

Development of policies for access, management and preservation of the Palm-leaf manuscript collection of the University of Peradeniya library

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Abstract

As it is a requirement to have written policies relating to the library procedures, this paper mainly discusses the sample policies relating to the palm-leaf manuscripts available in the University of Peradeniya. According to the records available at the University of Peradeniya library the amount of the Palm-leaf manuscripts, which are housed in the library, it has the second largest collection in Sri Lanka. The surveys revealed that none of the libraries have a written policy statement for any of the library procedures.

Non-documenting of policy statements is the major drawback in the library to manage the palm-leaf collection. This article points out the method of preparation of palm-leaf manuscripts, acquisition, collection management, customer service, reference service and proposed preservation policy statements of the University of Peradeniya. It also highlights preservation policy as the main policy statement among these policies and the non-availability of the trained staff, space, equipment, chemicals, and lack of training programmes are the drawbacks for the implementation of the preservation policy in the library.

All the suggestions are given to establish the preservation department/unit and the preventive care that needs to be practiced to preserve the collection with other necessary arrangements. The recommendations highlights from where to get the training for the technical staff regarding the preventive care of the palm-leaf in Sri Lanka.

Key Words: Preparation of Palm-leaf Manuscripts; Acquisition Policy; Collection Management Policy; Customer Service Policy; Reference Service Policy; Preservation Policy

Figure 1 - Palm-leaf Manuscript with Styluses



1. Introduction

The University of Peradeniya library is the oldest University library in Sri Lanka and it has a long history dating back to 1921, with the establishment of the Ceylon University College. Over the years the palm-leaf manuscript collection increased to nearly more than 5000 manuscripts.

The term “manuscript” simply means “a document of any kind which is written by hand”. Palm-leaves are the oldest collection in this library and this includes the 13th century Vissuddhi Magga Tika, which is one of the oldest palm-leaf manuscripts so far, found in Sri Lanka. The following table can be considered as large subject areas presently the library holds. It is also considered as the primary source of information containing eyewitness testimony, which is a more authentic source written contemporaneously.

Table 1 – List of Palm-leaves Available in the Main Library

Subject Areas	Amount of Palm-leaf Manuscripts
Buddhist related Manuscripts	2083
Arts	1008
Non Buddhist Manuscripts	688
History, Geography and etc.	525
Grammar and Literature	389
Tripitakas	30

Some knowledge of the detailed process of preparation of palm-leaf manuscripts is therefore, a necessary starting point in this article.

1.1 Preparation of palm-leaves for writing

From the many varieties of palm trees, two kinds of leaves were used for writing in Sri Lanka from early days. Talipot palm (*Corypha umbraculifera*) leaf was more popular for writing, which is rather a broader leaf, thinner, soft, coloured when dry and more flexible with excellent lasting qualities. The second variety is the Palmyra palm (*Borassus flabelliformis*) leaf; normally used for short notices and letters and not for writing of important books. (De Silva, 1938) Palmyra palm grows in many parts of India, Burma, and Sri Lanka. The Palmyra leaf is rather thick and inflexible, inclined towards brittleness over time.

The palm-leaf utilized for writing is produced after a tedious process of preparation. The leaf is cut before it is fully matured. The midribs of these leaflets are removed and the long strips of leaf loosely coiled in to rolls. These coils are then boiled in a copper pot with cold water over a slow fire for three to four hours at 100°C. Sometimes, to these are added tender pineapple leaves (*Ananas comosus*), (Piyadasa, 1985) Beli (*Aegle marmelos*) leaves and fruits, Kappetiya (*Crotolaria retusa*) or Pinna (*Clerodendrum pholomidis*) or Bombu (*Symplocos cordifolia*) leaves at a time (Wettasinghe, 1986) to enhance the durability of the leaf and brightness in colour. Then the rolls are taken out and hung out in single strips in the sun for three days or more until dried.

