

## **Role of Libraries in Preservation of Traditional Knowledge: with Special Reference to India**

**Ram Kumar Dangi<sup>1</sup> and Dr. Sanjiv Saraf<sup>2</sup>**

1. Assistant Librarian, Banaras Hindu University, Varanasi- 221005 (India)
2. Deputy Librarian, Banaras Hindu University, Varanasi- 221005 (India)

**Abstract:** The article discusses the concept of traditional knowledge, its importance, role of libraries and information centers in preservation of traditional knowledge in India. Libraries and Information centers are performing various activities to preserve traditional knowledge e.g. documentation of traditional knowledge, capturing/recording of traditional knowledge, microfilming of traditional knowledge, digitization of traditional knowledge and creating digital repositories to enhance the accessibility of traditional knowledge. In India, various libraries and information centers are engaged in preservation of traditional knowledge e.g. National Manuscript Mission (NMM), Traditional Knowledge Digital Library (TKDL), and National Digital Library of India (NDLI) etc. Some challenges are also being faced by above organizations e.g. lack of recording of traditional knowledge, copyright issues, cost of digitization and lack of trained manpower.

**Keywords:** Traditional Knowledge, Indigenous Knowledge, Digitization, Digital Repositories, Preservation of Manuscript.

### **1. Introduction**

India, officially the Republic of India is a country in South Asia. It is the seventh-largest country by area, the second-most populous country with over 1.2 billion people, and the most populous democracy in the world. India is a pluralistic, multilingual, and a multi-ethnic society. It is also home to a diversity of wildlife in a variety of protected habitats. India is a multi-cultural, multi-lingual country having nature friendly rich traditional knowledge. These have been shaped and nurtured by many tribal and non-tribal social formations inhabiting different parts of the country.

## **2. Traditional knowledge**

Traditional knowledge comprises the knowledge, innovations and practices of indigenous and local communities around the world, developed from experiences gained over centuries and adapted to the local culture and environment, which is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs etc. Traditional knowledge is an integral part of the culture and it plays a very important role in building the nation more progressive and transforming its society.

The International Council for Science (ICSU) define traditional knowledge as: A cumulative body of knowledge, know-how, practices and representations maintained and developed by peoples with extended histories of interaction with the natural environment. These sophisticated sets of understandings, interpretations and means are part and parcel of a cultural complex that encompasses language, naming and classification systems, resource use practices, ritual, spirituality and worldview.<sup>1</sup>

Indigenous traditional knowledge generally means traditional practices and culture and the knowledge of plants and animals and of their methods of propagation. It includes:

- Expressions of cultural values
- Beliefs
- Rituals and community laws
- Knowledge regarding land and ecosystem management.<sup>2</sup>

## **3. Need of Traditional knowledge**

Traditional knowledge can easily lose so it is wise to make efforts to preserve it. Traditionally, libraries, information centers and archives are guardian of knowledge and cultural legacy. India has possessed a rich traditional knowledge of ways and means practiced to treat diseases afflicting people. This knowledge has generally been passed down by word of mouth from generation to generation. A part of this knowledge has been described in ancient classical and other literature, often inaccessible to the common man and even when accessible rarely understood. Documentation of this existing knowledge, available in public domain, on various traditional systems of medicine has become imperative to safeguard the sovereignty of this traditional knowledge and to protect it from being misappropriated in the form of patents on non-original innovations, and which has been a matter of national concern.

## **4. Major Initiatives in Independent India**

Increasingly, communities and organisations around the world are realising the value and significance of Indigenous Knowledge and the importance of preserving it for future generations. The capture and preservation of Indigenous Knowledge is being used to revitalise endangered cultures, improve the

economic independence and sustainability of Indigenous communities and to increase community. India has implemented 3 Acts relevant on the issue

- Patents (Amendment) Act, 2005
- Protection of Plant varieties and Farmers’ Rights Act, 2001
- Biological Diversity Act, 2002- contains elaborate provisions on benefit sharing but weak in prior informed consent and involvement of communities in decision-making

The following Libraries and information centres are engaged in preservation of traditional knowledge in India:

### **5. National Manuscript Mission (NMM)**

The National Mission for Manuscripts (NMM) is an autonomous organization under Ministry of Culture, Government of India, established to survey, locate and conserve Indian manuscripts, with an aim to create national resource base for manuscripts for enhancing their access, awareness and use for educational purposes. The Mission was initiated in February 2003, by the Ministry of Tourism and Culture, Government of India and Indira Gandhi National Centre for the Arts (IGNCA) is the nodal agency for the execution of this project. India possesses an estimate of five million manuscripts, probably the largest collection 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. The National Mission for Manuscripts aims to locate, document, preserve Indian manuscripts and make these accessible—to connect India's past with its future ([www.ignca.nic.in](http://www.ignca.nic.in)).

