

## DIGITAL PRESERVATION OF MANUSCRIPTS: INITIATIVES IN INDIA

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**India perhaps has more collection of manuscripts than any other country in the world. Approximately five million of manuscripts are scattered throughout the country which are written on different material and in different scripts and languages. These precious treasures of knowledge are deteriorating with time and are immediately calling for proper care and maintenance. Currently, a number of methods and techniques are available to safe guard the manuscripts but the present study deals with the digitization including the different methods of digital conservation and preservation. The study discusses the initiatives taken by some prominent organizations and agencies in India for digital preservation of the manuscripts.**

**Keywords:** Manuscripts; Preservation; Digital Preservation; National Archives of India; Indira Gandhi National Centre for the Arts; National Mission for Manuscripts.

### INTRODUCTION

India contains the 'memory of the world' in the form of possessing vast manuscript wealth. The manuscripts of India symbolize sophisticated thoughts and the most everlasting ideas captured through language. They are featuring hundreds of themes. In India, each manuscript possesses history in itself that have been written over thousands of years in different languages [1]. The manuscripts are basically first hand-written information created by one or more people in varied languages and scripts on paper, cloth, bark, metal, leaf or on any other stuff in any work of art. The manuscripts are invaluable legacy of mankind with great intellectual value. India possessed the largest and oldest collection of manuscripts in comparison to the rest of the world. In fact, the manuscripts are extensively available everywhere in India in huge numbers that we are unable to take a rough estimate of their availability and location. This priceless wealth in the form of manuscripts are held by libraries, museums, archives, trust, temples, mosques and are also owned by some private custodians.

Libraries play a vital role in the collection development of these valuable manuscripts. Libraries as social institutions, not only serve the society by fulfilling its present information needs but also preserves the knowledge for future generations [2]. The manuscripts are the most important sources of knowledge to learn the cultural heritage of humankind. The effective utilization of knowledge hidden in manuscripts has recently been recognized as an essential tool to fill the gaps of our socio- cultural understanding of the traditions. So it is therefore necessary to preserve the manuscripts for current as well as for the future use [3].

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The digital preservation is now more suggested and followed, as it can preserve the manuscripts with its own physical features and contents. With the help of digital preservation of manuscripts, their use has been increased to a greater extent. The accessibility to such collection makes them the important resources of the library. Without digitization, the manuscripts remain obscure and out of sight [4].

### DIGITAL PRESERVATION

Manuscripts are invaluable inheritance of mankind and records of great intellectuals of the ancient and the present times. They conserve information, thoughts, views and evidences of human progress. These resources are very crucial for the development of the present and the future generation. The loss or damage caused to these rare resources is irreplaceable, because they are the original evidences of the textual communication. Today, the preservation of manuscripts is considered as the most difficult problem in libraries because of their fragile and subtle nature. With the digitization of manuscripts, users from all over the world can access the manuscripts as its images through the web. Beside this, users can also view the images of manuscripts offline by using a higher resolution uncompressed master file [5]. **Hasan, Azim & Bedar** [6] have discussed about the drastic changes happened in the world over the last decade about the advancement of many new tools and techniques to preserve our valuable and unique heritage. There have been adequate advancement in the field of information technology and these have made the glorious changes and touched each and every activity of libraries and information centers. Nowadays, the technology has brought the great opportunity to the field of preservation of manuscripts including digital preservation.

### NEED OF DIGITAL PRESERVATION OF MANUSCRIPTS

Digital preservation is the management of digital information over time. It takes the form of processes and activities that ensure the continued access to information. It includes all kinds of records, both scientific and cultural heritage, that exist in digital form. The aim of digital preservation is long-term, error-free storage of digital information with proper means of retrieval and interpretation.

According to **Parekh & Parekh** [7] “digital preservation refers to preservation of materials that are created originally in digital as well as those converted from legacy documents and artifacts into images using scanners, digital cameras, or other imaging technologies for access and preservation purposes”. A majority of manuscripts are paper and leaf based which have a limited life. More so their ageing, deterioration, mishandling, direct human access and intervention, weather, fire and bugs put them to a greatest risk of permanent extinction. These cultural assets and treasures of information can best be replicated, reproduced, preserved and transmitted for easy use [8]. Digital preservation is the series of management policies and activities necessary to ensure the enduring usability, authenticity, discoverability and accessibility of content over the very long-term. Briefly, the digital preservation of manuscripts is needed for the following reasons:

- Promoting access to manuscripts.
- Preservation in a longer lasting medium.
- Reducing handling of very fragile or frequently used original manuscripts.
- Maintaining historical value of information and preserving the national cultural heritage.
- Accessing the information and digital resources.
- Simultaneous access to multiple users.
- Generation of any number of copies.

