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*PUBLIC ACCESS TO INFORMATION & ICTs*  
*PHASE II REPORT*

***PERU***

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Prepared for the University of Washington,  
Center for Information & Society.

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# 1 Extended Executive Summary

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## 1.1 Research Project Overview

This research focuses on the public access to information and communication landscapes in 24 countries, with specific focus on public libraries, to understand the information needs of underserved communities, public access to information and communication venues, and the role of ICT.

Through field research in 24 countries conducted by local research partners, and cross-country comparative analyses based on common research design elements (see list of countries and research design overview in Appendix), the project aims to contribute to the knowledge in the field of information and ICT for development. Of particular interest and value are: the comparative look at key venues (libraries and other), and the mix of depth of in-country knowledge with breadth of global comparison to elicit success factors and scenarios to understand how diverse populations can and do access and use ICT to improve their lives. All outputs of this research will be broadly disseminated to interested stakeholders and placed in the public domain.

## 1.2 Introduction

This document presents the results of the research on public access to information and communication in Peru. Through the research we identified main venues used for population to access information and communication and could characterized why, how and by whom they are used.

This section presents a summary of research results. Following subsection includes general information on the country and about access to information and ICT in Peru. Then methodology of this research is explained. After that it introduces aspects of information needs of underserved communities and venues characteristics. Finally, it brings salient findings and key recommendations.

## 1.3 Country Overview

Peru is in western South America. It is bordered on the north by Ecuador and Colombia, on the east by Brazil, on the southeast by Bolivia, on the south by Chile, and on the west by the Pacific Ocean.

Peru covers an area of 1,285,220 km<sup>2</sup>; the Andes Mountains run parallel to Pacific Ocean, dividing the country into three geographic regions. Coast (Costa), to the west, is a narrow plain, largely arid except for valleys created by seasonal rivers. Highlands (Sierra) is the region of the Andes; it includes the Altiplano plateau as well as high peaks. The third region is the jungle (Selva), a wide expanse of flat terrain covered by the Amazon rainforest in the east; almost 60% of the country's area is located within this region. Peru, unlike other equatorial countries, does not have an exclusively tropical climate; the influence of the Andes and the Humboldt Current causes great climatic diversity within the country. Varied geography and climate produce a high biodiversity; 21,462 species of plants and animals had been reported as of 2003, 5,855 of them endemic.

Peru is a presidential representative democratic republic with a multi-party system. President is elected for five years and may not immediately be re-elected. There is a

unicameral Congress with 120 members elected for a five-year term. The Peruvian government is directly elected, and voting is compulsory for all citizens aged 18 to 70. General elections held in 2006 ended in a victory of Alan García from the Peruvian Aprista Party with 52.6% of valid votes in the ballotage.

Peru is divided into 25 regions and the province of Lima. Regions are divided in provinces (195), and provinces are divided in districts (1833). Each level has an elected government which serves for a four-year term.

Peruvian economy is growing based in extractive industries, mainly mining and with less importance agro exportation activities. Growth economy is producing deep differences between regions.

Peru has around 28'220,000 inhabitants, is the fourth most populous country in South America. Peru is a multiethnic nation formed by the combination of different groups over its history. Amerindians inhabited Peruvian territory before Spanish conquest (16th Century), Spanish and Africans arrived in large numbers during colonial period, mixing widely with each other and with indigenous peoples; after independence there has been a small European immigration, Chinese immigration at 1850's had a major influence.

Spanish is the primary language of the country (first language of 80.3% of Peruvians age 5 and older in 1993). It coexists with several indigenous languages, the most important of which is Quechua, spoken by 16.5% of the population in 1993. Other native languages (Aymara and Amazonian languages) were spoken by 3% of Peruvians.

Preponderant religion is Catholic (85% of population) followed Protestants, Adventists, Mormons, Jehovah's Witnesses, and Israelites of the New Universal Pact.

Literacy was estimated at 86.9% in 2005; this rate is lower in rural areas (76.1%) than in urban areas (94.8%). Primary and secondary education are compulsory and free in public schools, but their quality is low (Peruvian students was rank last in reading comprehension results of PISA at 2002).

Gender marks significant differences in the country: men have major participation in EAP (57%); women's income was around 40% less than men's income in 2002; illiteracy percentages are higher in women (16%) than in men (10%); Women are in disadvantage in access to ICT too, 32.6% of men access to Internet and only 25.4% of women do that.

Population characteristics as language, education level, gender, location (rural/urban) are especially relevant in access and use to information and ICT in Peru.

Access to appropriate information –relevant, opportune, understandable, and usable- is limited in Peru. Marginalized groups rely in social networks to access information, but quality and amplitude of information accessible through those channels is not adequate. Public information services –libraries, information services and so- are almost not integrated by social networks as information sources. Internet is being used to access to information, at first as an extension of social networks richness, amplifying them and helping nodes or points of them to be connected more easily. But Internet is also helping to

access to information outside social networks mostly through 'common' web pages but, increasingly, through specialized and appropriate information systems or services.

Internet is mostly accessed through "cabinas" (cyber cafés) which allow people to access the Internet without computer or internet connection at home, work or study places. Access to Internet and the capacity to enjoy its benefits are strongly affected by inequity variables. By other side, cell phone access had been growing tremendously since 2006 and it seems this process will continue for a while; cell phone access and usage had overcome fixed phones and is growing in places that did not have IT services before: rural areas. However, more Internet access and cell phones would help social networks to circulate information more efficiently, but will not help a lot in getting new and appropriate information.

Public information services –especially public libraries- should be the source for appropriated information. But Peru does not have a solid tradition of public libraries as other countries have and public libraries are being more devaluated now. Most of special libraries are opened to the public; they have an important function because most of the time they are the unique channel to access specialized information relevant for human development.

#### 1.4 Research Rationale, Sample, and Methods

Research started with an extensive literature review that included academic documents about ICT, inequity in Peru and venues selected; statistic information about population, inequity, ICT and venues selected; and reports about specific projects related with each venue. In a second phase, primary information was directly collected to characterize each venue and their use.

Venues considered for this research are: public libraries, special libraries, cybercafés (cabinas) and telecenters. Public libraries and cybercafés were selected because they are distributed along the country; telecenters were considered, despite of they are not so many, for their orientation to provide access to ICT and information to underserved groups; special libraries, concentrated mostly in Lima, were took because of the relevance of their content for human development. Other venues as university and school libraries were not considered because not all of them are opened for public in general; communitarian and rural libraries were not included because they are small experiences settled in particular location without national projection and possibilities to use ICT, and because there is not enough information about them.

Access to information and ICT through venues studied is analyzed considering different inequity variables. Socio-economic status affects the capacity of people to dedicate time to look for information, and is directly related with other variables as education level, gender and cultural issues. People with low education level do not have capacities required to use information and have more difficult to appropriate new technologies, less level of education is more common in women; gender considerations are important also in level of technology access, women access less and later to new technologies, although gap is been reduced, rural women are still to far from men on the same condition; location

(rural/urban) is an important variable, information services and ICT deployment are concentrated in Lima and some other cities, rest of the country is now getting connected – especially by cell phones- but there is still a big gap between Lima and the rest of the country, urban areas and rural areas, and the coast and the other geographical regions; people with non-Spanish languages as mother tongue are poorer, less educated and generally marginalized. Finally age is a variable to consider when thinking on provide digital services because older people feel left out by new technology and that is clearly producing a divide.

For data collection we used: individual interviews to experts and key informants in each venue; surveys (429) applied to users and operator's in each venue, distributed in 31 sites visited (13 rural and 18 urban). In order to identify and determinate quantity of venues in special libraries and telecenters, we have to perform an exhaustive search of them by Web browsing; in order to validate the information collected we made it public in email interest lists to receive feedback about new venues.

### 1.5 Information Needs of Underserved Communities

Information needs depends on practical needs that are situated in a particular moment and place. Information needs are different to different groups and between people inside those groups; they are also related to gender and age interests, to cultural factors, to occupation. Information needs are also dynamic, when you get some information you may need something else.

There have been some studies on information needs of underserved groups, but those needs can not be defined in general. It could be said that farmers need information on climate, technology and market issues, but needs are specific for every region or even valley considering there are different climates and also cultural and/or education level differences between farmers. Small entrepreneurs need information to improve their production and to have a better participation on markets, specific needs depend on which business or industry they are involved with; women need information on their rights, health and childcare; older people on rights & health; young people on study and/or work opportunities, leisure, etc.; and everyone need information on state paperwork and regulations, government services, goods prices, rights, etc.

Each group or specific community would benefit from better public access to information, but such information should be appropriate, it means that it should be relevant, opportune, understandable, and usable. While several Web services address concrete information needs of some underserved groups, there are scarce examples of services providing appropriate information.

### 1.6 Strengths, Weaknesses, and Opportunities in Key Public Access Venues

**Public libraries** are the second in number of facilities available between public venues, despite of that they are present only in 40% of districts. Public libraries should in theory serve different segments of population under their jurisdiction, but they are mostly oriented to school students. Focus of services and contents in this target group is supported by public perception that libraries are just to attend students.

Library's services costs are low and affordable for everyone. Public libraries are supported by municipal governments; they count with reduced budgets that usually cover only infrastructure maintenance and salaries. Staff does not receive adequate training due to economic constraints; it affects their motivation and capacity to design and develop services more adequate to serve a large range of population.

Quantity and quality of services is generally low, their collections use to be outdated and a very little portion of public libraries provided ICT services. This situation explains why libraries users decrease constantly.

Public libraries do not have political support at national level; with fewer budgets and less public, a lot of municipal libraries are getting closed in the last years because their lack of public and/or political support. Progress in national economy is not reflected in more investment in libraries, but eventual economic constraints in local governments are reflected in reducing library's budget and services.

Public libraries nearness to their communities could allow them to identify specific information needs of potential users to develop adequate services, but this would be possible only if they get more resources to develop staff capacities and collections. ICT could be an important tool, but their efficacy to improve services depends on solving staff capacities issue at first.

**Cabinas (cybercafés)** are the main point to access ICT and information in the country, they are more concentrated in urban areas, but their expansion to small towns and villages in rural areas is being accelerated thanks to governmental programs that will install around 5000 cabinas in the following 2 to 3 years.

Cabinas offer just connectivity, they do not develop contents. Some cabinas offer training as part of their business strategies, but their interest is not the development of user's capacities.

Cabinas users are mainly young people; adults and older people do not use this venue in a significant proportion because they did not develop skills using computers, and do not consider useful this tool to solve their particular needs of information and communication; cabina's owners do not consider older people as part of their target group.

Where cabinas are available, their use is completely integrated to people routine, especially for young people that look for information related with education and perform entertainment activities. Older people are minority among users. Despite of adults are not common user's, they consider cabinas have a great value because the technology is valuable by itself and because the benefits for their child education.