Then if there is no immediate demand the strips are tidily rolled into big reels and put into store for later completion of the process. (Nell, 1932) When required for use, the rolls are taken one by one and smoothened and polished both sides by repeatedly running them over a smooth surface of a wooden pole (hard trunk of an areca palm) such as a pestle with a weight tied to one end of each blade. Before the strips are put away they are cut into the needed lengths, they are from 2" – 2 3/4" in width, the lengths depend on the scribe's directions, and they vary from 6" to 32". (Wickremaratne, 1967) All the leaves in a book are uniform in size.

1.2 Perforation of palm-leaves

The sized book leaves are then perforated with a heated iron rod on each leaf to pass the cord for assembling together the leaves of a volume. The punched palm-leaves are then tightly pressed together and the loose fibres of the leaf edges are burnt away using a flame with the help of a hot iron rod, which one corner is wrapped with cotton cloth wet with coconut oil and fire is set to it giving off a gentle flame. This help to render all the leaves uniform in size and protect them from damp and from the attacks of insect pests.

1.3 Preparation of wooden covers

After preparing the leaves, two wooden covers are attached on both sides. All the leaves in a volume are assembled between these two wooden covers and the inner surface that comes in contact with the book leaf is made even and smooth and some times painted in colours.

The boards binding the leaves together were generally of hard wood such as Ebony (*Diospyros ebenum* Koen), Iron wood (*Mesua ferrea*), Val sapu (*Michelia nilagirica* Zent), Milla (*Vitex altissima*), Jak (*Artocarpus integrifolia*), Gammalu (*Pterocarpus marsupium*), (De Silva, 1938) Teak (*Tectonagrandis*), and Toon (*Cedrela Toona*). (Nell, 1932) Some books have covers with semi-precious stones, gold, silver, brass, ivory and tortoise shells, which are kept with the ornate covers.

1.4 Cord Binding

The leaves of a book and its covers are filed together with cords and two wooden cover boards are added. The cord passes through the punch holes on the left side of the leaves and the boards. The material of the cord was cotton or the fibre of the wild hemp.

The code is attached to a perforated old coin, a decorative bead, cut out of crystal, carved ebony or ironwood or other beautiful wood or engraved horn, ivory, silver, copper or brass, or some kind of disc rarely of gold or studded with gems at one end. The code is terminated at its other end by a decorative tassel or knot or by a crystal or bead.

1.5 Writing styluses

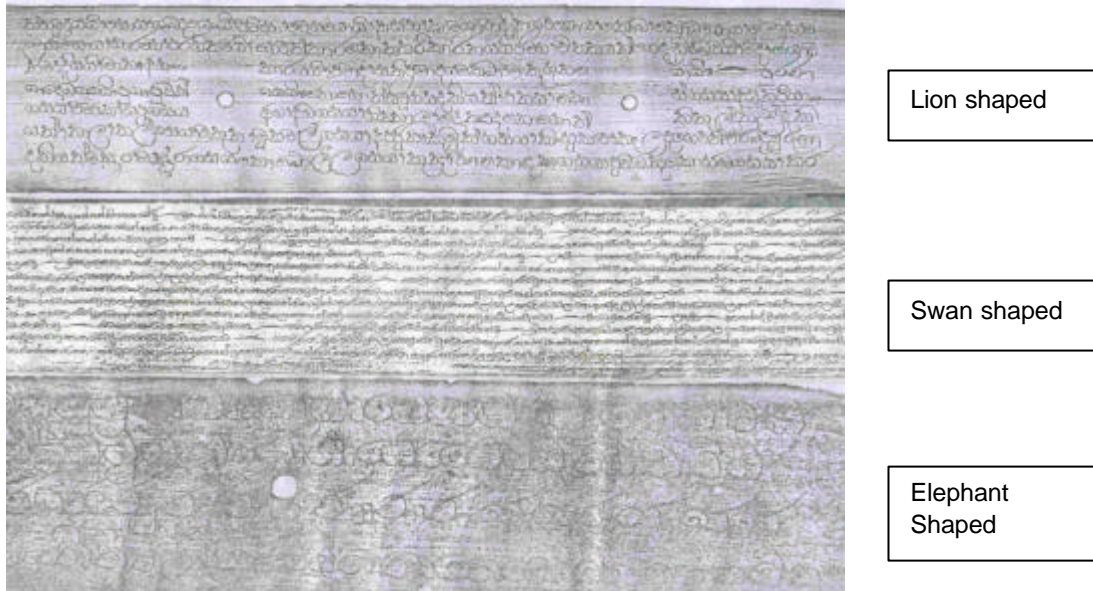
The normal writing instrument used is a steel stylus. There are two kinds of writing styles namely the "Ulkatuva" for the novice and the "Panhinda" for the master scribe. The beginners who are initiated into the art of writing use the Ulkatuva, which is a blunt, plain writing style made of steel. Professional scribes and scholars make use of the Panhinda which is usually a highly ornated style with a sharp steel point. The stylus for writing may be of any length from 10" to 20" but the various parts have to be of definite proportions, this ensured a proper balance in the hand.

