve preservation conditions       | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unsure |
| b) Develop conservation facilities       | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unsure |
| c) Train and recruit qualified personnel | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> Unsure |

5. Do you have in-house conservation facilities?  Yes       No       Unsure

**The environmental conditions of stack rooms**

**Temperature and relative humidity**

6. Does your building have a heating, ventilation and air conditioning (HVAC) system in the stack rooms?

Yes       No       Unsure

7. If you have one, how old is the HVAC system?

- a) Less than 1 year
- b) 1 to 3 years
- c) 4 to 10 years
- d) More than 10 years
- e) Unsure
- f) Other, please specify .....

8. Is the HVAC system on at all times? Yes       No       Unsure

9. Does the HVAC system provide constant climate control throughout the year?

Yes       No       Unsure

10. If you do not have a HVAC system, please state how the following conditions are achieved

- a) heating .....Unsure
- b) ventilation .....Unsure
- c) cooling .....Unsure

11. Do the stack rooms have separate environmental controls systems from offices?

Yes       No       Unsure

12. Do the stack rooms have separate environmental controls systems from reading rooms?

Yes       No       Unsure

13. What is the average temperature in the:

- a) Building? .....°C      Unsure
- b) Stack rooms? .....°C      Unsure

14. Is the temperature level in the stack rooms monitored constantly?

Yes       No       Unsure

15. Is the relative humidity (RH) level in the stack rooms monitored constantly?

Yes       No       Unsure

### Light

16. For how many hours are materials exposed to light during the day?  
..... Unsure [ ]
17. Are lights in the stack room turned off when not in use? Yes [ ]      No [ ]  
Unsure [ ]
18. Is the artificial lighting in the storage areas controlled? Yes [ ]      No [ ]  
Unsure [ ]

### Pest management

19. Are all materials that are to be accessioned checked for insects/vermin before they enter the stack rooms?  
Yes [ ]      No [ ]      Unsure [ ]
20. Have you ever experienced any insect invasion or vermin infestation in the building?  
Yes [ ]      No [ ]      Unsure [ ]
21. If you answer to question 20 is "Yes", please state the type(s) of insect invasion/  
vermin infestation  
.....  
.....

### Storage and handling

22. Is the storage area generally clean? Yes [ ]      No [ ]
23. How are the stack rooms cleaned? ..... Unsure [ ]
24. Is there adequate space for shelving and storage? Yes [ ]      No [ ]
25. Who has access to the storage place?  
a) Staff only [ ]  
b) Staff and the users [ ]
26. Are users trained in the handling of materials? Yes [ ]      No [ ]  
Unsure [ ]
27. Are staff trained in the handling of materials? Yes [ ]      No [ ]      Unsure [ ]
28. Are there written guidelines for handling of materials for staff? Yes [ ]      No [ ]  
Unsure [ ]
29. Are there written guidelines for handling of materials for the users? Yes [ ]      No [ ]  
Unsure [ ]

30. Who determines what can be safely copied? .....  
Unsure [ ]

**Disaster preparedness and management**

31. Is there a disaster planning team in place? Yes [ ]      No [ ]      Unsure [ ]

32. Have staff been instructed in emergency planning? Yes [ ]      No [ ]  
Unsure [ ]

33. If "Yes" to question 32, please provide details  
.....  
.....  
.....

34. Have staff been instructed in emergency recovery procedures? Yes [ ]      No [ ]  
Unsure [ ]

35. If "Yes" to question 34, please provide details  
.....  
.....

**Fire detection and suppression**

36. Do the stack rooms have a fire detection system? Yes [ ]      No [ ]  
Unsure [ ]

**Security**

37. What security systems exist in the building? (Please tick all the applicable options).

- a) Employ security personnel [ ]
- b) Electronic security system [ ]
- c) Closed circuit television cameras (CCTV) [ ]
- d) Intruder alarm system [ ]

38. How effective do think your security system has been over the past ten years?

- a) Effective [ ]
- b) Not effective [ ]
- c) Unsure [ ]

39. If your answer to the previous question is 'not effective' please explain why you think it is not effective.  
.....  
.....  
.....

