

Capacity-Building Through Digitization, Electronic Records Management And Other Means for Archives: Indian Scenari

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Abstract

This paper is an attempt to understand as to how digitization and electronic records management and related efforts have made effective changes in the working of Indian Archives and similar/ ancillary institutions dealing in traditional knowledge management and related task. In this regard, effort would be made to understand National Mission for Manuscripts (NMM) and National Archives of India (NAI) and their initiatives concerning digitization and e-records management in the recent years. Similar attempt are being made to understand the digitization and related efforts being made at Archival Cell, A.C. Joshi Library, Panjab University, Chandigarh as a case study of regional repository/university and how far it supports the national initiatives in this regard. Thus, overall, the focus would be to see and analyse capacity-building programmes in Indian archives.

Keywords: Capacity Building, Digitization, Electronic Records, Management, Archives, Digitization - India

1. Introduction

Archives are the custodian of non-current series of government records, private papers, manuscripts, rare books, etc. These and similar literature is very essential for history writing, policy making and related needs. With the liberalization and globalization trends assuming significance around 2000, Archives in India also made a road-map on the advice of International Council of Archives to shift from manual to electronic environment for records management and their related needs to facilitate the end-user. This paper is an attempt to understand as to how digitization and electronic records management and related efforts have made effective changes in the working of Indian Archives and similar institutions dealing in traditional knowledge management and related task. In this regard, effort would be made to understand National Mission for Manuscripts

(NMM) and National Archives of India (NAI) and their initiatives concerning digitization and e-records management in the recent years. Effort would also be made to understand the digitization and related efforts being made at Archival Cell, A.C. Joshi Library, Panjab University, Chandigarh and how far it supports the national initiatives in this regard. National Mission for Manuscripts (NMM) had been constituted in 2004 to create national catalogue of Indian manuscripts and digital repository whereas National Archives of India is the national repository of government records in India. These two organizations under the Ministry of Culture, GOI have much stack in systematizing cultural/archival literature and bring them to the public domain for intellectual dissemination.

1.1 Capacity Building

Capacity building or development is the process by which individuals, groups, organizations, institutions and societies increase their ability to: perform



core functions, solve problems, define and achieve objectives, and understand and deal with their development needs in a broad context and in a sustainable manner.¹ Digitization means acquiring, converting, storing and providing information in a computer format that is standardized, organized available on demand from common system. Manuscripts/Rare Literature is converted into compressed digital formats with specialized scanners and store systematically for future reference.² According to National Archives of Australia (NAA), Electronic or Digital Record include ‘word processed documents, emails, databases and images’. While many records are printed and kept in paper or hard copy format, increasing business activities are conducted in a purely digital context. As such, organizations (including academic) need to be able to capture these electronic records to ensure an effective and efficient business environment that can provide evidence of organization’s activities and fulfil legislative requirements. Those electronic records that are identified as being of continuing value need to be managed in such a way that they remain accessible. Electronic records can be stored throughout an organization in a variety of ways, i.e., in databases, or hard drives, in shared folders, in email accounts. In order to effectively manage the electronic records being produced by an organization a method of capturing records using an Electronic Records Management System (ERMS) needs to be implemented.

1.2 E-Records

E-records are the electronically recorded information, documents or data that provide evidence of policies, transactions and activities carried out in e-government and e-commerce environments from the pillar of the subject of e-records management. E-records are strategic and operational assets vital

to the operations of the state. They are the treasure trove for any research, be it on the social issues, policy making, or for that matter the scientific subjects. They need to be protected and used for the benefits of citizens. Like traditional paper records, e-records support the day-to-day operation of government services and interaction with citizens, private and public sector partners. It is important to understand their usefulness, particularly in the developing country scenario it is very important to catch pace of development with the developed world or at least making a good move in this direction. As government services are going to be online, e-records will become basis, for instance, of confirming pension and other entitlements; registering birth and deaths; verifying citizenship and certifying voting rights; enabling collection of taxes, supporting financial management and supporting litigation.³