The National Mission for Manuscripts works with the help of 54 Manuscript Resource Centres and 49 conservation centers established across the country. The MRCs include well-established Indological institutes, museums, libraries, universities and non-government organizations those function as the Mission's coordinating agencies in their respective regions.

**Table 1: Status of Digitized Manuscripts**

<b>S.No.</b>	<b>Organisation</b>	<b>Number of Manuscripts</b>
1.	Sampurnanand Sanskrit University, Varanasi	1,20,000
2.	Government Oriental Manuscript Library, Chennai	66,077
3.	Oriental Institute and Manuscript Library, Tiruananthapuram	56,000
4.	Saraswati Mahal Library, Thanjavur	47,000
5.	Adayar Library and Research Centre, Chennai	40,000
6.	Orissa State Museum, Bhubaneshwar	25,000
7.	Andhra Pradesh Oriental Manuscript Library & Research Institute, Hyderabad	21,136
8.	State-Central Library, Hyderabad	17,000

9.	Rajasthan State Archives, Jaipur	14,000
10.	Rajasthan Oriental Research Institute, Jodhpur	12,262
11.	Government Manuscript Library, Allahabad	11,000

(Source- <http://www.ignca.nic.in/nl002203.htm>)

### **6. Traditional Knowledge Digital Library (TKDL)**

Traditional Knowledge Digital Library is an Indian digital knowledge repository of the traditional knowledge, especially about medicinal plants and formulations used in Indian systems of medicine. Set up in 2001, as a collaboration between the Council of Scientific and Industrial Research (CSIR) and Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (Dept. of AYUSH), Ministry of Health & Family Welfare, Government of India, the objective of the library is to protect the ancient and traditional knowledge of the country from exploitation through bio-piracy and unethical patents, by documenting it electronically and classifying it as per international patent classification systems. Apart from that, the non-patent database also serves to foster modern research based on traditional knowledge, as it simplifies access to this vast knowledge, be it of traditional remedies, or practices.

As of 2010, it had transcribed 148 books on Ayurveda, Unani, Siddha and Yoga in public domain, into 34 million pages of information, translated into five languages — English, German, French, Spanish and Japanese. Data on 80,000 formulations in Ayurveda, 1,000,000 in Unani and 12,000 in Siddha had already been put in the TKDL. Plus it has also signed agreements with leading international patent offices such as European Patent Office (EPO), United Kingdom Trademark & Patent Office (UKPTO) and the United States Patent and Trademark Office to protect traditional knowledge from biopiracy, by giving patent examiners at International Patent Offices access to the TKDL database for patent search and examinations purposes.

### **7. National Digital Library of India (NDLI)**

Digital Library of India (DLI) is a digital collection of freely accessible rare books collected from various libraries in India. DLI project started in early 2000 with the vision to archive all the significant literary, artistic and scientific works of mankind and to preserve digitally and make them available freely for every one over Internet for education, study, appreciation and for future generations. As a first step in realizing this vision, it is proposed to create the Digital Library with a free-to-read, searchable collection of one million books, predominantly in Indian languages. The Project was initiated by the Office of the Principal Scientific Advisor to the Government of India and subsequently taken over by the Department of Electronics and Information Technology (DeitY), Ministry of Communications and Information Technology (MCIT), Govt. of India.

The availability of online search allows users to locate relevant information quickly and reliably thus enhancing student's success in their research

endeavors. This 24x7 resource would also provide an excellent test bed for language processing research in areas such as machine translation, optical character recognition, summarization, speech and hand writing recognition, intelligent indexing, and information retrieval in Indian languages. The DLI project is funded by the Department of Electronics and Information Technology (DeitY), The Ministry of Communication and Information Technology (MCIT), Govt. of India.