1.6 Art of writing on palm-leaf

There are certain principles to follow when writing on palm-leaf. The style is held in the right hand in the same way as a present day writing pen is held, except that the thumb of the left hand also supports the writing point. The scribe, if right-handed, had a notch cut in his left thumbnail to rest the stylus in that angle. Then the stylus is pressed against in this cut inscribing the letters and the decorations over the leaf. There is no doubt that the left hand guides to some extent the style during the inscribing process. It is a tradition to have uniformity in the size of letters incised on the palm-leaf. It is conventional to leave a marginal space of about 1 1/2" at the two ends of the palm-leaf and also adequate space around the perforations.

Letters inscribed on palm-leaves are of three principal types. These types are known as Gajalipi (Elephant shaped), Sihalipi (Lion shaped), and Hasalipi (Swan shaped), and of different sizes as depicted in figure 2. (Piyadasa, 1985). These letters are rendered distinct by blackening with resin oil and lamp black, which forms the mixture, which is rubbed over the incised leaf with a soft pad of cotton.

Figure 2 - The three principal types letters inscribed on palm-leaves.



1.7 Pagination of the manuscripts

The numbering of pages in a manuscript is done leaf by leaf and the numerals used are taken from the Sinhala alphabet. In the process of pagination, the first page of a manuscript has the benedictory word “Svasti” or “Svasti Siddham” and numbered with letter “Ka” below it; “Ka” being the first consonant in the alphabet. The 34 consonants of the Sanskrit alphabet are utilized for the purpose and produce a total of 544 signs or letters. When the number of leaves exceed 544 then a second series commences with the first page being marked with the letter “dva”; and if it continues to a third series the letter “tri” is utilized.

When the book is not in use it is tied and wrapped with a large silk or a cotton cloth and stored either in a Chester or in an Almirah. The airtight containers keep the books in a state of preservation.

These manuscripts shed light on the development of literary and linguistic trends. Before advent of the books, these manuscripts served as their primary function on the Buddhist doctrine and canonical literature and are unique as source materials for knowledge. However, the palm-leaf manuscripts have their own mythology, a flavour of authenticity, which makes it a most looked for treasury, and a unique instrument of investigation in to the internal process of literary creation and need greater care, as it is not an easy process to replicate the copies.

2. Purpose of the study

Palm-leaf Manuscript Collection is one of the special collections in the Main library. The aim of the Main library is to "add value to all library and information provision requirements for the customers of the University of Peradeniya and assist to actualize the mission of University of Peradeniya". At the same time, it supports the teaching, research, and public service needs of the University. The aim of the Palm-leaf Manuscript Collection in accomplishing this mission is to collect, preserve, and make available for research the unpublished materials relating to the history and culture of Sri Lanka. The surveys carried out in 1994 (Yapa, 1994) and 2003 (Alahakoon, 2003) regarding the preservation of library materials and palm-leaf manuscripts of University Libraries in Sri Lanka revealed that none of the libraries have written policy statements for any of the library procedures. The purpose of this study is to develop policies for Palm-leaf Manuscript Collection in the University of Peradeniya.

