

## Building a new home of our history - the Bafokeng Digital Archive

**Khumo Molobye**

Royal Bafokeng Nation

[khumo@bafokeng.com](mailto:khumo@bafokeng.com)

### Abstract

*The Royal Bafokeng Nation values its history and heritage. It believes in the Setswana proverb that says 'Maropeng go a boelwa, go sa boelweng ke teng'; meaning that mankind will always refer back to its origins in order to forge ahead and progress. In light of the above, an initiative, known as the Bafokeng Digital Archive was birthed in 2011, with the aim to collect and disseminate information about events that shaped the Bafokeng's past and*

**Key words:** digital archives, oral history, Royal Bafokeng Nation, preservation

### 1. Introduction

The Royal Bafokeng Nation, later to be referred to as the RBN, is a community of approximately 150 000 Setswana-speaking people living in the Rustenburg valley, in the North West province in South Africa, according to the study, Population and Use of Land Audit (PULA) that was conducted in 2011. The Bafokeng are under the traditional leadership of Kgosi (King) Leruo Tshekedi Molotlegi. Their capital city is Phokeng. The Bafokeng own over 1500 square kilometres of land which is rich in platinum and other minerals, Mbenga and Manson, 2010. They have used the wealth from these mines to build social structures and support social

*our identity as a nation. Using the new to preserve the old, the Bafokeng Digital Archives is a collaborative effort to document and make accessible, the community's rich history.*

*This paper aims to highlight some of the processes followed, challenges met and lessons learned from the project. Some of the achievements of the projects include: archival storage and digital infrastructure, material acquisition and metadata creation, web presentation and marketing.*

development that benefit the entire population of the Nation.

The RBN base their development on the nine key areas, namely Education & Skills Development, Health & Social Development, Economic Development, Food Security, Safety & Security, Public & Community utilities, Environmental Management, Sport Development, and History & Heritage. This clearly shows the high regard that the history and heritage aspect is given by RBN. RBN, through the Research and Knowledge Management department saw a need to design and implement a project to collect and preserve its history and heritage-related information.

The ancestors of the Bafokeng people did not leave much written records, although

there are few sources that can be consulted for traced of the RBN's past, for example Native Commissioner's records. Elderly community members who can orate the memories are some of the sources that can be consulted for more information on what the nation's ancestors lived for.

In 2008, the idea of a digital hub that would be the central point of the RBN's history and heritage was envisaged by the Research Department. There has always been an appetite for historical records, where the community needed to acknowledge its past and be made aware of issues that contributed to the position in which it finds themselves to date. Historical events that took place in the RBN also pushed for the idea to be a realizable one; for example: the enthronement of the current King, Kgosi Leruo Molotlegi, is one historical and cultural event that all the Bafokeng people regard highly (Smith 2003, Cook and Hardin 2006, Graham 2003). This is one of the events that propelled the RBN Governance to take a leap and implement this project. As the community was preparing to host international visitors, opportunities to start collecting and organizing its history arose. The making of the documentary 'Playing the Game the Bafokeng way', as well the history book entitled 'People of the dew', showed that there was an enormous amount of historical information for the Bafokeng people in many parts of the world, like the Hermannsburg Mission Centre in Germany. The records at this Centre are not easily accessible to the local community.

The plan to implement a digital home was therefore an ideal worthy to be pursued. The Bafokeng people needed to protect most of

the information about its past for posterity. The Bafokeng Digital Archives (BDA) was then conceived, with its aim being to act as a tool to retain the stories that shaped the Nation's achievements for future generations. BDA is a repository for all historical material which comes in different forms, including digital scans of photos, letters, maps, newspapers and journal articles, books, posters and art works, virtual representations of heritage sites, audio and video recordings. Oral history interviews are available as text, audio files and in some cases as video files.

