

Books and Digital Publishing in Africa: What Does the Future Hold?

Jacqui Scott*

'Our basic need is knowledge. If you gave me a choice between money and knowledge, I would choose knowledge.'

There are few generalisations that can be made about Africa, but the huge thirst for knowledge and information throughout the continent is almost certainly one that can. In the past access to written information in Africa has been primarily through printed books. To Western visitors the limited number of books in shops, libraries, and school environments leaps out. A publishing sector that has been limited by lack of investment capital, a large but poor population, and difficult logistics, particularly in rural areas, means that the need for books is not matched by the level of availability and accessibility of books.

In the West, particularly the UK and the USA, books are now increasingly being made available in two main formats, print and electronic, through a wide range of devices. Factors including high levels of technology adoption, home computer ownership, a culture of reading and high disposable incomes mean e-readers have become commonplace. However, library lending to digital devices is certainly not universal in the UK, nor much beyond the US.

Printed book supply in Africa has long been dominated by materials imported from Western (British, French, US) publishers, although this has recently changed. School textbooks are often produced through government or aid-funded bulk purchases from national publishers. In many countries, these supplies are often augmented by NGO initiatives, frequently utilising Western publishers' overstocks. In most sub-Saharan African countries, local book production is limited, focusing on curriculum-specific materials and novels. Recently some countries have gained access to digital content through e-readers and phones, primarily accessing imported Western content.

Unquestionably, there is a high level of demand for books in sub-Saharan Africa. However, most countries have some way to go to reach the level of technological advancement currently enjoyed in the West, which is rapidly adapting to accessing books – and other information – through electronic means. Publishers are selling more electronic books, and producing fewer printed books in some genres or sectors. Some sectors – reference in particular – are already seeing much reduced print orders, and therefore fewer of these kinds of titles may be available in print in Africa through either commercial or NGO routes.

* Jacqui Scott is Head of Fundraising & Communications at Book Aid International, the leading UK book donation NGO. Each year Book Aid International sends around half a million books to libraries in Africa through local partners. Nearly 90 per cent of the books they send are donated by UK publishers. Book Aid provides additional support to libraries to improve the delivery and reach of services. Email: jacqui.scott@bookaid.org

Increasing access to books in Africa

Book provision to schools and colleges has been a focus of funding from bi- and multi-lateral funders – the World Bank, EU and the UK Department for International Development among others. However, within the scope of those projects, school and public libraries have often been ignored. There are a small number of NGOs working to improve availability of and access to books in sub-Saharan Africa (and to the wider developing world) through provision of books directly to libraries in schools and community and public library networks. Many of the major International NGOs working in this field, in particular Book Aid International (UK), Biblionef¹ (the Netherlands and South Africa) and Sabre Foundation² (US), almost exclusively provide new printed books from their home country publishers. The book donation programmes are sometimes supplemented by local publishing grants or other support such as library refurbishment and librarian training. This is an effective though necessarily limited model to get the most appropriate book to the right reader in the developing world, because libraries are such an effective vehicle for optimising the number of users per book.

For most of the book donation NGOs, the vast majority of countries in which they work are in the UN ‘least developed’ category, mainly in sub-Saharan Africa. So book donation NGOs are working in countries with a very large proportion of the population living in absolute or relative poverty, with major infrastructural issues: in particular poor roads especially in rural areas, a lack of reliable electricity and patchy broadband provision; and low literacy levels (in 2001, averaging 62 per cent in sub-Saharan Africa).³ All of the NGOs report vastly more need from in-country partners than they are able to fulfil through their resources provided mainly from publishers.

Moreover, changes in the ways information is published and accessed in the West, combined with improved print technologies, could create a gap in the content that many institutions in Africa are able to access. In the UK, the way in which publishing is structured has ensured a steady supply of printed books for donation to the developing world, as the model has ensured continuous availability of overstocks and returns. But the nature of materials given to NGOs has changed: encyclopaedias and dictionaries are becoming increasingly rare because of the dominance of online versions. Unquestionably the publishing industry in the West is transforming.