Having more prepared personnel, cabinas would receive a varied public as some do. By other side, cabinas would become kind of business centers for small entrepreneurs. More interestingly, cabinas would be used by development projects, local governments or central government offices to train people, make diffusion of information systems, and provide help on e-government services and even to provide microfinance services. A few

experiences of such kind of use are under course, it is needed to study and make diffusion of their results.

**Special libraries** have an important function because they are most of the time the unique channel to access local contents with great relevance in human development. Special libraries have staff with high qualification but the information offered is not always appropriate in terms of language, format or kind of language to the majority of population. Most of the users of special libraries are professionals, practitioners and students. However, some of special libraries –because of the nature of its mother institution- try to address their services in specific underserved communities.

Special libraries are concentrated in Lima, just few of them are located in other cities, their services do not have enough diffusion, these reason difficult the access to their services by large segments of population; this problem is trying to be solved offering more information through on-line services.

By other side, networks strengthen special libraries because allow their access to resources that their institutions are not able to offer because of economic constrains (bibliographic material, training, cooperative work, etc.).

Special libraries have relevant contents that need to be ‘translated’ to be usable for underserved communities; these contents compiled in web services should be more usable for this new public.

**Telecenters** are public internet access points with a development purpose. Most of telecenters in Peru are in rural zones or deprived places where it was not expected to have private installation of Internet, before large installation governmental projects that are now being carried out. Telecenters are not significant in gross numbers and at national level, they are undoubtedly less significant in the quantity of people served than the rest of venues presented in this research.

Most of telecenters face financial sustainability problems, such problems are currently exacerbated if a cabina comes to town. Lot of telecenters had closed when local entrepreneurs installed cybercafés, other reoriented its functioning to serve the institution or group for which they were created and not the public in general. Telecenters face technological and organizational sustainability too; they can not keep external technical staff for long time. But training local people in rural areas often helps the trainee to migrate.

Operators need training in much more than technology issues, including trainer capacities, book keeping and development issues. That is needed to meliorate social inclusion from telecenters by training groups that are not using them (the less educated, adults or women) and invite them to use telecenters.

Some projects that promoted telecenters are looking at ways to involve cabinas on provision of services they want telecenters to provide. Telecenters can try to become e-government services facilitators; they would also provide micro-financial services in their

localities which normally lack of a bank office, in order to do so they need to get associated to local or national financial institutions.

### 1.7 Salient Findings

- Cabinas (cybercafés) are everywhere in urban areas. Because of governmental programs that promote them, they will have a significant presence in rural areas too. They are the main venue used to access information in the country.
- Cabinas offer connectivity but they do not produce contents or develop capacities.
- Special libraries have relevant contents but they are not appropriated –relevant, opportune, understandable, and usable– for most of population.
- Telecenters are fewer than in similar countries because of cabinas spread; they are in far away rural village like unique Internet access point.
- Public libraries collections are outdated, they are losing users, and do not have local or national political support.
- Contents are been provided through Web information systems focused in specific topics or regions.

### 1.8 Key Recommendations

- Understand how would be cabinas engaged into programs of provision and facilitation of useful and appropriate information in collaboration with other venues.
- Implement pilot programs that make cabinas a place to access information for development to solve underserved communities information needs.
- Develop training programs on ICT use addressing special groups, as women, illiterates, non-Spanish speakers and older people.
- Develop information systems for underserved groups.
- Public libraries should be reoriented in order to become more than big school libraries and to be able to solve needs of population in general.
- Develop regulations that allow public libraries to obtain and use external funds.
- Assess and improve web information systems usability.
- Adequate information available at special libraries and governmental services to be appropriate for marginalized groups.
- Continue with programs that enlarge rural access to Internet.
- Improve diffusion and accessibility of special libraries.

## 2 Methodology

### 2.1 Venue Selection

2 paragraphs

Brief description of the selection process: how you selected the types of venues to be studied, why they were included, why others were left out.

Note: this data collection template is designed to capture info about 4 venue types. If you study in detail more than 4 venue types in the country, include a full description of the 5<sup>th</sup> one as an appendix, using the same set of questions.

At first we identified all information sources used by people, then we select what are venues (according with research definition) and open to everyone, and finally what have major distribution. Public libraries and cybercafés are distributed in all country; telecenters were considered because their development objectives oriented to underserved communities. Special libraries were included because of their importance providing information for human development.

We left out university libraries because not all of them are open to everyone; rural and communitarian libraries were not considered because they are particular experiences located in specific areas without replica in other places (rural libraries are only in Cajamarca, communitarian libraries are in poor neighborhoods in Lima).

#### 2.1.1 Venues studied

Enter the details to complete the table based on the venues studied in this country (more details will be filled in other sections):

	Public Libraries	Special Libraries	Cabinas (Cybercafés)	Telecenters
Total number in country	729	106	31,600	72
<b>A. # in urban location</b>	390	106	30,600	3
% offering ICT	16%	92%	100%	100%
Total # of people served (annual)	N.A.	N.A.	5,432,000	N.A.
<b>B. # in non-urban location</b>	339		1,000	69
% offering ICT	3%		100%	100%
Total # of people served (annual)	N.A.		457,000	N.A.



## Comments

National Statistic Institute (INEI) defines urban areas as those with more than 400 continuous houses and/or 2000 inhabitant, and rural areas as non-urban. Number of cabinas is not available, we construct this number. According to Apoyo there are 9483 cabinas in Lima; based on expert opinions around 30% of cabinas are in Lima, so there may be around 31600 in the country. One of the main companies providing Internet to rural areas (Rural Telecom) calculates they are attending 200 cabinas in rural areas; then we may estimate there are 600 to 1000 cabinas in rural areas.

Number of people served by cabinas was calculated based in the percentage of cabinas users in the National Household Survey 2007. Part of rural people served, use cabinas at urban places but we can not determinate a percentage.

There is not information to determinate number or people serve by other venues. We have information about how many times each venue would be visited, but each user can visit several times a venue.

According to information from libraries, urban libraries received around 211,000 visits of user per month, whilst rural libraries receive only 84,600 per month.

According to Apoyo cabinas are used around 250 times per week. According to operators telecenters are visited around 10 times per day, and special libraries 5 times per day.

### 2.1.1 Other experiences of public access to information that are not quite “venues”

Basic information about other experiences with potential to make a difference to the public access landscape (tea rooms, Wi-Fi hotspots, coffee houses, web information portals) although they are not quite a “public information venue” in the sense defined for this study (see research design document for definition).

#### Other public access experience #1: Web information services for development

Description :

There are Web information Services focused in topics for specific region or issue. There are information services in agriculture, environmental, production and business (for example: milk productive chain, rural business)

Total number in country: 15

% offering ICT access: 100%

% in urban location:

Comments on how it is influencing public access venues in the country:

Those services are contributing with the production of relevant contents for human development in Peru.

## **Other public access experience #2: Governmental information services**

Description :

National regional and local government offices should offer information about their issues to every citizen that requires it. Some have “information desks”, in the rest of them citizens are referred to the correspondent office by the gatekeeper.

Total number in country: 2,000

% offering ICT access: 0%

% in urban location: 50%

We produce this numbers considering that there are 1830 local governments, 24 regional governments that not necessarily function coordinately or in the same building, and several tens of national institutions including departments, special issues institutions and so. We consider that half of them are rural because there are 1062 districts that are predominately rural. Those offices do not provide access to ICT to the public, but most of them use ICT in some way.

Comments on how it is influencing public access venues in the country:

Consciousness on the right to access public information is growing together with laws that endorse such rights. People is getting more access to governmental information and it is being easier to make claims. People proceedings with government offices are getting more efficient, and ICTs is helping a lot on that.

All the government offices should have an informative web page, but a lot of local governments in rural areas do not have one. A little of such web pages have transactional functionalities, most just give information.

### **2.1.2 Other existing public access venues, not included in this study**

Basic information about other public access venues **not** included in the study (e-tuktuk, school or other private libraries not open to the public, health centers, etc), although they could play a role in public access information in the country. Indicate rationale for NOT including them in the study.

## **Other venue not studied #1: University libraries**

Total number in country: 68

% offering ICT access: 100%

% in urban location: 100%

Description of the Venue:

University libraries objective is to offer information to their university students and support research activities.

<p>Reason why it was not included in the study:</p> <p>They were not included because most of them are not open for general public, is usual that their services are restricted to university community.</p>
<p><b>Other venue not studied#2: Rural or community libraries</b> (if needed)</p> <p>Total number in country:</p> <p>% offering ICT access: 0%</p> <p>% in urban location:</p> <p>Description of the Venue:</p> <p>There are rural libraries in some places, the better known experience is the Cajamarca rural libraries <a href="http://bibliotecasruralescajamarca.blogspot.com/">http://bibliotecasruralescajamarca.blogspot.com/</a>. There are also small libraries in churches or community organizations. A program by Lima's local government is implementing small libraries in deprived zones.</p> <p>Reason why it was not included in the study:</p> <p>It is difficult to obtain data from this services and no one has the possibility to implement ICT services.</p>

<p><b>2.2 Inequity Variables</b></p> <p>1-2 paragraphs each.</p> <p>Describe how each variable affects equitable public access to information and ICT in this country, and what you did in this study to make sure each one was addressed (for example, if you visited venues in both urban and non-urban locations).</p> <p>Also include additional variables of local relevance to your country, as you listed in Form 1, section 1a.</p>
<p><b>2.2.1 Socio-economic status</b></p> <p>Socio-economic status is not a main issue about restrictions to pay fees for access information because most of them are affordable. But low economic status affects the capacity to dedicate time to look for information, and is directly related with other more relevant variables as education level.</p> <p><i>This variable was considered when visiting venues located in places with low income, and venues, as telecenters, oriented to this type of users.</i></p>
<p><b>2.2.2 Educational level</b></p> <p>People with low educational level can not use most of the information that may</p>

be useful to them. A classical case is that of peasants which do not understand agricultural engineers or documents produced by them. Materials should be made adequate or translated but there are not resources to do so. Low educational level makes it more difficult to appropriate new technologies, especially to those with more age. Peru has some of the poorest results in reading comprehension tests in Latin America between school students, especially among those studying at public schools.

Low educational level is strongly associated with socio economic level and location of residence: poorer and rural people are less educated.

*This variable was considered in the analysis of user's type in all venues studied.*

### 2.2.3 Age

Age is a variable important to consider when thinking on digital services because older people feel left out by new technology and that is clearly producing a divide.

*This variable was considering in the analysis of user's type in all venues studied. Venues were visited at different time to guarantee a sample including young and adult people with different time available.*

### 2.2.4 Gender

Women had accessed less and later to new technologies, but they are in general closing the gap according to dynamic analysis of ICT and internet usage. However, aged and rural women are still far from men on the same condition and need of special actions and policies.