The Bafokeng people believe that it is every Mofokeng's right to know about their past because it is their heritage and part of their national identity (Bergh 2005, Niezen 2003, Bozzolli 1991). BDA is intended to bridge the gap and become a modern society's cultural institution, a source of meaning and reassurance that some pieces of the past will be preserved (Foster and Dillon, 1999). BDA is to serve that purpose of collecting knowledge from the elder generations, who still have historical accounts in their memories; and presenting it in online user-friendly platform, accessible for future generations.

## **2. Building BDA - the methodology**

Different aspects that contributed to the successful implementation and use of the BDA were thoroughly looked into and are as follows:

- Community participation
- Material acquisition and soliciting
- Infrastructural Development
- Interoperability

- Legal framework
- Marketing

## **2.1 Community participation**

The Oxford Dictionary defines a community as "a group of people who are linked by social ties and share common perspectives and interests; many also share a geographical location". The RBN as a community believes that for them to know where they are going, they need to know where they come from. It is our responsibility as information workers and research department to design interventions that are culturally appropriate. It is of utmost importance to include and work together with the community on this project. The active collection, recording and preservation of heritage, history and indigenous knowledge through community-based processes is central to BDA.

The RBN already has organized governance structures that helped to get the community buy-in on this project. Community wards, called *lekgotla* in Setswana, led by the Headman comprises of clans or families. There are seventy two wards in the twenty nine villages of the RBN and they are divided into five regions. About twenty-six out of seventy-two clans were randomly approached and were in constant consultation with the BDA Project leader regarding this project. They are the owners and users of the collections in BDA, and therefore there would be no BDA without their participation. "Communities are no longer seen as recipients of development programs but are critical stakeholders that have an important role in projects and programmes in their areas"(White, Williams and Spenceley 2001: 12).

## **2.2 Material acquisition and soliciting**

Community participation has proven that members develop a sense of responsibility towards the project. They want to see their project succeeding and being implemented fully and correctly. Gow and Vansant (1983: 427) mentioned that voluntary provision of time and material to a project is a necessary condition for breaking patterns of dependency and passivity. This has been the case at the RBN. The more community members are informed, the more they want to volunteer to assist. They understand that there are benefits that lay the project as they contribute positively to it. Educating them on the importance of preserving and sharing their heritage is therefore very key. Workshops with the community members were conducted, with regular communiqué through the local newsletter.

The BDA collection is made up of materials that were solicited from provincial, national and international official archives as well as personal collections such as family albums. Different libraries and archives were consulted to solicit for all the material of heritage- relevance to the community of Mafokeng. These include the National Library of South Africa, Brenthurst Library, and the Hermannsburg Mission Centre in Germany. Most of the information would be in paper-formats. The material get scanned through the assistance of the libraries and later uploaded onto the BDA. It is important to establish good working relationships with libraries and archives to help in this regard. Bafokeng community members have also contributed the majority of the items housed

in BDA. All these different stakeholders were consulted so as to achieve a comprehensive collection as possible.

One other way to extract information is through oral histories collection (Hurford and Read 2007, Swain 2003). Every year a theme that covers an aspect of Bafokeng history is selected, on which oral evidence is sought after. Community members with knowledge on the particular theme are invited to come forth and share their knowledge. Audio and video recording devices are used for this exercise. Themes that range from the origins of Bafokeng, to heroes and heroines of Bafokeng people are some of those covers in the oral history collections.

One challenge with community involvement is having to teach community members the value of some of the historical material that they may have in their homes. There is no doubt that apart from what has been donated to BDA, there is some valuable information that has been lost by community members simply because the younger generations are not aware of the value of such. BDA strives to teach locals the importance of safeguarding their history.

Community engagement processes helped to disseminate information about the project quickly to the rest of the Bafokeng community. This of course, makes facilitation much better. Material acquisitions and oral history collections did not demand much buy-in since the community had already been lobbied in. At the initial stages of the project, information hoarding was a major concern. However, through road shows and other information dissemination

plans such as newsletters and displays at community gatherings; people's understanding of the project gets clarified and the problem of hoarding gets minimised.

