Archival Documents And Its Conservation & Restoration

(Civil Servant Records 2001 B. S. Darsan Bhet)

—Griha Man Singh

1. Introduction

The word of archives is derived from Greek, referred to as Archeion (Apxeion). In Latine, French and English the word is coming down as archivium, Les archives and Archives respectively. So archives is an English work . According to the modern definition. "Archives is a place of collection or storage of traditional and non-traditional government, semigovernment, private and semiprivate records, which are officially received or produced by an administrative body." Stone & metal plate engraving, Birch bark, palm leaf, vellum, parchment and paper surface written documents come under the traditional archival documents, where as audio cine film, disc Video tape, micro film, glass plate, colour and transparent; Black and white photograph, and computer disc come under the non traditional archival documents. Archivist from different countries of the world formed an organization of archives in 1948 with initiation of UNESCO and is called International council on archives (ICA). The purpose of this organization is to improve the policies of archives and preservation technique of archival documents. There are also regional organization of archives such as: ALA, ARBICA, CARBICA, CENNARBICA, SARBICA, ECARBICA, and SWARBICA. The purpose of these organizations are same as that of ICA. The National Archives of Nepal is one among the members of ICA as well as SWARBICA. The National Archives of Nepal established in 1967 A. D. (2024 B. S.). The National Archives of Nepal has also its own act known as "The National Archives Preservation Act 2046 B. S. (1989 A. D.). Purpose of this act is also similar to ICA and other Regional organization of Archives.

There are different sources of collection of archival documents such as Governmental, non governmental organization and personal contract officially or non officially. So far the National Archives of Nepal is concerned it has following numbers of collection of Archival documents in different forms:

1. Stone rubing in paper archival documents (Shila Abhilekha) 2925
2. Birch bark archival documents (Bhoj Patra

Abhilekha) 1

3. Wooden archival documents (Kastya *Patra Abhilekha*) 1
4. Zig Zag in paper archival documents (Thaya Saphu 3010
5. Treaties in paper archival documents (1967 - 1986) 817
6. Civil servant record archival documents (1905 - 2002)
7. Historical letter archival documents 835
8. Copper plate archival documents 74
9. Historical paper document 244

Such documents have different problem on cover of materials, paper, ink, and binding materials. Here the author is interested to explain the techniques on preservation, conservation and restoration of deteriorated paper archival documents, which was received from civil servant record office, H. M.G. of Nepal. These records are very very important in various aspect i.e. Position of person in Government service, salary of civil servant, number of staffs in particular office, detail individual records of civil servant and other . All the paper materials are made of organic materials, So they are destroyed by different deteriorating factors: Environment, Pollution, Biological (Insect and Fungus) and mechanical. These problems are clearly seen in civil servant records. Hence, it is essential to preserve, conserve and restore these materials properly to prolong the life of archival document.

2. Sources of Archival document :

Government, non government and private organization are the main sources of archival documents, Usually many archival documents are in custody of various Government organizations such as Ministries, Departments and different other offices. Majority of documents are written in Nepali hand made paper because of durability, strong and nationalistic feeling. According to Archives "Preservation Act 2046 B. S. documents older than 25 years in Government offices and other relevant places should transfer the National Archives Ramshaha path Kathmandu." Some of the Ministries, Departments and offices have transfer archival documents to the National Archives. Such as :

Ministry of Finance comptroller office Kumari Chauk, Babar Mahal	- Civil Servant records, land property of various Organization and other government relevant subjects.
Ministry of Law	- Office agreement papers between H. M. G. of Nepal and other countries.
Office of the Election Commission	- Referendum voter list 2036 and its supporting documents.
Ministry of General Administration (civil service record office)	-Civil servant records (1905 - 2002 B.S.)
Constitution Reform commission (Sambidhan Sudhar Aayog)	- "Constitution of 1990 A. D. 2047" paper documents as well as audio records.

Ministry of foreign affairs is also going to hand over archival document to the National archives of Nepal .

Some of the archival documents are in custody of non governmental organization like. History Department Tribhuban University. They have also handed over some archival document in the form of microfilm and also from Indian office Library.

Some of the archival documents in the custody of private sector. Archival documents like Royal

seals, Chithipatra, Sandipatra, Khadga Nishan, Eak chhapes, Dui chhape, Lal Mohers are donated to the National Archives of Nepal. Some of them are purchased by the National Archives also.

3. Structure of Civil Servant Record Book and its Problems. or Conservation Report.

Title : Civil servant record 2001 B. S. Darshan Bhet.

Original condition:

Binding style and structure : Limp binding, flate spine and 30 X 47 X 4 cm size

No. of pages/ plates : 594 page.