Mission statement of the University of Peradeniya is "*to be a national and international center of higher learning, research, knowledge, dissemination and consultancy and to produce graduates of excellent quality and leadership who can contribute to national development with a sense of commitment and dedication. A higher degree of social sensitivity and ethical rectitude, with abilities to adjust to a rapidly changing knowledge-based employment*". The following policies operate under the Library's general policy statement with respective collection development.

2.1 Aims of the library

- To Support the study of an appropriate context primary source of research importance.
- To develop this national heritage to users in the most convenient format.
- To make its resources available beyond the immediate academic community to the extent consistent with its primary responsibilities to the University.

2.2 Acquisition Policy on Palm-leaf Manuscripts

The selection of palm-leaf manuscripts is shared by the Librarian and the Senior Assistant Librarian (Oriental Studies) with the assistance of the University. As no allocation of money made annually to acquire palm-leaf manuscripts, with the advice of the librarian and the oriental librarian, the management has the responsibility to allocate the funds accordingly.

The palm-leaf manuscript collection supports the research needs of the University of Peradeniya, and in particular the strategy "maintaining and developing a quality palm-leaf collection to support the historical research and publishing work of the University of Peradeniya".

2.2.1 Aims of the Acquisition policy

The library aims to provide a clear policy statement identifying acquisition principles to support, enhance and to meet the educational work and historical research by delivering primary research resources of palm-leaf manuscripts to the internal and external

patrons, researchers (faculty, staff, and students) at the University of Peradeniya. The Library serves a dual purpose such as:

- to provide scholars with primary sources for research;
- to give particular care and handling to manuscripts which - because of age, scarcity, aesthetic or financial worth, or association with notable persons or happenings – will merits special attention.

2.2.2 Methods of acquisition

1. The library purchases significant and rare palm-leaf manuscripts from the main library allocation, which has a historical value.
2. It is the policy of the university main library to acquire such palm-leaf manuscripts as they may support present and future research and teaching in the university, and also as they may contribute to the preservation of the cultural heritage of the society.
3. Acquire through donations, which are in personnel custody, temple libraries and Pirivenas (monastery).
4. In additions to the existing collection, particularly where the palm-leaf manuscripts relate strongly will be acquired.
5. The Library accepts gifts; bequest of palm-leaf manuscripts which will be useful to library users and which will strengthen the collections. There are no conditions attached to the donations and bequests.
6. Gifts, donations and bequests of all the palm-leaf manuscripts will be officially acknowledged and an itemized list of the donated titles and a detailed summary of the manuscripts will be provided to the donors upon a request.
7. The Acquisitions Division handles all the palm-leaf manuscripts received as purchases, gifts, donations and bequests.

2.2.3 Scope of Coverage

There is no such restriction or limitation regarding the year or the period of the manuscripts when acquired. All palm-leaves are accepted, regardless the date and their physical condition. No chronological or Geographical limitations are placed.

2.2.4 Subject coverage

The University of Peradeniya acquires manuscripts mainly from the following areas for the study. Buddhism, Literature, Prose and Verse, History and Tradition, Grammar, Lexicography, Arts, Indigenous medicine and Veterinary Science. Astrology, Magic and Charms, Drama, Art and Folk Lore.

2.2.5 Language coverage

The major emphasis is based on Pali, Sanskrit and Sinhalese language palm-leaf manuscripts.

2.3 Collection Management and Development Policy on Palm-leaf Manuscripts

The palm-leaf manuscripts, which are collected through private individuals, or purchased by, are made available in the catalogue, which are housed in the main library. It can only be developed and enhanced over time through the generosity of donors, and the knowledge and skill of experts, which will add to existing strengths and increase the value of the holdings for patrons. In addition to that, if the library finds important and significant collections, it will consider the value of the manuscripts and also if any of the individuals find any valuable collection it can be informed to the librarian to be added to the existing collection.

2.3.1 Authority

The Head of Oriental Studies (Senior Assistant Librarian) has the primary responsibility for the development of collection of Palm-leaf Manuscripts. The Head of Oriental Studies in consultation with the Librarian of the University of Peradeniya (UOP) will work together to manage and develop this national heritage of the library.

