South Africa

PUBLIC ACCESS LANDSCAPE STUDY SUMMARY

Overview

South Africa faces significant challenges as it tries to improve its public access to ICTs. Its needs are high. Social inequality is extreme, and improving access to ICT ranks low compared to providing the basic necessities to underserved populations such as reliable electricity, clean water, affordable housing, employment opportunities, and help with the HIV/AIDS epidemic. Libraries are generally lacking in materials, telecenters are not functioning well, and skilled ICT labor is exiting the country. Readiness is high, however, and improvement can be made.

Findings

The legacy of apartheid remains in evidence in South Africa, and the government, since the demise of apartheid and the establishment of a democracy in 1994, has worked to address inequities. This is apparent across a range of efforts from building an infrastructure for schools, clinics, roads and electrification projects in rural and underserved areas to the drive toward broad-based black economic empowerment initiatives designed to create wealth among the previously disadvantaged.

As a key response to the inequities, South Africa is working diligently to expand and improve access to information and ICTs. Despite significant successes in areas such as economic growth, inflation control, fiscal control and revenue collection, other sectors have been slow to meet certain stated national objectives. This is particularly evident given the national power crisis, the delays in improving the education system, and the approach to the HIV/AIDS pandemic.

The key findings from this study include:

- Overall, response to government efforts to improve access to ICTs has been mixed. The Internet is used by only a few people, and access costs are high nationwide. The deployment of ICTs is often hampered by limitations in the electric power supply. The telecenters are not functioning well, and many no longer operate. Mobile phone use has been the technology with the most pervasive impact, even in poor communities.

- There have been significant improvements in the public library network through efforts to extend the libraries into remote and underserved areas and to provide ICTs in these facilities. The increased emphasis on library enhancement and expansion highlights the need to develop more local content.

- An ongoing critical loss of technical and entrepreneurial ICT skills exists, as an estimated 200 to 300 ICT-skilled resources leave the country each month. Despite high unemployment rates, it is difficult to find sufficient numbers of skilled ICT workers to meet the increasing demand.
ACE Scores

PUBLIC LIBRARIES

TELECENTERS

CYBERCAFES

Venue Distributions

<table>
<thead>
<tr>
<th>VENUES</th>
<th>ALL PUBLIC ACCESS</th>
<th>PUBLIC LIBRARIES</th>
<th>TELECENTERS</th>
<th>CYBERCAFES</th>
<th>OTHER VENUES*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total urban &amp; non-urban</td>
<td>25-country average</td>
<td>25-country median</td>
<td>25-country average</td>
<td>25-country median</td>
</tr>
<tr>
<td>VENUES</td>
<td>5,489</td>
<td>10,017</td>
<td>5,489</td>
<td>1,350</td>
<td>1,273</td>
</tr>
<tr>
<td>number with ICT</td>
<td>1,334</td>
<td>9,802</td>
<td>5,122</td>
<td>384</td>
<td>349</td>
</tr>
<tr>
<td>% with ICT</td>
<td>24%</td>
<td>98%</td>
<td>87%</td>
<td>25%</td>
<td>31%</td>
</tr>
<tr>
<td>% OF PUBLIC VENUES</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>28%</td>
<td>11%</td>
</tr>
<tr>
<td>POP. PER VENUE ('000)</td>
<td>9</td>
<td>8</td>
<td>5</td>
<td>31</td>
<td>9</td>
</tr>
<tr>
<td>with ICT ('000)</td>
<td>36</td>
<td>15</td>
<td>6</td>
<td>123</td>
<td>2,093</td>
</tr>
</tbody>
</table>

ND=No data

*See the last page for country-specific definitions of these venues.

User Profiles

<table>
<thead>
<tr>
<th>PUBLIC LIBRARIES</th>
<th>TELECENTERS</th>
<th>CYBERCAFES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>25-country average</td>
<td>Non-urban</td>
</tr>
<tr>
<td>INCOME Low income</td>
<td>17%</td>
<td>28%</td>
</tr>
<tr>
<td>Medium income</td>
<td>65%</td>
<td>54%</td>
</tr>
<tr>
<td>High income</td>
<td>18%</td>
<td>7%</td>
</tr>
<tr>
<td>EDUCATION No formal education</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td>Only elementary</td>
<td>30%</td>
<td>16%</td>
</tr>
<tr>
<td>Up to high school</td>
<td>50%</td>
<td>20%</td>
</tr>
<tr>
<td>College or university</td>
<td>10%</td>
<td>28%</td>
</tr>
<tr>
<td>AGE 14 and under</td>
<td>3%</td>
<td>12%</td>
</tr>
<tr>
<td>15-35</td>
<td>79%</td>
<td>72%</td>
</tr>
<tr>
<td>36-60</td>
<td>19%</td>
<td>12%</td>
</tr>
<tr>
<td>61 and over</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>GENDER % female</td>
<td>47%</td>
<td>53%</td>
</tr>
</tbody>
</table>

