Preservation of library materials is an important concern for all libraries. All acquired materials should be preserved properly for use. This is the age of information dependent and readers are engaged in collecting, storing, retrieving, emending and disseminating information as part of their study and research. Library is a place where they can receive the information they want. Some readers use electronic resources to complete their work if necessary. But there are many users, who prefer to read physically the printed material or microform material. To provide them material and information they need, the library should be able to preserve the material for both present and past user groups. Its value will continually increase as time passes. Microfilms and microfiche are produced from the original material belonging to the library as duplicate of that material. The microfilm and microfiche themselves need to be preserved well in libraries.

**Management and organization of microforms:**

Libraries select printed materials - old, rare manuscripts, valuable newspapers and serial publications etc. for microfilming. Data pagination is undertaken and content of the documents are recorded in preparation. After that the correct type of microfilm is chosen and exposed in the camera. The master copy is made from the original film. An Methylene Blue test is done on processed film edits both bibliographical and technical i.e. page reading of microfilm reel using microfilm reader, resolution and density checking. Reviews the edited microfilm and microfiche. Lastly duplicate inspection, precautionary measures to produce good quality copies are completed.

After the completion of all these processing stages, the resultant negative needs to be handled with great care. From this master copy, duplicate or distribution copies are produced. The first duplicate copy may be used to produce distribution copies, while the master stored in a separate place. All materials are kept safely in the proper place and preserved for use in the library.

**History of Microform:**

History records that the microfilming of library material began in 1930. This technology was first used by the Philadelphia Bibliographical Center in 1941. The center published union list of microfilms of the Union Library Catalogue.

1. The effort to film rare or deteriorating materials was given tremendous impetus by World War II, which saw the whole destruction of libraries, archives and private collections in Europe, Asia and the United States. Librarian felt that it was their duty to find and preserve the written artifact of culture and civilization in anticipation of a time when source documents might no longer be available. Thus, started the storing the library materials in microforms for preservation. In Nepal, rules and regulations regarding the preservation of libraries appeared as early as 1869 B.S. as shown by the original copy of a lalmohar document of King Girwana Bikram Shah Dev which was issued to protect library materials from deteriorating. This document is available in
the National Archives of Nepal. But microfilming preservation method began being used by the country's libraries only recently. The very few libraries in Nepal that have adopted this technology are:

1. The National Archives
2. The Nepal National Library
3. Tribhuvan University Central Library (TUCL)

A single reel of film or single microfiche can contain several documents and store them conveniently. Readers can search for titles of documents on microfilm readers comfortably and have them printed if needed.

**Utility of microforms:**

So far as libraries are concerned microforms are useful in many ways:

1. **Space saves:** Records on microfilm reduce the space occupied by the same records on paper by as much as 98 percent.
2. **Speed and convenience of retrieval:** as information can be stored compatibly, searching time is reduced.
3. **Security:** Duplicates can be kept at different locations.
4. **Permanent record:** Silver halide microfilm is generally accepted as being suitable for archival purposes.
5. **Suitable for conservation:** Rare and costly original material can be kept safe and secure. Photo reproduction of it being what is used.
6. Microforms are safe from mutilation unlike books.
7. **Dimensional uniformity:** Original material is reduced to fit standard format images which facilitates handling.

**Care of microforms:**

Transparencies, particularly microfilms are susceptible to certain types of physical damage. Among the types of damage along with the measures to prevent them are:

**Scratches and abrasions:**

These are caused mechanically during some stage of exposing or processing by contact with abrasive surfaces, dust particles or sharp objects. The following steps should be taken to avoid such elements:

- Every piece of equipment through which the film is to pass starting from the camera and ending with the reader should be carefully examined to see that it is free from dust and other abrasive material and so also is clean and well polished.
- The film should be carefully handled; violent jerks should be avoided. It should be tightly spooled.
- Sharp pointed objects should not be allowed to come in contact with the film.

**Cracking, duckling and peeling of emulsion:**

To save the film from cracking, buckling and peeling of emulsion the following measures are suggested:

- Microfilm should be stored in an air-conditioned dust free environment.
- Efforts should be made to maintain a temperature 57° to 58° F and a humidity at 40 to 50 %
- Microfilm should not be used in projectors, which may overheat.
- Microfilm should not be placed near any source of heat.

**Stains, deposits and fingerprints:**

During the washing and drying process exposure to fumes and contact with chemicals or greasy fingers can cause these damages. The following are some of the remedial measures:

- Microfilm should be handled by the edges; soft cotton gloves can be used while handling microfilm after they are processed.
- Processing tanks should be used for automatic processing; and manual processing should be avoided as far as possible.
- Adhesive tapes and rubber bands that cause stains to microfilms should not be used. The place where microfilm is processed, dried or handled should be free from dust and smoke.

**Storage:**

Microforms are best stored in a locked cabinet in which a constant temperature and humidity are maintained.

The ordinary vertical File cabinets are good for reel microfilms stored in containers but are not suitable for strip microfilms or microfiche for which special cabinet like a catalogue card cabinet without a rod should be made.