1.3 Why Capacity Building?

The challenges brought about by new technologies in general and e-records management in particular require that records and archives management staff be equipped with new skills and competencies through training or retraining to be able to effectively operate and undertake projects in an e-environment. One of the directives by International Council of Archives in 2004 maintains that e-government services are delivered using new ICTs, the intended benefits will be compromised unless the issue of capacity building is addressed noting that failure to address this issue could lead to reduced government effectiveness; increased operating costs; gaps in recorded memory; reduced public access to entitlements; erosion of rights; and weakened capacity for decision making. The issue of e-records capacity building is more imperative given that governments are increasingly under public pres-

sure to demonstrate that they are accountable to the courts and the legislature and that they are committed to efforts to root out corruption or malpractice.⁴ The Right to Information Act 2005 in India mandates the Government of India to take necessary steps on the above line. National Archives of India started their digitization drive around the same time and National Mission of Manuscripts under the Ministry of Culture took a bold step to first catalogue and then to digitize these manuscripts in India in the year 2004-05.

The International Council of Archives and its Eastern and Southern African Regional Branch maintains that staff competencies, skills and tools needed to manage e-records in particular, have not been adequately developed in many public sector organizations specially in developing countries. This situation is complicated further by the fact that at policy level, senior officials and legislators are often unaware of the requirement to manage electronic records over time so that the evidence base of government will be secure and accessible when needed by authorized users.⁵

1.4 Problems & Challenges

Government authorities often have little knowledge about the management of records. Officials are unsure as to whether the electronic information they create and receive constitutes official records and if so how they should deal with them. Similarly, IT experts tend to promote the use of technology to create and share electronic information but pay little or no regard to the preservation of this information as unchangeable evidence over the time. National Mission of Manuscripts in India devised a standard in association with National Informatics Centre and the Department of Information Technology,

Government of India in 2004 but not much efforts have so far been made to bring all IT and libraries under its frame. Consequently, records management in general and e-records management in the developing world is severely under resourced, resulting in inadequate capacity and skill gaps. In addition, the move to information technology has created new skill requirements that need to be addressed as a matter of urgency if the Asian and African nations are to protect and preserve the records they require as evidence for their operations and to protect their citizens' rights and entitlements.⁶

1.5 Indian Scenario

In India, organizations like National Mission for Manuscripts, National Archives of India and few selected libraries initiated the capacity building programme to systematically convert their literature into digitized mode and thus made an attempt to catch the western world in sharing the e-resources, making the end-users having quick and easy retrieval of the academic resources, also help the government organizations cater to the needs of RTI related queries. However, our emphasis is more on facilitating research. Thus, here an attempt would be made to understand the work of NMM and NAI along with digitization work carried out at our Archival Cell, University Library, Panjab University, Chandigarh.

2. National Mission For Manuscripts (NMM)

The National Mission for Manuscripts was established in February 2003, by the Ministry of Tourism and Culture, Government of India. A unique project in its programme and mandate, the mission seeks to unearth and preserve the vast manuscript wealth of India. An estimate suggests that India possesses five million manuscripts, probably the largest col-

lection in the world. These cover a variety of themes, textures and aesthetics, scripts, languages, calligraphies, illuminations and illustrations. Together, they constitute the 'memory' of India's history, heritage and thought. These manuscripts lie scattered across the country and beyond, in numerous institutions as well as private collections, often unattended and undocumented. The National Mission for Manuscripts aims to locate, document, preserve and render these accessible – to connect India's past with its future, its memory with its aspirations.

2.1 Objectives of NMM

The Mission on its outset had the following objectives:

- ❖ Document each and every manuscript and manuscript repository, for a National Electronic Database that currently contains information on one million manuscripts making this the largest database on Indian manuscripts in the world,
- ❖ Conserve manuscripts incorporating both modern and indigenous methods of conservation and training a new generation of manuscript conservators,
- ❖ To promote access to manuscripts through publication of critical editions of unpublished manuscripts and catalogues, and
- ❖ To facilitate public's engagement with manuscripts through lectures, seminars, publications and other outreach programmes.

