Cultivating innovation in African public libraries

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Introduction

Asked about innovative library programmes most librarians point to the Global North because the literature, the conferences, and most meetings emphasize innovation in the Global North. What is missing from these discussions is the incredible work being done in public libraries in the Global South.

In this paper, we highlight innovative public library programmes in the Global South, specifically in Africa, in a discussion of the work of the EIFL (Electronic Information for Libraries) Public Library Innovation Programme (EIFL-PLIP)1 over the past 10 years. Through examples we show how under-resourced libraries in Africa lean on staff creativity and community engagement to introduce new programmes and services, often facing challenges that are unique to their communities and rare in the Global North.

Africa is one of the world’s most challenged regions in terms of its economic and social development. Many countries have extensive rural areas, or vast, sparsely populated land areas, which makes ICT rollout difficult. Internet usage rates range from more than 60 percent in the more developed countries to less than 10 percent in the least developed countries. In terms of Internet usage, there is a very significant gender gap and a rural/urban digital divide: only 20 percent of women use the Internet, compared with 37 percent of men, and only 6 percent of rural households have access to the Internet, compared with 28 percent of urban households.2 In Sub-Saharan Africa, there is also a significant gap in supply and demand across all digital skills levels, starting from basic software use and web research to intermediate and advanced skills.3 In this context, when public libraries are equipped to provide public access to computers and the Internet, they start playing new roles, supporting digital inclusion, and providing digital skills training in communities.

In 2010, EIFL-PLIP commissioned research to deepen understanding of the role of public libraries in Africa. The study investigated perceptions of users, non-users, and national and local officials towards libraries in six countries: Ethiopia, Ghana, Kenya, Tanzania, Uganda and Zimbabwe. Findings were that most people believe public libraries have the potential to contribute to community development in important areas such as health, employment, and agriculture. However, libraries were (and generally still are) small and under-resourced, and the research found that most people associated them with traditional book lending and reference services, rather than innovation and technology.4

To accelerate innovation in African public libraries, EIFL-PLIP employed several strategies, including demonstration projects, advocacy for resourcing of public libraries with ICT, and capacity building of public librarians and library managers. In this paper, we describe these strategies and provide evidence that public libraries in Africa, equipped with public access computers and the Internet, significantly contribute to community development, and help to bridge the digital divide in low-resource communities.

Accelerating innovation in public libraries

EIFL-PLIP works in developing and transition economy countries, where information is essential for development, yet public libraries are mostly under-resourced, and public librarians are not sufficiently

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1 EIFL Public Library Innovation Programme. URL: https://www.eifl.net/programmes/public-library-innovation-programme
2 ITU. Digital trends in Africa 2021. URL: https://www.itu.int/pub/D-IND-DIG_TRENDS_AFR.01-2021
skilled to harness new technologies for service innovation. Our overall goal is to advance community development through supporting sustainable innovative technology-based services in public and community libraries.

Since its launch in 2009, EIFL-PLIP has supported over 50 demonstration projects in public libraries in developing and transition economy countries in Africa, Asia, Europe, and Latin America. Half of these projects were implemented in African countries and targeted farmers, health workers and patients, women and girls, job seekers, the disabled and vulnerable children and youth. The projects focused on key development areas like agriculture, health, unemployment, youth development and others.

EIFL-PLIP’s approach to accelerating innovation in public libraries combines three strategies:

- supporting demonstration projects in libraries, that use technology to address community development needs;
- advocating with governments to equip libraries with digital technology and connect them to the Internet;
- scaling up innovation through capacity building of public librarians.

Evaluation of the impact of EIFL-PLIP demonstration projects provided sound evidence of public libraries’ ability to contribute to development at the local and national levels, and to international initiatives such as the UN Sustainable Development Goals (and prior to 2015, the Millennium Development Goals). This evidence created strong ground for advocacy for resourcing of public libraries with ICT. In three countries - Ghana, Kenya and Uganda - advocacy had an impact: public libraries are now being included in national ICT roll-out strategies, and their digital resources are growing.