### Condition and care of materials in general

40. What is the overall condition of the legal deposit materials?

Very good       Good       Average       Poor       Very poor

41. If you answer to question 40 is "poor" or "very poor" which types of records are in particularly poor condition?

.....  
 .....

42. In the table below state the extent of agreement or disagreement about the general physical condition of the materials in your stack rooms.

They are dirty (soiled, stained)	Strongly agree <input type="checkbox"/>	Agree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Strongly disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>
Deteriorating through wear and tear	Strongly agree <input type="checkbox"/>	Agree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Strongly disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>
Condition of paper is poor (acidic and brittle)	Strongly agree <input type="checkbox"/>	Agree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Strongly disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>
Condition of materials generally poor because of mould attack	Strongly agree <input type="checkbox"/>	Agree <input type="checkbox"/>	Disagree <input type="checkbox"/>	Strongly disagree <input type="checkbox"/>	Undecided <input type="checkbox"/>

43. Have you observed deterioration resulting from the use of documents by the users?  
 Yes       No

44. If "Yes" to question 43, do you ascribe the deterioration to: (Please tick all the applicable options).

- a) Frequent use
- b) Inadequate supervision
- c) Photocopying
- d) Microfilming
- e) Scanning
- f) Other, please specify.....

45. Who carries out conservation treatment? (Please tick all the applicable options).

- a) Done in-house
- b) Done commercially
- c) Done at the national archives (Pretoria)
- d) Not done
- e) Unsure

### Access to information

46. Are all your legal deposit materials open to use at present? Yes       No   
 Unsure

47. If your answer is "No" to question 46, please explain why access is limited  
.....  
.....  
.....

48. Are users made aware of their access rights and their responsibility to comply with the policies and regulations of your institution? Yes [ ] No [ ] Unsure [ ]

49. If your answer is "Yes" to question 48, how is this done?  
.....  
.....  
.....

50. Through which of the following are users able to locate descriptions of your legal deposit? (Please tick all the applicable options).

- a) Card catalogue [ ]
- b) Word processed registers/inventories [ ]
- c) Printed guide to whole collection [ ]
- d) Computer catalogue accessible in-house [ ]
- e) Computer catalogue accessible remotely [ ]  
(via dial-up modem connection, Telnet, Internet, etc.)
- f) Web site, please provide URL:.....
- g) Other, please specify.....

51. Are any of the following **significant** impediments to the use of your legal deposit materials? (Please tick all the applicable options).

- a) Cannot physically locate them [ ]
- b) Lack of indexes or other finding aids (because materials have not been processed)[ ]
- c) Necessary equipment not available (for example microfilm readers, tape players) [ ]
- d) Records have deteriorated beyond use [ ]
- e) Processing backlog [ ]
- f) Other, please specify.....

52. What equipment does your organization have at its disposal for use in managing or making your legal deposit materials available? (Please tick all the applicable options).

- a) Photocopier(s) [ ]
- b) Document scanners [ ]
- c) Computers [ ]
- d) Other, please specify.....

53. Are users made aware of their obligation to comply with copyright legislation and access conditions when using information contained in legal deposit materials?  
Yes [ ] No [ ] Unsure [ ]

54. If your answer is “Yes” to question 53, please describe the mechanisms used to make them aware.

.....  
 .....  
 .....

55. If “Yes” to question 53, when are the mechanisms communicated to the users?

- a) During use [ ]
- b) Before use [ ]
- c) Other, please specify.....

56. Please rank each of the following priorities for improving the management of your legal deposit collection and making them available for use: (Please tick one for each row). Major priority=4, moderate=3, minor=2, not a priority=1, undecided=0.