2.2 Challenges before the Mission

However, it was not an easy task before the Mission as there were manifold challenges owing to the

diverse plural culture of India. Some the challenges were as follows:

- ❖ The manuscript wealth of India is estimated at around five million and is perhaps the largest collection of the world.
- ❖ It is available in several languages and scripts many of which can no longer be read.
- ❖ They are available in different kinds of repositories – ranging from museums, institutions of learning to private homes and houses of worship, big and small.
- ❖ These have been neglected for decades and some of them are in very poor physical state – insect ridden, fungus infected or brittle, fading and fragile.
- ❖ There is a major lack of connection between so-called 'modern knowledge' and the knowledge contained in manuscripts. For instance, scholars who can study and use manuscripts are fast disappearing and a new generation of scholars is not able to rise to the challenge.
- ❖ With world-wide interest in traditional systems of medicine, such as Ayurveda and Unani, building science such as Vaastu Shastra and in older canons of literature and philosophy, there is revival search for manuscripts.
- ❖ Manuscripts need to be saved for their importance as records of India's past, society, culture and politics – as records of India's memory.

2.3 Digitization

Digital technology has opened up a new perspective in the field of data storage. The World Wide Web holds millions of websites and the Internet is

now integrally and universally linked with research, teaching, expression, publication and communication of information. Libraries and Archives are society's primary information providers as far as cataloguing and processing of data is concerned. Besides preserving and providing access to 'born digital material', a large number of libraries nowadays have also turned to creating digital surrogates from their existing resources.

These guidelines are aimed at decision makers, archivists, library managers, and curatorial and technical staff members. The reasons for implementing a digitization project, or more precisely for digital conservation of non-digital source material, are varied. Some of the important factors discussed by the NMM committee in its first meeting as follows:

2.3.1 Enhanced Access

This is the most obvious and primary reason, mainly for research purposes. Where there is high demand from users and the library or source has the desire to improve access to specific collection, digitization obviously is the first choice. Services to the expending user groups can be improved by providing enhanced access to the institutional resources with respect to education and lifelong learning.

2.3.2 New forms of access and use

The main purpose in this case is to enable the use of such originals that cannot be consulted without a visit to the specific repository, as also those originals that are fragile or damaged and where technology is needed to reveal the content and shape.

2.3.3 For Preservation

The purpose is, in the first place, to create accurate reproductions of the original documents on a long

lasting medium. These reproductions need to satisfy both, users of today and future potential users, and both must, therefore, be of high quality and possess a physical stability that can be maintained over time.

2.3.4 Reduction in handling

Reduce the handling and use of fragile or heavily used original material and create a 'back up' copy for endangered material.

2.4 Process of Digitization

In course of finalizing the process of digitization in India, NMM took the help of National Informatics Centre and also the prevailing trends available in Library of Congress, and other important European and other libraries and Archives around the globe. After a detailed survey and several meetings, they finalized eleven Steps necessary for a manuscript or historical material to be digitized. These include: Selection of Material, Treatment/Conservation/Handling of Materials, Selection of Equipment, Image Capture, Digital Conservation, Digital Image Processing and Cleaning, Out-put Specification, Metadata Creation, Quality Control, Integration, Storage and Management of Digitized Images, Retrieval and Migration Policy.⁷

2.5 Achievements and Capacity-building so far

Based on its several meetings, NMM undertook some bold and collective decisions which helped them to identify and create a network of partner institutions at various levels involved in manuscript documentation, preservation, and digitization. As proposed in its mandate, these steps and decisions helped capacity-building programme in this arena a great push. Some of these steps as follows:⁸

- ❖ Set up 57 Manuscript Resource Centres across the country.
- ❖ Set up 33 Manuscript Partner Centres.
- ❖ Set up a web based National Database of Manuscripts with information of Two Million Manuscripts.
- ❖ Broad-based information on manuscripts through the National Survey in 23 States of India in the first instance and 3 more States covered through the Post Survey.
- ❖ Set up 50 Manuscript Conservation Centres across the country.
- ❖ Set Standards on Storage and on Preventive Conservation of Manuscripts.
- ❖ Capacity-building in Conservation through training Workshops. An estimate suggests that 161 preventive conservation, 18 curative conservation workshops have already trained 4610 manpower in India.
- ❖ Broad-based Preventive Conservation through more than 200 Manuscript Conservation Partner Centres.
- ❖ The Standards and Benchmarks on Digitization of Manuscripts received for 3rd phase of digitization which has already been published on the website.
- ❖ A total of 1.02 Lakhs of Manuscripts have already been digitized in the 1st and 2nd Phase, however, the outcome of the third phase is awaited.
- ❖ Setting up of National Manuscript Library (Digital) at IGNCA, New Delhi is already on the way.