So African library services remain desperate for donated printed books at the same time as their Western book donors are facing a transformation within the industry. On the whole, African library services are not yet ready to provide books in electronic formats for lending, neither are their readers ready to borrow content for e-devices. Much of the information of interest to African libraries is still available in printed formats, but even in the NGO world, that is changing: Oxfam Publishing no longer provides printed resources but rather publishes all their materials in low bandwidth accessible digital formats, free of charge.

¹ <<http://www.biblionef.org/>>

² <<http://www.sabre.org/>>

³ Education for all global monitoring report 2005 Regional overview, Africa, p. 6, <http://portal.unesco.org/education/en/files/36083/11005297373sub_saharan_africa_ENG.pdf/sub_saharan_africa_ENG.pdf>



FIGURE 1 Queuing for the library

The book scene in Africa

There have been long years of debate about the ‘lack of a reading culture’ in sub-Saharan Africa. This debate has often centred around books, with a focus on literary books and reading for leisure. But there is a demand for books and information of a much wider variety. Literate people in Africa do regularly access and use a range of written materials – educational and self-improvement materials, newspapers and the Bible, as well as books for leisure. Libraries are hugely popular, often with long queues before opening time (Figure 1). People with a range of levels of literacy all want written content that builds their skills and provides them with relevant and interesting information.

Public libraries

Very many people who use books in Africa access them through a library service of some nature, or through their school or university, either in the classroom or in the library, if there is one. Libraries are seen as essential or very important by well over 90 per cent of the population.⁴ In the same study of four countries (Kenya, Uganda, Tanzania, Ghana), most users of the libraries surveyed visited at least weekly.⁵

But libraries in sub-Saharan Africa are almost all under-resourced, and most report a very small, or zero, budget for book buying. Library staff in Africa are often well qualified in librarianship, but many would benefit from more

⁴ Electronic Information for Libraries (EIFL): Perceptions of public libraries in Africa, p. 17, <<http://www.eifl.net/perception-study>>

⁵ Ibid. p. 17



FIGURE 2 Kenyatta University library

support in providing services for children or harder to reach groups, or more technically specialised subject areas such as health. Librarians are often not aware of what opportunities, costs, and changes technological approaches to digital content delivery could bring.

Schools and universities

Schools remain almost universally under-resourced in terms of provision of books for either classroom or library use: just two of the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ)⁶ countries achieve about the recommended level of 85 per cent availability of ‘own reading textbooks’. Overall the SACMEQ countries⁷ score just 61 per cent on availability of a library within the school bounds.⁸ The advent of more universities and more university students (Figure 2) means there is an increased need for higher level textbooks in a very wide range of subject areas which are often not catered for by local publishers, so many higher educational institutional libraries remain heavily dependent on book donors.

Western NGOs increasing access to books

Books for Africa, Sabre Foundation and International Book Bank in the USA, Book Aid in the UK, and Biblionef in South Africa and Europe are the leading

⁶ SACMEQ III Project Results: levels and trends in school resources among SACMEQ school systems, ‘Trends in essential classroom resources for SACMEQ school systems (2000–2007)’, p. 9, <http://www.sacmeq.org/downloads/sacmeqIII/Levels_and_Trends_in_School_Resources_FIN2.pdf>

⁷ Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Uganda, Zambia, Zanzibar, Zimbabwe

⁸ SACMEQ III Project Results p. 9

book donation NGOs, and have been operating for 175 years combined. Between them, these organisations have provided millions of print books for a huge variety of kinds of libraries and other institutions in sub-Saharan Africa and beyond. Book Aid, the oldest of this group, has donated more than 30 million books. Most of these organisations also provide additional support to their library and NGO partners, adding value to the book donations by providing refurbishment grants, librarian training and purchase of locally published books, especially in local languages.