ND=No data

Percentages may not add up to 100% in all cases

See the last page for country-specific definitions of these venues
• The most notable broad-based ICT access impact has come via the thousands of privately run “phone shops.” They use subsidized voice call rates from the mobile operators who are required to provide discounted tariffs as part of their licensing obligations.

• Access to wi-fi venues appears to be marginal due to restrictions limiting its use within property boundaries, as are all types of ‘self-provisioning’, except for the fixed and mobile licensed telecommunication operators.

• Internet cafés provide games, and some telecenters earn revenues from these sources. Interestingly, some Internet cafés post signs forbidding the use of the equipment for scams.

• Radio is the most widespread information medium and 88 percent of the rural population listens to radio in any seven-day period. South Africa also has by far the largest television audience in Africa, and there are more than four million licensed television households. Additionally, South Africa hosts 17 daily newspapers, seven Sunday newspapers, 24 weeklies, and 161 local or country newspapers, most of them weeklies.

• Much of the population lacks access to essential services, such as electricity, clean water, health care, and telecommunication services, and to essential resources such as adequate housing, land, and work opportunities. These same people have little access to information that would improve their quality of life, and ICT access has not been viewed as essential.

• Given the socioeconomic conditions among the majority of the population— including the impact of HIV/AIDS and unemployment — practical public service information is a priority for disadvantaged communities.

Recommendations

The government has largely put the necessary policies in place to address universal information access, but problems have arisen in implementing these policies brought about by a lack of people trained both in ICT and appropriate project management skills.

A nationwide need exists to provide more functioning low-cost public ICT access points. Also, the underserved communities need more local information content, both in English and in local languages, in a format that is relevant, accessible, and understandable.

South Africa faces a huge demand for greater educational resources. Correspondingly, more information is needed on what users want to find on the Internet.

The library system lacks sufficient source materials, especially in a digital format, but libraries play an increasingly important role as information access venues. Libraries are being extended into underserved areas, and the government is providing more funds for libraries. The use of libraries as study and reading areas can create an opportunity to expose young people to ICTs. The existing network of phone shops, particularly in underserved areas, is playing an increased role in providing more affordable telephone access for underserved communities. Their expansion to provide Internet access is a logical next step.

Most HIV/AIDS support centers lack public ICT access points. Where these do exist, they are well used, and even where they do not exist, the necessary operational infrastructure is often in place, and the centers could become venues for large-scale deployment of ICTs.

These recommendations could extend the reach and understanding of public ICT access:

• Accelerate deregulation of the telecommunication sector to encourage competition, reduce costs, and increase accessibility to the Internet.

• Improve the availability, reliability, and use of low-cost electric power both in rural and urban areas through support for alternative energy systems, policy support, and promotion of efficient computer devices.

• Collaborate with the ICT private sector to accelerate the government’s plans for action.

• Provide additional skilled human resources to municipal and provincial levels of government to help address the severe lack of capacity to deliver public services.

• Provide broad-based training in ICT skills, and include ICT training and work programs for the youth to provide them with marketable ICT skills.

• Explore a programmatic intervention by those who can deliver ICT funds in partnership with one or more of the HIV/AIDS programs. The managerial and administrative framework exists, and there is an expressed need for such an intervention.
Geography & Economy

South Africa sits at the extreme southern tip of Africa. Covering 1.2 million sq km, its coastline extends more than 2,500 km from the Atlantic Ocean around the Cape of Good Hope to the Indian Ocean. The country has a varied climate as well as topography, from subtropical in the east to Mediterranean in the southwest to hot and dry inland and north to the Kalahari Desert.

South Africa is a multiparty democracy dominated by the African National Congress party. It has one of the most progressive constitutions in the world and guarantees media freedom and the right to access public information.