- ❖ Built up Manuscript Studies Skills through short-term courses, advanced courses and projects for students for critical editing are already on the way. This will help in the creation of resource pool of manpower in Manuscriptology and Palaeography. In this regard, 43 basic level, 16 advanced level and 31 seminars have been completed by the end of 2013.
- ❖ Revived and supported the New Catalogus Catalogorum of the University of Madras.
- ❖ Launched lecture series, seminar series and bi-monthly publication in the area of manuscript and related researches. In this regard, so far 4 volumes of Tattvavodha (lecture series), 5 volumes of Samiksika (seminar series of research papers), 2 volumes of Samraksika (seminar series of conservation), 9 volumes of Prakasika (critical edition of rare manuscripts), 3 volumes of Kritibodh (edited manuscripts in advance level workshop), 3 catalogues and 22 issues of Kriti Rakshana have already been published.
- ❖ Outreach Programmes across the country through awareness campaigns, exhibitions, theatre and media. In this regard, 111 public lectures and 5 exhibitions have been completed by the end of 2013.
- ❖ • Initiated a Publication Programme. In this respect, 10 Manuscripts have been published and 50 are in the press.

2.6 NMM – An Assessment (so far)

After a detailed study of NMM, it is apparent that Mission has achieved a lot in these years which because of the two factors, firstly, professional commitment shown by different groups associated with

it and secondly, it got necessary help and co-operation from different regions. Not to forget, the government initiative and timely support, this is commendable so far and hopes the same in future. The Mission and its regional resources could be searched as per geographical locations in India. For instance, people from Purvottar (North-East) can use the Purvottar Gateway to locate their manuscript and related resources, this search engine was displayed in the Purvottari festival recently. This capacity-building programme, in my opinion would help and facilitate research scholars working on different regions and plural culture of India in future.

3. National Archives of INDIA

The National Archives of India⁹ is the repository of the non-current records of the Government of India and is holding them in trust for the use of administrators and scholars. It is an attached office of the Ministry of Culture with regional offices at Bhopal, Jaipur, Bhubneshwar, and Puducherry. It was setup in March 1891 in Calcutta (Kolkata) as the Imperial Record Department and subsequently with the transfer of National Capital from Calcutta to New Delhi in 1911 it was shifted to its present building in 1926. As maintained earlier, it is one of the heritage centres and is very crucial for archival record holdings, its upkeep and maintenance as well policy appraisal as regards different central, state, university and other archival institutions in the country. The importance of this institution has assumed greater significance with the Right to Information (RTI) and other public acts in the recent times. However, the capacity-building programme has also gained pace in the recent years. National Archives of India has started the programme of digitization, online listing as well as reoriented its training programme as well

as other applications in the recent times as per the changing requirements of the age.

The effort would be made to see as to how National Archives has reciprocated the needs of capacity-building programmes in the arena of archives in the recent years. Understanding of the same could be achieved by the cross-examinations of its various programmes.

3.1 Computerization and Digitization

A computerization and digitization¹⁰ programme for an “Automated Retrieval System” with the help of tailor made software known as “Archival Information Management System (AIMS)”, has been launched and computerization of reference media to records of the Home Public, 1748-1859, Home Political, 1907-68, Foreign Political, 1860-1946, Ministry of External Affairs, 1947-1970, and Ministry of State, 1947- 1953 has been completed. These records are now available online for the research scholars/archivists/administrators in the research room or on the intranet set up inside the premises of National Archives of India.

The Department has also computerized the reference media of library books using “Libsys Software”. The same is available for the use by scholars. For the convenience of scholars, a project to connect five libraries, i.e., Central Secretariat Library (CSL, New Delhi), National Museum Library (NML, New Delhi), National Gallery of Modern Art Library (NGMAL, New Delhi), National Archives of India (NAI, New Delhi) and Archaeological Survey of India (ASI, New Delhi) is underway.