Collection oral evidence also has its challenges. So far, most of the knowledge about our past has been transferred orally. The fact that most of the Bafokeng historical evidence is mostly tacit and held by the elderly generation poses a big threat to achieving comprehensive collection of as much information as possible. There is a saying that once an old man with knowledge dies, the whole library is burnt down. There is also a chance of information distortion and loss of the true reflection of our history due to total memory loss when sources age. In some instances, two or more people would orate the same story but with contradicting statements. This would most likely happen because as they age, they tend to forget the sequence of events. BDA aims to collect these tensions and present them in that manner to allow critical debates of the past that pertains to the people of Bafokeng. The project is being conducted with the assistance of eight Bafokeng community members. They have been trained on basic interviewing, recording, and transcribing oral recordings.

### **2.3 Infrastructural development**

Infrastructural development entailed the process of setting up the actual website. BDA is a site housing video and audio recordings, and digitized text and visual material. The project requires large amount of money to acquire and set up the necessary infrastructure. According to Lyman (2010), digital archives require large initial

investment for technology, research, development and training even though the return on investment might be very slow to emerge. This was experienced with the setting up of BDA. The return on investment is only be realisable once the project is been implemented.

As in a case of a new project, the BDA gained momentum with time, and only about six months after implementation, did we start seeing influx of people visiting the site. On average, the BDA would get about 600 hits as measured by the embedded function on the site to count different IP addresses visiting the sites.

BDA is built on Drupal platform, an open source software and it runs on Apache web server, a MySQL database with PHP programming. The platform was selected mainly because it is cost effective; no licensing is required to set it up and it has easy-to-use functionalities. The BDA is a large repository or content management system with search engine functions; aimed to be of high performance with utmost security to protect the material housed in. The chosen platform therefore met all the requirements and was found to be the best for this project.

The network environment, which is another important aspect in ensuring the success of the project, must be enabling to allow maximum use of the site. The BDA with its large content require big bandwidth so as to allow fast access and downloading time. It was important for the Research department to secure sufficient bandwidth with reputable host company. This would help with less down times which if experienced, might ruin

potential users' interest to use the BDA in future.

With regard to back up, separate dedicated server is set aside for the project. This is where high resolution, full text information sources and well as full length audio and visual items are stored. It is on these premises that regular monitoring of the system's performance and functionalities are made; and where needed, necessary steps taken to ensure full function of the system.; for example, monitoring disk space regularly to accommodate the growing collection of BDA. There are plans for weekly and monthly back up of the servers.

Technological obsolescence is one of the major challenges information workers are worried about the world over, and this was the case with the BDA project. Analogue recordings cannot easily be accessed these days because the special equipment that play them are no longer in use. There have been some materials donated to BDA on video cassette recorder (VCR), video home system VHS tapes and stiffy drives. Accessing the content in these tapes was not easy since the machine to read them are less in use. The materials had to be migrated and digitized as a matter of urgency to avoid losing them. Information stored on outmoded technologies really poses a threat to access. Apart from carrier degradation, recent development suggests that obsolescence and the associated unavailability of replay equipment may become an equal, if not greater threat for the future retrievability of information. Practically all analogue and most dedicated digital audio formats, apart from optical disks, are obsolete; this is according to International Association of Sound and Audiovisual Archives (IASA

Technical Committee, 2005. Data migration is a part of standard operating procedures. This is usually necessary as and when technology advances and new software packages are released. One has to be very careful though, not to be moved by any new development. As long as the newness of the technology will not hamper interoperability and compatibility of the systems, there will not be much of a need to migrate. Examples of material that had to be migrated and digitized include the VHS recording of the return of Kgosi Lebone I Molotlegi from exile. Kgosi Lebone is the father to the reigning King. He was forced to exile during the Bafokeng and Bophuthatswana land disputes between the years 1985 and 1994 (Mbenga and Manson, 2010). There is no one in the whole of Bafokeng who had that recording, except for one gentleman, a Mr Mpiti who had used his home video recorder to record this event. We had to convert the tape with the limited budget for conversion, digitize it and upload it on the BDA website. Failure to convert it would have meant that the content in the tapes were to be inaccessible and lost.