There are well established projects providing access to online information particularly to tertiary institutions through a number of international NGOs, such as INASP, HINARI and AGORA. These have focused mainly on providing access to online resources within the university using its computers. But there have also been some more projects in the developing world undertaken by NGOs aiming to improve access to content utilising digital means, focusing on primary and secondary schools, and using personal e-readers. Two significant projects – One Laptop Per Child (OLPC) and Worldreader (iREAD) – have been founded from the USA, by people with very strong technical backgrounds (from MIT and Microsoft respectively), and have attracted both praise and criticism.

OLPC aims ‘to provide each child with a rugged, low-cost, low-power, connected laptop’. They provide the laptop, content and software for ‘collaborative, joyful, and self-empowered learning’, and claim that ‘with access to this type of tool, children are engaged in their own education, and learn, share, and create together’. The key criticism of OLPC has been that their modus operandi fails to recognise the importance of the surrounding learning infrastructure and social environment – teachers, parents, librarians, home structures – in improving educational outcomes. This is not unusual in technology-based projects when the starting point is often an underlying assumption that technological solutions are simply better, and in the case of projects focusing on information provision, cheaper. These assumptions are naïve: provision of technological solutions in any context in the developing world is rife with problems. And good quality content – produced in any format – has a production cost which ultimately has to be recovered.

A constructive approach to digital content provision has been that of Worldreader. This started as a pilot project in Ghana, getting Kindles into the hands of school children and providing them with a wide range of free content, and has since expanded to Kenya and Uganda. The project now provides support for local solutions as well as structured support to local partners, including pedagogical support to teachers. It has recently moved into working with local publishers to ensure that the children they are working with have access to local content and have even created an app to enable their books to be accessed on mobile phones.

Private ownership

Private ownership of books and other information materials is limited by the high cost. Low incomes mean that the equivalent of even £4 – the price of one Christian studies guide available in a Nairobi shop – is unaffordable for most.



FIGURE 3 Lilongwe (Malawi) main library

Libraries are a crucial resource for accessing learning information and books for leisure reading, for those who have one in their locale.

Educational and self-help books are hugely popular: self-help books also sell well in shops and markets, and often locally produced books are available. Newspapers are widely read and purchased to get information about politics, jobs and study opportunities, and many public library services provide a free daily service for locals by posting up printed newspapers outside the library (Figure 3). But in most major cities there are just a handful of bookshops or book markets, and beyond the major centres, bookshops are virtually non-existent. Often where they do exist, their stock is dominated by school text books and stationery. Access to a wide range of written materials is limited.

Local writing and publishing

Local publishing in most sub-Saharan African countries is focused primarily on production of curriculum materials and readers for the primary and secondary school markets, and fiction, due in part to donor and government policies. One element inhibiting local publishing from flourishing in sectors other than education is the wide range of languages spoken, not all of which are written and read, and some of which are spoken by very small groups. Of course, economic drivers – the limited pool of potential purchasers of books across all linguistic groups – will remain a problem. Additionally, lack of reliable

infrastructure around the book chain – roads, delivery services, shops – has prevented publishing in the continent from flourishing.

Despite these impediments, many sub-Saharan African countries do have a vibrant creative writing scene. Kenya and Nigeria in particular have locally acclaimed and internationally recognised authors, including Ngugi wa Thiong'o, Binyavanga Wainaina, Margaret Ogola, Chinua Achebe and Chimamanda Ngozi Adichie. Although these authors are published by international publishers, they have strong commitments to local publishing and publishing in local languages. Publishers in several countries are nurturing writers and writing in various ways, including through the internet. In Tanzania the Children's Book Project supports local publishing, producing picture books mainly in Swahili, with some English titles. In Kenya, StoryMoja use extensive internet and offline marketing to get the books they produce read – books which are specifically produced with relevance to modern Kenyans, particularly urban dwellers. East Africa's East Africa Book Development Council is an active umbrella network of stakeholders supporting the development of the book chain. Other similar organisations are active elsewhere.

