HERITAGE COLLECTIONS OF MANIPUR: A STUDY OF THEIR PRESERVATION AND CONSERVATION

Salam Binoy Singh
Librarian,
NEISSR,
Dimapur-797112
Email: binoysalam14@gmail.com

Ch. Ibohal Singh
Associate Professor
Department of Library and Information Science,
Canchipur, Imphal-795003
Email: ibohal68@gmail.com

Abstract : *Different types and nature of heritage collections are owned by private, government institutions and individual as well in Manipur, a border state of India's North East. Conditions of the existing collections, their preservation and conservation techniques, adoption of digital strategies in the process and the problems associated with the same have revealed us many clues on the rich heritage of the state. The present study attempts to assess the same.*

Keywords*: Manipur, Heritage Collections, Preservation and Conservatio.*

Introduction :

Emergence of Heritage institutions in Manipur is of nineteenth century phenomenon. Preservation and conservation practices for the rich heritage materials has been an important aspect of these institutions. Such an institution act as a repository of our past, present and the future. The heritage materials, on the other hand, constitute an important component of the memory of the world. Any loss to such materials is simply irreplaceable; therefore, preserving heritage materials becomes not only the academic commitment but also the moral responsibility of our society and for those who are in charges of these repositories. Manipur, one of the border states of India's North East has a long history of more than two millennia possessing its rich heritage in many dimensions. Preserving and conserving such materials of institutions such as libraries, archives, museums, archaeological institution have been playing a very pivotal role. In this study an assessment has been made through conducting a survey of 31 such institutions of the state which reveals us many clues on that.

Past Studies :

Review of some selected related literature has revealed us the trends of research in the field. Arianna and Ashley (2019) discussed the new advances in heritage site monitoring using a geo-spatial method for assessing the state of preservation of earthen architecture overtime as a preventive conservation measure. Nicola (2019) in a study examined the potential utility of TLS and the Multiscale Model to Model Cloud Comparison (M3C2) surface change detection method for monitoring and preserving ancient earthen architecture that suggested that the proposed method can be used effectively to enhance site monitoring and perform preventative on-site interventions at large earthen sites. Octavian (2018) studied the virtual humans in cultural heritage concerning ICT applications discussing the strengths

and weakness of current approaches and point out unsolved issues. In another study Octavian and Miihai (2018) identified the possibilities of reversal film image digitisation color enhancement and digital for the restoration of the purpose of preserving its heritage and also increasing content availability in the digital era.

Objectives of the Study : The main objectives of the study are:

1. To survey and identify the conditions of heritage collections of different institutions;
2. To understand the causes and nature of deterioration of heritage materials;
3. To assess the preservation and conservation techniques used by them;
4. To know the problems faced in preservation and conservation of heritage collections.

Scope and Methodology :

The present study covers the preservation and conservation aspects of heritage institutions of Manipur. They have been surveyed to identify their collections. A questionnaire has been used to collect the necessary data from 31 such institutions. Likert five-point scales has been used for the analysis of data to find out the score value. Such institutions include 3 archives and archaeological institutions, 6 libraries, 20 museums and 2 art gallery cum museums.

Analysis of Data :

Conditions of heritage collections

The following table shows the conditions of the collections available in different heritage institutions.

Table 1 – Conditions of heritage collections N= 31

S/N	Condition	Score	Deviation from mean	Calculated value
1	Good condition	15.42	2.83	χ = 12.59
2	Damaged	12.56	0.03	Absolute
3	Insect infected	12.52	0.07	MD= 0.99
4	Humidity	13.73	1.14	SD =1.34
5	Variation in temperature	12.26	0.33	χ^2= 1.24
6	Variation in relative humidity	12.08	0.51	Co efficient of MD= 0.08
7	Polluted by Winds	10.85	1.74	
8	Missing of title label	11.33	1.26	
	Total	100.75	7.91	

MD- Mean deviation SD- Standard deviations' N- Number of Respondents; χ^2 - Chi- square

As the table indicates, collections in good conditions in collected humidization in the institutions are relativity by high (more than mean value) as compared to other conditions. While the absolute MD is accounted to be 0.99, the SD of the score values of the conditions of the materials is 1.34. The value of sd is small, which emplies that the score values are not

widely scattered away from the mean x= 12.59. This again implies that the conditions under consideration are homogenous. For the calculated values χ^2= (1.24) is less than the tabulated value of it at 5%level of significance with 7d.f. (14.07). It means the difference in the conditions of the heritage materials may be due to chance only.