2.3.2 Location

The whole palm-leaf collection is stored in the Ground floor and the Basement of the Main Library which are in the drawers of the wooden cabinets. All the manuscripts are closed accessed for protection. The patron must request palm-leaf Manuscripts and the staff reserves the right to limit the number of palm-leaves given to the patron at a time.

2.3.4 Catalogue

To help locating the palm-leaf manuscripts or the particular subject of the manuscript that you are looking for, there are detailed and updated alphabetical and subject catalogues that are prepared for this manuscript collection. This card catalogues are available in paper format. Figure 3 depicts a sample catalogue card.

All the palm-leaf manuscripts in UOP are catalogued by considering the following details;

- Accession number (if accessioned)
 1. Title of the manuscript and classification no. (if available)
 2. Author (if identified)
 3. Number of leaves
 4. Length and width of the leaf, number of lines, length of the written line.
 5. Date (if mentioned in the Mss.)
 6. Language of the Mss., whether complete or incomplete Mss., missing leaves etc. (by mentioning letters)
 7. Whether damaged and availability of boards.

At the same time, in future, it is planned to use the modern technology (*Alice for Windows software*) to computerize these collections without any fatigue for the original manuscripts. In that software, all the above details could be able to fill in each separate field and it could be able to access by any of the users through Online Public Access Catalogue via UOP library web site.

Figure 3- Sample of the palm-leaf manuscript catalogue card

Acc. 224650
1. Banadaham Pota
2. Author
3. Foll 124 (k-j ^m)-3 = 121,
4. 16 in. by 21/4 in., 5 lines, 14in. (written line)
5. Date
6. Sinhala with Pali, Incomplete, Missing (g,g [^] ,c [`])
7. Damaged by insects and torn leaves. No boards
Split in the corner of the <i>Kamba</i> .

2.4 Customer Service Policy on Palm-leaf Manuscripts

This facility will be given on prior request to all the members of the UOP library those who have the membership in the main library. For non-members the following membership facility will be provided.

Table 2- Membership for none UOP students

User Category	Amount	Documentation
1. Outside Students	Free 1-5 days	A form to be filled by the student from the Librarian's office of UOP.
2. Post Graduate Researchers outside – Local	100 Rs. Per month	To be filled a "Post-Graduate Library Reader's Ticket" from the Librarian's office of UOP Main Library.
3. Post Graduate Researchers – Foreign	150 Rs. Per Week	

2.4.1 Users

The Palm-leaf Manuscript collection is available for all members of the University of Peradeniya (who have membership in the main library) and to other outside serious researchers. It is advisable to contact the appropriate divisional librarian in advance to gain membership and access to this manuscript collection.

- Library membership is essential to refer the manuscripts.
- For outside readers, it is necessary to provide identification or any other document provided by the institution to get the membership.

2.4.2 Opening Hours

The main library palm-leaf collection can be accessed on Monday to Saturday from 8.00 a.m. to 4.00 p.m. within the semesters for its entire user category. Access at other times and the days may be arranged with the circumstances permit.

2.5 Reference Service Policy on Palm-leaf Manuscripts

As these are considered more authentic and rare manuscripts the entire palm-leaf manuscript collection is stored in closed access area of the library and is locked. The reference privileges are granted according to the following rules.

1. Readers have to prove their registration/ membership of the main library.
2. Should have to provide a call-up slip or any particular form regarding the request of palm-leaf manuscripts.
3. Separate area of the reading room should be arranged for the reference of the manuscripts.
4. The fragile condition, damaged and irreplaceable nature of palm-leaf manuscripts in the library may make it necessary for the Library to limit access and have the possibility to provide the microfilmed copy.
5. The staff member designated as in-charge of the collection should attend on duty in the area to observe and supervise the users at all times to avoid any thefts, possible damages which could happen.
6. Not to allow bringing the manuscripts to other areas of the repository.
7. As these manuscripts collection are rare, readers are asked to handle the palm-leaf materials with care.
8. The reader should have to use one palm-leaf manuscript at a time.
9. Pencils only are permitted for taking notes. In particular, readers must not use ink or pens of any kind (fountain, ball point, felt tip, platignums, highlighting pens, tipex, gum or gum tapes etc.) on palm leaf manuscripts.
10. Unnecessary handling of palm-leaf manuscripts should be avoided and must not be marked, folded, leaned upon, or paper-clipped.
11. Food or drinks are prohibited in the library.
12. After referring the manuscripts should be handed over to the person in –charge.
13. No loans or inter-library loans are normally permitted. Loans for exhibitions may be permitted by the in-charge of the collection if suitable safeguard methods are adopted.
14. No researchers are permitted to obtain manuscripts from cabinets.
15. Library staff and the users should have to use the manuscripts by wearing hand gloves.

