Bangladesh

PUBLIC ACCESS LANDSCAPE STUDY SUMMARY

Overview

Public access to ICT in Bangladesh is poor. The country has high needs and very low readiness, making for significant challenges ahead. Much of the population is poor and illiterate, local language content is scarce, and gender inequity is an issue. Community libraries are the most typical type of public access ICT venue in Bangladesh. Public libraries fare better by comparison than the country’s telecenters and cybercafés.

Findings

One of the major problems in all three types of venues studied is the lack of uninterrupted electrical power. The success of many public access venues is largely dependent on this single factor. The power supply issue is slightly less common in cybercafés. The study strongly recommends investment in equipment that consumes low power and which has a long battery life. This is the most effective solution for the non-urban areas, where the reliability of the power grid is most often described as ‘dismal’. The power grid issue is not expected to improve in the foreseeable future.

Other findings from this study include:

- As might be expected, venues with an Internet connection are far more popular than those that do not offer Internet connectivity.
- Many venues are not easily accessible by women due to their location. Gender inequity is an issue; only 22% of urban public library user are women.
- In a related finding, more effort is needed to make public access venues truly public—especially with community libraries, telecenters, and public libraries—by introducing activities that involve greater numbers of the local population.
- More local language content is needed, and more people must be trained to use ICTs to be relevant to underserved people. The content also should be developed in a variety of forms (text, photos, and animation) and in innovative combinations, and be deliverable through multiple channels. Visualization and voice-enabled text would be particularly valuable to less well-educated people.
- The community library system in Bangladesh is large, accounting for over 40% of the country’s public access ICT venues. Community libraries are community-oriented and better able to understand local needs. Also, community-driven initiatives and local funding sources are more effective than when these initiatives and sources exist in some distant agency or organization.
ACE Scores

PUBLIC LIBRARIES | TELECENTERS | CYBERCAFES

Shaded data points are outside standard deviation for 25-country set
See the last page for country-specific definitions of these venues
See the last page for a definition of the ACE scoring framework

Venue Distributions

<table>
<thead>
<tr>
<th>ALL PUBLIC ACCESS</th>
<th>PUBLIC LIBRARIES</th>
<th>TELECENTERS</th>
<th>CYBERCAFES</th>
<th>OTHER VENUES*</th>
</tr>
</thead>
<tbody>
<tr>
<td>VENUES</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>number with ICT</td>
<td>5,211</td>
<td>10,017</td>
<td>5,489</td>
<td>1,119</td>
</tr>
<tr>
<td>% with ICT</td>
<td>53%</td>
<td>98%</td>
<td>87%</td>
<td>10%</td>
</tr>
<tr>
<td>% OF PUBLIC VENUES</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>POP. PER VENUE ('000)</td>
<td>30</td>
<td>8</td>
<td>139</td>
<td>134</td>
</tr>
<tr>
<td>with ICT ('000)</td>
<td>56</td>
<td>15</td>
<td>6</td>
<td>1,394</td>
</tr>
</tbody>
</table>

* See the last page for country-specific definitions of venues. For this country, “other venues” refers to community libraries.
Data points are missing for some measures in some countries, which can result in oddities when comparing rows of data (for instance, the average number of venues with ICT appears high compared to the average number of venues). For a complete overview of comparative country data, please see the summary paper for this study.

User Profiles

<table>
<thead>
<tr>
<th>PUBLIC LIBRARIES</th>
<th>TELECENTERS</th>
<th>CYBERCAFES</th>
</tr>
</thead>
<tbody>
<tr>
<td>INCOME</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low income</td>
<td>11%</td>
<td>20%</td>
</tr>
<tr>
<td>Medium income</td>
<td>69%</td>
<td>70%</td>
</tr>
<tr>
<td>High income</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>EDUCATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Only elementary</td>
<td>10%</td>
<td>3%</td>
</tr>
<tr>
<td>Up to high school</td>
<td>67%</td>
<td>63%</td>
</tr>
<tr>
<td>College or university</td>
<td>23%</td>
<td>28%</td>
</tr>
<tr>
<td>AGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 and under</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>15-35</td>
<td>81%</td>
<td>79%</td>
</tr>
<tr>
<td>36-60</td>
<td>10%</td>
<td>20%</td>
</tr>
<tr>
<td>GENDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% female</td>
<td>22%</td>
<td>22%</td>
</tr>
</tbody>
</table>