**Table 2: Language by Status of Documents Digitized**

<b>Language</b>	<b>No of Books</b>	<b>No of Pages</b>
<b>Unknown</b>	<b>2857</b>	<b>1150908</b>
<b>Persian</b>	<b>255</b>	<b>116082</b>
<b>Punjabi</b>	<b>2</b>	<b>508</b>
<b>Arabic</b>	<b>7593</b>	<b>2466049</b>
<b>Assamese</b>	<b>71</b>	<b>37444</b>
<b>Awadhi</b>	<b>2</b>	<b>325</b>
<b>Bengali</b>	<b>25176</b>	<b>7885272</b>
<b>Bhojpuri</b>	<b>1</b>	<b>160</b>
<b>Braj</b>	<b>5</b>	<b>2821</b>
<b>Danish</b>	<b>1</b>	<b>268</b>
<b>Dutch</b>	<b>1</b>	<b>120</b>
<b>English</b>	<b>288576</b>	<b>115197499</b>
<b>Farsi</b>	<b>3</b>	<b>3424</b>
<b>French</b>	<b>980</b>	<b>453410</b>
<b>German</b>	<b>330</b>	<b>136207</b>
<b>Greek</b>	<b>23</b>	<b>11502</b>
<b>Gujarati</b>	<b>39605</b>	<b>6623708</b>
<b>Hindi</b>	<b>54220</b>	<b>16766290</b>
<b>Irish</b>	<b>1</b>	<b>538</b>
<b>Italian</b>	<b>57</b>	<b>28903</b>
<b>Kannada</b>	<b>3346</b>	<b>723606</b>
<b>Kashmiri</b>	<b>479</b>	<b>58146</b>
<b>Kokborma</b>	<b>1</b>	<b>28</b>
<b>Malayalam</b>	<b>73</b>	<b>15617</b>
<b>Manipuri</b>	<b>379</b>	<b>35364</b>
<b>Marathi</b>	<b>3904</b>	<b>1045301</b>
<b>Multilingual</b>	<b>1942</b>	<b>496549</b>
<b>Nagari</b>	<b>1</b>	<b>65</b>
<b>Nepali</b>	<b>28</b>	<b>4956</b>
<b>Norwigen</b>	<b>3</b>	<b>882</b>
<b>Oriya</b>	<b>49</b>	<b>18454</b>
<b>Pali</b>	<b>91</b>	<b>31594</b>
<b>Persian</b>	<b>7548</b>	<b>2660712</b>
<b>Polish</b>	<b>1</b>	<b>530</b>
<b>Portuguese</b>	<b>1448</b>	<b>167428</b>
<b>Prakrit</b>	<b>2</b>	<b>269</b>
<b>Punjabi</b>	<b>392</b>	<b>88335</b>
<b>Rajasthani</b>	<b>4</b>	<b>759</b>
<b>Roman</b>	<b>2</b>	<b>506</b>
<b>Russian</b>	<b>6</b>	<b>1642</b>
<b>Sanskrit</b>	<b>35431</b>	<b>14006004</b>
<b>Sindhi</b>	<b>87</b>	<b>33207</b>

<b>Spanish</b>	<b>14</b>	<b>8457</b>
<b>Swedish</b>	<b>3</b>	<b>662</b>
<b>Tamil</b>	<b>5385</b>	<b>1293078</b>
<b>Telugu</b>	<b>23370</b>	<b>4485797</b>
<b>Tibetan</b>	<b>966</b>	<b>1618567</b>
<b>Turkish</b>	<b>133</b>	<b>25004</b>
<b>Urdu</b>	<b>32360</b>	<b>9901158</b>
<b>Others</b>	<b>143</b>	<b>52224</b>

### **8. National Archives of India (NAI)**

The core mandate of NAI is to function as a central repository of public records. However, NAI has also taken some initiatives for preservation and cataloguing of manuscripts. NAI has been implementing a project called National Register of Private records since 1957. Under this project NAI undertakes surveys and listing of private papers, manuscripts and historical documents in the possession of individuals, NGO's, churches, temples and mutts in collaboration with State Archives Departments<sup>3</sup>.

The information so collected is published on a regular basis. National Archives has published 19 volumes of the National Register of Private Records till date, containing over 34,000 entries. The volumes contain lists of documents from Rajasthan, Karnataka, Orissa, Punjab, Tamilnadu, Bihar, Kerala, Madhya Pradesh, Uttar Pradesh, Assam, Maharashtra, Jammu and Kashmir, Delhi, Andhra Pradesh, Haryana, Arunachal Pradesh and West Bengal. However, this database is neither a comprehensive reference guide about manuscripts nor does it provide the necessary level of details about the nature of manuscripts or their preservation status<sup>4</sup>. Apart from the publication of National Register of Private Records, NAI implements the following two schemes:

1. Scheme of Financial Assistance to State/Union Territories Archival Repositories, Government Libraries and Museum and
  2. Scheme of Financial Assistance for preservation of Manuscripts/Rare Books.
- Under these schemes funds are provided to the state governments' archival repositories, museums, libraries, voluntary organizations, educational institutions, Temples, Mutts and individuals on matching basis. While the institutions of the state governments are eligible for a grant of Rs. one million, the maximum grant to individuals and private institutions is limited to Rs. 0.2 million per annum.