Paper : Thin sheets of folded Nepali Hand made paper.

Sewing : Simple side stiching sewing

Head bands : No head band

End papers : No end paper

Boards : No board

Coverings : Thick brown leather covering material

Spine : Flat leather spine

Adhesives : No adhesives.

Decoration (tooling) : No decoration or tooling .

Water mark : No water mark on paper.

Ink : Almost all the records are written with permanent black ink, and fewer of the latter additions are blue and red colour ink. (Photograph No. 1, 2, 3)

Present Condition :

Paper: paper of civil servant record is very thin, but durable and strong due to its physical and chemical properties such as folding, tearing and bursting, chemically pH 8 -9, negative lignine test. Some portion of paper is torn away due to mishandling of documents. Lower portion of document on spine side is badly damaged by fungus due to unsuitable storage system of document i. e. Moist room, high humid and damp place. Colour of fungus seems to be black in colour, may be Asparagillus Nigar or some other fungus infection .

Some of the documents are weaken by physical and chemical change in paper. Book pages, seems to be crumbled folded page and ugly in structure.

Sewing: Some of the sewing thread are broken down due to careless handling of book.

Covering: Thick brown leather covering materials is little bit weaken due physical & chemical effect on leather.

Spine: Lower portion of spine leather is black in colour due to fungus effect.

Ink: Some portion of permanent black colour ink is changed into slightly brown in colour, may be due to photo chemical reaction or some other chemical reactions. Permanent black ink is insoluble in water where as latter addition blue and red colour ink are soluble in water. Water soluble test is performed by drooping few drops of water using blotting paper.

4. Chemistry of paper :

There are different methods of paper making in Nepal. Jesper trier in Ancient paper of Nepal has mentioned that art of making paper was introduced in Nepal Vai Tibet in the 7th century especially Tamang and Lama people were involved in this work . The Bhaktapur craft bulletins publication also noted that technology of hand made paper brought from china since 11th century and used the bark of Lokta plant. The National Archives of Nepal depository room exhibits a 10th century KARANAYA VYUHA Book.

This paper made of Thymelaceceae, Daphne bholuna plant fibres so, hand made paper made in Nepal seems before or during 10th century A. D.

Author's field study (2054 - 2055 B. S.) (1998 - 1999) on paper making in hilly region of west Nepal (Myagdi, Parbat and Baglung) shown the typical technology of hand made paper making by the villages as a cash crop product. For the development of technology on Nepalese hand made paper making, His Majesty 's Government of Nepal in collaboration with UNICEF Nepal have lunched a project under the name of Bhaktapur craft printers (BCP) in different parts of Nepal. Main objective so this project is to improve the quality of hand made paper as well as quality of villagers living,

Process or Technology of paper making :

(a) Collection of raw materials fibres:

Two different species are used for paper making

Daphne papyrcea

Daphne pholua

These are also called Baudoar or Baruwa locally referred to as Lokta. These raw materials collected from Maygdi district of Ruma and Barangja village. It is about 6 hours walk from Maygdi district bazar.

(b) Soaking :

Collected barks of Baruwa is soaked in water and cleaned or rinsed to free of earth particals in running water. Dark bits of bast and other impurities are carefully removed with a knife.

(c) First cooking, washing and cleaning :

Earth particals free Lokta cooked for 1/2 hr with wood ash and water in the ratio of 5:12. Thus cooked stripes are again turned with fingers, washed thoroughly with water to remove all the ash particals present in the bark. Still bark contains black particals of some impurities charcoal or bark, removed by simple cleaning method.

(d) Second cooking :

Again cleaned bark is cooked with caustic soda in the ratio of 2 manas caustic soda and 6 Dharni bark for 1 /2 hour to make more fabricate. (Photograph No. 4)

(e) Beating :

Clean bast strips are placed on stone slab, beaten with wooden mallet to make more fibrous paper pulp. Required quantity of paper pulp is separated with the help of small pot a kachaura and made small rounded ball .one ball used for one sheets of paper. (Photograph No. 5)

(f) Scooping :

Measurable quantity of paper pulp ball mixed with water in plastic balti, stirred thoroughly with wooden stick and made homogeneous mixture. The mould or mesh frame placed over the water tank, pour the homogeneous mixture of paper pulp on mould, shaken very gentally to distribute all the pulp equally on cotton cloth mesh. The mould with paper pulp taken out from water tank. Paper surface made smoothness by gentally and carefully rubbing with hand or smooth surfaced materials. (Photograph No, 6)

(g) Drying and folding

The mould paper kept on sun to get it dried . Usually the moulds are placed at right angle to sun ray about 1, 1/2 hours, some places mould are placed at 180: Such dried paper are then pulled out by hand very carefully, 20 sheets of dried paper are tied into single bundle using thin bast strips. This bundle also is referred to as one Dhep. (Photograph No. 7)

5. Physical and chemical properties of Hand made paper : -

Durability and strength of hand made paper depends upon its structure plus physical and chemical properties. Structure means the component or arrangement of fibres in the paper; physical properties

includes strengths : tensile, bursting, tearing, folding, hydro extension and hysteresis of paper; and chemical properties encompasses . pH, Lignine, Alum, sulphur, and copper content.