Percentages may not add up to 100% in all cases
See the last page for country-specific definitions of venues
Data collected through interviews conducted by research teams. See country reports for details with regard to methodology, locations, timing, and data collection issues.

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Read more at www.cis.washington.edu/landscape
**Recommendations**

Public access to information and communication technology is limited in Bangladesh, and must be expanded. There is little networking between public access ICT venues, and this must also be expanded in order for information to become available to more locations. This study recommends that a comprehensive plan be prepared for creating a broad range of e-government services to be available through public access venues.

The transfer of information will affect greater numbers of people when that transfer is available through a combination of voice, pictures, and text. This effort will benefit huge numbers of illiterate people in Bangladesh, and will be nearly impossible without the use of public access venues and ICT.

The majority of the potential venue users have extremely limited finances, and ICT-based venues should operate with minimal fees or be free to the users. This study recommends making Internet connectivity in all public access venues free. Universal Service Funds or free connection vouchers issued from the BTRC could be introduced.

The research team noted the inadequacy of secondary data, and this was particularly true for public libraries and cybercafés. The in-depth interviews played an important role in capturing information related to those venues, and the team concluded that a comprehensive venue census would probably resolve the issue.

The technical support system must be improved for the public access venues and be available through a common network to serve all public access venues.
**Geography & Economy**

Bangladesh is a small densely populated nation in Southeast Asia bordered by India, Myanmar, and the Indian Ocean. The country is quite flat geographically, making for relatively unimpeded signal transmissions.

The population of Bangladesh is 156 million. An estimated 40 to 50 percent live below the poverty line, and two-thirds have little or no formal education. Three-fourths live in rural areas and depend on agriculture for their livelihoods (there are few non-agricultural jobs beyond the urban areas). People under the age of 25 years make up more than half of the population (57.7 percent).

Bangladesh gained independence from Pakistan in 1971 and emerged as a parliamentary democracy, though one which has tended to be politically unstable and corrupt.

Until the global downturn of 2008, Pakistan’s economy has been strong in recent years, growing at an average annual rate of five percent from 2001-6 and six percent in 2007.

**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, telesetcners, and cybercafés. 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 country-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, cybercafés, telesetcners, 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 scores 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)

**Community libraries**: Fully funded by non-government organizations and community contributions.

**Cybercafés**: For-profit venues that mainly serve demand for communication in urban and semi-urban areas.

**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 in 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.

**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**: A “rural” area. Urban vs. non-urban classifications vary by country.

**Public libraries**: ‘Public’ in this case is defined not as funded by the government, but rather in terms of access for public or common people; funded by private sector, NGOs, and small percentage government, few with ICTs and no training.

**Telecenters**: Venues whose focus is on information and knowledge services for underserved populations, usually in a not-for-profit or hybrid income model.

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**COUNTRY PROFILE**

<table>
<thead>
<tr>
<th>Total population* (millions)</th>
<th>156</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban population* (millions)</td>
<td>39.8</td>
</tr>
<tr>
<td>Literacy (%)</td>
<td>47.9</td>
</tr>
<tr>
<td>E-readiness</td>
<td>3.03</td>
</tr>
<tr>
<td>Gini</td>
<td>0.47</td>
</tr>
</tbody>
</table>

*World Bank 2006 data

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Front photo: Inside the BRAC Pirgacha Gonokendra Library. Photo courtesy of the Bangladesh research team.