2.5.1 Fine for damage

It is a strict rule that, if a user damages, a fine for the damage should be paid and if it is a major damage, readership will be cancelled.

2.5.2 Copying service

As these are organic and closed accessed collections, the library has microfilmed the whole collection of palm-leaf manuscripts enabling the reader to get a printed copy of the leaves of the manuscripts if required.

- Microfilm reader printout can be taken.
- Copying the palm-leaf manuscripts by own using a pencil.
- No photocopying is possible except with the permission of the authorized person of the collection.

3. Proposed Preservation Policy on Palm-leaf Manuscripts

The library's current policy does not include individual conservation treatments. This policy relates to the manuscripts in the special collection of palm-leaf manuscripts, which require special preservation arrangements. It needs to cover all the palm-leaf manuscripts housed in the University of Peradeniya library. The vision, mission and goals shall guide preservation priorities as put forth by the University of Peradeniya Main Library.

The ethics of preservation and conservation of palm-leaf manuscripts are as follows.

- The written or printed texts should not be enhanced or obscured, in the process of preservation and conservation.
- The treated material should retain the original format of the document.
- The treatment should be in a way that it is able to read, handle and use.
- All conservation processes adapted by a conservator has to be reversible.
- A critical as well as analytical approach to conservation of any object is preferred.

3.1 Preventive Care Practices

Rigidly maintaining high standards within the physical environment in which library palm-leaves are stored and ensures the greatest longevity for all formats within the Palm-leaf manuscript collection.

- The storage should be designed not to disturb other palm-leaf manuscripts while retrieving one.
- Manuscripts should be arranged horizontally inside the cupboard and should need to maintain a suitable gap between two manuscripts so as to not to disturb the other ones.

3.2 Preservation Treatment Practices

It is needed to maintain a high standard in the physical treatment of palm-leaf manuscripts and promote the preservation of the item as an artefact. Preservation treatments need to be undertaken to prolong the useful life of material and the information it contains. All treatments need to be undertaken to a high standard by using appropriate tools and materials. In accordance with conservation ethics, all treatments should be judiciously minimal, and wherever possible involve minimal sacrifice of bibliographic, historic or aesthetic integrity. Appropriate measures carried out at the Library also include:

Blackening of writing: (Ancient technique of conservation)

- This is accomplished by the application of a special solution prepared by mixing resin oil or Kekuna oil and finely powdered charcoal obtained by burning the wood of "Gadumba" tree (*Trema Orientalis*).

- The resin oil is distilled and prepared from a special substance known as “Dummala” produced from fossilised roots of plants. (De Silva, 1969)
- Mainly two varieties of fossilised roots such as “Hul” (*Vateria Copallifera*) and “Dun” (*Doona Zeylanica*) (Ashton, 1997) were dug for the distillation process from under the soil. Kekuna oil is distilled from seeds.
- Get a new clay pot and make a hole diametrically 1” from 3-4” bellow at the neck of the pot and fix a bamboo or papaw stalk to the hole.
- Put the resin into a pot and add water to the ratio of 10:1 by wt. Then cover the mouth with a coconut shell and apply a thick clay layer to seal the air inlets and then keep on a hearth and fire the pot into high flame.
- Then collect resin oil drips (dark black green in colour) out from the open end of the bamboo or papaw stalk.
- The powdered charcoal and black paste of resin oil is mixed and the paste has been applied on the leaves by using a piece of cotton cloth.
- Wipe out the excess oil in the leaves by using sifted rice barn/ cotton or the sifted “Kurahan” (*Eleusine coracana*).