*This variable was considered in the analysis of user's type in all venues studied.*

### 2.2.5 Location

This is a good place to offer further details on the urban/peri-urban/non-urban definitions and relevance in your country, among other location variables.

This is maybe the most important variable to consider when analyzing access to information and digital services. Information services as special libraries and ICT deployment had concentrated in Lima and some other cities. The rest of the country is now getting connected –especially by cell phones- but there is still a big gap between Lima and the rest of the country, urban areas and rural areas, and the coast and the other geographical regions.

*Location was considered visiting venues in urban and rural locations.*

### 2.2.6 Other inequity variables

#### Other Inequity Variable 1: Mother Tongue

People with mother language other than Spanish had less socio-economic level, less education and live in rural areas. There is little information available in native languages and information services are not prepared to provide services to this group.

*This variable was considering in the analysis of user's type in all venues studied*

## 2.3 Data Gathering Techniques

Describe the different data gathering techniques you used to conduct this study. Provide specific examples and sample selection criteria.

### 2.3.1 Literature review

Describe the type and approximate number of documents reviewed. Include detailed references of the most useful ones. Include valid links for all online sources.

50 number of documents reviewed.

Literature review include academic documents about ICT, inequity in Peru and venues selected; statistic information about population, inequity, ICT and venues selected; and, reports about specific projects related with each venue.

#### 2.3.1.1 Most useful bibliography:

APOYO (2007). Perfil de las cabinas públicas de Internet 2007. Lima: APOYO Opinión y Mercado.

Ardito, W (2007). Discriminación y racismo en el Perú: ¿cómo estamos?. En: Pobreza, desigualdad y desarrollo en el Perú: informe anual 2006-2007.— Lima: Oxfam. Pp. 109-114.

Barrantes, R. (2007) Oportunidades móviles: pobreza y acceso a la telefonía en América Latina y el Caribe. El caso de Perú. Lima, DIRSI.

- Biblioteca Nacional del Perú (2007). Directorio nacional de municipalidades provinciales y distritales que cuentan con biblioteca pública. Lima: Biblioteca Nacional del Perú. 13 p.
- Bossio, J. (2002). Flujos de información en áreas rurales: punto de partida para intervenciones con tecnologías de información y comunicación. In: Perú, el problema agrario en debate SEPIA IX / edited by M. Pulgar Vidal, E. Zegarra and J. Urrutia. – Lima: SEPIA. Pp. 662-688.
- Bossio, J. (2002b). Recomendaciones de política a la Dirección General de Información Agraria hacia proyectos y sistemas de información. – Lima: MINAG (internal document)
- Bossio, J. (2007) ICT for artisanal miners: designing a strategy for development project. In: Application of computers and operations research in the mineral industry APCOM 2007 Santiago: GECAMIN, 2007. pp. 785-792
- Bossio, J. (2007b) From an Information System and Telecenter Network Project to a Community Network: Building Financial Sustainability through Social Sustainability. Paper presented at GK3 session EP3: Making Community-Driven Networks a Reality. Available at <http://www.regulateonline.org/content/view/1096/63/>
- Bossio, J. (2007c) Sostenibilidad de proyectos de desarrollo con nuevas tecnologías: el caso de la organización de regantes y su sistema de información en Huaral In: The Journal of Community Informatics, Vol 3, No 3 (2007). <http://ci-journal.net/index.php/ciej/article/viewArticle/394>
- Bruce, J. (2007). Nos habíamos choleado tanto. Lima: Fondo Editorial UPSMP.
- Campodónico, H. (2007). Crecimiento y pobreza. In: Pobreza, desigualdad y desarrollo en el Perú: informe anual 2006-2007.—Lima: Oxfam. Pp. 19-26.
- Castro, C. (2002). La biblioteca pública municipal en el Perú: avances y perspectivas. Lima: Colegio de Bibliotecólogos del Perú.
- CODESI (2005). Plan de desarrollo de la Sociedad de la Información en el Perú: la agenda digital peruana. Lima: CODESI.
- Defensoría del Pueblo (2007). El desafío de la telefonía rural: una mirada desde los ciudadanos. Lima: Defensoría del Pueblo (Serie Informes Defensoriales n. 117)
- Escobar, Javier; Saavedra, Jaime; Torero, Máximo (1998). Los activos de los pobres en el Perú. (Documento de trabajo R-361). Lima: Red de Centros de Investigación BID.
- Gallardo, J.; López, K. and González, C. (2007) Perú: Evolución del Acceso, la Cobertura y la penetración en los Servicios de Telefonía. Lima: OSIPTEL. (Reporte N° 1 SGI-GPR 2007)
- García, A (1988) Bibliotecas especializadas: mesa redonda. In: Jornadas Mexicanas de Biblioteconomía (17 : 1986 : Puebla). Memorias. México: SEP, 1988 p.423-424

- Huber, L. (2002). Consumo, cultura e identidad en el mundo globalizado: estudios de caso en los Andes – Lima: IEP. (Colección Mínima, 50)
- INEI (2007). Perú: perfil de la pobreza por departamentos, 2004-2006. Lima: INEI.
- INEI (2007b). Las tecnologías de información y comunicación en los hogares: julio - setiembre 2007. Lima: INEI. (Informe Técnico Nro. 04, Diciembre 2007)
- INEI (2007c). Estudio de la población peruana 2007: indocumentación y grupos étnicos. Lima: INEI.
- INEI (2008). Las tecnologías de información y comunicación en los hogares: enero – marzo 2008. Informe técnico n. 2 Junio 2008. Lima.
- Saravia, M. and E. Iriarte (2007). Perú. In: Global Information Society match 2007 (focus on participation).—(Montevideo): APC; IteM.
- Schilderman, T (2002). Strengthening the knowledge and information systems of the urban poor.—Rugby: ITDG, DFID.  
([http://practicalaction.org/?id=kis\\_research](http://practicalaction.org/?id=kis_research))
- Sotomayor, K and J. Bossio (2006). Estudios de necesidades de información en zonas rurales en el Perú: bibliografía comentada.  
[http://tic\\_rural.blogspot.com/2006/05/estudios-de-necesidades-de-informacin.html](http://tic_rural.blogspot.com/2006/05/estudios-de-necesidades-de-informacin.html)
- Tejada, M (Forthcoming). Análisis descriptivo de municipalidades provinciales y distritales que cuentan con biblioteca municipal: Registro Nacional de Municipalidades 2004-2006.

### 2.3.2 Individual interviews

Describe the type and approximate number of individuals you interviewed. Include detailed contact information for the most useful ones (indicate for which topic, if appropriate). Discuss how representative is this sample of people you interviewed in relation to different opinions and perspectives in the country.

15 number of individuals interviewed.

Interviews were focused in getting an overall view about each venue selected, there are not so many specialist about it. For public libraries, topic with different points of view, we consider the different opinions of an informant that is working in Library National System, another that used to work there, and an academic researcher.

Elizabeth Asencio

Library Head, INRENA, [eascencio@inrena.gob.pe](mailto:eascencio@inrena.gob.pe)

Topic: agrarian information services, special libraries.

Cesar Augusto Castro Aliaga

Asesor para asuntos indígenas de LAC, [castroaliaga@hotmail.com](mailto:castroaliaga@hotmail.com)

Topic: public libraries

Kelvin Mitchell Tejada Ojeda

Biblioteca Nacional del Perú. SNB. [ktejada@bnp.gob.pe](mailto:ktejada@bnp.gob.pe)

Topic: public libraries

Yuri Rojas

Representante de ASPECI. [yurirojas@gmail.com](mailto:yurirojas@gmail.com)

Topic: cabinas (cybercafés)

Eiko Kawamura

CEPES and telecentre.org [eiko.kawamura@gmail.com](mailto:eiko.kawamura@gmail.com)

Topic: telecenters

Erick Iriarte

Iriarte & Asociados, [eiriarte@alfa-redi.org](mailto:eiriarte@alfa-redi.org)

Topic: Law and regulation in ICT

### 2.3.3 Group interviews and focus groups

Describe the type and number of group interviews or focus groups you conducted. If available, include detailed contact information for the most useful informants (indicate for which topic, if appropriate).

0 number of group interviews or focus groups.

### 2.3.4 Site visits

Describe the number and location of site visits you conducted. If available, include detailed contact information for the most useful informants (indicate for which topic, if appropriate).

31 number of site visits.



We visited 13 rural and 18 urban sites. Distribution of sites according natural regions was: 13 in highlands, 11 in coast, and 7 in jungle.

### 2.3.5 Surveys

Describe the location and number of respondents to surveys you conducted for this study. Indicate their relative distribution across venues (for example, 30% in telecentres, 20% in cybercafés, 50% in public libraries), and how they were selected.

Describe the venues, their locations and the sample size for each:

	Public Libraries	Special Libraries	Cybercafés	Telecenters
# of <b>urban</b> venues surveyed	14	27	14	2
# of <b>non-urban</b> venues surveyed	7		7	15
# of respondents in <b>urban</b> venues	102	93	97	11
# of respondents in <b>non-urban</b> venues	36		42	48

#### Survey description and comments:

We applied two different surveys to operators and users of each type of venue.

We tried to take a similar proportion of venues according with their total distribution in rural and urban places.

We distributed our sample of cybercafés, public and special libraries in 8 regions: Southern coast (Tacna) Central Coast (Lima), Northern Coast (Lambayeque), Southern Highlands (Arequipa), Central Highlands (Cusco), Northern Highlands (Cajamarca), High Jungle (San Martín) Low Jungle (Iquitos). For telecenters location was not considered the most important variable, because most of telecenters are in rural areas and there are not distributed in all the country; we take as variables type of institution that support them (CBO, ONG, local government) and natural region where they are settled (coast or highland).

The distribution of surveys across all venues was 32% in public libraries, 22% in special libraries, 32% in cybercafés, and 14% In telecenters.

Surveys in public libraries and cybercafés were applied by the research team; telecenters operator's respond their surveys and send it by email; surveys to user in telecenters was applied by operator's; special libraries operator's was request to answer the survey that was distributed by email interest lists, and we receive answers by email; finally special libraries users' survey were applied by the research team.

We did not collect the expected number of responses of surveys to telecenters users because not all operators' contacted could apply surveys.

In general terms we consider that our sample was representative, an indicator of that is the consistency between our results in cybercafés and the information that National Institute of Statistics and Apoyo produced about this venue.

### 2.3.6 Other data gathering techniques

#### **Other Data Gathering Technique 1: Web browsing**

In order to identify and determinate quantity of venues in special libraries and telecenters, we have to perform an exhaustive search of them by Web. In order to validate the information collected we made it public in email interest lists to receive feedback about new venues.

### 2.3.7 Most useful contacts

List here some of the most knowledgeable and useful contacts that can provide additional information and insight, in case someone else wants to gather additional information about this topic in the country.

