

**Majella Marjorie Tan**  
**MARQUEZ\***

\* Second Deputy Director of the Sabah State Archives Department (SSAD), Km 4, Penampang Rd, Locked Bag 2017, Kota Kinabalu, Sabah, Malaysia  
Tel. +6088259916  
Fax: +6088225803  
Email: majella.marquez@sabah.gov.my

**MARQUEZ, Majella Marjorie Tan, Technical and Professional Archives Problems and Questions: a Sharing Experience. Atlanti, Vol. 19, Trieste 2009, pp. 303-312.**

*Original in English, abstract in English, Italian and Slovenian, summary in English*

*This paper aims to share selected issues experienced and challenges undertaken by The Sabah State Archives Department (SSAD), East Malaysia towards addressing technical and professional archives problems in the preservation of archival records. Part One of the paper provides a brief overview of Sabah's administrative history and the historical development of SSAD. This is evidently significant in order to have a better insight and understanding as to how archival records were created, used and maintained, preserved and managed. In short, SSAD's profile. Through this introductory account, Part Two of the paper then seeks to address the four main key issues and its contributing factors leading to serious deficiencies or technical and professional archives problems encountered by SSAD management. It then unveils series of initiatives undertaken to overcome the said deficiencies. Part Three concludes with the opinion on the importance of sustaining a proper management in preserving the life cycle of records (paper and electronic) - as part of the nation's historical, evidential and cultural heritage for our present and future generation.*

**MARQUEZ, Majella Marjorie Tan, Problemi e questioni tecnico-scientifici sugli archivi: un'esperienza da condividere. Atlanti, Vol. 19, Trieste 2009, pp. 303-312.**

*Il presente articolo vuole far condividere alcune particolari questioni e sfide affrontati dal Dipartimento archivistico di stato di Sabah (SSAD), nell'Est Malesia, al momento di confrontarsi con le problematiche archivistiche tecniche e professionali nella conservazione dei documenti d'archivio. La prima parte*

# Technical and Professional Archives Problems and Questions: a Sharing Experience

## PART ONE

### BRIEF GEOGRAPHICAL LOCATION AND DEMOGRAPHY OF SABAH

Sabah, located in the Northern part of Borneo, is surrounded by the South China Sea in the north, the Sulu Sea in the North East, the Celebes Sea and Makassar Straits in the East and the Java Sea in the South. It has a population of 3.3 million with more than 40 different ethnic groups and over 80 local dialects spoken.

### BRIEF ADMINISTRATIVE HISTORY OF SABAH

Sabah once known as North Borneo was administered by the British North Borneo Chartered Company (BNBC), 1882-1942; the Japanese Military Administration, 1942-1946; the British Military Administration in 1946; and the British Crown Colony, 1946-1963.

On 31 August 1963, Sabah was liberated from the British government. Following the findings of the Cobbold Commission into possible merger with the Federation of Malaya and Sarawak, Sabah then became part of the formation on 16 September 1963 known as Malaysia.

The capital city of Sabah is Kota Kinabalu. Kota Kinabalu is located on the west coast of Sabah with a population of 300,000 inhabitants. The seat of government is administered in Kota Kinabalu and so is The Sabah State Archives Department.

## HISTORICAL DEVELOPMENT OF THE SABAH STATE ARCHIVES

Based on archival records it was during the reoccupation of Sabah (then North Borneo), Sarawak and Brunei by the British Military Administration (BMA) from August 1945 until 15th July 1946 who found and preserved, prewar public archives and public records that survived. Brigadier General C.F.C Macaskie gave the orders to search, acquire and preserved North Borneo archives including those of Sarawak and Brunei records. As a result, it is now believe that the British Crown Colony who took over North Borneo from the British Military Administration on 15th July 1946 realized the establishment of a North Borneo Central Archives.

On 22nd November, 1957, the British Crown Colony Secretariat issued a circular to all Residents, Heads of Departments, District Officers and Asst. District Officers informing the setting up of the North Borneo Central Archives (NBCA), at the Secretariat office, with the view to acquire and centralise all records created during the British North Borneo Chartered Company and Colonial period.