Increase funding major priority [ ] moderate [ ] minor [ ] not a priority [ ] undecided [ ]
Increase capacity of storage space major priority [ ] moderate [ ] minor [ ] not a priority [ ] undecided [ ]
Improve storage conditions (temperature & humidity controls, security) major priority [ ] moderate [ ] minor [ ] not a priority [ ] undecided [ ]
Improve staff training or expertise major priority [ ] moderate [ ] minor [ ] not a priority [ ] undecided [ ]
Improve finding aids major priority [ ] moderate [ ] minor [ ] not a priority [ ] undecided [ ]
Automate description systems major priority [ ] moderate [ ] minor [ ] not a priority [ ] undecided [ ]
Reformat collections (microfilm, imaging) major priority [ ] moderate [ ] minor [ ] not a priority [ ] undecided [ ]
Develop policies/procedures for handling new media major priority [ ] moderate [ ] minor [ ] not a priority [ ] undecided [ ]
Preservation/conservation of collections major priority [ ] moderate [ ] minor [ ] not a priority [ ] undecided [ ]
Develop disaster plan major priority [ ] moderate [ ] minor [ ] not a priority [ ] undecided [ ]
Process back log of acquired collections major priority [ ] moderate [ ] minor [ ] not a priority [ ] undecided [ ]

57. Please use the space below for any additional comments or concerns related to the management, care, or use of your organization’s legal deposit materials.

.....  
 .....  
 .....  
 .....  
 .....  
 .....

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.....  
.....  
.....  
.....  
.....

**Thank you very much for your time.  
Please put the completed questionnaire in the box provided at the Adult  
Reference section by the 21 September 2007.**

## Appendix 3

ID.....

### Interview schedule for collecting information on preservation of and access to legal deposit materials at the Msunduzi Municipal Library, Pietermaritzburg

Interviewer: Zawedde Nsibirwa

Date of Interview :.....

#### INTRODUCTION:

I am a student at the University of KwaZulu-Natal doing a Masters in Information Studies. I would like to ask you a few questions about the study I am conducting on legal deposit materials at the Msunduzi Municipal Library, Pietermaritzburg. The purpose of the study is to identify how legal deposit materials are preserved and accessed at the Library. The survey is designed to collect data about preservation policies and procedures, storage and handling of legal deposit materials, access to materials and education and training of staff for preservation of these materials. All replies will be treated in the strictest confidence and will not be attributed to particular respondents, organizations, or departments. I realise that there are many other demands on your time, but the results will be beneficial to all those with responsibility for preserving legal deposit materials. The results of the survey based on the findings may be used as a proposal.

#### Demographic Data

1. Male  Female

2. Which age group do you fall under?

Under 20  20 – 30  31 – 40  41 – 50  51-60  over 60

3. What is the highest level of education you have reached?  
(Please specify the level in the space provided)

Primary school

High school

Technikon

University

Other.....

#### Preservation policies and means

4. Does your organisation have a mission statement?  Yes  No, go to question 6  
 Unsure, go to question 6

5. If you answer to question 4 is "Yes", please state your mission statement.

.....  
.....  
.....  
.....  
.....

6. Does your library have a policy to:

- a) Improve preservation conditions       Yes       No       Unsure
- b) Develop conservation facilities       Yes       No       Unsure
- c) Train and recruit qualified personnel       Yes       No       Unsure

7. Do you have in-house conservation facilities?       Yes       No       Unsure

8. Which of the following preservation options do you use?

- a) Boxing
  - b) Microfilming
  - c) Digitisation
  - d) Encapsulation
  - e) Lamination
  - f) De-acidification
  - g) Leaf casting
  - h) Other, please specify .....
- .....

9. What is your role in preservation?

.....  
.....  
.....  
.....

10. Is there a micro-photographic or reprographic unit operating in your institution?  
 Yes       No       Unsure

11. Are the personnel carrying out preservation activities trained in preservation techniques?  
 Yes       No       Unsure

12. Is your institution involved in co-operative preservation activities with any of the following institutions in South Africa?