Cesar Augusto Castro Aliaga, Asesor para asuntos indígenas de LAC, Peru; castroaliaga@hotmail.com; expert in Public Libraries

Aurora de la Vega, Coordinadora de la Facultad de Bibliotecología y Ciencias de la Información PUCP; avega@pucp.edu.pe; expert in public libraries

Margarita Isabel Martinez Ordinola; Sistema Nacional de Bibliotecas; dtsnb@bnp.gob.pe; expert in public libraries

Elizabet Asencio; Library Head; INRENA; eascencio@inrena.gob.pe; expert in Agrarian Information Services

Gaby Caro Salazar, Organización Panamericana de la Salud Peru; gcaroper.ops-oms.org; expert in health information services

Sandro Marcone; Gerente Comercial de la Red Científica Peruana; smarcone@rcp.net.pe; expert in Internet developpe in Peru

Aldo Laderas Parra; Fondo de Inversion en Telecomunicaciones; aladeras@mtc.gob.pe; expert in telecommunication regulation

Eiko Kawamura; CEPES; eiko.kawamura@gmail.com, expert in telecentres

Maicu Alvarado; CEPES; maicu@cepes.org.pe; expert in telecentres

## 2.4 Research Trustworthiness and Credibility

2-3 paragraphs

Describe any steps you took to minimize your own bias in conducting this study, and to increase the credibility and trustworthiness of the results you are presenting.

We had interviewed experts with different opinions about each topic or venue, having the possibility to judge their and our positions.

We make our best effort to have a varied and representative selection of sites to conduct surveys. We also instruct our assistants to make a non biased selection of survey respondents and they followed such instructions as long it was possible.

We also contrasted our results from surveys with other studies in the few cases that some is available.

Finally, we shared the draft of this document with colleagues in order to get their opinion.

### 2.4.1 Research limitations

Describe important limitations you encountered in conducting this research, and limitations in drawing generalizations or broader conclusions based on the findings you report.

This research faced limitations because there is not statistic information about venues as special libraries and cybercafés; financial information about venues is not available. Surveys applied to get information were not representative samples in statistical terms, but we tried to select a sample considering the variety of our universe.

Number of user's survey applied in telecenters and special libraries was reduced; our conclusions in these venues are based only in that information because there is not secondary information to contrast our findings.

### 2.4.2 Team qualifications

1 paragraph

Description of the research team and its qualifications to undertake this study.

Katia Sotomayor and Juan Bossio had several years of experience as researchers, including research on ICT for development issues. Assistants that applied surveys in public libraries, cabinas and special libraries had university degrees.

### 3 Country Assessment

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#### 3.1 Overall Country Assessment

Provide a broad picture of the public access information landscape in the country, informed by the results of this research. In 2-3 paragraphs, what is your overall assessment of public access information venues in this country?

Access to appropriate information –relevant, opportune, understandable, and usable- is limited in Peru. Marginalized groups rely in social networks to access information, but quality and amplitude of information accessible through that channel is not adequate. Public information services –libraries, information services and so- are almost not integrated by social networks as information sources. Internet is being used to access information, at first as an extension of social networks richness, amplifying them and helping nodes or points of them to be connected more easily. But Internet is also helping to access to information outside social networks mostly through ‘common’ web pages but, increasingly, through specialized and appropriate information systems or services.

Internet is mostly accessed through ‘cabinas públicas’ (cyber cafés) which allow people to access the Internet without having computer or internet connection at home, work or study places. Access to Internet and the capacity to enjoy its benefits are strongly affected by inequity variables. More than 60% of Internet users use it at cabinas, this proportion is higher outside Lima and almost absolute in rural areas. On progress government funded projects will install cabinas in 5000 rural settlements and it has been also an observable increment in private provision of such service. By other side, cell phone access had been growing tremendously since 2006 and it seems this process will continue for a while; cell phone access and usage had overcome fixed phones and is growing more and more in places that did not have IT services before: rural areas. However, more Internet access and cell phones would help social networks to circulate information more efficiently, but will not help a lot in getting new and appropriable information. People need information on technical or productive issues in relation with their small business, on health and care, on their rights, on commercial or work opportunities, on form-filling or transactions with government and other subjects. They need such information in a particular moment, expressed in their language and using words they would understand, and in adequate format. Information on the issues and with the characteristics above mentioned is scarce.

Public information services –especially public libraries- should be the source for such information. But Peru does not have a solid tradition of public libraries as other countries have and public libraries are being more devaluated now. Municipal libraries -the most common kind of public libraries- had outdated collections; most of their public are school students –because school libraries are almost inexistent-, but school students are now going to cabinas to make their homework. With fewer budgets and less public, a lot of municipal libraries are getting closed in the last years. By other side, most of special libraries are opened to the public; they have an important function because most of the time they are the unique channel to access specialized

information on certain issue or subject. Most of the users of special libraries are professionals, practitioners and students, and the materials they have got are appropriate for those communities, but not necessarily to underserved communities. In Peru, maybe because of the cabinas phenomena, there are not too much telecenters as in other similar countries. Most of telecenters in Peru are in rural zones where it was not expected to have private installation of Internet; there are also some attending special communities in urban areas as housekeepers or blind people. Most of telecenters face financial sustainability problems. Some projects that promoted telecenters are looking at ways of involve cabinas on provision of services they want telecenters to provide.

## 3.2 Real Access Framework

Summarize the key findings and your assessment of each dimension in the Real Access framework used in this study. You will provide more details later.

### 3.2.1 Access

2–3 Paragraphs:

What is your overall assessment of ACCESS ecosystem in the country (physical access, appropriate technology, affordability)?

It should be differentiated access to information from access to ICT. Access to ICT is far from being a “solved” problem for everyone, but there is affordable access to appropriate ICTs near to daily living places through cabinas for most of the people. Cabinas are the main point to access Internet in Peru, 75% of total users of Internet according INEI (2008). For people without Internet connection at home or without computer, cabinas solve their requirement of this service. Cabinas are proportionally less accessible in rural areas, but there are some appearing and a big public project is in place to install thousands of cabinas. Not everyone that would access does it, but it has more to do with capacity and content issues than to access issues. However, if we look at the accessibility of information the picture is different.

People access to information through social networks which are accessible, appropriate and affordable, but do not necessarily found all the information they look for or all the information that they need but ignore that exists. Part of this information exists while other should be reformatted and/or translated, but use of this information is still poor. Special libraries are the best place for finding information for developmental purposes, but they are hardly known by underserved communities and are concentrated in Lima. Lot of their librarians would like to reach underserved communities with the information they hold, but they do not necessarily know how to do it or do not have enough resources to do so. Public libraries are more extended, but lack of updated information and are not viewed as useful information sources. Telecenters are few, they are accessible for the communities they serve. Cabinas are almost everywhere and are in some way affordable –not for everyone- but they do not provide appropriate information or teach how to get it from the Internet, in general they just do not care about that issue.

### 3.2.2 Capacity

2–3 Paragraphs:

What is your overall assessment of CAPACITY ecosystem in the country (human capacity, locally relevant content, integration into daily routines, socio-cultural factors, trust in technology, social appropriation of technology)?

Human capacity is a key issue to understand and process information as for using ICTs. Illiteracy is high (11.5%), but is higher between women (16.5%), between poor people (18%), rural inhabitants and those with non-Spanish mother tongue. Furthermore, there is a quite extended but hardly measurable functional illiteracy. Lot of people learn how to read at schools but do not read in their normal life, so they end almost losing the capacity to do so. Public libraries and some telecenters are teaching reading comprehension to school students during vacations, but we do not know about any course like this directed to adults. Telecenters and the few libraries which provide Internet connectivity are training users in how to use computers and the Internet. Such libraries are the richer ones, so they have professional librarians who know that training courses should consider age and gender in order to make similar groups for studying. Capacity building is not a function for special libraries. In the case of cabinas, willingness to collaborate with users relies on operator goodwill. There are not formal courses in the gross majority. Few cabinas had trained rural people being paid for that by development projects that have signed agreements with them.

Locally relevant knowledge is scarce and hard to access. Special libraries content have great relevance for human development, but it is not necessarily appropriate for underserved communities. Institutions that support these libraries are trying to put available part of the information they produced through their Web pages make it more useful for large segments of population. Contents at public libraries are outdated and not related to information needs to solve every day life problems, they are mostly oriented to attend school students needs. Cabinas offer just connectivity, they do not develop contents. Some telecenters provide access to relevant content produced by the projects that promoted them.

Just cabinas are integrated to people routines in all the country while telecenters are integrated by the communities they attend. Older people are minority among users in both venues because they did not develop abilities using computers and do not consider useful this tool to solve their particular needs of information and communication.

ICT access is considered a sign of progress and venues that provide it are appreciated by most of the population. However, there are some contradictory feelings when minors' security against pornography and abuse is considered. Public and special libraries are valued by their users and related communities. Between venues studied, just some telecenters develop actions for social appropriation of technology.

### 3.2.3 Environment

2–3 Paragraphs:

What is your overall assessment of the ENVIRONMENT ecosystem in the country (local economy, national economy, legal and regulatory framework, political will and public support, regional and international context)?

National economy is growing, but it is being expressed unequally at local levels. Lima, Piura and Ica –all of them coastal cities- are having less poverty and more employment than in last years, it is also happening in some way in the rest of the coast and some cities in the highlands, but it is not occurring in rural places or small cities or towns in the highlands. Some local economies have also been impacted by mining. Economic situation in general would positively affect a business as cabinas. More locally available resources would benefit local governments, local governments should have a public library and are the holding institution for half of Peruvian telecenters, but more resources in the local government do not mean more resources for public access to information. Eventual economic constraints in local governments would be reflected in reducing library's budget and services. A recently published Law establishes that private and governmental institutions have to have accredited librarians at their libraries, it would become a problem for institutions with small budgets.

Public libraries do not have political support at national level; there are few local governments that support their libraries and their results constituted an example. Public support is really low, in exceptional cases when libraries have an important role by their communities, public defend them and claim when services and resources are reduced. Cabinas are recognized as a successful model to provide access to internet and their extension to places without connection is been supported by governmental projects. Government support is based in the conception that services have to be provided for private agents; under this conception there are not significant regulatory and legal barriers that affect cabina's performance. Special libraries do not count with any political or public support; they exist and are sustained because the diffusion of information is an objective for institutions that support them.

Commercial agreements subscribed (specially with EEUU) will push down computers price in next years, this will benefit cabinas to serve low income users but would affect cabinas in upper and medium neighborhoods where more people will have access at home.

### 3.3 Information Needs of Underserved Communities

Describe the specific information needs experienced by underserved populations, based on the results of your research. Who could benefit from better public access to information? This could relate to e-government services, health or agriculture information, job training, employment search, among many others. Include reference to the key inequity variables in your country.