After independence, the Sabah Museum was held responsible for the continuum care of NBCA in 1965. Archival activities, except for research, came to a standstill for thirteen(13) years, from 1966 to 1979. It was not until 18th July, 1979, the NBCA achieved a breakthrough when the Sabah State Archives Department (SSAD) was finally set up. The State Archives Enactment was passed in 1980 and subsequently gazetted on 1st January, 1985.

Records stored at the NBCA were then transferred to a building in 1980 meant to be for the Sabah Museum Gallery. In 1984, SSAD merged with Sabah Museum and became known as the Department of Sabah Museum and State Archives under the Ministry of Culture, Youth and Sports. Records management awareness programme was conducted in various state public offices. Historical materials were acquired and oral history and oral tradition was conducted actively in Sabah, Australia and Great Britain.

In 1992, The Sabah State Archives Department functioned independently under the Chief Minister's Department. The organisation was restructured- Records and Archives Management division, Processing and Support Services and Extension Services were established.

As years went by, there were several SSAD directors that came and went. It was not until 22nd March 1999 when Datuk Datu Tigabelas Datu Zainal Abidin, assumed the directorship post, which he still holds until today the department seemed better poised. A Records Centre branch at Keningau district was set up; Records Management and Acquisition Program has escalated; Arkib Negeri Information Services (ANiS) which was launched on 28th September 2004; various state exhibitions were held, publications on prominent personalities, historical places and events were published; The Sabah State Records and Archives Enactment 2007 was passed in 2007 repealing the previous State Archives Enactment No.9 of 1980. The

*dell'articolo fornisce un breve sguardo della storia amministrativa di Sabah e dello sviluppo storico del SSAD. Ciò al fine di ottenere una migliore visione ed una migliore comprensione del come i documenti d'archivio sono stati formati, utilizzati e conservati, gestiti. In breve, un profilo del SSAD. Dopo tale introduzione, la seconda parte cerca di trattare dei quattro principali aspetti chiave e dei fattori che hanno contribuito a serie deficienze ovvero a problemi tecnici e professionali incontrati nel corso della gestione del SSAD. Evidenzia quindi la serie di iniziative prese per superare tali deficienze. La parte terza conclude con il giudizio sull'importanza di sostenere un'adeguata gestione nel conservare il ciclo vitale dei documenti (cartacei ed elettronici) come parte del patrimonio storico e culturale della nazione per la presente e le future generazioni.*

**MARQUEZ, Majella Marjorie Tan, Tehnični in strokovni problemi in vprašanja arhivskih dokumentov: temeljne izkušnje. Atlanti, Zv. 19, Trst 2009, str. 303-312.**

*V prispevku razpravljam o temeljnih podatkih, do katerih smo prišli v projektu v državnem arhivu Sabah v Maleziji, ko smo iskali reševanje tehničnih in strokovnih problemov pri brambi arhivskih dokumentov. V prvem delu prispevka navajam kratek pregled zgodovine administracije v Sabahu in zgodovinski razvoj državnega arhiva, ker je to pomembno, da lažje razumemo, kako so arhivski dokumenti nastajali, se uporabljali in kako se z njimi upravlja. Po uvodnem delu pa v drugem delu razpravljam o štirih ključnih oblikah tehničnih in strokovnih problemov, s katerimi se ubadamo pri upravljanju z dokumentacijo. Pri tem navajam več načinov, kako razrešiti te probleme. V tretjem delu prispevka navajam sklepe o pomembnosti upravljanja z dokumenti tako na papirju kot z elektronskimi, saj pomenijo del nacionalne kulturne dediščine za to generacijo in za naslednje.*

### SUMMARY

*The task and responsibility in managing the preservation of archival records is very tedious and demanding as it is a specialised area that needs special attention and requires a variety of mechanisms such as archival legislation, purpose built Archives building and Records Centre storage, proper preservation and conservation techniques, trained and qualified staff and appropriate facilities and equipments. Most archival institutions today are trying their very best to ensure that these various mechanism in preserving and maintaining the longevity of records both paper and electronic for our present and future generation are perpetually initiated, protected and to continuously cope with the introduction of modern methods and technologies in their very best*