The National Archives chemical laboratory of Nepal performed some of the test in paper samples.

(i) Structure:-

Microscopic observation of hand made paper shows that it contains long fibres, arranged irregularly and have some impurity materials like black solid particals.

(ii) Physical test : -

Basic weight, hygro extension, Hysteresis, thickness and folding tests are performed in the laboratory. Due to the lack of instruments other tests could not be tested.

(a) Basic weight :

Different paper samples, Nepalese hand made papers; thick variety (used end paper) and thin variety (used as repair paper); Japanese hand made paper, machine made paper (industrially produced papers) were tested for basic weight by simple method in laboratory using weighing balance. Basic weight was calculated using following formula :

$$\text{Basic weight of paper} = \frac{\text{Weight of the paper in gm}}{\text{Area of the paper meter}^2\ (m^2)}$$

(b) Hygro extension :

Different paper samples end paper repair paper, Japanese hand made paper machine made paper were tested for Hydro extension test in laboratory using British metalie scale, tap water and damped with sponge. Result were calculated using following formula :

$$\text{Hygro extension} = \frac{\text{Increase in length (I. L.)}}{\text{Original length O. L.}}$$

S. N.	Length	x	Breath	= Area M^2	Weight gm.	W gm/m^2	Mean
1. Nepalese Hand made paper thick (End paper).							
(a)	0.3697		0.3575	= .1327	11. 980	90.68	90.3
(b)	0.3697		0.3577	= .1322	11.90	90.01	
2. Nepalese Hand made paper thin (Repair paper)							
(a)	0.367		0.317	= .1163	6.150	52.8	53.2
(b)	0.3665		0.3167	= .116	6.22	53.62	
3. Japanese Hand made paper (Repair paper)							
(a)	0.4455		0.40	= 0.1782	4.60	25.81	25
(b)	0.446		0.40	= 0.1784	4.65	26.06	
4. Machine made paper.							
(a)	0.29		0.22	= 0.0638	5.80	90.90	90.69
(b)	0.291		0.224	= 0.0652	5.90	90.49	

Basic weight

Reading were taken at 65 % Relating Humidity and 25.5*c temperature.

S. N.	Original length	Extension	Increase in Length	$\frac{\text{I. L.}}{\text{O. L.}}$ X 100
1. End paper				
(a)	L. 31	31.22	0.22	0.709 %
	B.13	13.1	0.1	0.76 %
(b)	L.31.50	31.75	0.25	0.79 %
	B.13.0	13.1	0.1	0.76 %
2. Repair paper.				
(a)	L.24.2	24.4	0.2	0.826 %
	B.18.2	18.65	0.15	0.81 %
(b)	L.24.2	24.4	0.2	0.826 %
	B.8.25	8.325	0.075	0.90 %
3. Japanese paper.				
(a)	L.30.5	30.625	0.125	0.40 %
	B.16.4	16.475	0.075	0.46 %
(B)	L.30.45	30.625	0.175	0.57 %
	B.16.3	16.35	0.05	0.31 %
4. Machine made paper .				
(a)	L. (grain direction			
	29.1	29.175	0.075	0.26
	B. (cross direction)			
	10.4	10.55	0.015	1.44
(b)	L .g 28.9	29.0	0.1	0.34
	B.c 10.5	10.65	0.15	1.42

Hydro extension Reading were taken at 66. % R. H. and 27 % *c temp.