## 2.4 Interoperability

Interoperability means the ability of diverse systems and organizations to work together, to exchange information meaningfully and accurately to serve users of both systems (inter-operate). Interoperability in BDA terms mean that the system as it is built as well as the content uploaded must be accessible optimally by all potential users throughout the world. Metadata standards to help to achieve this. For the BDA, the Dublin Core metadata standard is used to index the material on BDA. The Dublin

Core Metadata is a widely and universally adopted standard to describe resources for the purposes of discovery, [dublincore.org/metadata-basics](http://dublincore.org/metadata-basics). Dublin Core favours document-like objects because traditional text resources like books, are simply well understood, for example, one can easily by looking at the cover page of the book, already get descriptive information about the source. Wactlar and Christel (n.d) also note that the Dublin Core has been tested against moving images and sound, and was found to be generally adequate. On this basis, it was agreed that the Dublin Core metadata standard is ideal for metadata framework for BDA. The core 15 elements are embedded on our system, namely:

- Title
- Creator
- Subject
- Description
- Publisher
- Contributor
- Date
- Type
- Format
- Identifier
- Source
- Language
- Relation
- Coverage
- Rights

One cannot upload anything on the BDA website without filling in the compulsory fields of the metadata on the system. Metadata simply means information about information but Greenberg (2003) defines metadata as 'structured data about an object that supports functions associated with the designated object' in other words, it is the description of an object that makes it simply

identifiable. It helps to describe the information source so that it is easy to search for the information from any web platform, hence interoperability. There are other similar institutions that also use same programming language as well as standards used for the BDA project that are intended, going forward to be part of strategic relations with the BDA; to allow communities to access the information, for example: the National Recordal System (NRS) by Department of Science and Technology (<https://nrs.dst.gov.za/nikmas/>). BDA is also aiming at linking with the Africana Research Library in Kimberley as they house some of the material on early mining activities that some Bafokeng community members were involved in. Another useful site to the general Tswana communities including Bafokeng community is [Tlhalefang.com](http://Tlhalefang.com); and it is linked on to the BDA. It serves to collect and promote the Setswana language and has information about the history of the Tswana communities in the Southern Africa including Bafokeng. The above mentioned use same standards and are therefore interoperable to the BDA.

#### Digitisation of the collection

For an item to finally be accessible on the BDA website, the process starts with the vetting of the articles. We have guidelines that help determine whether an item will be of value for BDA or not; for example is does the item have authoritative source, is it relevant to the BDA objective, and is the item of readable quality. When an item is considered relevant, it is digitized. The method of digitization differs, depending on the form that the information source is in. If it is a text document, it is scanned. At times, digital photographs of such sources are

taken. Digital recordings of oral evidence also form part of the BDA collectable materials. Measures of scanning quality such as resolution and bit depth matter more for scans of images than text. Resolution, as Cohen and Rosenzweig (2005) put it, is the density of information that the scanner samples and it is expressed in dots per inch. The bit depths on the is the amount of information gathered from one dot which generally ranges from 1 bit per dot for black and white images to 24 bits per dot for high-quality colour. All the original items that we have are scanned at a high resolution of 300 to 600 dpi for preservation purposes. Optical Character Recognition (OCR) is important to make sure that the content of the site is machine-readable. Specialised software like ABBYY Fine Reader suite that is used for the BDA material performs this exercise very fast and seamlessly. However, the challenge with OCR software is that it cannot read hand-written text, small print, tables and mathematical symbols. This means that once an item has been OCRed, one has to thoroughly check the content and where the system failed to read characters properly, be manually inserted.