- (i) If appropriate, indicate any specifics that apply to Digital ICT services alone.
- (ii) Indicate the sources of data for this assessment

Information needs depends on practical needs that are situated in a particular moment and place. Information needs are different to different groups and between people inside those groups; they are also related to gender and age interests, to cultural factors, to occupation and so on. Information needs are also dynamic, when you get some information you may need something else (BOSSIO 2002b).

There have been some studies on information needs of underserved groups (Sotomayor and Bossio 2006), but a general answer to above questions is not possible by revising them. It could be said that farmers need information on climate, technology and market issues, needs are specific



for every region or even valley considering there are different climates and also cultural and/or education level differences between farmers. Small entrepreneurs need information to improve their production and to have a better participation on markets, specific needs depend on which business or industry they are involved with; women need information on their rights, health and childcare; older people on rights & health; young people on study and/or work opportunities, leisure, etc.; and everyone need information on official paperwork and regulations, government services, goods prices, rights, etc.

Each group or specific community would benefit from better public access to information, but such information should be appropriate, it means relevant, opportune, understandable, and usable. While several Web services address concrete information needs of some underserved groups, there are scarce examples of services providing appropriate information.

**Source:** *Referred literature, interviews to key informants, revision of Web services*

### 3.3.1 Information sources

4.2b) What are the current sources for this kind of information in the country? Are these sources adequate (current, appropriate to the population, etc.) In sum, does the locally-relevant content exist?

- (i) If appropriate, indicate any specifics that apply to Digital ICT services alone.
- (ii) Indicate the sources of data for this assessment

People access to information through different sources. Most of the information is accessed using informal channels as social networks; this is too much common for people with less education, rural inhabitants, women and non-Spanish speakers (BOSSIO 2002). It happens because formal channels are not accessible or not appropriate and because such practice is culturally enforced.

However, some information is accessed through formal channels or services as governmental or NGO information services at the Internet, information desks or libraries. In general, there are lot of information needs not been adequately served. Governmental information services or information desks at government offices are most of the time inadequate or insufficient, but it should be said that they are growing and meliorating. By other side, libraries (public or special, governmental or private funded) are hardly been used by most of the population (Castro 2002). In sum, there is not too much formalized local content.

Internet and phones are being integrated as technology tools for communication inside social networks. Cell phones are used to communicate with relatives and friend, and for work or commercial reasons.

Internet, mostly used at cybercafés (called “cabinas de Internet” in Peru), is used to maintain, create and develop social links (HUBER 2002), social links that are used to access information, made business, look for jobs, etc. Cybercafés will be analyzed more extensively in next chapters.

**Source:** *Referred literature, interviews to key informants, users survey*



### 3.3.2 Key barriers to accessing the information that underserved communities need

Are the people who could benefit from this information getting access to it? Why or why not (e.g. content exists but not in the right language, print media exists but has not been distributed appropriately, digital media is available but people do not have access points, etc.)?

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

As explained above, most important information sources use to be social networks. Social networks are functional as information sources, but they should not be enough. Richness, appropriateness, opportunity and up-to-datedness of information circulating through a network depends on quantity and variety of its members and the capacity of them to search, gather, process and adequate information to their network. Comparative research that included Peru as one case found that those networks are organized around 'nodes' which are key informants and that most of them act as 'infomediaries' (information intermediaries) (Schilderman 2002). Those 'infomediaries' get information from the media, formal information services as libraries, institutions, and the Internet. However, some of the external sources are more appropriate than others.

Libraries are normally not capable to enrich social networks of marginalized people: public libraries had small out to date collections mostly centered on school students needs and specialized libraries had collections directed to an educated public. There are exceptions, as public libraries developing information services in job, training and study opportunities or specialized libraries with collections of "appropriate materials", but they are exceptions.

The possibility to get information from public institutions depended a lot on the capacity to communicate and understand of the infomediary, low education and/or language had been big barriers. However, public institutions are improving their information services because several laws press them to do so and because of the work of the ombudsman office (Defensoría del Pueblo) which push in this direction. Nevertheless, information for non-Spanish speakers continue being scarce.

Internet is a great opportunity for all to access to information. As information source, it was firstly used by school students who started to use Internet before their teachers, Huber (2002) describes how it happens in Huamanga, Ayacucho. Internet is now being used by lot of young people looking for opportunities to study or work; some small entrepreneurs and a little bit of CBOs leaders looking for support; or farmers, fishermen, artisanal miners or rural people in general. Users' quantity of thematic information systems with information for development is growing every day, however most of those information systems should examine the usability of their web services by the people they are pretending to serve. Few usability studies have been done on information for development web systems and the improvements they are undertaking relies on 'benchmarking', but most of the systems are top-down designed.

**Source:** *Referred literature, interviews to key informants*

### 3.3.3 Ways users experience different types of public access venues

Based on responses to the open question in user surveys, how do users experience different types of public access venues? Are there any trends or preferences for kinds of information, services or activities in one type of venue over another?

Most users prefer Internet as information source and Internet is mostly used in cybercafés. Users of special libraries are the most educated, they access different venues as other special libraries and university libraries together with the Internet, some of the respondents do not like cybercafés to look for information because they are noisy. Users of public libraries of rural zones have few alternatives, they also access the Internet through cybercafés and school libraries, they prefer public libraries because they do not cost; some users of public libraries at urban areas also access special or university libraries, they aggregate the noise as a reason to dislike cybercafés to look for information, but they use them with other purposes.

Users of cybercafés are not necessarily looking for information, they may be at the cybercafés for communication or leisure reasons; so it is not rare that nearly half of them just answer that they do not access any other public access venue at all; another similar group mentioned public libraries as other venue visited, they like that public libraries do not charge for services and that normally are quiet places where reading is possible, but most of them criticize outdateness of collections while some dislike lack of kindness of staff. Most of telecenters users do not have or do not know other options for accessing information, which is consistent with their location. A few of telecenters users' visit higher education libraries, while those who mention public libraries say they do not use them because there are not recent books.

### 3.3.4 Inequity environment in the country

2-3 paragraphs

What does inequity look like in the country? Using the inequity variables described in section 2.2, provide a short overview of the main underserved groups, regions and/or other locally-appropriate segments of the population.

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Peruvian economy is experiencing a good momentum with every macro-economic indicator showing improvements, for example there were an 8% increase in GDP and 5.4% in GNP in 2006 (Campodónico, 2007). But it is happening over a highly unequal structure; the GINI coefficient has been consistently going down from 1961 to 1996 from 0.58 to 0.38 (Escobal, Saavedra and Torero 1999), but it has been increasing since then to 0.58 in 2006. There is an important inequity in regional terms (Lima vs. the rest of the country, urban vs. rural areas, and coast vs. highlands and jungle) that specially affect women, young people, the less educated population and those who do not speak Spanish properly.

According to INEI (2007) there is a high percentage of population in poverty situation (44.5% in 2006) and this poverty is unequally distributed between the capital (24.2% under poverty line in 2006) and the rest of the country (52.8%); urban (31.2%) and rural areas (69.3%); coast (28.7), highlands (63.4) and jungle (56.6). Poverty has been reduced in general, but it fall down in Lima, the coast and urban areas while maintain the same levels in rural areas and the highlands. Certain

Regions concentrate extreme poverty: Huancavelica is the poorest with almost 3 of every 4 inhabitants being extremely poor; three other regions (Huanuco, Puno and Ayacucho) are over 40%. Poverty indexes are also worst for women (female conducted households are more likely to be poor) and young people (more than 40% of people under 14 years is extremely poor). There is not statistical information that would show how race is related to income, level of education, basic needs satisfaction or, obviously, access and use of ICTs. Racism phenomena had been hidden, but it is being unveiled and its links with inequality and poverty are being shown (ARDITO 2007; BRUCE 2007). But there is information on how excluded are those with mother tongue different to Spanish (INEI, 2007c)

In terms of access to ICTs, regional inequities are the most important. According to September 2007 ENAHO –national household survey- results (INEI 2007b), the 30.58% of the population (older than 5 years) accessed to Internet, but 48.73% of Lima, 36.83% in the rest of urban places and just 8.41% in rural areas. Access through public Internet access points (PIAPs) is proportionally higher in the rest of urban areas and almost absolute in rural areas. Access to ICT services at households is very unequal, there is telephone mainline in 59% of Lima, 29% of urban rest and less than 1% of rural areas households; there is Internet connection at 16% of Lima, 5% of urban rest and 0.07% of rural households. However, cell phones access is bridging the divide, there are cell phones at 66% of Lima, 56% of the urban rest and 15% of rural households; interestingly the gross increment in one year was of 7% in Lima, 22% in the urban rest and 10% in rural areas. In terms of capacities, those with less education (in years and quality) has less capacities to use ICT, it is not surprising that 76% of people with higher education use Internet while just 11% of people with primary or less education do so; however, the education group with best proportional increments in the last years was the less educated group. In terms of gender, there is an observable difference between men (34.52% of Internet users) and women (26.52%). Related to cultural issues there is a big gap between people having Spanish as mother language (36.16% are Internet users) and those having a native language as mother language (8.6%). In terms of age, while half of those between 12 and 24 years old and nearly 30% of those from 25 to 40 years have used Internet, just 3.81% of people over 60 have do so (INEI 2007b).

### 3.3.5 Freedom of press and expression and the right to information

What is the overall perception of freedom of press, censorship and right to information in this country?

The government often disagrees with press and/or political opposition criticism to its politics without giving real responses to it; sometimes it also tries to present this opposition as “anti system” or “anti development”. But, in general, it would be said that Peru has freedom of press and no censorship. However, the recent cancellation “for financial reasons” of a critical program at the national TV channel would be interpreted as a kind of censorship.

By other side, there is not a strong and lastly culture of transparency in Peru, but since 2002 according with a law called “Ley de transparencia y acceso a la información pública”, governmental agencies are obligated to publish in their Web pages information about execution of their functions (especially financial information), and they are obligated to bring information required by any citizen because all the information produced by the State is public (except information about national security). Iriarte & Asociados is conducting a research on

governmental Web pages that is showing improvements of such pages as information provides. However, it also shows that they are generally far from providing e-services, with few exceptions.

### 3.4 Charts: Information Needs, Users, and Uses

Based on the results of your research (especially user surveys and interviews with librarians and operators), complete the required data to chart the information needs of underserved communities using the following examples. Provide any explanatory comments as needed.

#### 3.4.1.1 Users, by type of venue

[illegible]

(if appropriate)	other								
	other								
	other								
Ethnicity (if appropriate)	Dominant								
	other								
	other								
	other								

**Source:** *Operator's survey, users survey*

**Comments**, including comments on other inequity variables.

ICT uses have not significance in rural public libraries because rural libraries offering ICT services are exceptional.

All special libraries in the country are in urban areas.

Cases for urban telecenters are few; percentages presented could not be viewed as representatives.

It is not possible to ask about ethnicity and there is not national statistics about that. We asked about mother tongue; over 10% of users of every venue had native languages (Quechua or Aymara in all the cases) as mother tongue. Percentages are a little higher for public libraries and cybercafés users.