(d) Thickness of paper :

Different paper samples (End paper, repair paper, Japanese paper, machine made paper and document paper) were measured for thickness using, Calliper reading are as below :

1. End paper = 40 X 0.01 = 0.40 mm
2. Repair paper = 14 X .01 = 0.14 mm
3. Document paper = 10 X .01 = 0.10 mm
4. Japanese paper = 0.9 X .01 = 0.09 mm
5. Machine made paper = 11 X .01 = 0.11 mm

(e) Hysteresis of paper : -

Different paper samples (End paper, repair paper Japanese paper and Machine made paper) were tested for Hysteresis test, Results were calculated by using following formula.

$$\text{Hysteresis of paper} = \frac{\text{Change in length (C. L.)}}{\text{Original length (O. L.)}} \times 100$$

S. N.	Original length O. L.	Increase in length I. L.	Change in length C. L.	$\frac{\text{C.L.}}{\text{O. L.}} \times 100$
1. End paper.				
	(a) 31.00	31.10	0.10	0.32 %
	13.00	13.05	0.05	0.38 %
	(b) 31.50	31.60	0.10	0.31 %
	13.00	13.05	0.05	0.38 %
2. Repair paper.				
	(a) 24.2	24.3	0.1	0.41 %
	18.5	18.6	0.1	0.54 %
	(b) 24.2	24.3	0.1	0.41 %
	8.25	8.3	0.05	0.60 %
3. Japanese paper.				
	(a) 30.5	30.55	0.05	0.163 %
	16.4	16.425	0.025	0.152 %
	(b) 30.45	30.50	0.05	0.164 %
	16.3	16.325	0.025	0.153 %
4. Machine mad paper.				
	(a) 29.1	29.025	0.075	0.26 %
	10.4	10.425	0.025	0.24 %
	(b) 28.9	28.825	0.075	0.26 %
	10.5	10.525	0.025	0.24 %

Hystersis reading were taken at 66 % Relative Humidity and 27.5 •c

(e) Folding test

Different paper samples were tested for folding test in laboratory applying same amount of force during opening and folding paper samples, experiment results are as follows.

S. N.	Paper samples	No. of folds.
1.	End paper	more than 500 folds.
2.	Repair paper	more than 500 folds.
3.	Japanese paper	more than 500 folds.
4.	Machine paper	Breaking start at 200 folds separated into 2 piece at 430 folds.

(iii) Chemical test of paper:

Some of the important possible chemical test like pH and lignine tests were performed in the National Archives conservation laboratory for different paper samples.

(a) pH test:

Different pH test methods : pH paper, pH indicator and pH meter instrument were applied to test pH in different paper samples as mentioned above experiment results are shown below.

S. N.	Samples	pH paper	pH Indicator	pH meter
1.	End paper	8.5	8.0	8..4
2.	Repair	6.5	7.0	8.2
3.	Japanese paper	6.5	7.0	7.6
4.	50 years old paper	7.0	8.0	8.5

(b) Lignine test: -

Lignine test performed in different paper samples using 5 % Alcoholic phloro glucinol $C_6H_3(OH)_3\,2H_20$ and diluted Hydrochloric acid. Pink colour indicate the positive test of Lignine.

S. N.	Samples	Test Results
1.	End paper	–
2.	Repair paper	–
3.	Japanese paper	–
4.	Machine made paper	–
5.	News print paper	+

Conservation Techniques.

Civil Servant record of Darshan Bhet 2001 B. S. is taken as an example for conservation work. Its found most important and interesting because of following information of Kathmandu valley civil servant records. Salary (monthly/Annual), numbers of staff involved in offices & position of each and every staff.

Name of offices

- Hospital
- School/College/Library/Institute/technical institute.
- Durbar maintenance office.
- Guthi
- Court
- Fire brigades
- Drinking water supply
- Vaidya Khana
- Medical School
- Gorkhapatra
- Taxation office
- Cottage Industries
- Hanuman Dhoka maintenance office
- Royal palace
- Industrial business news collection.

The record is highly deteriorated due to fungal attack and mechanical pressure.

Following steps have been taken for conservation of the deteriorated record.

(I) Pagination :

Civil servant book pages were paginated on each and every pages. denoted by numerical numbers 1, 2, 3..... down the end page. At end of the page

written as numbers oblique end. For example if there are 100 pages at the end is written as 100/end . These letters are written on the corner side of the pages with soft pencil not even with ink pen.

(II) Fumigation :

Observation of deteriorated civil servant records show the fungal infection, so it is urgent need of fungicidal as well as insecticidal treatment. Fumigation method is one of the important protective measure of such infected book. Usually para dichloro benzene fumigant is used during fumigation using fumigation chamber for 3 hours daily up to 2 weeks.

(III) Cleaning :

Fumigated civil servant records were contaminated dust and dirt, spores of fungus, and eggs of insect, So they were cleaned with soft brush and in some of the portion vaccum clearer was also used. Folded pages were opened and made uniform, pressed for 48 hours with light weigh .

(IV) Dismantling :

All the sewing threads were trimmed with sharp knife, taken out, separated each pages of section very carefully as per requirement of the work and leather spine of the book placed separately .