Digital books and information in Africa

Sub-Saharan Africa lags far behind the developed world in terms of accessibility and availability of digital content, the hardware necessary to use it, and availability of the technological infrastructure needed to enable the hardware to be used. The UK market for e-books was believed to be around 9 per cent of the sector's revenues in 2010, yet in South Africa, the most advanced country in sub-Saharan Africa in terms of availability of personal use devices, e-book sales were just 1.5 per cent of total revenues.

However problems with internet connectivity and bandwidth are declining in many countries. In 2009, the first undersea cable to bring high speed fixed internet access to east Africa went live, and there is a massive extension of the cabling even into some remote areas in Kenya. Additionally, 99 per cent of Kenya's 1.7 million internet subscribers are accessing the internet using mobile phones.⁹ In Malawi, laptops are becoming more popular with university students, with an increasing number using them in the library for their studies, accessing the internet with 3G dongles.¹⁰ Unquestionably, more people in Africa are accessing useful and relevant written content using digital means: getting information about work availability; transferring of money and obtaining commercial and sales information by mobile phone is becoming commonplace.

There certainly seems to be an appetite for digital content for personal devices in some sectors of the population. A US NGO through its social enterprise arm is developing kiosks inside Nairobi bookshops to sell dedicated e-reader devices, tablets, phones and e-books.¹¹ This initiative will use two key pieces of technology to enable it to work: Adobe digital rights management software, which will give both local and international publishers reassurance

⁹ World Economic Forum (2011): The global information technology report 2010–2011, p. 71

¹⁰ In-field observation, Karen Sharkey, June 2012

¹¹ <<http://www.ekitabu.com/blog?p=8>>

that their intellectual property is being protected to international standards; and M-Pesa, to enable Kenyans to pay for books even if they do not have a credit card.

In South Africa, a social networking mobile phone service launched the first e-book solely for reading on a mobile phone screen on the continent. Fantasy e-book *Emily and the battle of the veil* had 5,000 chapters downloaded in the first month.¹² The ability to download the novel chapter by chapter may have held particular appeal in enabling people to read the content on their phone screens. Another South African initiative, MOBfest, introduced a literature contest for mobile phones and included a contribution from the 2008 Caine Prize¹³ winner Henrietta Rose-Innes.

Much of the discourse on the potential of digital books in Africa is subtly focused on 'literature', which, to a large extent, requires reading of large volumes of pages of prose at a time. But what people actually read – in the West as well as in Africa and beyond – does not necessarily require that kind of approach. Newspapers, magazines, even textbooks, often do not require the reader to focus on large amounts of text, but lend themselves to a more 'dip in, dip out' approach. Perhaps the issue of reading from a screen much smaller than the average printed novel is less important than is often assumed. Already, enormous volumes of information are consumed (and often contributed to) through mobile phone screens around the world and websites like Facebook, Wikipedia and Google.

Digital content and libraries

Few, if any, public or national library services in sub-Saharan Africa are delivering library resources via e-reader or mobile phone. Many university libraries have subscriptions to online services like HINARI, INASP and AGORA.¹⁴ These are mainly used by students and academics through their library computers, but also, increasingly, at the institutions through privately owned laptops using 3G dongles. Some universities still prioritise CD/DVD based resources.