*possible manner as they could, despite the minimal budget allocated, insufficient manpower and qualified officers and staff. As in the case of SSAD, systems affecting the preservation of records are evident and we did identify the issues and was able to address them effectively. As a result, initiatives were undertaken for example the introduction of the archival enactment, The Sabah State Records and Archival Enactment 2007 repealing the State Archives Enactment 1980; A Proposed New Purpose Built Archives Building Complex; Succession Plan to Recruit Qualified Civil Servants with Academic Qualifications in Records Management, Archives Administration, Conservation and IT; and finally utilising proper Equipment and Facilities. We are also in the process of looking into the feasibility of long term preservation of electronic records because of the cost implications and durability of the medium. Having said that, can you imagine how life is going to be without the existence of records if it is not properly preserved? Which form of mediums should we seriously preserve for our heritage? EARTH WITHOUT RECORDS? Without records there can be no rule of law and no accountability. The foundation of accountability is based on records. Without records there can be no accountability framework, and without an accountability framework there can be no responsible government. If RECORDS disappear from the face of the Earth overnight, how long would it take for nature to reclaim its evidence? And which format or medium will replace it?*

first ever state level Seminar on Records Management was held on 3rd December 2008; the creation of post for officers and junior staff increase and is still ongoing and not forgetting the continuous upgrading of post for the present officers and junior staff.

## PART TWO

The task and responsibility in managing the preservation of archival records is very tedious and demanding as it is a specialised area that needs special attention and requires a variety of mechanisms such as archival legislation, purpose built Archives building and Records Centre storage, proper preservation and conservation techniques, trained and qualified staff and appropriate facilities and equipments.

As in the case of SSAD, systems affecting the preservation of records are evident and it is significant to address and share the key issues identified and initiatives undertaken to improve the said mechanisms as disclosed below:

### 1. THE ENACTMENT

#### **ISSUE: The Sabah State Archives Enactment No. 9 1980**

For twenty-nine (29) years since 1980, SSAD functioned in accordance to the Sabah State Archives Enactment No.9 1980. The Enactment contained four main chapters and 19 provisions which dealt with interpretations, responsibility and authority of the Minister-in-Charge, functions and powers of the Director, identification and establishment of places of storage, access of public to public archives and penalties for the prohibition or export of public records and archives.

It emphasized more on the end product of records life-cycle and lesser initiatives to promote good practice in the earlier phases of records management. In this context, it is however extremely significant to create awareness on the preservation of records at the creation stage to ensure records of national, historical and evidential value are not neglected or otherwise ignored or destroyed at the earlier phases of the life-cycle of records.

Subsequently with the wake of the oncoming changes and impact of information technology, the Enactment has also grown less and less ineffective in public offices to meet the needs of proper records management.

## **INITIATIVES: The New Sabah State Records and Archives Enactment 2007**

Hence, the obvious solution was to have a more succinct Enactment reflecting the Sabah State Government's commitment to the total preservation and management of the life-cycle of records.

With the repeal of the principal Enactment, a new Enactment was enacted featuring 11 chapters with 79 provisions designed to:-

- 1) ensure a better coverage of the elements of proper management of the life-cycle of records (paper and electronic);
- 2) strengthen the role and functions of the Director from 8 to 23 functions;
- 3) establish an Advisory Board;
- 4) strengthen the role of public offices in the management and protection of classified and unclassified state records-;
- 5) establish and manage Record Centres and Archives Repositories;
- 6) strengthen the provision on access, custody, control and security of public records and archives for the better protection, preservation of our heritage;
- 7) legalise the registration of plaques and time-capsules;
- 8) enforce stricter penalties;

S.24 of the Enactment clearly stated that destruction of public records (paper or electronic) is prohibited without prior approval or written consent from the Director of SSAD. Any persons who failed to abide by the instruction are liable to a fine not exceeding Ringgit Malaysia Ten Thousand or to imprisonment for a term of not exceeding two years or to both if convicted;

S.28 of the Enactment also stated that any persons who failed to surrender public records which are more than 20yrs old or non-current public records which in the opinion of the Director are or likely to be of archival value are liable to a fine not exceeding Ringgit Malaysia Five Thousand or to imprisonment for a term of not exceeding one year or to both if convicted;

Finally, S.43 of the Enactment, prohibits any persons from exporting archives except with the prior consent of the Director failing to do so, an offence is committed and shall be on conviction be liable to a fine not exceeding Ringgit Malaysia Twenty Thousand or to imprisonment for a term of not exceeding two years or to both;

and

- 9) establish memorials and galleries.