- a) Libraries  
Yes  No  Unsure
- b) Art galleries  
Yes  No  Unsure
- c) Museums  
Yes  No  Unsure
- d) Research laboratories  
Yes  No  Unsure
- e) Other, please specify .....

13. Does your institution have a preservation policy?

- Yes  No  Unsure

14. If yes to question 13, overall, how successful do you consider your current preservation policy/strategy is in achieving your institution's preservation goals?

- a) Successful
- b) Unsuccessful
- c) No opinion

15. What factors influenced your answer to the previous question?

.....  
.....  
.....

16. Do you foresee the emphasis of the preservation policy/strategy shifting over the next five years?

- Yes  No  if no go to question 19.

17. If "yes" to question 16, please elaborate in what direction?

.....  
.....  
.....  
.....

18. What are your current priorities in terms of the preservation of the collection?

.....  
.....  
.....  
.....

19. What is the current total budget for the library?

.....

20. How much money is allocated to the legal deposit function of the library?  
.....

21. Is the allocation sufficient? Yes [ ] No [ ]

22. If "no" to question 21, please specify.  
.....  
.....  
.....

23. Does the library receive any alternate funding? Yes [ ] No [ ]

24. If "yes" to question 23, please state the organizations that provide extra funding.  
.....  
.....  
.....

25. If "yes" to question 23, please state what the funds are/will be used for  
.....  
.....  
.....

**The building**

26. Type of building:

a) Was the building constructed for the purpose of its current use? Yes [ ]  
No [ ] Unsure [ ]

b) Was it adapted for use? Yes [ ] No [ ] Unsure [ ]

c) When was it built? .....

d) What materials are used in the structure of the building? Brick [ ]  
Concrete [ ] Unsure [ ] Other [ ], please, specify  
.....

e) From what material is the floor in the stack areas made from?  
..... Unsure  
[ ]

f) Has the building ever been renovated? Yes [ ] No [ ]  
Unsure [ ]

g) If your answer to item (f) is "Yes", please state the year the building was last renovated

.....  
.....

h) How long has your institution occupied the building?

.....

i) Is your institution the only tenant in the building?      Yes [ ]      No [ ]  
Unsure [ ]

j) Is the building subject to regular technical maintenance?      Yes [ ]      No [ ]  
Unsure [ ]

k) Are the stack areas isolated from the other parts of the building      Yes [ ]  
No [ ]      Unsure [ ]

27. Is the building equipped with? (Please specify the applicable options).

a) De-humidifiers      Yes [ ]      No [ ]      Unsure [ ]

b) Humidifiers      Yes [ ]      No [ ]      Unsure [ ]

c) Air filtering      Yes [ ]      No [ ]      Unsure [ ]

d) Windows with filtering glass      Yes [ ]      No [ ]      Unsure [ ]

e) Air conditioning      Yes [ ]      No [ ]      Unsure [ ]

28. Are there water pipes close to the stacks (records storage area)?

Yes [ ]      No [ ]      Unsure [ ]

**Temperature and relative humidity**

29. Does your building have a heating, ventilation and air conditioning (HVAC) system in all the stack rooms?

.....  
.....  
.....

30. If you have one, how old is the HVAC system?

.....

31. How often is the HVAC system maintained?

.....

32. What is the average temperature in the:

- a) Building? .....°C    Unsure [ ]
- b) Stack rooms? .....°C    Unsure [ ]

33. Is the relative humidity (RH) level in the stack rooms monitored constantly?  
 Yes [ ]      No [ ]      Unsure [ ]

34. If your answer is yes for question 33 which of the following instruments do you use for measuring relative humidity at your institution? (Please specify all the applicable options).

- a) Data loggers [ ]
- b) Hygrothermograph [ ]
- c) Psychrometers [ ]
- d) Humidity indicator strips [ ]
- e) Hygrometer [ ]
- f) Thermometer [ ]
- g) Other, please specify .....