Many public libraries report that internet-enabled computers are used mainly for games, CVs, email and Facebook – an experience similar to many public libraries in the UK and US. Often users have limited knowledge of how to access other digital resources, and frequently, more support needs to be provided to both public and specialist librarians to equip them with the right skills and knowledge to support their users. Lack of access to computers (21%), poor connectivity (25%) and lack of awareness of e-resources (18%) are quoted as most common hindrances to utilisation of e-resources in academic and research organisations in Kenya.¹⁵ Unreliable

¹² Kulesz, O. (2011) Digital publishing in the developing world, International Alliance of Independent Publishers, p. 51

¹³ Caine Prize for African Writing, <<http://www.caineprize.com/>>

¹⁴ HINARI: Access to Research in Health <<http://www.who.int/hinari/>>; AGORA: Access to Global Online Research on Agriculture <<http://www.aginternetwork.org/>>; INASP: International Network for the availability of Scientific Publications <<http://www.inasp.info>>

¹⁵ Gothonia N., Gikandi, J., Ratanaya, F. *et al.*: Monitoring and evaluation of electronic resources in academic and research institutions in Kenya, summary report 3/10/11, INASP/KLISC

electricity and low bandwidth remain widespread problems: Copperbelt University in Zambia report that their entire institution has access to only one megabyte of broadband.^{16,17}

However, in several countries national library services and other institutions have begun digitisation of national archives and other useful documents, particularly content with very specific local relevance, for example the comprehensive collection of digital documents relating to health research at the Ifakara Health Institute in Tanzania.¹⁸ These projects are often driven by concerns about protecting fragile texts and documents and the need for more useful reference material for students, particularly local research and papers. Projects with a more international focus are also being undertaken: the National Library of Uganda has been one of the primary partners, and one of only two sub-Saharan African partners, in the World Digital Library project¹⁹ which aims to make available on the internet, 'free of charge and in multilingual format, significant primary materials from countries and cultures around the world'. The Kenya National Library has a project to digitise rare books, government reports and past newspapers.

Accessing information through mobile phones

One route to accessing digital information in sub-Saharan Africa may have real potential. Mobile phones have taken off in many parts of sub-Saharan Africa with a trajectory that no one could have predicted. In 2000, mobile network coverage by population – i.e. the percentage of the population covered by a mobile network – across sub-Saharan Africa was estimated at 25 per cent. By 2008 that had more than doubled to 58.5 per cent.²⁰ The increase in mobile phone adoption has occurred despite some enormous barriers, in particular very high taxes.²¹

In countries where infrastructure remains poor in both urban and rural areas, unique arrangements such as mobile phone charging kiosks have sprung up to ensure that phones can be charged, and solar power projects are also being initiated.²² But mobile phone ownership in rural areas remains low, and women are much less likely to own a mobile phone than men.²³ Many access mobile phones through phone sharing schemes amongst friends and family.

Perhaps one of the reasons for the success of mobile phones is that the technology helps provide services that people really want and need. For example, M-Pesa, in South Africa, Kenya and Tanzania (and Afghanistan), was developed on the back of increased mobile phone penetration. This mobile

¹⁶ Personal communication, Clive Nettleton, Book Aid

¹⁷ For more detail on the issue of accessibility to online information in African universities, see Harle, J. 'Growing knowledge: access to research in east and southern African universities', downloadable from <<http://www.africadesk.ac.uk/asauk/pages/research-resources/access-journals>>

¹⁸ <www.ihl.org.tz/about/what-we-do>

¹⁹ <<http://www.wdl.org/en/about/>>

²⁰ International Telecommunications Union, Information society statistical profiles 2009, p. 43

²¹ Ibid. p. 23

²² <<http://gvepinternationalblog.wordpress.com/2011/09/30/charging-mobile-phones-in-rural-africa/>>

²³ <<http://www.scidev.net/en/new-technologies/icts/news/many-kenyans-share-mobile-phones-study-finds.html>>

phone payment system can be used on very basic handsets to pay almost anyone for almost anything. Improving access to information about job opportunities or commercial information have made mobile phones popular, and mobile phones are decreasing the cost of communication.

Mobile phones are used in increasingly innovative ways: in South Africa, Mxit, a free message service also has its own currency and includes apps, games, a maths education initiative – and a digital novel download.²⁴ Initiatives such as this and World Reader's app, if successful, could help open up other opportunities for accessing more book content through mobile phones.