National Archives of India has also stated a new project of digitization of rare and valuable manu-

scripts with the assistance of National Institute of Advanced Studies, Bangalore.

Moreover, its administrative organization is making efforts to reorient all its branches in the light of this digital and electronic environment. Therefore, it is important to highlight these core areas as it is very important to understand its capacity-building programme in totality.

3.2 Training Programme

Established in March 1891 in Calcutta, National Archives of India, an edifice of Lutyen's Delhi at the intersection of Rajpath and Janpath is the sentinel of nation's documentary heritage. It has been conducting training courses in archives keeping since 1941. However, The Institute of Archival Training was setup in National Archives of India in 1976 and was renamed as School of Archival Studies in 1980. The School was established to meet the demand of trained custodians of archival and library wealth. The school conducts theory and practical classes to train Archivists, Record Managers, Preservationists and Microphotographers. The training programme is supplemented by seminars, workshops and extension lectures by eminent Archivists, Preservationists and Microphotographers from leading institutions and universities.

3.2.1 Programmes: One Year Diploma Course in Archives and Records Management

This is the premier course module covering all the areas of archives. The duration of the training programme is one year.

Objectives of the Course

- i. To produce highly competent professionals in the field of Archives, Records Management,

Conservation, Reprography and other related fields of Archival Science.

- ii. To understand the principles and methods of description of archival material according to the standards adopted by the archival community in India and abroad and to familiarize with various perspectives concerning the nature and purpose of archival description.
- iii. To impart technical knowhow to the students in application of information technology in the management and preservation of archival documents.
- iv. To acquaint them with the records management practices and the changing requirements.

3.2.2 Other Certificate Programmes: Records Management

The course is to train the people already working in archives and related organizations in creation, control and disposition of records.

3.2.3 Reprography

The course is designed to train personnel in the process of reproduction of documents and manuscripts in microfilming, handling of automated information, storage, retrieval and dissemination of information to the concerned persons.

3.2.4 Care and Conservation of Books, Manuscripts and Archives

The course is designed to train personnel in scientific methods of conservation, repair, rehabilitation, storage and handling of documentary heritage.

3.2.5 Servicing and Repair of Records

To train the persons in arrangement, supply, restoration and upkeep of records.

3.3 Publications

Since 1942, the National Archives has been engaged in bringing out various journals, volumes and reports that facilitate in propagating the archival awareness in the country. Several outstanding and scholarly publications have since been brought out by the Department. Notable among these are 21 Volumes of the Fort William-India House Correspondence, 56 volumes of the Proceedings of Indian Historical Records Commission, Selections from “English Records”, Selections from Educational Records; Persian Akhbars; Selections from Orme Manuscripts; Bulletin of Research, theses and dissertations; proscribed poetry banned by the British Raj; Descriptive List of Mutiny Papers, National Register of Private Records; Catalogues of Maps of Survey of India; Calendar of Persian Correspondence, etc. Further, the technical aspects of records management and preservation have also been adequately taken care of through specialized publications like “Repair and Preservation of Records” “Micrographics” for Archives, Reprographics in Archives, Guide to Restoration of Documents, Elements of Management and Preservation of Records, etc. Further, to facilitate research by the scholars of other countries the National Archives of India is collaborating with UNESCO in bringing out a set of six volumes under the Asian Chapter of “Guide to the Sources of Asian History” to provide comprehensive information to users about record holdings housed in the National Archives of India, the State Archives and other custodial Institutions. So far

five volumes have been published. The NAI also brings out a Bi-annual Journal “The India Archives”.

3.3.1 Indian Archives (Journal)

The Indian Archives is a bi-annual journal being published by the National Archives of India since 1947 with the object of stimulating interest in and imparting knowledge of archival studies and preservation of manuscripts. It contains, besides news-notes, book reviews and other useful matter, articles of technical as well as of general interest on records administration, preparation of reference media, editing records, records of Indian interest in foreign countries, various methods of preservation and repair of documents.