### 3.4.1.2 Information People Seek, by type of venue

(estimated proportion in each category, %)	Public Libraries				Special Libraries				Cybercafés				Telecenters			
	Urban		Non-urban		Urban		Non-urban		Urban		Non-urban		Urban		Non-urban	
	General use	ICT use	General use	ICT use	General use	ICT use	ICT use	General use	General use	ICT use	General use	ICT use	General use	ICT use	General use	ICT use
Education	93%	10%	98%		52%	20%			54%		57%		67%		69%	
Health	10%	1%	3%		47%	23%			4%		9%		11%		6%	
Agriculture	1%	2%			18%	9%			7%		3%		33%		17%	
Government services	1%	1%			11%	9%			5%		3%				3%	
Entertainment	3%				8%	6%			45%		46%		22%		17%	
News	2%	1%	1%		12%	6%			12%		11%		22%		17%	
Personal	4%		1%		20%	11%			33%		23%				31%	
Other					6%	3%					6%					

**Source:** Operator's survey, users survey

**Comments:** (Include description of "other". Suggested headings based on frequently reported topics in other research and may vary across countries).

ICT uses have not significance in rural public libraries because rural libraries offering ICT services are exceptional.

All special libraries are in urban areas.

Cases for urban telecenters are few; those percentages are not enough representatives. The high percentage in Agriculture (33%) for urban telecenters users' was because 4 surveys were in a telecenter located in a urban place but serving rural users.

Topics in "other": Human Rights (special libraries), technical information (cybercafés).

### 3.4.1.3 Uses of ICT, by type of venue

(estimated proportion in each category, %)	Public Libraries				Special Libraries				Cybercafés				Telecenters			
	Urban		Non-urban		Urban		Non-urban		Urban		Non-urban		Urban		Non-urban	
	General use	ICT use	General use	ICT use	General use	ICT use	ICT use	General use	General use	ICT use	General use	ICT use	General use	ICT use	General use	ICT use
Email		2%			8%				61%		51%		89%		46%	
Chat		1%			9%				51%		46%		78%		43%	
Web browsing		12%			17%				67%		69%		100%		74%	
Blogs & social networking		1%			6%				25%		6%		56%		23%	
Commerce & business					2%				12%		3%				9%	
Phone or webcam					2%										17%	
Games		2%							22%		14%				6%	
Other		4%			3%											

**Source:** Operator's survey, users survey

**Comments:** (Include description of "other". Suggested headings not exhaustive, based on frequently reported topics in other research and may vary across countries).

ICT uses have not significance in rural public libraries because rural libraries offering ICT services are exceptional.

All special libraries are in urban areas

Apoyo's survey in Lima and National Household survey present some percentages different to our results in Cybercafés: only 37% for Email, and 38% for Web browsing, around 40% for games, 5% phone calls, and 28% for typing and printing.

Cases for urban telecenters are few, percentages are not enough representatives.



Other: consult of local data bases and e-publications (encyclopedias for example)

### 3.4.1.4 Frequency of Use for each type of venue

(estimated proportion in each category, %)	Public Libraries				Special Libraries				Cybercafés				Telecenters			
	Urban		Non-urban		Urban		Non-urban		Urban		Non-urban		Urban		Non-urban	
	General use	ICT use	General use	ICT use	General use	ICT use	ICT use	General use	General use	ICT use	General use	ICT use	General use	ICT use	General use	ICT use
First visit	5%				27%	12%			4%		14%					
Rarely (less than monthly)	6%		10%		14%	8%			7%		11%		11%		3%	
Occasional (about once a month)	20%	2%	6%		20%	18%			8%		11%		11%		14%	
Regular (about 2-3 per month)	25%	3%	10%		3%				14%		9%				14%	
Frequent (about once a week)	24%	5%	50%		18%	11%			27%		54%		11%		37%	
Daily (about every day)	20%	9%	24%		8%				40%				67%		31%	

**Source:** Operator's survey, users survey

**Comments:**

ICT uses have not significance in rural public libraries because rural libraries offering ICT services are exceptional.

All special libraries are in urban areas.

Cases for urban telecenters are few, percentages are not representatives.

### 3.4.1.5 Barriers to use for each type of venue

(estimated proportion in each category, %)	Public Libraries				Special Libraries				Cybercafés				Telecenters			
	Urban		Non-urban		Urban		Non-urban		Urban		Non-urban		Urban		Non-urban	
	General use	ICT use	General use	ICT use	General use	ICT use	ICT use	General use	General use	ICT use	General use	ICT use	General use	ICT use	General use	ICT use
Location, distance	20%	6%	10%		32%	18%			13%		9%		33%			29%
Hours of Operation	19%	5%	10%		33%	14%			8%		26%					14%
Cost	3%	1%							8%		29%					14%
Lack of skills/training	7%	13%	17%		6%	5%			25%		29%					26%
Not enough services	15%	5%	28%		6%	3%			28%		17%					26%
Not in right language	1%				2%	2%			4%							3%
Not enough content	48%	11%	52%		11%	3%			6%		3%					9%
Other	3%				5%	5%			10%		6%					9%

**Source:** Operator's survey, users survey

**Comments:**

ICT uses have not significance in rural public libraries because rural libraries offering ICT services are exceptional.

In public libraries the recurrent answer included in "not enough content" was about outdated collections.

All special libraries are in urban areas.

Cases for urban telecenters are few, percentages are not representatives.

Other barriers:

- Public Libraries: Not enough space; people have read at the library, they can not borrow books for home.

- Special Libraries: not enough diffusion of their services, people in general do not know they exist.
- Cybercafés: reduced spaces, not enough computers, slow connection.
- Telecenters: not enough computers, slow connection.

### 3.4.2 Salient initiatives to help meet critical information needs by underserved communities

What are the most salient initiatives in the country (past, ongoing, or planned) that aim to meet the information needs of underserved communities in the country? How important are they? In what ways are they successful or not? Where can more information about them be found?

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

#### 3.4.2.1 Past initiatives:

In relation with ICT access, the most important initiatives are those from FITELE. It is affirmed that after the first FITELE projects that took 5 to 7 seven years the average distance a rural inhabitant should walk in order to get to a public telephone fall considerably. Some of these projects also include internet and computers. However, several critiques on quality and usability of those services had arisen.

##### **More information:**

FITELE website <http://www.fitel.gob.pe>

#### 3.4.2.2 Ongoing initiatives:

In relation to ICT access, FITELE is developing projects that will install Internet facilities in around 5 thousands rural settlements in the following 2 to 3 years. Those projects include some capacity building and contents development activities, but they are hardly enough.

Several governmental and non-governmental organizations are developing information systems that want to address information needs of different groups of population. Considering the accessibility of public internet access points in urban areas and the above mentioned FITELE projects, such information systems would help people to find the information they need. However, most of this information systems normally face non-recognized usability problems related to: how the information is presented and organized, language used (mostly Spanish), accessibility to blind people, and platform usability.

Lima local government is developing a project called "Bibliotecas de la solidaridad" (solidarity libraries) which aims to set up small libraries in deprived zones. We are trying to get more information on such initiative.

##### **More information:**

FITELE website <http://www.fitel.gob.pe>

Research Governmental Web pages <http://www.iriartelaw.com/apc-aa-iriartelaw/template/investigacion.php>

#### 3.4.2.3 Historical trends and opportunities to serve information needs

Based on the above, what is the general trend in the country in relation to provision of public access information services? Are there any important upcoming opportunities (for example, upcoming regulatory

changes, infrastructure enhancements, etc) that can impact public access information (include services through libraries and other public information venues)?

i. If appropriate, indicate any specifics that apply to Digital ICT services alone.

After Fujimori fall because of well known and media covered corruption events, access to public information has increased very much following public policy and civil pressure. In the last years, Peru has seen an increased governmental use of web as a way to provide information. There are also some governmental institutions providing interactive services through the web, but e-government has not yet spread to the majority of national governmental offices and just a little bit of regional or local government's web sites has e-government services.

There are cyber cafés in every urban place in Peru; we may guess that every small town with more than 2000 inhabitants has at least one cybercafé. There are also some installed in rural places, as artisanal miners camps with 500 inhabitants (Bossio, 2007), but in general, internet public access points in rural areas do not produce enough income to support operation so they need some kind of subsidy. Big public access points' installation projects of FITEC had just started; those projects will install PIAPs at more than 5000 small towns or villages in the next three years.

Libraries had no importance in terms of policy or the media. Last January a Law on Librarians profession was approved at the Congress and this event was used by the media to joke about Congress effectiveness.

In the near future, it would be an increase on demand of information services, specially those addressing rural people because of FITEC deployment of Internet connections. It strongly depends on quality of capacity building programs and the development of appropriate contents. It is undoubtedly an opportunity for rural people to enjoy better services, to have more informed participation at markets, to participate in decision taking and to influence in policymakers; but it is not a fact, it is just a possibility.

It is expected that government e-services will continue getting better, more usable and appropriate. However, inclusion of non-Spanish speakers by public services will not be guaranteed without civil society pressure for an adequate policy.

**Source:** *Referred literature, interviews, ongoing research Iriarte & As.*

#### **3.4.2.4** *Planned initiatives:*

ICT deployment initiatives of FITEC described above will take 2 to 3 years. We could not find information on other projects of ICT deployment in rural areas, but there may be more from other government offices or regional governments.

#### **More information:**

<http://www.fitec.gob.pe>

### **3.5 Economic, Policy, and Regulatory Environment**

### 3.5.1 National and local economic environment

Describe the national and local economic environment and how it affects public access to information and communication in the country.

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Peruvian economy is growing mostly because of gold and other metals or minerals prices increase and –less important in dollars but more in jobs creation- because of export agricultural production. While mines do not bring development to places where they operate –the highlands-, agricultural industries are strongly contributing to the creation of some development poles in the coast. As explained above, poverty remains amongst marginalized groups and inequality is growing, this would cause political instability but it does not seem to be realized by the government.

The State has historically neglected as services provider, especially for poor people, rural inhabitants, highland and jungle populations, and non-Spanish speakers. Since 90s, with Fujimori as president, Peru has followed neo-liberal and privatization policies as the rest of the continent. It means that the State abandon planning and just regulates private investment in services.

Now the government has more money to invest, so they are using it for infrastructure development. Better roads, sanitation, school buildings and telecommunication installations would help population to improve their livelihoods, but infrastructure does not bring development automatically and population should be helped to get revenues from it.

Trends:

More investment in infrastructure, including ICTS, is expected in the near future.

**Source:** source of information

### 3.5.2 National and local policy (legal and regulatory) environment

Describe salient features of the policy and regulatory framework in the country (and if applicable, locally) that affect delivery and access to information (e.g. censorship, Wi-Fi bandwidth regulation, etc). What is your assessment of the general trend on this matter?