Opportunities for local publishers

Multilateral aid funders and NGOs, as well as governments, can influence the book scene in a myriad of ways, but ultimately, the most lasting solution is likely to be found in the commercial sector. Anecdotally, some African publishers are excited by the possibilities that digital content provision could hold for them. Others see the solution not in providing end content in a digital format, but rather to use new digital printing technology like the Espresso Machine for print on demand.²⁵ African Books Collective, the Oxford based distributor of African books from a variety of publishers now provides many of its books internationally as ebooks.²⁶

Certainly, some barriers to accessing information are removed when content is delivered through digital means. Once the infrastructure for accessing digital content is in place, any digitised book can theoretically be provided to any reader without the need for a shop, road or paper. There are possibilities for locally produced content in local languages, and new opportunities to sell African content to Western audiences could open up.

Yet as some barriers are removed, others are created or remain: cost and economic viability will remain an issue for content production, particularly in local languages; technical skills and the upfront investment in the tools for digital production will need to be enhanced. Personal ownership is likely to remain low because of poverty, and libraries will remain crucial to information provision. Issues of affordability, accessibility, appropriateness and suitability of content remain.

Conclusion

Is it possible that access to information in Africa will improve in the age of digital publishing? Certainly, access to information through digital means will increase in the medium term – following a similar trajectory to the West, where early technology adopters and the middle classes have become most engaged at this early stage. But what will this mean for printed books? Will there be an interregnum during which the demand for printed books in Africa is outstripped by the ability for NGO or commercial sources to supply them? Will the majority of Africans be able to access even less information than currently, because they do not have the tools necessary for accessing digital information?

²⁴ <<http://www.mxit.com/>>

²⁵ Kulesz, O., p. 53

²⁶ <www.africanbookscollective.com>

Printed materials will continue to co-exist alongside digital materials at least in the medium term, and will continue to be sourced from a range of suppliers including NGOs and international and local publishers. NGOs are likely to continue to receive printed books from Western publishers in the medium term, but the make-up of these donated books will change – reference books and dictionaries are unlikely to form part of the mix for much longer. A continued supply of good quality educational materials will remain vital. Although by no means guaranteed, it is reasonable to expect this trend to continue, because digital resources and printed books currently complement each other in UK and USA schools, rather than digital having entirely replaced printed formats.

Digital rights management and initiatives such as Open Access may mean that more and more useful content is available in digital formats, for free. The adoption of the technology needed to access digital content is, by and large, likely to be led by the burgeoning middle classes, and needs to be supported by continued investment in the infrastructure needed to ensure such devices are able to run – broadband, 3G and 4G, and electricity. It is hoped that donors of all natures will continue to be interested in funding projects that help seed innovations in providing digital content.

But there are still underlying social and infrastructural issues which mitigate against universal access to digital content in the medium term: people in remote areas still lack access to the infrastructure for purchasing, charging and maintaining reading devices and mobile phones. They are also likely to be the poorest and therefore, the least likely to have disposable income to buy books or invest in the means to read them.

Technology infrastructural issues are slowly being addressed. African economies are, by and large, doing well. Products can be distributed to even the most hard to reach areas: bottles, tyres, corrugated iron, generators – even books! – can all be found in extremely remote places. Mobile phones are increasingly reaching isolated communities, and so is broadband and 3G and 4G capability. Clever solutions to many problems have cropped up, particularly around mobile phones – some supported by Western NGOs and/or African or international governments, some entirely indigenous solutions. There will continue to be unique African solutions to these problems.

Whether or not access to digital content expands, libraries remain the most effective model to optimise the number of users per book, able to provide access to information for the widest range of people. From small community libraries in rural areas to large municipal libraries, libraries must remain central to providing access to books for millions of African people. Providing support to libraries, librarians, teachers and parents and other readers will enhance the experience of readers and potential readers, whether they are using an e-book or a printed book.

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