Some selected articles of importance in the previous year are as follows:

- ❖ Effects of Changes of Sovereignty on Archives, Ernst Posner (Vol.1, No.3)
- ❖ Records and Archives: What are they?, Purnendu Basu (Vol. II, Nos. 2-4)
- ❖ Twenty-Five Years: Some Reminiscences of an English Archivist, Hilary Jenkinson (Vol.III, Nos.1-4)
- ❖ Recent Developments in Records Preservation, Arthur E. Kimberly (Vol.III, Nos.1-4)
- ❖ Max Lehmann and Genesis of the “Principle of Provenance”, Ernest Posner (Vol. IV, No.2)
- ❖ The Problem of Archival Estrays, Sourindarnath Roy (Vol. VII, Nos. 1-2)
- ❖ The Finding Aid Programme in the National Archives, USA, T.R. Schellenberg (Vol. VIII, No.1)

- ❖ Public Records: The Arrangement in England, J.H. Collingridge (Vol. XII, No.1-2)
- ❖ Records Appraisal: A Demanding Task, Lew J. Darter Jr. (Vol. XVIII, No.2)
- ❖ Archival Contributions of Ernst Posner, Phillip C. Brooks (Vol. XVIII, No.2)
- ❖ Government Records 'Explosion': How to Contain It, K.D. Madan (Vol. XXIX, No.2)
- ❖ Vital records Management, R.K. Perti (Vol. XXIX, No.2)
- ❖ Records Management in British India, S.A.I. Tirmizi (Vol. XXIX, No.2)
- ❖ Training of Archivist in South and West Asia, R.C. Gupta (Vol. XXXI, No.1)
- ❖ Archives and Technology: some Experiences of the Public Activities of Canada, W.I. Smith (Vol. XXXIII, No.2)
- ❖ Archival Management in Bombay Presidency: Colonial Policy and Popular Revolts, A.R. Kulkarni (Vol. XXXIX, No.2)
- ❖ Tagore Manuscripts in Oriental and India Office Collections, British Library, Dipali Ghosh (Vol. XLII, No.1-2)
- ❖ The Effect of the New Communications System on Access: Standards, Formats, Conventions, Micheal Cook (Vol. XLVI, Nos.1-2)
- ❖ Necessity and Problems of Business and Political Archives, Dilip Chakravarty (Vol. XLVI, Nos. 1-2)
- ❖ Managing a Scientific Programme for Conservation of Documentary Heritage, Ranbir Kishore (Vol. XLVI, No.2)
- ❖ The Creation of Pakistan: The Triumph and Tragedy of Jinnah, S.R. Mehrotra (Vol. XLVI, Nos.1-2)
- ❖ Exhibitions – A Blessing or a Curse, Helen Forde (Vol. XIVII, Nos. 1-2)
- ❖ Information Technology Applications in Archives, T.A.V. Murthy, M.K. Chary (Vol. XLIX, Nos. 1-2)
- ❖ Impact of Technology on Management of Old Records, Vijay Bhargava, Ashok Vijayvergia (Vol. XLIX, Nos. 1-2)
- ❖ A description Standard for Electronic Record, Michael Cook, Marger

The publication and articles part of old collections in Indian archives reflects a trend towards capacity-building since its inception. This also highlights the changes in the trend from manual to electronic environment in the recent times. The very fact that NAI is now looking towards resource sharing and collaboration with the other ministerial libraries and archives will definitely help the users and the research community in their endeavour. Alongside this, the bodies like Indian Historical Records Commission and National Committee on Archivists have suggested the growing needs for digitization and electronic documentation for future records keeping.

4. Archival Cell, Panjab University, Chandigarh

4.1 Archival Cell

Archival Cell was established by Panjab University, Chandigarh as per the UGC guidelines in its 6th plan of 1981. In this plan, based upon the importance of collection and location, Panjab University was selected to have its own Archival Cell for the maintenance and up keeping of records of importance in the region. However, it actually came into being in 2005 with the appointment of Assistant Archivist in the Cell.