(V) Repair :

Problems of civil servant record book clearly shows that the book is badly damaged by fungi and mechanical pressure. To maintain properly and prolong the life of the record, it has been felt urgent conservative and restoration of the missing pages of document. There are different technique of restoration of paper documents. In the National Archives of Nepal conservation laboratory only wet repair or traditional repair method is possible, because of the limited variety of raw materials and tools available in laboratory.

Solubility test of inscription or ink shows that the majority of them are insoluble in water and fewer ink latter addition inscription red, black and blue are soluble in water, such ink or inscription were protected by 2-3% PVA (Polyvinyl Acetate) solution .

Thin Nepal hand made paper (Repair paper) were laid down on net and cleaned white perpex sheet, moisten, damped with 1-2% formaldehyde treated boiled water, removed all the unwanted solid materials & thick fibers from the paper with the help of forcipe very carefully.

Freshly prepared flour pest containing 1-2% fungicide applied on the surface of the paper with the help of brush, smoothen, and removed excess of the pest using spong.

Dusted archival document are laid down very carefully on the surface of pasted hand made paper, pressed lightly with moist sponge, applied fungicidal treated pest on different edges of document .

A sheet of same colour (archival document). Japanese hand made paper was laid down on above document, missing portion as well as different edges of archival document (Right-left, top and bottom) were pressed with moist spong very carefully.

Rest of the remaining Japanese hand made paper from central and non-missing portion of archival document sides were taken-out or removed very carefully .

Long fibres of hand made paper were pressed on documents with the help of brush, dried at room temperature and peeled out manually very carefully.

(VI) Trimming and sewing :

Repaired document were taken out and made single fold. Single folded documents were marked standard size for trimming as per requirement using pencil and carpenter square than trimmed with sharp knife.

25 numbers of trimmed folded repair documents were piled together, pressed in Nipping press for 24 hours for single section. Similarly other sections were also done with.

A straight line drawn from top to bottom 1 cm apart towards the edges of spine, marked for sewing holes at a distance of 2 cm using same pensile, made holes on pencil marks using Bodkin and Hammer, and sewn single section by using strong book binding thread as side stitching method or stab sewing technique. In this way all the section were made, and pressed in nipping press for 24 hours.

(VII) Binding and finishing :

Pressed four sections were taken out, measured the thickness and length, noted, trimmed the thick leather of same thinkless and 6mm longer than above length for spine.

Measured thick leather width & divided into four equal parts, drawn a straight line from top to bottom marked on the middle of each part with pencil, again made pencil mark firstly at a distance of 2.3 cm and than 4 cm. made sewing holes in all the pencil marks with Bodkin and Hammer. In thus way spine leather is prepared for binding.

Sewn all four section in the spine leather very carefully by simple sewing technique tiped the single fold end paper (Thick Nepalese hand made paper) on front and reverse side of book. Sewing portion of the thread on the leather spine was lining or covered with cotton cloth, using paste and PVA (1:3) kept it dried at room temperature, further covered with hand made paper along top to bottom, pressed with bone folder and kept it dried for over night at room temperature. Thus civil servant record book was ready for making cover.

Two pieces of straw boards were measured and trimmed as per requirement of civil servant record book's size, 3 mm larger than both head, tail and fore edges, and also made 5mm groove in between spine edges and board.

Same thickness of board, same length of board taken, marked width of this board (2 thickness of board + one thickness of book), trimmed with sharp knife very carefully .

Cloth covering materials was measured and trimmed as requirement (for 2 board, one spine, two 5mm grooves) of board book size.

Freshly prepared paste and PVA mixture pasted on board and fixed on covering materials, pressed in Nipping press, and left it to dry at room temperature.

Such ready covering materials checked in civil servant record book than after applied paste on end paper, lining cloth, and lining paper; fixed in ready covering materials, pressed with bone folder and light weight.

Left it to dry at room temperature. Excess of end paper measured with divider, mark and trimmed off with sharp knife.

Conclusion :

The National Archives of Nepal depository hall of Archives section shows the archival documents in paper form. So that author is interested in conservation of paper archival document. General observation shows that paper documents like civil servant HMG of Nepal and other government, Voter list and its supporting documents, constitution of 1990 A. D (2047 B. S), Lal Mohar, Chithipatra, Sanlipatra, and National News paper (Gorkhapatra, The Rising Nepal) are historically as well as officially very important and valuable. Paper materials are made of organic material. Process of paper making shows the paper made bark from Daphne bholua (Baudoar/Baruwa/Lokta), due to this environmental, Pollution, Biodtceioration and mechanical pressure and chemical are higher chances to damage the paper materials. During the process of bark cooking caustic soda is used to make more easier defibricate the fiber,