### DIGITAL PRESERVATION INITIATIVES OF MANUSCRIPTS IN INDIA

The manuscripts are selected, acquired, and preserved to make them accessible for use. Intellectual and physical accessibility are vital components of managing these information resources. Different repositories are having different types of manuscript collection useful to scholars. Apart from providing the physical access to the users, the repositories help to preserve the original forms for future use. In India, a number of projects have been initiated by different organizations for the preservation of these valuable manuscripts in digital format. There are a number of national level organizations which are working for the preservation and conservation of the country's rich cultural heritage. Government of India has taken a number of

initiatives for conserving and preserving cultural heritage of our country. A scheme of financial assistance was also taken by the Department of Culture, Government of India under which it gives financial assistance to voluntary organizations, educational institutions, libraries, museums and universities for preservation, listing, cataloguing, evaluation and publication of manuscripts. The different initiatives and projects taken by the governmental and non-governmental agencies in India can be mentioned as:

### National Archives of India

National Archives of India (NAI) is a repository of the non-current records of Government of India and possesses private papers of prominent personalities of India. The main initiatives taken by the archive are:

- **Microfilming:** For preserving the cultural heritage of the country, NAI created a facsimile of the original manuscripts by microfilming the whole collection of documents. Since 1998, NAI has taken up the conversion of the analogue microfilm images into digital and has integrated the same with the metadata of the record holdings to keep pace with the changing environment in the field of Information Technology.
- **Digitization of Rare Manuscripts:** In July 2000, NAI in collaboration with Department of Science and Technology and National Institute of Advanced Studies, Bangalore started a pilot project for digitization of rare manuscripts. In CD medium, rare manuscripts have been digitized and stored such as Bhagwadgita, Ramayana, Mahabharata, etc. [9].

### National Library of India, Kolkata

National Library is the largest Library in India which is considered as an institution of national importance. The responsibility of the library is to collect, disseminate and preserve the printed heritage of the country. It is also one of the oldest institutions of the country which is primarily responsible for the conservation and maintenance of the bibliographic documents in various fields of knowledge in our country. The main initiatives taken by the library are:

- **Down Memory Lane:** ‘Down Memory Lane’ is a digitization programme initiated by National Library of India, Kolkata, to digitize manuscripts along with other rare books and documents from its collection.
- **Digitization of Manuscripts:** The library started digitization of manuscripts with respect to the growing use and adaptability of information technology to libraries and library related activities. A sample project was undertaken by the National Library with the objective of better understanding on the different issues pertaining to the digitization of manuscripts. The library has completed digitization of seventy two lakh pages from 21,425 rare documents. These are available to the users within the Library [10].

### Indira Gandhi National Centre for the Arts

Indira Gandhi National Centre for the Arts (IGNCA) is an autonomous institution under the Ministry of Culture, Govt. of India. It acts as a main resource centre for the Indian art and culture. It carries out research and publication programmes and arranges exhibitions, conferences, workshops and seminars. The main programmes of the center are:

- **Cultural Informatics Lab:** In 1994, IGNCA established Cultural Informatics Lab. It acts as a main central place of digitizing manuscripts, slides, books, audio and video to safeguard the repository for present and future. The contents developed by Cultural Informatics are accessible to the whole world through CD-ROMs, Kalasampada and through IGNCA website.
- **Kala Nidhi:** Kala Nidhi is a reference Library of books, manuscripts and visuals. This library has a collection of more than 1.5 lakhs of books in twelve languages, including some foreign languages and a subscription of more than 250 research and technical journals. The library is fully automated, providing easy access to its resources through Online Public Access Catalogue (OPAC), and has been organized scientifically as per internationally accepted standards.
- **Kala Nidhi Reprography Unit:** It has initiated a manuscript-microfilming programme a few years back. The Reprography Unit has microfilmed over 2.78 lakh manuscripts in 21722 microfilm

rolls. All the rolls have been duplicated, digitized and catalogued.

- **Information and Data Bank:** IGNCA has developed several unique computerized multi-media databases and information systems to preserve the vast cultural heritage in various forms and make it accessible for research and development. Special efforts have been made to network these programmes with various institutions inside and outside the country.
- **Kalasampada:** In association with Ministry of Communication and Information Technology, IGNCA established Kalasampada which is a "Digital Library: Resources of Indian Cultural Heritage (DL-RICH)". The Digital Library has a collection of over 50 lakh folios of manuscripts, one lakh of slides, thousands of photographs, books by IGNCA, and over 400 hours of audio and video tapes and above 50 walkthroughs [11].