Learning from the demonstration projects became central to EIFL-PLIP’s capacity building strategy. Through engaging with librarians implementing demonstration projects, we deepened our understanding of their skills needs in the areas of technology (to enable them to use newly installed public access ICT to its full potential, and to train communities to use it); leadership and change management, and project management (including grasping the concepts of service innovation; assessing community information needs; measuring the impact of new services), and communications and advocacy. Drawing on this learning, we were able to develop an extensive and replicable capacity building model to empower public libraries in low-resource environments to integrate ICT into innovative services, and to train community members to use ICT. We have piloted the curriculum in Ghana, Kenya and Uganda, focusing training on those public libraries that already had computers and the Internet for public use. We also provided training in Ethiopia and Zambia.

We have since further developed the capacity building programme into a major continuing professional development (CPD) training of trainers (ToT) programme for public librarians. We have implemented this CPD / ToT programme in Kenya and Namibia and deployed an adapted version of the CPD-ToT programme in Zambia and Uganda.

In the following sections, we provide more details about each of the three strategies and their results.

**Strategy 1 - Demonstration projects of new library services**

Creation of demonstration projects was the first strategy we took in the initial stages of our work in Africa. We considered that national scale projects would require substantial capacity, and at that time there was limited commitment from governments to support and sustain innovative library services. We therefore decided to start with small local examples of innovation and later look for ways to replicate them on a larger scale.

The demonstration projects EIFL-PLIP supported had to be new to the community or the library, use technology in creative ways, and be implemented in partnership with other stakeholders in the community. We awarded small short-term grants (ranging from US$5,000 to US$30,000 for one year) for
public libraries to innovate and develop services focused on issues like agriculture, entrepreneurship, health, education, and employment. By sharing successful examples and spreading ideas for innovative public library services to other libraries and stakeholders (for example, local and national government officials), we hoped to convince more public libraries to go down the path of change and innovation and to encourage governments to invest in public libraries. To demonstrate how public libraries contribute to local development, EIFL carefully documented case studies of successful public library innovation and shared these widely.\(^5\)

Below we provide a selection of case studies focused on the key development areas of agriculture, digital inclusion, education, employment, and health.

**Public libraries supporting agriculture**

Enabled with technology and with minimal additional funding, public libraries can be effective and sustainable rural development partners. They are helping to improve farmers’ lives and livelihoods by connecting them to information, providing free ICT access and training, and bridging the urban-rural divide, linking distant farming communities to vital sources of city-based information, expertise, and support.

For example, in Uganda, most people live in rural areas and are involved in farming. Without access to information about modern farming methods, they struggle to make a living. EIFL-PLIP supported a project of the non-governmental organization Maendeleo Foundation, which installed wi-fi Internet connections and netbook computers in five rural libraries. Soon afterwards, the libraries launched a programme that includes free ICT training for farmers and creation of information in local languages. In less than a year, the five libraries trained 700 farmers and other community members to use computers and the Internet. They supported information searches of 570 farmers and trained farmer volunteers to share translated and re-packaged information at farmers’ group meetings, thus also serving the needs of non-literate farmers.\(^6\)

**Public libraries contributing to digital inclusion**

In low resource countries, where most offline people live, libraries are playing a vital role. They are teaching ICT skills and, through information services focused on local needs, demonstrating how online information can change lives. This role is especially essential regarding the most vulnerable groups, such as people living in rural and remote areas, women, early school leavers, unemployed youth.

For example, many remote and rural schools in Ghana do not have computers or Internet connections, and are not connected to the electrical grid. Passing ICT exams is crucial for children in their final year at basic (primary) school to progress to secondary school, and failure rates were extremely high. This meant many children had to leave school early because their parents could not afford a repeat year. To address this problem, with EIFL-PLIP support, four mobile regional libraries travelled to under-resourced schools every week bringing solar-powered laptops to give children hands-on experience of computers and help them to pass ICT exams. From 2015 to 2019, the four regional libraries reached an average of 3,000 - 3,500 children in over 20 poor and rural schools every year - a total of over 12,000 children four years. The children’s exam results improved annually, climbing from a 45 percent average pass rate in the ICT exam at schools in the four regions in 2015 to an average 84 percent pass rate in 2019. From 2020, the project was taken over by the Ghana Library Authority (the national agency managing public libraries), which expanded the service to all 10 regions of Ghana.\(^7\)

\(^5\) EIFL Public Library Innovation Programme Grantees. URL: [https://www.eifl.net/programme/public-library-innovation-programme/eifl-plip-grantees](https://www.eifl.net/programme/public-library-innovation-programme/eifl-plip-grantees)

\(^6\) EIFL Video: Connect Uganda: why empowering public libraries with technology is so important. URL: [https://vimeo.com/84380776](https://vimeo.com/84380776)

Public libraries supporting education

Using digital technology in innovative ways, public libraries can make a vital contribution to the education of children and adults.