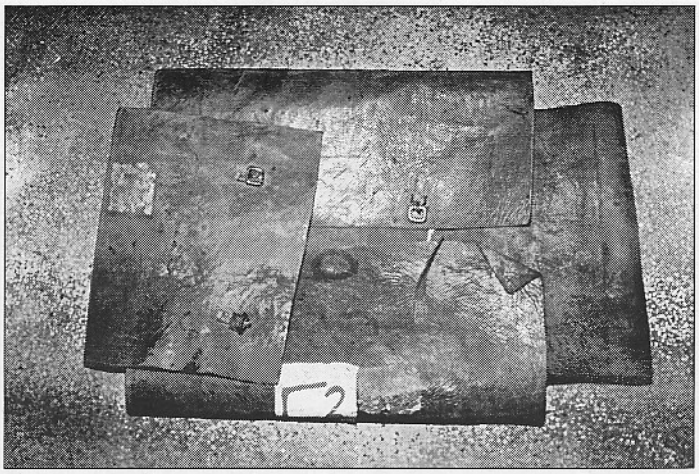
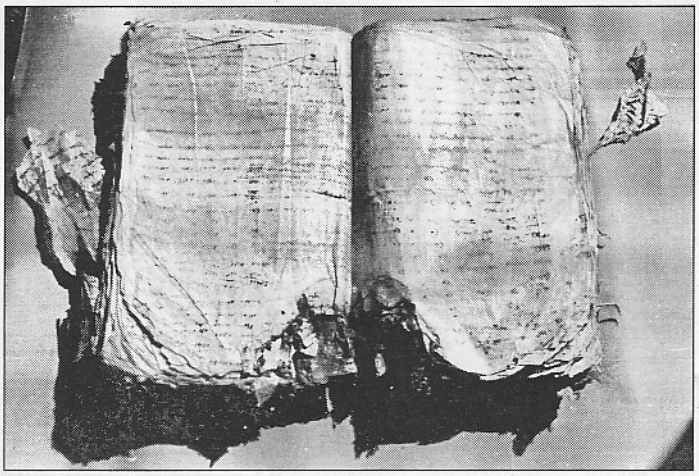


Photo No. 1 Leather covering material

Photo No. 2 Before restoration



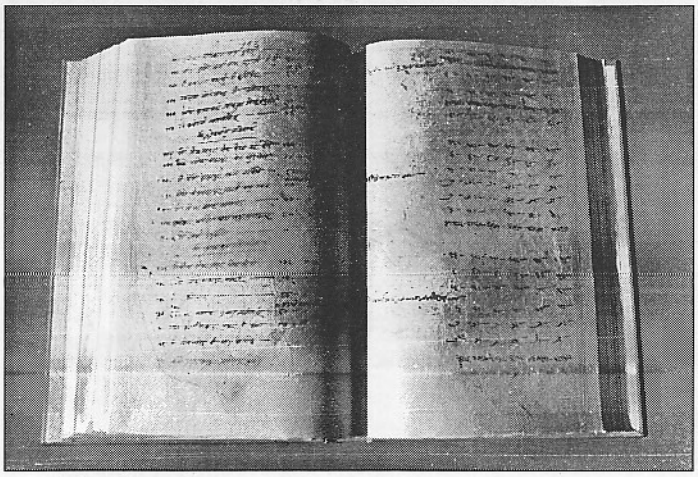


Photo No. 2 After restoration

"Photograph of Civil Servant Record 2001 B.S. Darshan Bhet."