### National Mission for Manuscripts

In February 2003, Ministry of Culture, Government of India took an initiative for the Indian manuscripts by establishing National Mission for Manuscripts (NMM). It is an autonomous organization commenced for creating a national database of surveying, locating, and facilitating curative and preventive conservation of manuscripts. It provides a comprehensive access to the manuscripts and to build a National Manuscript Library. The main initiatives taken are:

- **Kritisampada:** Kritisampada is a National Electronic Database of Manuscripts. It is a web-based national database of manuscripts launched by NMM on 14 February 2007. It is a first of its kind online catalogue of Indian manuscripts. As of December 2015, NMM has documented 41,12,000 manuscripts.
- **Digitization of Manuscripts:** In 2004, NMM instigated a pilot project of digitization to create a digital resource base for manuscripts which was completed in 2006. The intention of creating such a resource base was to preserve the wealth of knowledge contained in manuscripts by

developing a reliable policy for digitization. NMM now in the third phase of Digitization i.e., upto December 2015 NMM has digitized 2.53 crore pages of 2.11 lakh manuscripts and the phase will come to an end in 2017.

- **National Digital Manuscript Library:** This Digital Manuscript Library is an online database which provides access about all human facts in the form of manuscripts of our country. National Manuscript Library is a hybrid library situated in the premises of IGNCA containing both online as well as offline digital collection. Digital collections are available on the intranet only in the building of IGNCA. This library provides a gateway to Indian Digital Manuscripts Libraries in science, arts, culture, music, traditional medicine, vedas, tantras and many more disciplines. The result will be a unique resource accessible to everyone, without regard to socioeconomic background or nationality [12].

### Khuda Bakhsh Oriental Public Library

Khuda Bakhsh Oriental Public Library is a unique repository of about 21,000 Oriental manuscripts and 2.5 lakh printed books. It is perhaps well on its way to become the country's first library to computerize its hand written collection for universal dissemination through Internet. The main initiatives taken are:

- **Digitization of Manuscripts:** A project of digitization and creation of a database of manuscripts has been taken up with a view to consider the following:
  - Conservation;
  - Access;
  - Publication on demand and
  - Preservation of the digital images.

The pilot Project of Digitization of 10,00,000 pages of manuscripts has been entrusted to National Informatics Centre Services Incorporated (NICS). The work is expected to be completed in a few months. At present, 1,214 manuscripts covering 3,57,915 folios have been completed for use [13].



## Rampur Raza Library

The Rampur Raza Library is a treasure house of Indo Islamic learning and arts. The library has a collection of nearly 17,000 manuscripts, 60,000 printed books, nearly 5,000 miniature paintings, 3000 rare specimen of Islamic calligraphy, Nawabi antiquities. Besides, it consists of centuries old astronomical instruments and nearly 1500 rare gold, silver and copper coins datable from 5th century B.C to 19<sup>th</sup> century A.D. The library is also very rich in Mughal and old rare antiquities. It has also a collection of Palm leaf manuscripts in Tamil, Telugu, Kannar and Malayalam languages.

- **Digitization:** The work of digitization has been out sourced by a reputed firm from New Delhi which prepares the digital images at 300 dpi in JPEG and TIFF files along with the back up in DVDs. In the first phase, the library planned to digitize 25,00,000 pages, of which 14,00,000 have been digitized which covers the period from 2006 to 2012 [14].

## Nehru Memorial Museum and Library (NMML)

The Nehru Memorial Museum and Library (NMML) is an institution of advanced academic research in the field of Modern Indian History and Contemporary Studies. The Manuscripts Division acquires, preserves and makes available the papers of distinguished individuals and institutions to scholars.

- **Digitization:** The NMML has started the digitization and microfilming of its artifacts and about 19,423 photographs and five lakh pages of manuscripts have been digitized to enhance the accessibility of archival material. The NMML provides access to its digital collection through facebook and a link has been also given to YouTube from the NMML website.

## The Asiatic Society

The Asiatic Society, Kolkata, founded by Sir William Jones, a great scholar and a judge of Supreme Court of Bengal on 15th January, 1784. It is an autonomous body under the Ministry of Culture, Government of India.

- **Digitization:** Since 2011, the in-house project for Digitization of Manuscripts, rare books and other archival documents of the Society, more than 15,000 pages have been digitized so far. In

the present year, a total of 6750 pages, 48 manuscripts, 1 album, 3 rare books and 5 plates have been digitized.