### **9. Museums and Libraries under Department of Culture**

The Manuscripts available with some of following organizations under Ministry of Culture, Government of India are as indicated below

1. Rampur Raza Library 15,000 Manuscripts
2. Khuda Baksh Oriental Public Library 20,060 Manuscripts
3. Asiatic Society, Kolkata 32,000 Manuscripts
4. National Library, Kolkata 3,258 Manuscripts

5. Central Institute of Buddhist Studies, Leh 10,000 Manuscripts
6. Central Institute of Higher Tibetan Studies, Sarnath 1,028 Manuscripts
7. Salar Jung Museum, Hyderabad 10,000 Manuscripts

Though the resource base and information about manuscript with autonomous organization funded by the Department of Culture is quite vast, there has been no systematic attempt by these organizations to consolidate the database into subject catalogues.

## **10. Challenges in preservation of traditional knowledge**

### **1. Lack of recording and documentation of traditional knowledge**

Traditional knowledge is mostly stored in people's minds and passed on through generation to generation by word of mouth rather than in written form, it is susceptible to change, that is one threat of extermination of traditional knowledge. In this way, traditional knowledge easily faces loss due to a lack of recording. In written and recorded form, the knowledge becomes vulnerable to exploitation and unlawful use.

### **2. Copyright issues**

One of the main challenges to the structure a policy about protection/preservation of traditional knowledge is the inadequate amount of persons trained in intellectual property protection of tradition knowledge. The difficulty experienced by indigenous people in trying to protect their traditional knowledge under intellectual property rights law stems mainly from its failure to satisfy the requirements for protection under existing intellectual property law.

### **3. Cost of digitization**

The cost of digitizing items varies greatly in different digitization programme, partly because much digitization is carried out by a third commercial party under contract which may make it difficult for the responding library to determine unit costs.

### **4. Lack of trained manpower**

Many libraries have depreciated staff establishment which requires further training and exposure to modern digitization technologies, in addition, the absence of a digitization policy.

## **11. Conclusions**

India has an ancient culture and also has rich traditional knowledge. This knowledge must be preserved for present and future use, otherwise it will be

lost. The government of India has taken some initiatives to preserve traditional knowledge. National Manuscript Mission, Traditional knowledge Digital Library, Digital library of India are preserving traditional knowledge. But these efforts are only for preservation of explicit knowledge. Tacit knowledge is also available with Indigenous people. For preservation of tacit knowledge, a National policy should be framed and implemented to get better result.

#### References

- International Council for Science, Science and Traditional Knowledge, Report from the ICSU Study Group on Science and Traditional Knowledge, Paper delivered to 27<sup>th</sup> General Assembly of ICSU, Rio De Janeiro, Brazil, September 2002, p 3 at [https://www.humanrights.gov.au/sites/default/files/content/social\\_justice/nt\\_report\\_ntreport08/pdf/chap7.pdf](https://www.humanrights.gov.au/sites/default/files/content/social_justice/nt_report_ntreport08/pdf/chap7.pdf)
- United Nations Permanent Forum on Indigenous Issues, Report of the Secretariat on Indigenous traditional knowledge, UN Doc E/C.19/2007/10. At: <http://daccessdds.un.org/doc/UNDOC/GEN/N07/277/15/PDF/N0727715.pdf?OpenElement>
- Ramesh C Gaur and Mrinmoy Chakraborty. Preservation and Access to Indian Manuscripts: A KnowledgeBase of Indian Cultural Heritage Resources for Academic Libraries. In *Proceedings of ICAL 2009 – Vision And Roles Of The Future Academic Libraries*, P90-98. At [http://crl.du.ac.in/ical09/papers/index\\_files/ical-14\\_227\\_489\\_2\\_RV.pdf](http://crl.du.ac.in/ical09/papers/index_files/ical-14_227_489_2_RV.pdf).
- Jyotshna Sahoo, Bismita Sahoo, Basudev Mohanty, Nrusingh Kumar Dash. "Indian Manuscript Heritage and the Role of National Mission for Manuscripts" (2013). *Library Philosophy and Practice (e-journal)*. Paper 984. At: <http://digitalcommons.unl.edu/libphilprac/984>

www.ignca.nic.in.