Some of the materials donated to the BDA to get digitized very fragile and brittle. They have deteriorated because they are old and have not been preserved correctly. In cases where we receive these kinds of material, we encourage owners to temper less with items, and rather access the electronic items on the BDA. Through digitization, everyone can access and use the online versions as many times as they wish without fearing further damage, while the original one is preserved.

## **2.5 Legal framework**

BDA fully acknowledges and adheres to all legislature and legal requirements in dealing with issues of intellectual property and copyrights.

The following Acts are acknowledged:

- Promotion of Access to Information of South Africa Act No. 2 of 2000: The Act ensures that people can exercise their constitutional right of access to any information held by state or governing body. The material housed in the BDA is material about the history of the entire Bafokeng community and they are all to freely access such information; as stipulated by this Act.
- Intellectual Property Rights of South Africa Act No. 38 of 1997: The Act protects owners of all creative concepts who may want to donate to BDA that they may continue to enjoy full exclusive rights of their intangible assets.
- National Archives and Records Services of South Africa Act No. 43 of 1996: The Act guides proper management and care of records of government bodies; and the preservation and use of a national archival heritage. The BDA is not legally bound to adhere to this but it is adopted as best practises and source of guidelines on how to best handle and manage records.
- Electronic and Communications of South Africa Act no. 36 of 2005: The Act promotes universal access to electronic communications and transactions. It also provides for facilitation and regulations of electronic communication.
- Copyrights Act of South Africa, 1978: This Act governs the right to control the

use and distribution of artistic and creative works. The Bafokeng community are encouraged to also depict some of their historical milestones in creative and artistic manners; and the BDA aims to protect and adhere to standards and acts relevant in the country for such purposes.

We have clauses on BDA that outline the terms of use of the material in the archives, citing the material on BDA and getting full permission from the owners of different sources before one can use the material. This includes the Terms of use, Copyrights and Privacy guidelines. They can be accessed on the landing page of the BDA.

When community members donate materials to BDA or agree to be interviewed, we always explain the legality of the project and clarify expectations. We then have them sign the Consent and Release forms that give us the permission to upload their material and put it on the public domain. Full acknowledgement of the donors of such information is adhered to.

## **2.6 Marketing BDA**

The Bafokeng Digital Archives can be accessed on [www.bafokengarchives.com](http://www.bafokengarchives.com).

The vision statement of BDA states as derived by the Research Departments states: "The Bafokeng Digital Archive is a comprehensive, authoritative and accessible source of original material of the day to day lives of the Bafokeng people of South Africa; past and present."

The mission statement also derived by the Research Department states:



- Preserve and make accessible any and all original artefacts and documentation related to the Bafokeng community located in South Africa's North West Province.
- Provide opportunities for the Bafokeng community to actively record, explore and share their history, culture and language

Different communication platforms such as community events and gatherings are also used to market BDA. These are ideal places to workshop people about BDA and also allow them to log on to the site to experience it. Continuous roadshows in and around the RBN villages, schools and churches will assist in raising awareness of the BDA project. Posters in different public places have also been placed to help raise awareness about this project.

Newsletters and social media are also used to market the site. The official Royal Bafokeng Nation Facebook page is infested with messages from the community about the project and from the administration to continue teaching the community of the importance on history preservation.

BDA's target audiences which comprises of universities, research institutions and individuals as well as media are being made aware of what we are doing and are constantly being informed of the latest records with regard to our history and heritage. BDA also aims at reaching out to other Tswana speaking communities, history students and teachers, as well as tourists and every individual that wishes to know about the Bafokeng story. Drew (1998) states that

the past always reminds one of timeless human truths and allows for the perpetuation of cultural traditions that can be nourishing. He further mentions that it contains examples of mistakes to avoid; preserves the memory of alternative ways of doing things, and is the basis of self-understanding.

Further developments and upgrades are underway and we are anticipating major growth of the site, especially now that people know about it and are aware that they can be involved in this project and donate towards the growth thereof. These include creating the mobile version of the site, embedding social media onto the BDA and generally growing the current collections.