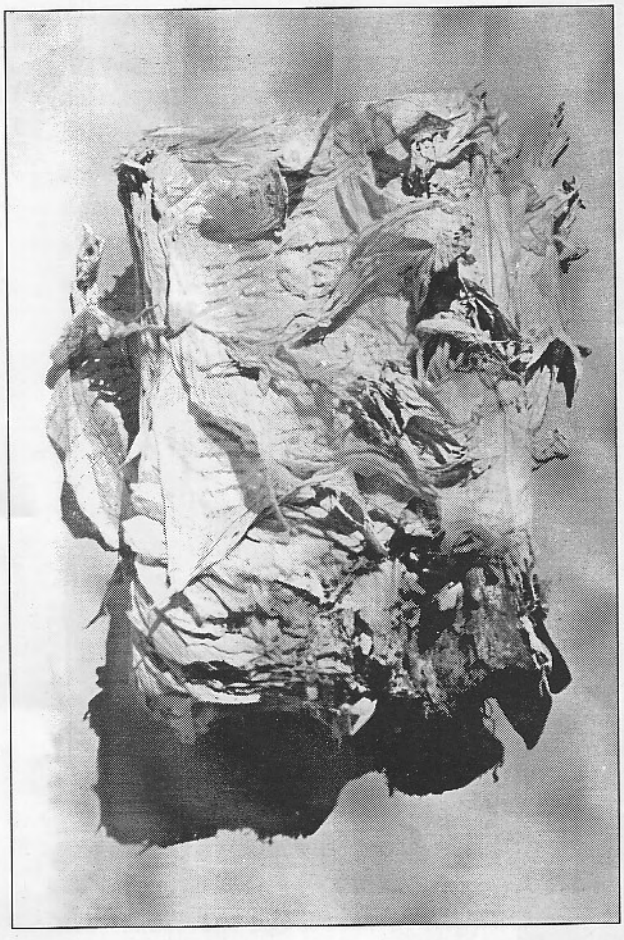


Photo No. 3 Before restoration deteriorated book

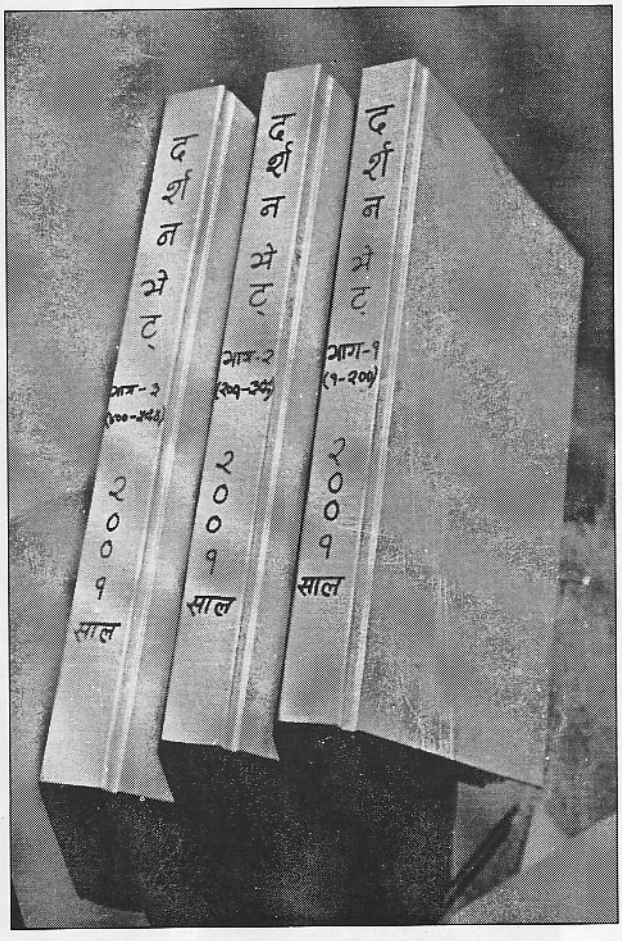


Photo No. 3 After restoration deteriorated book

"Photograph of Civil Servant record 2001 B.S. Darshan Bhet."