4.1.1 Importance of the Collection

The Archival Cell, located at the ground floor of the prestigious A.C. Joshi Library, has two kinds of holdings, i.e., manuscripts and rare books. A total of 1492 manuscripts are in Hindi, Urdu, Persian, Arabic, Sanskrit, Gurumukhi and Sharda Script. Starting from Hindu scriptures, it covers a range of subjects like Persian Court Etiquette, Poetry, writings of Sikh Gurus, Janam Sakhis, Zafarnamah, Gita, and several translations from the original text. These manuscripts are very important from the point of inter-faith and inter-religious traditions and hence a treasure trove for researchers working in these areas.

Rare books are another important category of this collection. They are around 40,000 in number, and are continuously growing through donations and by other means. Starting from 1634 to the present, these collections are diverse and cover almost all discipline and subjects. Some of the important themes are as follows:

- ❖ Mutiny Records
- ❖ Writings on different tribes and cultural categories of North-Eastern States and Andaman and Nicobar Island by different English authors
- ❖ Reports on the result of scientific voyages (H.M.S. Challenger)
- ❖ Educational Records Series published by GOI since colonial days
- ❖ Reports and Surveys of the Flora and Fauna of the British India
- ❖ Atlases
- ❖ Imperial Gazetteer of India

- ❖ Art, Architecture and Painting Series
- ❖ Writings of the Viceroys and Governor-Generals
- ❖ Biographies
- ❖ English Factory Records
- ❖ Religious Literature pertaining to Gurudwaras, Temples and Mosques
- ❖ Literature pertaining to Shakespeare and George Bernard Shaw
- ❖ Original Persian Sources by Medieval Travelers and Writers
- ❖ Sanskrit, Hindi and Gurumukhi folk lore of Punjab
- ❖ Laboratory results from different laboratories of India on scientific subjects and many more...

4.2 Digitization Process

Archival Cell, Panjab University, Chandigarh started the digitization process in the year 2004. The necessity of such an approach became true because of a few important factors. First and the foremost was the importance of the collection. The second was the process of physical preservation, as applied in the case of archival documents, though in practice, this methodology of archival preservation failed to provide a solution to the growing demands of these documents for research and other ancillary purposes. Third and the most important factor was the guidelines from the NMM for digitization and digital preservation.

Thus, based upon the guidelines, as specified above, the university started digitizing its collection. At the outset, we had two goals, firstly, to harness

the knowledge embedded in the manuscripts and the rare literature. Second was to preserve and conserve the cultural heritage of our nation through enhanced digital longevity. The outcome of the practice is visible on the ground. Research use of the manuscripts and the rare literature has increased manifold. These users are both national and international. A number of scholars from Europe, US and especially from the Arab countries visit our repository every year. Though we have not put our digitized collection on web, still, we hope that in the coming years, research and use of these collections may be more. The making of these resources is more visible and now we are planning to put them on the web using D-Space software.

5. Concluding Remarks

To conclude, one may say that capacity building programmes in Indian Archives and ancillary organizations are now firmly established on track. This firm establishment and sound footing may be located in the vision, hard work and commitment of our forefathers. Today, archives are slowly and gradually adopting the techniques of digitization and electronic records management. However, there is a shortcoming on account of loose connectivity between national, regional, and university archives and other record centres. But recent initiatives like formation of consortia of ministerial libraries and archives as well as preferring universities for historical exhibitions are bridging the gap between these organizations. Similarly, development of a standard for digitization by NMM is helping regional and university archives in their digitization and electronic documentation. We are hopeful that these steps supplemented with others would definitely shape the capacity building moves in future as well.

References

- 1 www.iicp.unesco.org/fileadmin/user_upload/records.../chapters.pdf
- 2 [www.namami.org/digitization concept.html](http://www.namami.org/digitization%20concept.html).
- 3 Justus Wamukoya and Stephen M. Mutula, Capacity-building requirements for e-records management: The case in East and Southern Africa, *Records Management Journal*, Vol.15, No.2, 2005, pp.71-72.
- 4 International Council of Archives Annual Report for the Developing Countries 2004.
- 5 Ibid.
- 6 Annual Report, national Mission for Manuscripts in India, 2004.
- 7 www.namami.org/digitization
- 8 www.namami.org
- 9 www.nationalarchives.nic.in

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