For example, in Kibera slum in Nairobi, Kenya, schools are critically under-resourced, and children must learn in classrooms that do not have electricity, computers or Internet access. Poor education means that children struggle to pass exams; lack of access to technology further disadvantages them in a job-market that increasingly demands computer skills. With EIFL-PLIP support, the library bought seven tablet computers and a wireless Internet router and began designing a computer skills and education project to help children with their school subjects. The library partnered with the Kenyan educational agency eLimu, which creates digital content for schools in fun formats like animations, video, and quizzes. eLimu pre-loaded the tablet computers with educational material and taught the librarians how to integrate the tablets and the content into a learning programme. In less than a year, the library taught 120 students to use the tablets, research the Internet and access the educational material - more than double the number originally intended. Over half of the students interviewed said the programme had helped improve their school results in English, mathematics, and science.\(^8\)

Public libraries supporting employment

Public libraries are increasingly offering ICT skills training to equip people for today's job-market. For example, in Masiphumelele, an informal settlement just outside Cape Town, South Africa, youth unemployment is estimated to be as high as 50 percent. Masiphumelele Public Library is a colourful and vibrant centre in the heart of the community - the only place providing free access to computers, the Internet and the training support young people desperately need.

With support from EIFL-PLIP, the library upgraded its computer laboratory and designed a training programme that included basic, intermediate, and advanced computer and Internet skills. Working with the youth development organization, IkamvaYouth, the library added careers counselling and job-seeking skills to this curriculum. In just one year, the library trained 1,540 beginners to use computers, and 48 intermediate students. This training coupled with employment information and careers support, helped over 20 vulnerable young people find jobs and encouraged 31 to continue with their education.\(^9\)

Public libraries contributing to community health

Public libraries contribute to community health through training community and health workers to use computers and Internet to search for health information, hosting health events for the community, connecting people to doctors in online consultations.

For example, in Ghana maternal mortality rates are extremely high. The Northern Regional Library, with support from EIFL-PLIP, used computers, the Internet, mobile phone text messaging (SMS) and radio to access and disseminate vital pregnancy information. The library also hosted maternal health events at which health workers could meet women and talk about their concerns and fears. In less than a year, the library trained 15 health workers to use computers, to conduct online health research and to access the pre-loaded material. They also sent weekly text messages to 94 expectant mothers. Three health events at which over 180 community members interacted with health workers, and a maternal health campaign


over northern Ghana’s most listened-to station, Radio Savannah, ensured that non-literate women also received health messages.¹⁰

In addition to supporting creation of new and innovative public library services, EIFL-PLIP communicated good practices to the broader library community in Africa and beyond, by sharing case studies of successful public library services and also supporting grantee libraries to share their experiences at national and international library gatherings, and training events for librarians.

**Strategy 2 - Advocating with governments to equip libraries with ICT**

To stimulate advocacy, we encouraged library authorities and library support organizations in Ghana, Kenya, and Uganda to form advocacy and awareness raising groups, which would use success stories from the demonstration projects to show decision-makers the potential of public libraries and aim for stronger support for technology infrastructure and new services in libraries. The process of convincing government agencies responsible for ICT infrastructure development about the value of public libraries in relation to local and national development goals took years and required multiple attempts to reach out and several strategy reviews. However, our partners in all three countries succeeded in convincing government programmes for public access computing, supported by Universal Service and Access Funds, to include public libraries. To illustrate the EIFL-PLIP interventions and their results, below describe our long-term partnership with Kenya National Library Service (KNLS), the parastatal agency that develops and manages public libraries across the country.