3.3 Reasonable Care

The Library Palm-leaf manuscript collection shall be made available to the fullest extent possible without potential damage to the manuscripts. Especially staff and users are responsible for any palm-leaf manuscripts they use and they should always handle all palm-leaves carefully to avoid any damage. Basically following methods are applied for the care of the palm-leaf manuscript collection in the Main Library.

- Reasonable care of all the palm-leaf manuscript collection of the library includes delineated in the Preservation Policy.
- Library staff is authorized to clean and maintain, or provide daily care to each manuscript of the palm-leaf collection.
- Manuscripts are housed in a restricted access area. All re-arrangements are done by authorized staff of the Library.
- Researchers and staff using Palm-leaf Manuscripts division must handle all manuscripts with extra care and observe additional regulations concerning the use of valuable manuscript collections.
- The restoration or maintenance of manuscripts will be carried out either by staff or by authorized individuals under their direction.

3.4 Environmental Control

Specifications for the upgrade and maintenance of climate control in storage areas should be arranged. Climate control includes the establishment and maintenance of temperature, humidity, ventilation, filtration and light levels that will minimize damages to manuscript collections. Institutional pest control procedures and the management of conditions that support pest infestations are part of the environmental control responsibilities, which is normally done by the University Health Center.

3.4.1 Temperature:

As Sri Lanka is a tropical country, maintaining of an ideal temperature in the storage area of the repositories is difficult as it fluctuates but,

- Provision of standard air-conditioners is used to controlling temperature inside the storage area.
- The ideal temperature for palm-leaves is 21.1° C (70° F). (Joshi, 1995)
- It should also function for 24 hours a day, 365 days a year.
- Deposit all the palm-leaf manuscripts, which are scattered, in various places inside the repository in this controlled area for its protection.

3.4.2 Humidity:

In order to control the cold temperature inside the storage area,

- De-humidifiers need to be used to normalize the relative humidity to protect from fungi, insects and brittleness of the manuscripts.
- Or Silica Gel in a small enamel bowl can be placed in the storage areas to control the humidity level. Approximately 500 gms of Silica Gel is sufficient for an enclosed space of 1 cu. m. or to be placed inside the cupboard. (Agrawal, 1993)
- Or exhaust fans, wall fans or table fans are used for the storage area of the manuscripts.
- The optimum relative humidity ranging from 50% - 60% are most desirable to palm-leaf collection. (Joshi, 1995)

3.4.3 Light:

As sunlight and tube lights weaken the manuscripts fixing curtains or closing windows could block the sunrays.

- If fluorescent tubes are used, ultra-violet filters to be put over the light tubes.
- Switch on the area when only needed to use the storage area for cleaning, retrieving or supervision etc. and switch off extra lights in the area.
- Incandescent lamps are more feasible which are the safest and contains less ultra-violet rays.
- Access of direct sunlight into the storeroom should be avoided.

3.4.4 Control of biological infestation

To control the biological infestation the following good house keeping methods need to be practiced.

- Regular inspection of the storage area is needed.
- Should provide adequate preventive measures to control the conditions.
- The materials should not be kept undisturbed for years.
- Apply wood preservatives and keep naphthalene balls or flakes inside the cupboard or boxes or drawers as a repellent of insect.

3.4.5 Security

The manager and the in-charge of the palm-leaf manuscript collection will work together to identify and resolve issues regarding the security and protection of the collection.

3.4.6 Cleaning Programmes

General cleanliness, awareness, tidiness and periodic inspection should be carried out in the storage areas of the repositories. Should undertake the good house keeping practices such as:

- Low vacuuming with special care for deteriorated manuscripts and dusting the collection periodically by using a soft cotton clothe or soft brushes (camel brush) are essential.
- Wiping the floor or vacuuming or brooming could be undertaken to clean the floor of the storage areas.
- Should undertake minor repairs of materials such as provision of boards and yarn for the manuscripts.
- New acquisitions should be cleaned before depositing the collection.
- Training for cleaning, handling and re-shelving of the palm-leaf manuscripts is essential and also not to allow placing one over the other.
- When needed, tie the loose manuscripts.
- When cleaning, a random sample of the collection to be examined in order to check the effectiveness of the environmental factors.
- If the palm-leaf manuscripts have any defects, segregate the suspected material from the collection.
- Specific instruction to be given to clean the remote corners of the cupboards, behind cabinets, top of the boxes and all surfaces where dust and dirt have accumulated.

