CIS CENTER FOR INFORMATION & SOCIETY
UNIVERSITY of WASHINGTON

Ecuador

PUBLIC ACCESS LANDSCAPE STUDY SUMMARY

Overview

Ecuador has a mixed record with regard to public access to ICT. Its library system is somewhat average compared to the other countries in this study, while its telecenters are among the best and cybercafés among the worst. Ecuador has a low readiness ranking (political and economic will), which combined with other challenges such as poor non-urban access and a lack of appropriate content make the public access landscape challenging. Since there are both highs and lows, CIS classifies Ecuador's potential for ICT improvement as "steady gains."

PUBLIC ACCES LANDSCAPE	
Challenges ahead	Steady gains
Needs	Moderate
Needs (rank)	10/25
Readiness	Low
Readiness (rank)	20/25

Findings

Public libraries in Ecuador depend on SINAB (the National Library System), a decentralized Education Department office. There are 557 libraries distributed over the country and these are especially important in rural zones and underserved urban neighborhoods. In general, however:

- Library services are oriented toward students, and only rarely offer services or content appropriate for the general population.
- Public libraries collectively lack professional staff, ICT services, and adequate budgets, and only 11 libraries offer ICTs to the public.
- The population at large seldom accesses libraries because they do not find information or services to meet their needs.

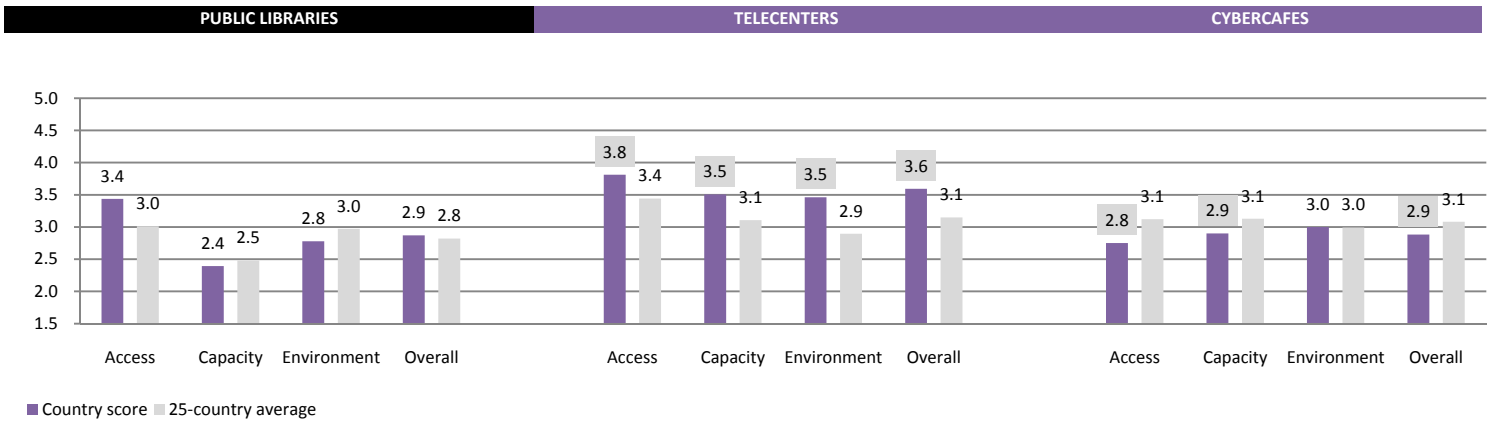
Across all public access ICT venues in Ecuador, the following were among the more important findings that emerged from this study:

- There is insufficient appropriate content for underserved communities that have a high concentration of low education levels, illiteracy, and people who do not speak Spanish.
- High Internet connection costs are a barrier to wide sectors of the population increasing who could use access to the Internet.
- Cybercafés are the main venue to provide access to information and communication, but they are concentrated in urban areas.

Success factors that will improve access to information and communication for underserved groups include specific policies and actions related to capacity building and appropriate content development. Information should be adapted, translated, organized and disseminated in appropriate ways to meet the information needs of the public. Capacity building projects should focus on purpose-oriented training, links among groups with common interests, and strong levels of commitment among the trainers.

The Ecuadorian economy depends heavily on petroleum-based revenues and to a lesser degree on agriculture and mineral deposit mining. The government investments that

ACE Scores



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

	ALL PUBLIC ACCESS			PUBLIC LIBRARIES			TELECENTERS			CYBERCAFES			OTHER VENUES		
	Total urban & non-urban	25-country average	25-country median	Total urban & non-urban	25-country average	25-country median	Total urban & non-urban	25-country average	25-country median	Total urban & non-urban	25-country average	25-country median	Total urban & non-urban	25-country average	25-country median
VENUES	1,994	10,017	5,489	557	1,111	1,062	45	1,273	366	1,392	8,693	3,225	0	398	46
number with ICT	ND	9,802	5,122	22	349	96	45	1,149	257	ND	8,507	3,251	0	146	13
% with ICT	ND	98%	87%	4%	31%	20%	100%	90%	100%	ND	98%	100%	NA	37%	92%
% OF PUBLIC VENUES	100%	100%	100%	28%	11%	20%	2%	12%	11%	70%	73%	67%	0%	4%	1%
POP. PER VENUE ('000)	7	8	5	24	93	37	293	205	68	9	52	9	NA	419	103
with ICT ('000)	ND	15	6	592	2,093	208	293	242	119	ND	62	10	NA	1,354	198