**Light**

35. What are the sources of light in areas where legal deposit materials are stored?  
 .....  
 .....Unsure [ ]

36. Do you control light from the windows in your storage areas?  
 Yes [ ]      No [ ]      Unsure [ ]

**Pest management**

37. Do you carry out routine extermination of vermin infestation (insects, rodents, etc.)?  
 Yes [ ]      No [ ]      Unsure [ ]

38. If "Yes" to question 37, how often is the extermination done?  
 .....

39. What method is used?  
 .....Unsure [ ]

40. Who does the extermination?  
 .....Unsure [ ]

41. State the chemicals used? .....  
 Unsure [ ]

**Disaster preparedness and management**

42. Is there a written disaster preparedness and recovery plan for your institution?  
 Yes       No, go to question number 48

43. If "Yes", please choose the aspects that it covers from the list below.

- a) It deals with safe evacuation of people
- b) It deals with records
- c) It deals with the building
- d) It describes emergency procedures
- e) It outlines disaster response
- f) It lists emergency supplies
- g) Unsure
- h) Other, please specify.....

44. Choose from the list the natural disasters covered by your plan

- a) Floods
- b) Earthquakes
- c) Tornado
- d) Mould
- e) Insects
- f) Unsure
- g) Other, please specify .....

45. Choose the human-made disasters covered by your plan from the list.

- a) Fire
- b) Bomb threats
- c) Vandalism
- d) Unsure
- e) Other, please specify .....

46. When was your disaster preparedness and recovery plan last tested?

.....  
.....

47. When was your disaster preparedness and recovery plan last reviewed?

..... Unsure

**Fire detection and suppression**

48. Are fire extinguishers available throughout the building in general?  Yes       No,  
go to number 54

49. If "Yes" to question 48, please state the numbers in:

- a) The stack rooms .....

- b) The building .....
  - c) Unsure [ ]
50. State type of fire extinguishers used
- a) Halon [ ]
  - b) Multipurpose [ ]
  - c) Electrical [ ]
  - d) Water [ ]
  - e) Unsure [ ]
51. How often are the extinguishers inspected? .....
52. Have staff been trained to use fire extinguishers? [ ] Yes [ ] No, go to number 54
53. If "Yes", please specify who did the training? .....
54. Is there a sprinkler system or any other type of fire suppression system in the building?
- [ ] "Yes"
    - a) Wet pipe [ ]
    - b) Dry pipe with delay mechanisms [ ]
    - c) Other, please specify .....
  - [ ] "No", go to number 57
55. Has it ever been tested? Yes [ ] No [ ] Unsure [ ]
56. If "Yes", please state when it was last tested  
.....

### Security

57. If you have an intruder alarm system is it linked to the police or a third party such as a security firm?
- Yes [ ] No [ ] Unsure [ ]
58. How many access points are there to the building? .....
- Unsure [ ]
59. Who has keys to the building? .....
- Unsure [ ]

### Care of materials in general

60. Within the past two years have you carried out a holdings survey of the majority of your stack rooms to identify potential preservation problems? Yes [ ] No [ ]  
 Unsure [ ]

61. Have you observed any damages caused by: (Please specify the applicable options).

- a) Water damage [ ]
- b) Mould [ ]
- c) Insects [ ]
- d) Fire [ ]
- e) Light [ ]
- f) Poor handling [ ]
- g) Inadequate storage [ ]
- h) Vandalism [ ]
- i) Acidity (brittle) [ ]
- j) Other, please specify .....

62. During the past year, have you undertaken any of the following preservation/conservation measures, either in-house or through an outside contractor? (Please specify the applicable options).

- a) Microfilming or other imaging (optical disk transfer) [ ]
- b) Document conservation/repair [ ]
- c) Disaster recovery [ ]
- d) Upgraded environmental controls [ ]
- e) Other, please specify: .....
- f) Unsure [ ]

### Level of skills and knowledge in preservation management

63. The table below indicates some of the features of the staff employed in the preservation and conservation of legal deposit materials at your institution? Please indicate the total number of staff involved in each instance. Technical training =technician without university degree; academic=university degree plus professional qualification in conservation. Indicate "NA" where it does not apply.