The General Techniques :

The general techniques adopted in the heritage institution for preservation and conservation of their materials are shown under table 2 below.

Table 2- General preservation and conservation technique N=31

S/N	Techniques	Score	Deviation from Mean	Calculated Value
1	Making storage environment	15.77	0.15	$\varkappa$ = 15.62
2	conducive	16.65	1.03	MD = 3.43
	Maintaining friendly atmospheric			
3	condition	12.61	3.01	Co efficient of MD
4	Dehumidification	12.93	2.69	= 0.22
5	Deacidification	26.6	10.98	SD = 4.49
6	Following traditional methods	19.57	3.95	
7	Taking pest control Measures	16.57	0.95	χ^2 = 21.01
	Use of recommended chemicals for			
8	preservation	13.15	2.47	
	Security to prevent theft, paper	12.61	3.01	
9	mutilation	24.27	8.65	
10	Photocopying	12.42	3.2	
11	Cleaning and dusting of objects	15.57	0.05	
12	Lamination	13.63	1.99	
13	Binding	11.67	3.95	
14	Encapsulation	10.25	5.37	
15	Microfilming			
	Installing air- conditioners in	234.27	51.45	
	institution			
	Total			

SD- Standard deviations' N- Number of Respondents; χ2 - chi- square MD- Mean deviation

The above table shows the traditional general techniques followed by the institutions having mean value of x= 15.62while the MD being 3.43. Here the value of SD= 4.49 is a bit high which signifies that the score values are scattered away a bit from the mean value. The calculated value of χ^2 is less than its table value at 5% level of significance in the techniques of general preservation and conservation of the heritage materials are due to fluctuations' in the sampling.

Digital Strategies :

The digital strategies adopted by the institutions for preservation of the materials are not satisfactory in the state as understood from the following table. The response rate in this context is below the desired level.

Table 3- Digital reservation techniques N= 31

S/N	Techniques	Response	Percentage
1	Sharing insocial networks	8	25.81 %
2	Archiving of digitized materials	11	35.48 %
3	Preservation in secondary storage media	7	22.58%
4	Developing institutional repository	5	16.13 %
	Total	31	100%

On digital mode of preservation of heritage materials, the process "Archiving of digitised materials" is found to be highest (35.48 %) as the table -3 shows followed by sharing in social networks (25.81%). For the preservation in secondary storage media (22.58%) and of developing institutional repositories (16.13 %) are also seen as techniques of digital preservation.

The Problems Associated :

The heritage institutions are found to associate with two distinct problems in preservation and conservation of the resources.

General problems in preservation and conservation associated :

The following table 4 shows different problems in preservation and conservation with the process by the institutions of the state.

Table 4- Problems in preservation and conservation N= 31

SL. No	Types of Problems	Score	MD	Calculated value
1	Lack of competent manpower	25.78	1.59	$\varkappa = 24.19$
2	Lack of equipment needed	26.2	2.01	MD = 3.76
3	Little awarenessof preservation and conservation	24.03	0.16	Co efficient of MD = 0.16
4	Lack of policies	27.95	3.76	SD= 0.97
5	Lack of trained personnel	22.86	1.33	$\chi^2 = 8.74$
6	Frequent power failure	20.52	3.67	
7	Financial problems & insufficient fund	29.75	5.56	
8	Inadequate infrastructures	26.95	2.76	
9	Lack of suitable and appropriate equipment's	27.83	3.64	
10	Lack of facilities	28.05	3.86	