If appropriate, indicate any specifics that apply to Digital ICT services alone.

The Law 29181 published in January 2008 establishes that private and governmental institutions should have accredited librarians at their libraries. If this Law is strictly applied would cause that a lot of professionals in other subjects but without diploma studies in librarianship will not be able to work as librarians in the libraries they are working now and that a lot of institutions will be pushed to close their libraries because they can not afford to contract a professional. This Law was proposed by the librarians association (Colegio de Bibliotecólogos) and is now being criticized by several colleagues.

Since 2001, several initiatives from governmental or civil institutions had promoted the

understanding of ICT impacts and the development of plans to use them. In 2005, the governmental commission for the development of the information society had published the “Agenda Digital Peruana” (Peruvian digital agenda) (CODESI, 2005). However, the agenda is not really guiding public policy and CODESI does not include yet enough stakeholders from civil society (Saravia & Iriarte, 2007).

FITEL has been the main program to increase access to ICTs. At the beginning its projects just installed public phones, and then it started to include limited internet connectivity and finally the installation of PIAPs. In 2007 a big project including installation of public phones, PIAPs, and home and mobile phones by wireless has started. There has been also a progressive inclusion of capacity building and content provision in their projects, but projects continue being technology centered.

However, ICT access spread can not rely on subsidized programs if such services should reach majorities. The amazing growth experienced by cell phones access and usage across the country in the last two years was encouraged by policies from the government, but better policies are required to expand access to ICTs outside from Lima and in rural areas. Wireless technologies offer possibilities that are facing regulatory limitations. By other side, there are good experiences of local providers of ICT which are more able to produce localized and appropriated solutions<sup>1</sup> but it is still difficult to become an ICT services provider at regional or local level.

There are different state offices with programs or projects related with ICT, most of them install infrastructure, but there is not coordination between them. A big educational program called “Huascarán” offers computers with Internet connection in schools (especially in rural areas and urban peripheries), but this infrastructure can not be used by anyone except school students and teachers, infrastructure is not used when the school is closed.

Local government’s Law set that one of their functions is to “organize and sustain cultural centers, libraries, theaters and art workshops in provinces, districts and settlements”, but it also states that if they can not provide this service they would ask other governmental institutions to do it<sup>2</sup>. Furthermore, this Law mentions hundreds of functions for local governments and there are not clear procedures to demand for most of them. Most of Local Governments do not give importance to libraries and lot of them directly ignore they should have one (Castro 2002). By other side, we get to know that regulation and obligatory procedures make difficult to libraries to offer digital and other services if they need to charge for them. Some local governments do not permit the installation of antennas, because they think they may cause some illness or because they want legal or illegal payments from telecom companies. Most of local governments personnel and authorities, especially in rural areas, do not know how to use computers and do not have idea of the potentialities that internet would offer to their functioning.

Trends:

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<sup>1</sup> Examples are local ICT provider at Huarochiri (<http://www.fitel.gob.pe/contenido.php?ID=32>) and agrarian information system of Huaral (see Bossio 2007b).

<sup>2</sup> Law n. 27972, quote is a translation of the Artículo 81 inciso 2.11.

While investment in deployment of ICT infrastructure in rural or poorer areas is expected, the general trend is of increasing liberalization of telecommunications and the entrance of new competitors. Liberalization –understood as more private investment in telecommunications and ICT deployment- is not good or bad by itself; its impact in society will depend on different factors. It had been observed that since 2006 the two bigger telecommunication companies realize that rural areas would be a good place to invest in order to have more clients for mobile phones, so they did it, they may have realized it some years before if someone had shown it. In the same way, both companies announce in July 2008 that they have telephone services in Quechua and Aymara; inclusion arguments hadn't convinced them, we are sure they made it for business.

**Source:** *Referred literature, interviews to key informants, media*

### 3.5.3 Regional and international policy (legal and regulatory) environment

Describe salient features of policy and regulatory framework in the region and internationally that affect the delivery of public access to information and communication in the country. What is your assessment of the general trend on this matter?

If appropriate, indicate any specifics that apply to Digital ICT services alone.

World Summit on Information Society (WSIS) and its preparation was a motive to create CODESI in Peru. CODESI is a commission formed by delegates from different governmental offices which would have some relation with information society development policies. In some cases the institution core theme is quite related to information society, in most of the cases the delegate is in charge of informatics or information policies at his institution. CODESI is lead by the Prime Minister office and has an important participation of the transport and telecommunications department.

Principles to be considered in national plans in the region were set in 2003 at Bavaro's Declaration. Since then Latin American governments set common goals that form part of eLAC 2007.

eLAC became in a political agenda for Latin America and Caribbean, inspired in eEurope, that recognize importance of ICT to reach economical and social development. eLAC 2007 covers five key areas: Access and digital inclusion, development of capacities and knowledge, transparency and public efficiency, political instruments, and environment.

Trends:

In February 2008 at El Salvador eLAC 2007 plan was revised and a new plan was presented eLAC 2010. This new plan gives more importance to goals about education and health that include development of contents and access to them. This plan will guide futures policies in Peru about Information Society.

**Source:** *Erick Iriarte report*

## 3.6 Collaboration Practices and Opportunities Across Venues

Linkages and collaboration between different types of venues was identified as a **strong emerging theme in**



**the preliminary analysis.** Please provide as much detail as possible to help understand existing and potential collaboration opportunities and linkages among and between public access venues, and how they can improve the quality and relevance of information access to underserved communities.

- i. Include reference to existing as well as potential collaboration opportunities.
- ii. If appropriate, indicate any specifics that apply to Digital ICT services alone.

There is a rich practice of association and networking of special libraries (governmental or non-governmental). They get linked by a common theme: AIDS, agriculture, forestry, disasters mitigation, appropriate technology, etc. Libraries networks have long time using ICTs as a tool, inclusive before Internet boom and the WWW; health libraries for instance had more than 20 years sharing common bibliographic databases in Isis or Microsis.

There is a national public libraries system (governmental) which link such libraries, however most of them do not have relations with other ones.

Cybercafés (cabinas públicas) are not integrated, there are two or three small associations, being the most active ASPESI which define its associates as “cyber centers” and not cabinas because they want to provide more than just internet connectivity.

There have been four national meetings of telecenters, the last one in March 2008 (<http://infoandina.org/telecentros>). There is a group of organizations and professionals interested on promoting telecenters and making them more useful, they meet and organize events with some regularity (as national telecenter meetings and others) but they have failed on their attempts to formalize this networking. There are strong links and some formal networks between telecenters that were created or promoted by the same project as SIA Huaral and SIRA Arequipa telecenters, but they just have local or regional level.

As mentioned above, collaboration between governmental projects or initiatives is not as common as it should, but it is increasing.

It is clear that telecenters and cybercafés would gain from developing functional networks. The collaboration between those networks would be also fruitful. Telecenters and cyber cafés may have different goals, but they share some common problems and may share learning.

The practical experience of networking between special libraries is very well known among librarians, but it may be not well know by other professionals. It may be important to learn from this experience and inform policy makers at different levels.

Public libraries would obtain benefits by networking with local telecenters and cyber cafés as they would get benefits too, it is needed to think how to promote such kind of networking

### 3.7 Buzz Factor: Public and Government Perceptions About What is “Cool”

The “buzz factor”, i.e., public and government perceptions about what is “cool” in relation to public access venues, where to invest resources, what places to hang out in, was identified as a **strong emerging theme in the preliminary analysis**. Please provide as much detail as possible to help understand how these perceptions about what is “cool” offer new opportunities or obstacles to strengthening public access information venues in the country.

Most of the public (then, most of the votes) consider infrastructure as “good”, so that explains why governments prioritize investment in infrastructure. It would also be said that most of operative offices at any level of government are managed by engineers, not sociologist or economist, which would also explain the focus in infrastructure. Furthermore, the link between higher percentage of infrastructure budget in ICT projects and failure hadn’t been shown enough. More research and better incidence are needed.

### 3.8 Legitimate Uses

The difference between “legitimate” or “non-trivial” uses of information in public access venues was identified as a **strong emerging theme in the preliminary analysis**. For example, uses of social networking spaces (Facebook and similar), blogs, chat, video games, as well as opportunities to download, install and run open source software applications in public access computers poses new challenges to traditional notions of “legitimate” information needs for development, and “trivial” uses of information for development... Please provide as much detail as possible to help understand how local definitions and restrictions based on what is “legitimate” or “non-trivial” information or communication practices offer new opportunities or barriers to public access information venues in the country.

Public access points to internet that were installed with public funds or international donations – as telecenters, local government computer labs or public libraries- normally restrict games and sometimes chat. While reasons for such policies would be understood, there is also critiques to it, some from civil rights defense and others –more interestingly- that pose that such uses help people to get used with new technologies. However, at the end, in global numbers, PIAPs that make any restriction are a scarce minority.

Chat and email are the most accessed services in cybercafés. According to law, the cybercafés should provide “safe computers” (i.e., filtered against porn) for minors.

### 3.9 Shifting Media Landscape

The ever-changing media landscape and the new opportunities brought about by new media such as mobile phones, SMS, GPS, and even renewed roles for community radio open, was a **strong emerging theme in the preliminary analysis**. Please provide as much detail as possible to help understand how these new technologies and media offer new opportunities or barriers to public access information venues in the country.

#### 3.9.1 Mobile phones

If appropriate, describe salient uses of mobile phones, text messaging, SMS and similar technologies, in relation to public access information venues and information needs of underserved communities.

There is a fast expansion in use, number of subscribers and regional coverage of ICT services, especially to cell phones which are overcoming lack of phone penetration (Gallardo, López and González 2007). Gallardo et al. present several indicators of this importance: number of cell phones per 100 inhabitants passed from 14.7 at the end of 2004 to 31.9 at the end of 2006, districts –the smaller political division in Peru- covered by cell phone signal have more than doubled in 2006 from 434 to 974 of 1828 in total, there has been an increment in percentage of household having access to phone (fixed or cell) from 24.4 in 2001 to 41.9 in 2006 and this

increase has been proportionally higher in other cities than Lima (from 24.4 in 2001 to 50.6 in 2006) and in rural areas (from 1.0 to 4.13), the expansion had been mostly in cell phone ownership by members of households that previously had not a fixed phone. According to the authors, the gap between expected phone penetration considering GNP and real phone penetration has been closed during such period and Peru is having as much phones per 100 inhabitants than countries with better economic situation.

According to Barrantes (2007) statistical data on ICT density underestimate cell phones importance because such phones are normally used by more than one person and not necessarily members of the same household. Results of representative surveys in Lima and two other cities applied to low income households (“Base of Pyramid”) shown that 60% are cell phones users but just 60% of users own a phone, the rest borrow or rent one in order to make calls.

During July 2008 new information services in Quechua and Aymara were announced by the two main cell phone connection providers.