ND=No data
NA=Not applicable
See the last page for country-specific definitions of these venues
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

		PUBLIC LIBRARIES				TELECENTERS				CYBERCAFES			
		Urban	25-country average	Non-urban	25-country average	Urban	25-country average	Non-urban	25-country average	Urban	25-country average	Non-urban	25-country average
INCOME	Low income	36%	28%	33%	35%	69%	26%	73%	24%	23%	26%	63%	24%
	Medium income	57%	54%	67%	46%	31%	56%	27%	45%	62%	56%	29%	45%
	High income	7%	7%	0%	6%	0%	9%	0%	4%	15%	9%	7%	4%
EDUCATION	No formal education	0%	3%	0%	2%	2%	5%	7%	6%	0%	5%	0%	6%
	Only elementary	19%	16%	19%	21%	23%	14%	66%	13%	7%	14%	1%	13%
	Up to high school	67%	50%	73%	36%	57%	37%	17%	32%	28%	37%	33%	32%
	College or university	14%	28%	8%	19%	18%	40%	10%	28%	17%	40%	18%	28%
AGE	14 and under	11%	12%	0%	15%	13%	9%	50%	14%	3%	9%	36%	14%
	15-35	79%	72%	83%	51%	87%	74%	17%	57%	84%	74%	57%	57%
	36-60	7%	12%	17%	23%	0%	12%	33%	8%	7%	12%	7%	8%
	61 and over	3%	2%	0%	2%	0%	0%	0%	1%	3%	0%	0%	1%
GENDER	% female	58%	53%	50%	49%	40%	39%	50%	39%	41%	39%	64%	39%

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

apply to the access to information have largely been orientated toward the education sector. In 2006, the allocation for education was of nine percent (US$923.2 million) of the central government budget, and in 2007, that figure increased to 11 percent (US$1,190.8 million). This increase produced a significant investment in the education infrastructure that, in terms of information access, has been oriented primarily to providing connectivity and content platform development.

The intensive growth of the telecommunications sector and the renegotiation of contracts with service providers, guarantees an increase in the next several years in the collection of revenues for the FODETEL funds. The application of these increased funds may increase the incentive to deliver ICT access to underserved sectors and promote the creation of e- education, e-health, and e-government content and stimulate local economic development.

Ongoing government policy revisions that address access to information show that the use of new ICTs has turned into an expanding paradigm reinforced by the public's growing perception of the value of ICTs. As a result, several new big investment projects related to access to information have a strong technological component; however, there is no corresponding effort to invest funds and support to enlarge coverage of library services.

The high value placed on the technological component of these new projects is the reason why many development projects aimed at access to information have placed little emphasis on capacity building and content development in favor of prioritizing connectivity. Still, the level of connectivity remains low for most of the population. A moderate level of investment is directed toward new projects focused on education, health, e-government, and the effort to create platforms for local content.

Recommendations

There are huge information needs that are not adequately met by public libraries, cybercafés, and telecenters. Among the more outstanding content deficiencies are:

- Migration procedures, remittance alternative systems, visa and travel information)
- Small business and job opportunities
- Community development opportunities
- Accessible, understandable, opportune, and precise information on health issues; and
- Agricultural market prices, planting and harvesting information, weather forecasts, business opportunities, and technical issues.

A few other sources provide some local or thematic agricultural information systems and services from NGOs.

The following recommendation emerged from the study:

- Develop information systems specifically for underserved groups.
- Develop ICT-based capacity building programs that can also apply specifically to special groups including women, illiterates, people who do not speak Spanish, and older people.
- Provide governmental funds to encourage the private sector to establish telecenters in rural and underserved areas and provide content that meets the local needs.
- Reorient and provide greater support to the public libraries to ensure they meet the needs of the general population and become more than school libraries.
- Create and expand programs that improve rural access to the Internet and establish policies to reduce Internet connection costs.

Geography & Economy

Ecuador is a small and sparsely populated country in northwestern South America with an ethnically diverse population estimated to be 13.8 million. Mestizos are the largest ethnic group (65 percent of the population) and are the mixed descendants of Spanish colonists and indigenous Indians. Amerindians comprise about 25 percent of the population. Spanish is the official language and is the first language of 94.4 percent of Ecuadorians.

The public education system is free, and attendanceis mandatory until age 14. In rural areas, however, only 10 percent of the children go on to high school. Government statistics show the mean number of years completed is only 6.7.

The country's geography is also diverse, and includes coastal plains, dense Amazon rainforest, and rugged highlands in the Andes Mountains. The Galapagos Islands in the Pacific also are part of Ecuador. The country is bordered on the north by Colombia, by Peru on the east and south, and on the west by the Pacific Ocean.

Ecuador is a presidential republic with an executive branch that includes 25 ministries.

COUNTRY PROFILE	
Total population* (millions)	13.2
Urban population* (millions)	8.3
Literacy (%)	91
E-readiness	4.12
Gini	0.44

*World Bank 2006 data

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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, cybercafés, 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 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)

Cybercafés: Offer connectivity only, do not develop content or offer ICT training.

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.

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: Dependent upon SINAB (National Library System), a decentralized office of the Education Department; services oriented to students and do not offer services or content appropriate to the general population.

Telecenters: Developmentally-oriented venues that provide public access Internet points, which are promoted by different organizations such as community-based organizations, NGOs, and local governments.

Front photo: Internet access via a rooftop satellite connection in rural Ecuador. Photo courtesy of Matthew Kebbekus.