EIFL-PLIP’s work in Kenya began with a perception study of public libraries in 2010¹¹, which showed that all stakeholders (national and local government officials, librarians and community members) saw public libraries as places for books and study. At that time, fewer than five of Kenya’s 61 public libraries had Internet connections or computers for public use. We awarded KNLS grants to start demonstration projects in health, education, and digital inclusion in seven of its libraries. These projects were used to advocate with the government for equipping more libraries. As a result, between 2011 and 2013, the Communications Authority of Kenya (an agency managing the Universal Service Fund to facilitate access to communications services by all in Kenya)¹² equipped 10 community libraries from the KNLS public library network with 10 computers each, in addition to peripherals (e.g., printers, servers), software, Internet connectivity infrastructure (where needed) and a two-year connectivity subscription, as well as furniture for a computer lab. Following the success of this pilot intervention, the CA and KNLS agreed to scale up the project to cover most public libraries in the country. By the end of 2016, all public libraries in Kenya were providing public access to computers and free Internet access. EIFL stepped in to train public librarians to ensure that they had the skills to guide people in discovering the Internet and the opportunities it offers. To ensure training could continue and be sustained in Kenya, EIFL also trained selected KNLS librarians to become local trainers and continue training their peers in the KNLS network¹³.

Over the years some other African governments have also included public libraries in national broadband plans, where they are considered to be public Internet access facilities (e.g., national policies in Zambia and Nigeria), and / or providers of digital skills training (e.g., Botswana), or partners to promote e-learning and support broader educational goals (e.g., Mauritius and Ethiopia), or digitalization and creation of local content (e.g., Gambia)¹⁴. Despite these positive signals, not many of these plans have led to actual

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10 EIFL Case Study: Library service contributes to maternal health (2013). URL: https://www.eifl.net/resources/ghana-library-authority-northern-regional-library-technology-maternal-health-service


12 Communications Authority of Kenya. URL: https://www.ca.go.ke/


implementation and in general government support for public libraries remains weak. Therefore, EIFL and partners continue to advocate and showcase the dynamic role that libraries are playing in digital inclusion of lower income, underserved and remote communities.15

**Strategy 3 - Scaling up innovation through capacity building**

One of our main learnings from demonstration projects was that positive outcomes are highly dependent on librarians’ capacity and competences. This includes mastering digital technologies, the ability to identify community needs and using needs as the basis for service planning, managing projects, capturing the evidence of the impact of projects and using this for service advocacy with the governments for better support, and/or fundraising campaigns. Over the years, EIFL-PLIP has seen ICT infrastructure coming to libraries through governments and initiatives of other funders. However, librarians lacked the skills and knowledge needed to integrate the technology into services and to encourage community demand and adoption. As a result, they failed to meet expectations of supporters.

In response to this situation, EIFL developed a capacity building programme for public librarians, with a curriculum focused on ICT and digital literacy skills for librarians; project management and development of new library services; training skills to enable librarians to provide public Internet access and digital literacy training in their communities; performance and outcome evaluation, and advocacy and communication. The programme targeted public libraries that already have computers and Internet connections, but where librarians needed skills to use this technology more effectively in providing new services. From 2014 to 2020, EIFL-PLIP trained over 2,200 librarians from public libraries in Ethiopia, Ghana, Kenya, Namibia Uganda and Zambia in this curriculum.

Along this journey, working closely with libraries and library authorities, the EIFL-PLIP team realized the extreme importance of robust continuous professional development (CPD) systems, which would ensure the sustainability of capacity building efforts, and build the groundwork for long lasting transformation of public library services. We were convinced that the success of future capacity-building development work depended on the local capacity for change as opposed to bringing change in from the outside. Our new approach of building in-country CPD capacity involved working closely with national public library authorities and agencies to train library staff in their networks, and to develop a national CPD framework that relied on local trainers, that would be self-sufficient and able to respond to public library skills needs without outside assistance.

Training was planned and delivered in partnership with the national organizations in charge of public library development. In Kenya, for example, we worked with the KNLS; in Namibia, we worked with the Namibia Library and Archives Services (NLAS). The national partners worked with EIFL-PLIP to select librarians to be trained as trainers for future deployment in their networks. The training curriculum covered training abilities (training of trainers, ToT) and 8 subject modules providing competences required for service innovation and sustainability, such as mobile information literacy, library spaces, design thinking and others. Rather than spending time developing new training content, we sought partnerships with library organizations across the globe, for example, the University of Washington’s Technology & Social Change Group (TASCHA), Johannesburg city library, Aarhus public libraries, the International Federation of Library Associations and Institutions, and worked together with local partners to adapt relevant modules to the needs of public libraries in our partner countries.