Variable	Total
Number of staff at your institution	
Staff directly involved in preservation and conservation activities	
Number trained abroad	
Number with technical training	
Number with the highest qualification as Grade 10	
Number with the highest qualification as Grade 12	

Number with the highest qualification as a Certificate in archives or records	
Number with the highest qualification as a bachelor's degree without archives studies	
Number with the highest qualification as a Masters in an archival related discipline	
Number with training in deacidification	
Number with training in microfilming	
Number with training in digital preservation	
Number with training in developing conservation-restoration programmes or surveys	
Number with training in providing advice and technical assistance for conservation-restoration of cultural property	
Number with training in developing and implementing preventive and handling procedures	
Number with training in evaluating conservation problems in context	
Other, please specify	

**Access to information**

64. Are users' interests and needs analysed at regular intervals, and policies and practices adjusted accordingly?

Yes [ ]                      No [ ]                      Unsure [ ]

65. If "yes" to question 64 please describe how?

.....  
.....  
.....

66. Through which of the following are users able to locate descriptions of your legal deposit? (Please specify the applicable options).

- a) Card catalogue [ ]
- b) Word processed registers/inventories [ ]
- c) Printed guide to whole collection [ ]
- d) Computer catalogue accessible in-house [ ]
- e) Computer catalogue accessible remotely [ ]  
(via dial-up modem connection, Telnet, Internet, etc.)
- f) Web site please provide URL: .....
- g) Other, please specify.....

67. What portion of your legal deposit materials are described in one or more of the finding aids listed in 66, above?

- a) Less than 25% [ ]



## Appendix 4

### Observation guide for collecting information on preservation of, and access to, legal deposit materials at the Msunduzi Municipal Library, Pietermaritzburg

Name of stack room.....

Date..... Time.....

#### Location

Where is stack room located?.....

#### The environmental conditions of stack rooms

Is there a heating, ventilation and air conditioning (HVAC) system?  
.....

Is the HVAC system on? .....

Is the stack room hot or cold?.....

What is used to measure humidity?.....

What type of lights are used?.....

Are lights in the stack room turned off when not in use?.....

#### Physical appearance of the stack room

How are the materials arranged?.....

Are the materials in order?  
.....

Are they numbered and labeled?.....

Is the stack room clean?  
.....

What type of shelving is used?

- Wooden
- Metal
- Compact or high density
- Other .....

Is there adequate space for shelving and storage?  
.....

**Security**

Is it easy for anyone to go into the stack room?  
.....

Are the doors locked at all times?  
.....

What measures are taken to protect the materials while they are being used?  
.....  
.....  
.....

What measures are taken to protect the materials while they are not being used?  
.....  
.....

**Finding aids**

What finding aids are available?  
.....

Does the user have access to these, or are they for staff only?  
.....

**Preservation**

What basic preservation measures have been taken?

Use of boxes [ ]

Use of files [ ]

Use of brown paper [ ]

Use of Mylar (jiffy) bags [ ]

What is the general condition of materials?  
.....  
.....  
.....  
.....  
.....

## **Appendix 5**

### **Informed consent form**

**Title of the study:** The preservation of, and access to legal deposit materials at the Msunduzi Municipal Library, Pietermaritzburg.

I....., agree to take part in the study as outlined in the covering letter attached to the questionnaire and made clear by the researcher. I understand that participation is entirely voluntary and that I will not be forced to answer questions and I am able to withdraw from the project at any time and this will not affect my status at Msunduzi Municipal Library.

I acknowledge that the study will be conducted by Zawedde Nsibirwa and I understand the contents of this form and willingly consent to participating in the study.

#### **Respondent**

**Signed**.....

**Date**.....

#### **Researcher**

**Signed**.....

**Date**.....