Having the new Enactment in-place, the SSAD is in the process of reviewing and revising the department's policies, procedures and systems.

## 2. THE BUILDING

### **ISSUE: The Sabah Museum Building**

For 30 years since 1979, archival records are stored at a building once known to be for the Sabah Museum Gallery. It is a T-shaped two storey building seated at a higher elevation ground on a widespread of 12 acres land. The land soil is sandy clay with shales at shallow depth except for the reclaimed area where it is of soft sandy clay up to 10ft deep and the underlying layer is sandy clay.

The building structure is of conventional reinforced columns and bricks with brick infill. The brick walls are 9 ins thick plastered both sides with shanghai plaster and fascia finish. The roof is flat and built with structural steelwork with concrete roof slab carried by 8 ft span cantilever beams. The roof sheeting is of 1/10 in 'nuralite' semi rigid asbestos asphalt and cemented with a 10 year warranty water-proof screed which has expired.

The layout design of the building is grouped into 3 distinct zones. Zone One (1st floor) accommodates the Administration and Finance Section, offices of the director, deputy directors, heads of section, and the Organisation Development and Technology Section. While Zone Two (ground floor) houses the Acquisition and Processing Section, Conservation and Reprography Section and the Research Section. The Archives Repository and Records Centre is located in Zone Three.

### **The Repository-Physical Layout**

Archival records are preserved and stored on the 1st floor of Zone Three measuring an area of 9,459 sq.ft. While semi-current and non-current records are stored on the ground floor measuring 6,724 sq. ft where the entrance is located. Access to archival records are either taken or return via a lift or using the spiral staircase which are both located within the Records Centre.

The floor between the upper and ground storey are constructed of rib-beam floors resting on double beam 36in x 27in main beam and 30in x 5in secondary beam. Since it was built for a museum gallery, the floor loading on the upper floor can only withstand a load of 80lb/sq.ft. Presently, the floor loading is carrying a live load of 180 lbs/sq.ft which is far beyond the recommended load that it should carry as it has 60 static metal shelves accommodating each 4 linear meters of records weighing about 60kg. Therefore the total each filled shelf carries is 240kg load (approx. 528 lbs) excluding the shelf weight and each shelf occupies a floor area of about 3sq. ft. On the upper floor, public archives houses various medium of records - paper and electronic records. Whereas on the ground floor, the Records Centre only accommodates paper records.

### **The Repository: Care & Handling, Environment, Security & Disasters**

The Repository is equipped with 24 hrs air-conditioning, dehumidifiers and thermohydrometers and is fitted with openable windows covered with dark tinted sheets. The lights are fitted with filtering sleeves.

The department has been facing problems with climatology control and biological factors towards the preservation of records as it experience frequent fluctuation in temperature and relative humidity due to frequent roof leakages as the design of the roof is flat. When it rains water clogs and the standing water causes the roof to crack permitting rain water to seep through the hairline cracked ceiling during heavy rainfall. Coupled to this, SSAD also experienced power failure affecting the air-conditioning in the repository.

In addition to this matter, in 1994, concrete pieces from the roof slab and gutter of the main building structure fell some 30ft down to the corridor. The relevant authorities were notified. Remedial steps were undertaken to restore the defects but the problem still persists as we are experiencing further increase deterioration and to top it off, the structural columns has developed deeper cracks.

There are two entrances to the Repository equipped with CCTV and so is the internal area of the Records Centre and the Archives repository. The wooden doors are not fireproof. Fire extinguishers are of carbon dioxide and powder form. No sprinklers are installed.

### **INITIATIVES: A New Archives Building Complex**

Having identified the setbacks of the present building, it is definitely non-compliance to international archival standards and therefore unsustainable as it impedes the mobility and longevity of the preservation of our archival records and making the task of preservation more difficult. A proper purpose built Archives building would assist in minimising the bottle neck problem in ascertaining the longevity of our archival records.