The training was intentionally planned to be highly interactive and very practical, including presentations of real-life examples of successful EIFL-PLIP supported demonstration projects from Africa. EIFL-PLIP worked with each trainer to make sure that the training materials (lists of online resources, planning templates, etc.) were usable and useful both during the training, and after the training at the workplace.

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15 Partnership for Public Access. URL: [https://p4pa.net/](https://p4pa.net/)
In Kenya and Namibia, 47 trainers completed the CPD-ToT programme and are engaged in ongoing staff development activities for public libraries in their countries. The cascade training led by local public library trainers has already started to produce positive outcomes. For example, just six months after attending Mobile Literacy and Design Thinking workshops led by local trainers, staff at KNLS / Murang’a public library reported that:

- Our services are now more user focused.
- We have been able to cascade MIL to over 300 users of the library, including 9 staff members.
- We have started coding for kids especially during holidays.
- When I have to solve a problem, I ask: What are the clients saying about the issue that I consider a problem?
- In the past I have complained severally about lacking or limited furniture in the library. I am now open to using what I have and I have taken several activities to Ihura stadium which is adjacent to the library.\footnote{16}

In Namibia, where cascade training took place just before the country went on lockdown to prevent the spread of COVID-19, some libraries nonetheless succeeded in introducing new services, for example, weekly Teenage games club (Luderitz Public Library), cooking club (Okahandja Library), assisting grade 10-12 learners with reading and group discussion on their school subjects (Rehoboth Public Library), organizing sports training and activities for street children (Omaheke Regional Library), starting ‘TIP-TOP’ game sessions for kids (Rundu Public Library).\footnote{17}

Considering differences in public library governance, an adapted version of the programme has also been deployed in Zambia and Uganda, and the programme can also be replicated in other African countries, which have strong library authorities and where governments have equipped public libraries with ICT and Internet connectivity or are starting such initiatives.

Conclusions

Over a decade of EIFL-PLIP support for public library transformation in Africa has resulted in numerous innovative services being created, in partnership with public and community libraries, highlighting the new roles that libraries are playing in key development areas, such as education, health, digital inclusion and others. Despite ongoing funding challenges, most partner libraries have been able to continue and extend the new services by building new partnerships, advocating for support, and fundraising for additional resources. The findings of the EIFL study, Perceptions of Public Libraries in Africa, and the diverse examples of African public libraries contributing to community development were used in developing the EIFL-PLIP curriculum for capacity building of public librarians in Africa. The study and the examples of the demonstration projects also fed into numerous library advocacy initiatives on the African continent and beyond and helped to initiate partnerships and to generate additional support for public libraries.

EIFL-PLIP has developed an effective approach to cultivating innovative library services in Africa, built around close collaboration and trusted relationships with local and international partners, long-term commitment, and shared responsibility for the initiatives. The strategies (support for demonstration


\textsuperscript{17} EIFL Evaluation Report: Continuous Professional Development / Training Of Trainers Programme For Public Libraries In Namibia (2020). Compiled by Aletta Dunn and Ugne Lipeikaite. URL: https://www.eifl.net/resources/results-and-impact-continuous-professional-development-training-trainers-programme-0}
projects, advocacy, and capacity building) were adaptable to different contexts, and the focus was on sustainability and evaluation.

Although they are well-positioned locally to make a positive impact on local development, public and community libraries in Africa need support and resources to live up to this potential. EIFL-PLIP’s experience confirms, at the library level, the success of supporting service innovation. These innovations depend on the people who work in libraries - professional or non-professional librarians and volunteers - on their skills and abilities, and their motivation and commitment, which are often driven not just by salary or prestige, but by the desire to be useful to the community and change lives for the better. These librarians have in-depth local knowledge and connections with their communities, and with little support in the form of small grants or capacity building, they can offer ICT-based services in their libraries and to provide meaningful contributions to international librarianship through peer-to-peer knowledge exchange.