Photo No. 4 Cooking

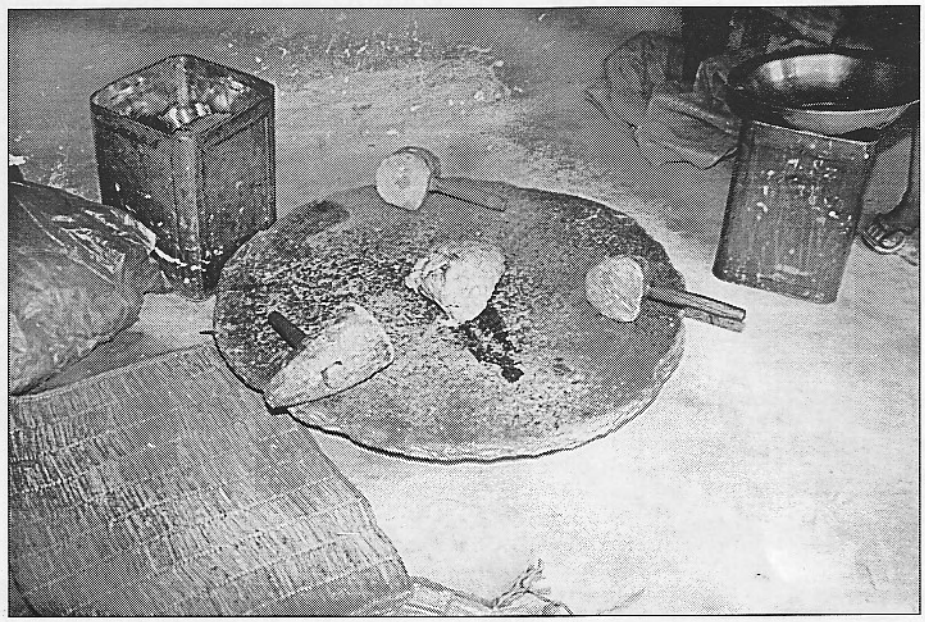


Photo No. 5 Beating

Process of Paper making in Nepal

Photo No. 6 Scooping

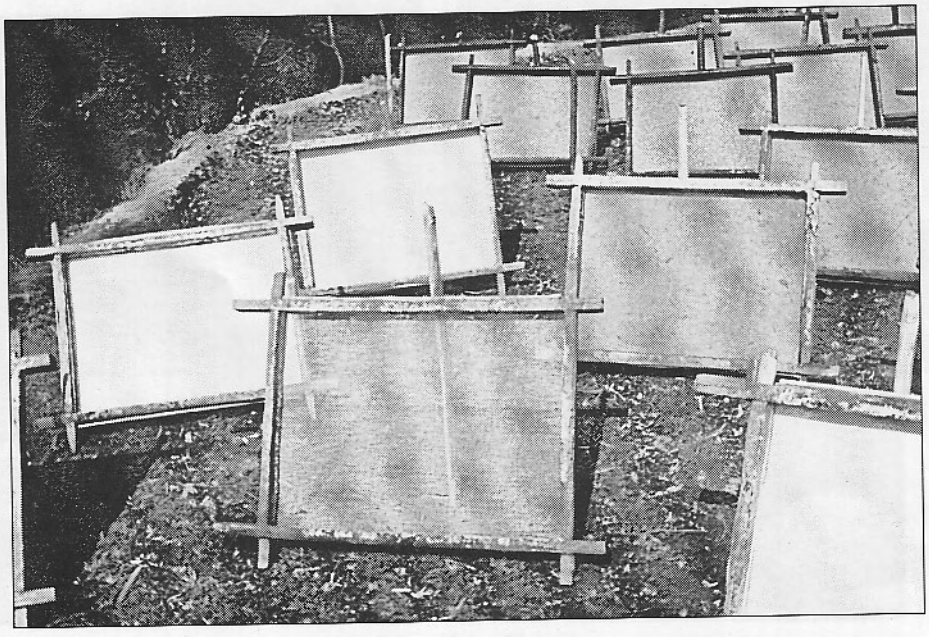


Photo No. 7 Drying

Process of Paper making in Nepal

in the long run caustic soda damage the cellulose if it is not thoroughly washed out with water .

As seen from the civil servant record book (Dharshan Bhet 2001), the book was badly damaged by fungi and mechanical pressure indicated serious problem. Such record documents are urgently needed of conservation and restoration. Conservation work carried out by para dichlorobenzene fumigation and brush cleaning technique, Deacidification is not needed because paper are still alkaline nature. Missing portion of documents are carried out by traditional repair method. Here author used Nepalese hand made paper because of durability, strength and in comparison to other paper. Here the author also performed some of essential paper test for check strengthening and durability of paper. Like Hygro extension, Hysteresis, thickness, folding test, pH and lignine test. Hygro extension and Hysteresis give the idea about the required size of paper during conservation work, folding test give the strength of paper and thickness test give the volume of book, pH and Lignine test indicate the durability of the paper, like wise microscopic study shows the arrangement of fibess, irregular arrangement of fiber clearly indicate the paper expands equally in all direction as indicated in Hydro extension experiment, applied in tradition repair method.

During the sewing process the author used stab sewing technique, here total two hundred ninety seven single folded sections divided and made three volume. Such volume consist of four section each section consist of twenty five single folded section for suitable and reasonable volume of book. Thick Nepalese hand made paper used as end paper, not used any glue and paste on spine of the record book and used thick leather as in original case for durability and strength of the book. Flat case binding preferable in the current situation. Finally, author would like to suggest that in order to protect the record books from different deteriorating factors its is necessary to place the books properly, maintaining good lighting system, ideal temperature (18 - 23^0 c) relative humidity (55 -65 %) made free from dust & dirt and also have good air circulation inside the Archives depository hall.

References

1. Dangol, Bal Ram Das "Abhilekha Bandobashat Ko Shidhanta Ra Rastriya Abhilekhalaya", 2044 B. S.
2. Hilarry Jenkinso, "Manual of Archives administration" 1966.
3 Jesper Trier "Ancient paper of Nepal" Jutland archaeology Society publication Vot. X 1972
4. National Archives of India "Repain and preservation of Records."
5. Singh. G. M. "Preservation of writing materials in the National Archives of Nepal." Abhilekha PP. 84 - 102 Vot 13, 2052.