## CONCLUSION

Manuscripts are considered as the rich sources of knowledge which connects us with the past related to the history, culture, literature, tradition and civilization of a country. Such invaluable and precious wealth connotes a great deal of care and proper maintenance especially in libraries and museums. As we know that the manuscripts are available in different forms, formats and media. They are deteriorating day by day due to various reasons such as fungus, fire, insects and human negligence. The deterioration is the rule of nature, but the initiatives that have been taken are not enough to preserve and conserve the reservoirs of knowledge in the form of these manuscripts. There should be a comprehensive policies and technology driven platforms which should emphasize on the conservation of the contents along with the physical preservation of the manuscripts. With the help of digital preservation, it is now possible to preserve the manuscripts with its own physical features and contents. There are different organizations and agencies that are working in India for preserving the manuscripts from deterioration using digital preservation techniques and methods. These organizations have taken different initiatives in different aspects of digital preservation of manuscripts and that these should give due significance to the suitability in terms of infrastructure, outsourcing agencies, proper funding, complete awareness, newer techniques, and more importantly the manpower, because without well-trained professionals, scientific preservation can never be possible.

## REFERENCES

- [1] Ministry of Tourism and Culture, 2007. Manuscripts. Retrieved March 22, 2017 from <http://indiaculture.nic.in/sites/default/files/annualreports/MoC%20Annual%20Report%202006-2007.pdf>.
- [2] Ameen, K. & Shafique, F. Oriental Collection in the Punjab University Library A Case Study. *TRIM* 5(1), 2009, 1-18. Retrieved April 11, 2017 from <http://ojs.uok.edu.in/ojs/index.php/crdr/article/viewFile/141/129>.

- [3] Sarasvathy, P., Giddaiah, D. & Selvaraja, A. A bird's eye view of digital preservation of manuscripts in India. *Managing College Libraries: Issues and Trends*, 2011.
- [4] International Federation of Library Associations and Institutions, 2015. Guidelines for Planning the Digitization of Rare Book and Manuscript Collections. Retrieved April 12, 2017 from <https://www.ifla.org/files/assets/rare-books-and-manuscripts/rbms-guidelines/guidelines-for-planning-digitization.pdf>.
- [5] Fazluddin Ahmed. Digitization as a Means of Preservation of Manuscripts: Case study of Osmania University Library". In 7<sup>th</sup> International CALIBER 2009, Pondicherry University, Puducherry, 25-27 February 2009, INFLIBNET Centre, Ahmedabad, 93- 97.
- [6] Hasan, N., Azim, M. & Bedar, S. Digital preservation of rare books & manuscripts: a case study of Aligarh Muslim University. *International Research: Journal of Library & Information Science*, 6(4), 2016. Retrieved March 22, 2017 from <http://irjlis.com/wp-content/uploads/2017/02/1-IR-379-64.pdf>.
- [7] Parekh, Y.R. & Parekh, P. Planning for digital preservation of special collections in Gujarat University Library. In 7<sup>th</sup> International CALIBER-2009, Pondicherry University, Pondicherry, 25-27 February, 2009, INFLIBNET Centre, Ahmedabad.
- [8] Rattan, P. & Singh, R. A Study of Government Initiatives of Digitizing Manuscripts in Punjab (India). *International Journal of Multidisciplinary and Current Research*, 2, 2014. Retrieved March 28, 2017 from <http://ijmcr.com/wp-content/uploads/2014/09/Paper3909-914.pdf>.
- [9] National Archives of India, 2017. About us. Retrieved March 22, 2017 from <http://nationalarchives.nic.in/>
- [10] National Library of India, 2017. Digitization. Retrieved April 18 2017, from [http://www.nationallibrary.gov.in/nat\\_lib\\_stat/conservation.html](http://www.nationallibrary.gov.in/nat_lib_stat/conservation.html).
- [11] Indira Gandhi National Center for the Arts, 2017. Digitization. Retrieved April 18, 2017 from <http://ignca.nic.in/>
- [12] Ministry of culture report, 2016. Annual report. Retrieved April 18, 2017 from <http://indiaculture.nic.in/sites/default/files/annualreports/Culture%20Annual%20Report%202015-16%20ENG%20for%20Mail.pdf>.
- [13] Khuda Bakhsh Oriental Public Library, 2017. Digitization of Manuscripts. Retrieved April 15, 2017 from <http://kblibrary.bih.nic.in/Digitization/Digitisation-introduction.pdf>.
- [14] Rampur Raza Library, 2017. Computerization and Digitization. Retrieved April 17, 2017 from, <http://razalibrary.gov.in/Razalibnew/ComputerizationandDigitization.html>.