11	Shortage of skilled staff	26.58	2.39	
12	High temperature level	18.05	6.14	
13	Relative Humidity	28.08	3.89	
14	Dust and particular matters	28.5	4.31	
15	Biological agents'	29.75	5.56	
	Total	362.8	5.63	

SD- Standard deviations' N- Number of Respondents $\chi 2$ - chi- square MD- Mean Deviation

Table- 4 shows the problems in preservation and conservation of the heritage materials. The average value of the distribution in this regard is 24.19 while MD and its Co efficient being 3.76 and 0.16 respectively. On the other hand the SD is accounted to be 0.97. The small value of which indicates that the values are not much scattered from the mean value. The calculated values of χ^2(8.74) is less than its tabulated value (23.68) at 5% level of significance with 14 df. So the scatterness of the different problems faced is not much significant and the source may be due to fluctuations in sampling only.

Findings and Discussion :

Libraries, archives, museums, archaeological institutions and art galleries are important repositories of heritage materials, the same is globally being accepted. The small states of Manipur, in the North Eastern part of the Indian sub- continent, also witness the existences of such institutions playing an important role in preserving and conserving the rich heritage collections of the land. Most of the collections available in the institutions are found in good conditions and homogenous in nature. The differences occur in the conditions of mostly due to chances only. The techniques for preserving and conserving the materials of which traditions methods are highest and installation of air- conditions as a technique is lowest, the differences in the techniques in the process are due to fluctuations in sampling. Budget, biological agents, lack of facilities, humidity, dush particles, etc are major problems encountered in the preservation and conservation of the heritage materials by the institutions, other problems such as lack of policies, suitable and appropriate equipments, skilled staff, competent manpower, etc are also relatively high. On the basis of the absence, it is now clear that institutions in the state need to come out with certain selections on priority basis if the rich heritage collections are to be preserved and conserved for the generations to come.

Suggestion and Conclusion :

Following suggestion are made about the preservation and conservation of the cultural heritage materials. Custodians of heritage institutions need to make regular watch for checking of materials. All the custodians of all institutions must be aware of preservation and conservation. These institutions required to organized seminars, workshops and conferences in order to create awareness among the staffs about the preservation and conservation. Heritage institutions also need to organise training courses in project management in preservation and conservation among other professionals also. The study investigated the preservation and conservation of cultural heritage materials in private institutions of Manipur. The study revealed that there was no written policy on preservation and conservation in all

private cultural heritage institutions. It is also found that maximum cultural heritage institutions were having cultural objects and established nearly in 80's and 90's. The main constraints to proper preservation and conservation in cultural heritage institutions were lack of written policy, Lack of trained manpower, and lack of funding.

References

- Arianna, C. Ashley. & Nicola, L. Spatial: (2019). Analysis and heritage conservation: Leveraging 3-D data and GIS for monitoring earthen architecture. Journal of cultural Heritage, 39:166- 176.
- Nicola, Lercari. (2019). Monitoring earthen archaeological heritage using multi-temporal terrestrial laser scanning and surface change detection. Journal of cultural heritage, 39: 152- 165.
- Octavian, M., Machidon, Mihai. Duguleana. & Marcello, Carrozzino. (2018). Virtual Humans in Cultural Heritage ICT applications: A review. Journal of Cultural Heritage, 33:249-260.
- Ambika, & Khaiser, Jahan. Begun: (2017). Problems and challenges in preservation and conservation of law colleges library resources in Karnataka: A Study. International Journal of Digital Library Services, 4:21-31.
- Octavian, M., Marchidon, Mihai. Duguleana. &Marcello, Carrozzino: (2018).Digital Color restoration for the preservation of reversal film heritage. Journal of Cultural Heritage, 201833, 181-190.
- Boss, Katherine. & Broussard, Meredith: (2017). Challenges of archiving and preserving born-digital news applications. International Federation of Library Associations and Institutions,43(2):150–157.