Seeing the crucial need to resolve these problems, the Chief Minister on 15th July 2009 has delegated the Director of SSAD to set up an Archives Building Committee to plan, design and submit a draft proposal for a purpose built Archives building focusing on the important elements of preservation and conservation operation and other added features.

Reference materials and Archives consultants on Archives Building are scarce. It is hoped that the ICA - Archives Building Committee, UNESCO, the International Institute for Archival Science, Maribor, Slovenia and other Archival Institutions and consultants with expertise in this field be able to aid us in our quest to for a new purpose built archival building.

## **3. HUMAN RESOURCE MANAGEMENT**

### **ISSUE : Technical and Professional Archivists**

At present our staff strenght is **69**. 33 comprised technical staff while the 36 remaining consists administrative staff. Out of the 33 technical staff only two have obtained their masteral degrees from the University College London and will eventually retire in 2017 (8 years) and 2019 (10 years) respectively.

Some of the remaining technical supporting staff are degree holders in different fields like History, Political Science, Education, Human Resource and Economics. The junior staff did not undergo any formal academic education on records management, archives administration, conservation and reprography and information management system due to family commitments and financial factor. Nevertheless, efforts were made for them to attend technical training and short term attachment at the National Archives of Malaysia. The Government of the Sabah State also encourages the SSAD staff and officers to attend refresher courses, workshops, seminars and conferences on records and electronic records management and archives administration at the national and international level.

Education and training opportunities are very significant for SSAD staff more than ever, as it is a paramount to maintaining and enhancing one's skills, especially in response to changes in technology.

Collaboration with other archival institutions in developing education and training programs is equally important and encouraged and can be an excellent way to raise awareness of some of the challenges in preservation and to identify general areas of concentration. Besides, the above, resource sharing and efforts worldwide sources is essential to keep abreast with the latest and updated technologies applied in overcoming the problems of preservation faced by various archival institution.

Between the years 2015 to 2020, a total of 20 senior technical staff will be retiring. This figure is very alarming and wearying as it portrays a vacuum scenario, if replacement is disregarded.

#### **INITIATIVES: Succession Plan**

The quality of any records management and archives administration is directly related to the quality of staff who operates it.

Records work must be seen as a worthwhile career for those who are well educated, intelligent and industrious, not as the posting of last resort for those who are unqualified, incompetent and idle. When planning a restructured records and archives institutions, it is necessary to consider the number of staff needed, the tasks they will undertake, their particular qualifications and the requirements for their promotion through the civil service.

This year 2009, the Director of the SSAD has stressed the need to recruit citizens with academic qualification in Records Management, Archives Administration, Conservation, Preservation, Information Management System, Information Technology Management System, Chemistry, Electronic Records Management System, Computer Science, Linguistics, History, Journalism, Education, Mass Communication, and Photography by submitting a proposed succession plan. A person responsible for the continuum care of the life-cycle of records (paper and electronic) will certainly need specific knowledge and expertise.

New job titles and the creation of new officers posts for the management level such as Archivists, Records Management Officers, Linguists, Photographers, Historians, Information and Enforcement

officers, Paper Conservators, Photograph Conservators, Audio-Visual Conservators, Architectural Conservators, Data/Digital Archivists, Preservation Officers, Web Archivists, Database Administrator, Network Administrator, IT officers, System Analyst has also been proposed not only to meet the needs of growing conventional records but also on electronic records which have become part of SSAD holdings.

SSAD have also requested for the creation of more posts for assistant officers, technicians and assistant technicians on the above fields to assist in the execution of proper preservation and conservation of the entire records life-cycle (paper and electronic).

#### **4. EQUIPMENT AND FACILITIES**

##### **ISSUE: ICT**

Another challenges to the management of records is the introduction of computer technologies which has changed the life style and working culture of the public and private sectors. In the public sector, The Sabah State Computer Department(SSCD) was established in 1976 to organise structures and systems to suit the needs of an increasing global demand.

In 1992, SSAD began the use of computers in phases with the guidance from the SSCD. Gradually as years went by, the number of computer usage at SSAD increased. SSAD wishing to preserve and use electronic information are however faced with the difficulty of dealing with a technology-dependent medium.