There are eleven official languages in the country. English and Afrikaans are widely spoken. A variety of religions are practiced freely, but Protestant Christians represent more than two-thirds of the total population.

South Africa, well known for enormous natural resources and for its emergence as a prominent industrial nation in Africa, has a robust and well-developed media and information sector. The overall national economic position is secure and growing steadily, but striking contrasts linger within the social sector.

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About this study

CIS's Public Access Landscape Study examined how people around the world access and use information and computers in public settings such as libraries, telecenters, and cybercafes.

Understanding public access is particularly important in developing countries where there is often limited private access to information and communication technologies (ICTs).

This study covered a carefully-selected sample of 25 developing countries containing over 250,000 public access settings. Local research teams surveyed over 25,000 people and conducted interviews and focus groups in order to develop a detailed picture of the public access ICT landscape in each country. CIS collected, interpreted, and analyzed these detailed county-level results, and also conducted cross-country comparative analyses to uncover common themes, challenges and opportunities.

The goal of this work is to help strengthen public access to information and ICTs around the world.

This project was conducted in two phases. During the first phase, country-based research teams prepared draft reports describing the information access landscape, presented a national assessment, and compiled a preliminary set of recommendations. In the second phase, teams identified the principal locations where people seek information: public libraries, cybercafes, telecenters, and other locations (such as private and religious libraries).

Local research teams used a combination of research methods to: (1) observe how people access information; (2) conduct surveys in information venues where they interviewed operators and users; and (3) perform secondary research and analysis of existing reports and documents using both local and international sources. Teams combined site visits and interviews to review the physical infrastructure and human resources of a variety of venues, and to determine the information content, service usage patterns, communication, and knowledge development. Additionally, teams examined the effects of environmental factors such as government policies, geography, and ethnic and linguistic differences.

Definitions

ACE scoring framework: Developed by CIS based on a modified bridges.org Real Access framework. The scale goes from zero to five, with 5 being the best possible score. ACE scores are calculated by evaluating dozens of variables having to do with ICT access, capacity and environment in public access ICT venues. “Access” includes variables such as accessibility, suitability, affordability, and the availability of technology; “capacity” includes training, relevant content and services, social appropriation, and collaboration capacity; and “environment” includes socio-cultural factors, popular support, political will, and a country’s legal and regulatory framework.

Challenges ahead: from table on front page: Estimates based on combinations of ACE scoring indicating difficulty in improving country’s public access to ICT. From the fewest challenges to most, categories are: quick wins, steady gains, slow gains, and significant.

CIS: University of Washington Center for Information & Society (CIS)

E-readiness: The ability to use ICT for economic development, as determined by measures of connectivity and technology infrastructure, business environment, social and cultural environment, legal environment, government policy and vision, and consumer and business adoption. E-readiness is scored on a scale from 1 to 10. In 2008, the global e-readiness score was 6.4, with the highest levels in North America and the lowest in Africa and Asia.

Gini coefficient: Measures the inequality of income distribution. A low coefficient indicates more equal income distribution, while a high Gini coefficient indicates more unequal distribution. The global average is around 0.6; the US Gini is around 0.45.

HIV/AIDS Support Centers: Offer resources through three main programs for Orphaned and Vulnerable Children, Child-Headed Households, and young people in combating HIV/AIDS; primarily in disadvantaged communities.

ICTs: Information and communication technologies (especially computers and the Internet)

Needs & Readiness indexes: From table on front page: The needs index is comprised of three indicators: inequality, ICT usage and ICT cost. The readiness index is also comprised of three indicators: politics, skills and ICT infrastructure. Proxies are used for all indicators. See “Information Needs & Watering Holes” on the CIS Landscape Study website (www.cis.washington.edu/landscape) for a more detailed discussion of these indexes and proxies.

NGO: Non-governmental organization

Non-urban: Commonly labeled a rural area, but definitions of rural or periurban vary by country.

Public libraries: Open to the public and funded by the provincial and municipal governments, with grant allocations from the national government; characterized by a few well-resourced libraries in the old “white” municipal areas and many under-resourced libraries in other areas.

Telecenters: Run by the Universal Service and Access Agency of South Africa; mandated by the South African government to ensure that all citizens have equal access to ICTs.

Research Team

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For more information, please visit our website at www.cis.washington.edu/landscape.