What we want to achieve with BDA, is a situation whereby this project is incorporated in our local school's curricula so that Bafokeng learners can be exposed to their history from an early age at their respective schools.

With the growing content of BDA, more and more departments within the RBN institutions have started to rigorously use the material on BDA for their day-to-day operations. The Land Affairs, Legal, Geographic Information System GIS and Central Communications Departments are some of the users of the archive.. The Lebone College and local primary schools have requested for some material from BDA regularly. Other communities from different parts of the country like the Bafokeng ba Motlatla in Ventersdorp; have also requested material that could have provenance to their communities from BDA. We see this tool as a model for other communities and a wheel

for the coming generations to further drive developments that come with knowing one's history and heritage.

## **References**

- Bergh, J. S. 2005. We must never forget where we come from: The Bafokeng and their land in the 19th century Transvaal. *History in Africa*, 32: 95 – 115
- Bozzoli, B. 1991. *Women of Phokeng: Consciousness, life strategy, and migrancy in South Africa, 1900 - 1983*. London: James Currey
- Cohen, D.J and Rosenzweig, R. 2005. How to make text digital: scanning, OCR, and typing. In: *Digital history: A guide to gathering, preserving and presenting the past on the web*. USA, Virginia. [Online]. Available WWW: <http://chnm.gmu.edu/digitalhistory/1.php>
- Cook, S. E and Hardin, R. D. 2006. The culture of being Bafokeng. Paper presented at the Annual Conference of Anthropology Southern Africa , 07 December 2006, Cape Town, South Africa.
- DCMI Home (Dublin Core Metadata Initiative). 2013. <http://dublincore.org>.
- Drew, B. 1998. *Crossing the expendable landscape*. Dallas, USA: Graywolf Press.
- Foster, D.G and Dillon, B.D (eds), 1999. *Why Preserve the past? Arkansas Archaeological Society, California, USA*.
- Gow D and VanSant J. 1983. Beyond the rhetoric of rural development participation: how can it be done? *World Development* Volume 11, No.5, p425-445
- Graham, S. 2003. Africa's wealthiest tribe enthrones a king. *The Washington Times*. August, 17. USA
- Greenberg J. 2003. Understanding metadata and metadata schemes. *Cataloguing and Classification Quarterly*. Volume 40, No. 3/4, p17-36. The Haworth Information Press. USA, North Carolina.
- Hurford, A. A. and Read, M. L. 2007. Bringing the voices of communities together: The Middletown digital oral history project. *Indiana Libraries* 27 (2): 26 - 29. USA, Indiana
- International Association of Sound and Audiovisual Archives Technical Team. 2005. The safeguarding of the audio heritage: ethics, principles and preservation strategy. In: *Standards, recommended practices and strategies*. Dec 2005, South Africa, IASA -TC 03 [Online] [www.iasa-web.org/sites/default/files/downloads/publications/TC03\\_English.pdf](http://www.iasa-web.org/sites/default/files/downloads/publications/TC03_English.pdf) (Accessed 31 May 2013)
- Lyman, P. 2010. *Archiving the world wide web*. School of Information Management and Systems. Berkeley: University of California
- Mbenga, B. and Manson, A 2010. *People of the Dew: A history of the Bafokeng of Phokeng-Rustenburg Region, South Africa, from Early Times to 2000*. South Africa: Auckland Park.

- Niezen, R. 2003. The origins of indigenism. Human rights and the politics of identity. Berkeley: University of California Press.
- Smith, C. 2003. One of the world's wealthiest men. A king on the donkey cart. Diamond Fields Advertiser. August 19.
- Swain, D.E. 2003. Oral history in the Archives: Its documentary role in the twenty-first century. *The American Archivist* 66 (Spring/Summer 2003): 139 - 158. USA
- Wactlar, H. D and Christel, M. G. Digital video archives: Managing through metadata. Computer Science Department, Carnegie Mellon University, USA: Pennsylvania