Electronic records medium when stored is fragile compared to other media forms such as paper and microfilm. The life of a computer diskette is only about ten years before degradation of the media begins to have an impact on the records. Electronic records when stored in poor environment conditions can be subject to loss and destruction. Even slight changes in humidity and temperature can disturb the magnetic properties of disks and tapes thus leading to the loss of some or all of the records.

Power shortages, power surges or situations where the power is shut off suddenly can lead to a sudden loss of electronically recorded information, especially if there are no emergency back-up facilities in place.

The absence of assigned accountability and responsibility is also probably one of the most serious threats to electronic records because staff within the organization were not charged with the tasks of protecting them.

##### **INITIATIVES:**

Despite the setbacks, SSAD went on to launched its web site in the year 2000. However sources on our records are available for public viewing. We are at the moment at the neophyte stage but will striving towards the same direction as other Archives institutions dis-

seminating preservation information around the world through their respective web sites.

A database system known as Arkib Negeri Information Services (ANiS) was developed and launched on 28th September 2004 for the Acquisition and Processing section with the assistance of the Sabah State Computer Department. The existence of ANiS made it possible for public to view our record sources

On 5th March, the Japan Consul for Labuan, Sarawak and Sabah had donated to SSAD a digital scanning machine to digitise all archival records holding. An Archives Digitisation Unit was formed with the placement of two staff to undertake the task.

We are vigilant of the obsolescences and the introduction of new hardware and software into an organisation, digital records are required to migrate to the new system to avoid loss of information but at times it is inevitable due to incompatibilities between the original system and the new system.

Discussions between the Directors of the SSAD and SSCD is still ongoing to develop appropriate tools and techniques necessary to ensure that electronic records are managed properly at the mean time while waiting for the new archives building to be erected.

## PART THREE

In summary, no doubt both paper and electronic records are globally utilised, and are indeed an empowering and sophisticated tool utilised, maintained and referred to by any organisation and society all over the world, after people, money and physical resources, as they are in nature evidential to our present and future generation.

**According to Kitching (1996), 'we turn to records because we have a short memory on events which we experienced each day in our lives, the decisions made and actions taken everyday or even the history we create is recorded.'**

A variety of mechanisms as mentioned in Part Two of my paper is significant to safeguard records longevity. **Can you imagine how life is going to be without the existence of records if it is not properly preserved? EARTH WITHOUT RECORDS?**

Most archival institutions today are trying their very best to ensure that the various mechanism in preserving and maintaining the longevity of records both paper and electronic for our present and future generation are perpetually initiated and to continuously cope with the introduction of modern methods and technologies in their very best possible manner as they could, despite the minimal budget allocated, insufficient manpower and qualified officers and staff.

Coupled to this, It is also of my opinion that the International Council on Archives should assist ailing archival institutions and bridge the various Archival institutions into implementing Best Practi-

ces and Standards to preserve and protect and further enhance the use of our world's archival heritage around the world not only for the present but also the future generation. **If RECORDS disappear from the face of the Earth overnight, how long would it take for nature to reclaim its evidence? And which form or media will replace it?**

## REFERENCES

### Primary Sources

1. ANS 100 -1/1 Enakmen Arkib Negeri Sabah
2. ANS (S) 100 -1/1 Enakmen Arkib Negeri Sabah
3. ANS 100 -9/7 Jld. 1-2 Jawatankuasa Latihan
4. ANS 100 9/8 Jawatankuasa Komputer
5. ANS 100-9/21 Pengkomputeran Jabatan
6. ANS (S) 500-13/3 Jld 1-2 Jawatankuasa Perjawatan

### Secondary Sources

1. The Sabah State Archives Department, *The Sabah State Records and Archives Enactment 2007*, Government Printing Department, Kota Kinabalu, Sabah, Malaysia, 2008
2. Edmund, Margaret: *Storage of Archives with reference to the Sabah State Archives*, Malaysia 1994 (thesis)
3. Kitching, Christopher: *Archives: The Very Essence of Our Heritage*. West Sussex: Phillimore, 1996.
4. Roper, Michael and Millar, Laura: *The Management of Public Sector Records: Principles and Context*, UK, International Records Management Trust, 1999.
5. Laporan Tahunan 1980-1986: *Government Printing Department*, Kota Kinabalu, Sabah, Malaysia, 1986