**Microfilm preservation in three libraries of Nepal:**

The three major libraries of Nepal where material has been microfilm for use and preservation are:

The National Archives
The Nepal National Library
Tribhuvan University Central Library (TUCL)

**The National Archives:**

In the National Archives a huge amount of traditional material dating from as early as the 7th century is available and has been preserved. For the protection of these old manuscripts and scattered folios are stacked together. To separate them from each other some solvent or mechanical method are used. Similarly, all old documents are wrapped with different colored clothes namely red, white or yellow. The whole collection is well protected from dust, dirt and biological threats (e.g. by insecticide treatment). To ensure the original documents, the archives have copied these documents into microfilm. For this work financial support has been provided by German Research Council. Catalogues of the titles microfilmed are available in the National Archives and in the Nepal Research Center (Baluwater). The microfilms are maintained with the aid of air-conditioning system and humidity control. A microfilm service (readers copies) is provided to users.
The Nepal National Library:

The Nepal National Library is the national library of Nepal. It houses a large collection of documents on the Nepali language, literature (including children's literature), ethnic groups, books in Sanskrit and more. The library policy is to cover the entire written output of the nation, record of culture, knowledge and experiences of both past and current and so to preserve that national heritage for the use of future generation. Realizing the value of preserving such material the library made a request to the government of Japan to grant micrographic equipment for microfilming its collected rare documents. On February 5th 2001 this equipment was provided to the library under Japanese Cultural Grant Aid Programme. With the aid of it, printed texts are now being copied into microforms. It has microformed rare and valuable materials and these are made available to users upon request for viewing and printing.

Tribhuvan University Central Library (TUCL):

TUCL is the main university library of Nepal. It has the nations largest collection of material, over 2,80,000 volumes of general and specially printed documents including large number of old and new serial publications. There are also special collections: The Nepal Collection, Singh Collection, TU Archive Collection, Reference Collection, American Studies Collection, Japanese Studies Collection and others. Beside the Special Collection the library has received personal donations from scholars, politicians, educationists, lawyers ex-ambassadors, professors and other donors whose expectation is that their materials will be preserved and used properly by users. Indeed the library has protected and preserved them well. Kali Prasad Upadhyaya, Paras Mani Pradhan, Nerendra Mani Acharya Dixit, Maheshchandra Regmi, Dr. Madhav Raj Pandey, Sirish Chandra Regmi, Dr. Devendra Raj Pandey, Rishikesh Shah, Parasmani Pradhan, Dr. Trilokya Nath Upreti, Mahesh Chandra Regmi, Dr. Kamal Prakash Malla are major donors. The library has made it a policy to select the appropriate, rare, or other valuable records such as cultural studies, Nepali literature etc. from personal collection and house them in the Nepal Collection and Rare Collection.

National Academic Resources:

The Nepal Collection is TUCL's most important collection. Large number of users have benefited by this collection. It consists of valuable and rare or unique works on Nepal. The collection includes more than 38,000 documents written in English or Nepali including 900 religious manuscripts, more than 1000 rare manuscripts 500 years old, 6,000 pieces of Nepali and Newari literature and 6,000 Master-level dissertations and Ph.D. thesis on different subjects presented by students of the Central Departments of Tribhuvan University. No other libraries in Nepal or abroad has such a large collection of Nepal-related materials It is true to say that documents which are not found anywhere else in the nation can be found here.

Nepali Journal Collection:

Special arrangements have been made for the maintenance and use of the Nepali Journal Collection. All journals whether published in Nepal itself or abroad in one of several languages are housed in it. A content list of these journals has also been prepared. The users can ask the staff for particular articles and will be supplied with the original journals. Rare, back volumes of issues of journals are also available in the section.

Library has a special annual budget for the purchase of books on Nepal published in Nepal and abroad.
Understanding the importance of preserving this large amount of rare materials useful to both national and foreign researchers, the present librarian of TUCL, Mr. Krishna Mani Bhandary requested the government of Japan to provide micrographic equipments for microfilming as early as possible. Three years later the library received approval from the government of Japan under Japanese Cultural Aid Programme. The grant amounts to ¥ 31,300,000 (NRS. 20,37,000). Formally on October 4, 2005, Minister-Councilor of the Embassy of Japan Mr. Hiroshi Jingu handed over the microfilm and book binding equipments to Prof. Dr. Govind Prasad Sharma, Vice-Chancellor of TU for use in Tribhuvan University Central Library. The equipment includes three microfilm readers, two cameras, one processor, 600 reels, one duplicator, two microfilm scanners, two printers, one inspector and six microfilms cabinet and book binding equipments. After handing over the equipments Mr. Jingu warmly praised the library objective of employing the micrographic equipments for the preservation of its valuable archival documents of the library knowing that this will help to promote the cultural, educational and research activities of Tribhuvan University. Similarly, Dr. Sharma said that a long-felt need of the library had been fulfilled thanks to Japanese cooperation, and expressed deep gratitude.

The library has started converting the material of the Nepal Collection, Nepali Journals Collection and other collections into microform on a priority basis, for preservation and dissemination.

References:

4. नेपाल राष्ट्रिय पुस्तकालय स्वर्ण महोत्सव स्मारीका २०६२, नेपाल राष्ट्रिय पुस्तकालय, २०६२