4. Recommendations

The University of Peradeniya has already conducted the above-mentioned policies except the preservation policy, as the library does not have the expertise and the conservation unite to undertake the physical maintenance of the collection. The lack of trained staff is another draw back to implement the curative conservation of the manuscript collection. The formation of preservation policy is a fundamental requirement that the library is needed.

The Library seeks to organize and promote preservation as an integral part of the management of the Library, and to ensure a rational use of palm-leaf manuscripts. Though the University of Peradeniya Library has no Preservation Department/ preservation policy that currently practiced, aims to raise awareness of the importance of palm-leaf manuscript preservation, and of the need to identify priorities for preservation in the library as a whole. What ever the policies practiced in the University of Peradeniya, the specific recommendations can be put forward regarding the preservation of palm-leaf manuscripts of significant bibliographical, historical or aesthetic value, which should be preserved for the benefit of researches and scholarships. Consideration is also given to the rarity or uniqueness of the manuscripts in our collection, their national or cultural significance, and to our own local needs and special interests.

4.1 Establishment of preservation Department

According to the users of the repositories,

- The preservation department should be formalised to undertake the various activities as a separate building from the repository or inside the repository is needed.
- If these departments could not be established, it should have one person designated to address the preservation and conservation activities in the repository.
- Professional training should be given to this officer at the Department of National Archives of Sri Lanka. If the funds are adequate and permitted, a foreign training too should also be given.

4.2 Preservation programmes and training

Staff education programmes such as training in sound technical knowledge, preservation surveys, general awareness programmes should be in operation with the preservation policy. Training should be organised for selected members of staff recommended for the protection and salvage of palm-leaf manuscripts in emergencies and to ensure that an adequate pool of staff is available when required.

- Need to share this responsibility for education of staff and users of the Library in basic preservation and conservation practices.
- The collection in-charge and the management should be responsible to give instructions to users for proper care and handling of library palm-leaf manuscript collection.
- At least one person of the staff should have to obtain the detailed technical knowledge from a reputed organization in Sri Lanka such as Department of National Archives or Sri Lanka National Library and Documentation Services Board or National Museums.

In addition to this the following areas of the preservation is needed at least for basic practice:

- Knowledge and training of handling sophisticated machinery, equipment and tools.
- Measuring the temperature and humidity data daily.
- Proper reporting of damages or defects and the physical environment.
- Detailed technical knowledge.
- Microfilming.
- Instructions on proper manuscripts handling techniques and proper deposit.

4.3 Condition Surveys

Condition surveys of palm-leaf collection are needed to practice to gather data that is needed to evaluate treatment priorities, storage requirements, and to take decisions to practice good house keeping methods.

4.4 Advisory service

If there is a properly arranged service system, most of the flaws in palm-leaves could be minimised. As some are not aware to use the techniques, equipment and chemicals, this would be helpful to create joint venture between the expertise in the field. In Sri Lanka, the reputed national level institutions are the National Archives and the National Library and Documentation Board where the preventive conservation is practised.

5. Conclusion

The University of Peradeniya library being the oldest and the largest academic library and is holding the largest collection of Palm-leaf manuscript among the University libraries in Sri Lanka, the importance of having policy documents and practices are vital. Most probably this library serve as a leading advisory service to other libraries, the establishment of archives for management of oriental and other documents is nationally important for our future generations as the modern readers are not much aware of the traditional materials which contain eyewitness testimony.

At present the financial constraint is the more serious problem to implement the preservation arrangements in the library and due to which, it will take time for the establishment of the conservation and preservation units within the library. Though the other policies could be able to practice in the library it is essential to have a strong scientific background for treating damaged or deteriorated manuscripts in the Peradeniya library.

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