Also in July, the agricultural department started a service of provision of market information on agricultural products (prices in main market in Lima) through mobiles phones.

### 3.9.2 Web 2.0 tools and use

If appropriate, describe any salient uses of Web 2.0 tools among users of ICT in public access venues. (Web 2.0 refers to evolution of web-based communities and hosted services, such as social-networking sites, wikis, blogs and others. [Wikipedia](#)).

Blogs access and production has grown a lot in the last two years. This usage, together with amateur video posting, had gain public knowledge in recent months. However, there is not any study or estimation about how and how much are those Web 2-0 tools being used in public access venues.

## 3.10 Health Information Needs

This is an extra contribution to other research on health information needs going on at the University of Washington, based on willing respondents to last two questions on user surveys at the public access venues.

### 3.10.1 Sources of health information

Where are people most successful at locating useful health information for themselves or their family (% of respondents across all venues):

49%	21%	14%	33%
clinic/hospital	friend	health worker	public access venue (library, community center, etc)

**Comments:**

<sup>3</sup> This increment occurs mostly during 2006 and is explained by cell phone coverage increment above cited.

### 3.10.2 Types of health information

What types of health information do they have the most difficulty finding (% of respondents across all venues)?

22%	15%	12%	36%	
disease prevention	how to locate healthcare	child health information	remedies/drugs	Other

**Comments:**

## 4 Venue-Specific Assessments

### 4.1 Venue 1: Public Libraries

#### 4.1.1 Overall venue assessment

Provide a broad picture of the public access information landscape in this venue, informed by the results of this research.

2–3 Paragraphs:

What is your overall assessment of public access information in this type of venue?

Public libraries are supported by local governments at provincial and municipal level. According with the law about local government, every one is obligated to implement a library, but just 40% have one. Public libraries have in theory to serve to different segments of population under their jurisdiction, but in real terms they are oriented to school students because school libraries are almost inexistent. However, school students are now going to cabinas to resolve their information needs.

Public libraries count with reduced budgets that usually cover only infrastructure maintenance and salaries. Staff at those libraries does not receive adequate training due to economic constrain; it affects their motivation and capacity to work. That explains why those libraries do not develop adequate services to population in general and to make diffusion of their service and utility in order to bring more public to the libraries. With fewer budgets and less public, a lot of municipal libraries are getting closed in the last years because their lack of public or political support.

A very little portion of public libraries use Internet and even less provided such service. There are interesting exceptions that show that something else could be done, their experiences should be shared.

#### 4.1.2 Access

2–3 Paragraphs:

What is your overall assessment of ACCESS ecosystem in this type of venue (physical access, appropriate technology, affordability)?

Public libraries are not accessible for most of population because 60% of municipalities do not have one. Their services are not appropriate for population in general; they are focused in school students.

Where libraries are available, costs of services are low and affordable for everyone. Quantity and quality of services is generally low; libraries lack of ICT access, ICT are available only in 10% of them.

#### *4.1.2.1 Physical access*

Describe how accessible this venue is to various population segments, differentiating by applicable Equity of Service variables (Form 1c), especially the differences between urban and non-urban settings.

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Public libraries are available in a minority of the jurisdictions in the country. Rural population is less served, just 25% of rural districts have library whilst 82% of urban district have one. In rural districts people not settled at the village or town need to travel in order to access library services.

Just few libraries in Lima had made in last years enough efforts to make them available to people with disabilities.

#### *4.1.2.2 Appropriate technology and services*

Describe how appropriate the technologies, services and information offered in this venue are to the population, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Public libraries services are focused in school students and not in general public. With outdated collections, almost all the public libraries offer access to books in their buildings, they can not lend books because of patrimonial regulation issues users only can read books at the library. Libraries lack of ICT access, just 16% of urban and 3% of rural libraries offer it.

#### *4.1.2.3 Affordability*

Describe how affordable the technologies and services offered in this venue are to the population, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Costs for use services in municipal libraries are really low and are affordable for everyone.

#### *4.1.2.4 Fees for services*

What fees or other requirements exist in order to access and use the information in the venues? (registration, user fees, restrictions to certain populations)

If there are fees: What do these fees buy?

Annual registration fees

Indicate amount in local currency from 5 to 10

Equivalent in US Dollars: from 1.7 to 3.5

Date of estimate 15th July 2008

and local currency name Nuevo Sol

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Explain any salient differences in the services offered in different regions, sizes or other variables of significance:

Libraries un rural districts do not request any payment. In libraries that offer Internet access, it is very usual that this service is free for students for one hour if they use it for educational purpose.

#### *4.1.2.5 Geographic distribution*

What is the distribution of the venues in terms of their geographic location?

Complement any details not already included in section 2.1: Venue Selection.

The next table show the distribution of Municipal Libraries by regions based in a study made in 2006 (Tejada, forthcoming)

Region	Number of libraries
Amazonas	10
Ancash	52
Apurimac	26
Arequipa	37
Ayacucho	36
Cajamarca	33
Callao	6
Cusco	59
Huancavelica	32
Huanuco	17
Ica	19
Junin	60
La Libertad	33

	Lambayeque	27
	Lima	77
	Loreto	12
	Madre de Dios	1
	Moquegua	8
	Pasco	18
	Piura	62
	Puno	57
	San Martin	22
	Tacna	8
	Tumbes	11
	Ucayali	7

#### 4.1.2.5.1 Map

If available, insert a map that displays the geographic distribution of this type of venue in the country (expand to the size you need).



Description of map:

#### 4.1.2.6 Other factors affecting access

Other factors that affect equitable access to public information in this type of venue, not covered above?

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Level of municipalities income define their possibilities to have better libraries in terms of equipment and collections, poor districts where underserved population live had poorest libraries



if they have one at all.

Frequency of access and use of this venue is been affected in general because school students prefer to get updated information from Internet through cabinas (cybercafés).

#### 4.1.3 Capacity and relevance

2–3 Paragraphs:

What is your overall assessment of CAPACITY ecosystem in this type of venue (human capacity, locally relevant content, integration into daily routines, socio-cultural factors, trust in technology, social appropriation of technology)?

Public libraries do not have trained and motivated staff. This situation does not allow to design and develop services more adequate to serve a large range of population.

Their contents are oriented to serve students, so students are the mainly users. Focus of services and contents in this target group is reinforced by public perception that libraries are to attend just students.

If library have some updated contents, students go frequently, especially if there are not other information source in their community (as cybercafés). If libraries have a collection completely outdated, they are empty; this situation is unfortunately very common.

##### 4.1.3.1 Staff size

How many people work in a typical facility for this type of venue? (full time-equivalent employees or contractors; describe any significant variations; i.e., large, medium and small libraries in the country)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

In a small library work 1 or 2 employees, medium libraries have 3 or 4 employees and the large ones 5 or more. If the library offers Internet access they count usually with an employee in charge of this service.

##### 4.1.3.2 Staff training

What is the overall capacity of the staff (i.e., librarians, telecentres operators) to help users access and use public access to information and communication services offered in this venue? Differentiate by applicable Equity of Service variables (Form 1c).

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

(ii) For Public Libraries, indicate if Library School training is available and/or required for librarians.

According with Tejada (forthcoming) 11% of municipal libraries have professional staff (not necessary librarians), 43% have technical staff, and 46% have staff without higher education. There are just two Librarianship Schools in the country, both of them located in Lima, and there are not technical training as library assistant; the consequence is that libraries do not have appropriated staff.

It is usual that library staff was not hired for a position in the library, they were transferred from

other area; to be transferred to the library is assumed as a punishment. In this context the staff disposition to help users and their compromise with library goals are really low.

#### *4.1.3.3 Services offered*

What kind of services does this type of venue offer to the public? (i.e., access to books, magazines; meeting and conference rooms; audio/video programs, computers, Internet, other). Include Digital ICT services if offered.

<i>Services Offered</i>	<i>Comments</i>
1. Access to books	
2. Access to magazines	Available in 12%
3. Children's library	Available in 9%
4. Reference	Available in 36%
5. Access to Internet	Available in 10%
6. Interlibrary loan	Available in 6%
7. User's training	Available in 11%
8. Cultural extension	Available in 14%
9. Reading promotion	Available in 22%
10. Photocopies	Available in 13%

Explain any salient differences in the services offered in different regions, sizes or other variables of significance:

Library size has a direct relation with the quantity and quality of their services; the smallest usually offer only access to books. Libraries use to be smaller in rural areas, and their services are concentrated in offer access to books.

Source of data: Tejada (forthcoming).

#### *4.1.3.4 Programs for underserved communities*

Describe if this venue has programs specifically intended to reach underserved communities, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

There are few libraries, located in Lima, that are developing programs oriented to people with visual and motor disabilities.

In theory the public library has the objective to reach all the communities, however is a fact that they are oriented to serve school students. There are experiences in bilingual education, but libraries that serve these groups are not integrated with these experiences.

Several local governments are developing special programs for the aged, but such programs are not related with public libraries in most of the cases.

#### *4.1.3.5 Relevant content*

What type of locally relevant content is available? What else is needed? Who is doing it?

If appropriate, indicate any specifics that apply to Digital ICT services alone.

#### **Available Content:**

Libraries offer content for educational purposes, their collections are focused in school courses as mathematics, literature, geography, history, etc.

#### **Other Content Needed:**

In order to cover information needs of a large range of population, libraries must to reorient their collections and services to offer information about job opportunities, health and child care, and information about economic activities in relevant areas for their communities.

#### **Local Initiatives to build needed content:**

There is not this kind of initiatives.

**Source:** *interviews with key informants*

#### *4.1.3.6 Services and information available in local languages*

Describe the availability of services and contents relevant to human development that are available in **local languages** in this type of venue? (i.e., info on health, education, government services, etc)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Municipal libraries have services and contents oriented to support education; the formal education is offered mainly in Spanish, that's why they do not have resources in other languages.

#### *4.1.3.7 Types of uses*

What do people USE the venues for (most frequent kinds of information and services people seek in them, activities they carry out in them)?

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Refer to section 3.4 Charts: Information Needs and complement here as needed.

More that 90% of library usage is for educational purposes, just a 10% look for information in health, other topics and uses are not significant (source: our survey to users). If library has newspapers, this service has a big demand, but there are few libraries that offer this service. Libraries that offer Internet connection and ICT training have big demand, but they are few

(source: interviews and the media).

#### *4.1.3.8 Number, type, and frequency of users*

Refer to section 3.4 Charts: Information Needs. Complement here as needed.

Public libraries users are mainly school students; in rural areas is more clear because almost a half of users are under 14 years old; in urban areas 95% of users are between 15-35 years old because library is visited by secondary or tertiary students. In urban areas 65% of users are from middle socio-economic class, whilst in rural areas around 70% of users are from low socio-economic class.

Frequency of library use is regular; 50% of users go to library once a week or more, 38% go 1-3 times per month.

#### *4.1.3.9 Users Capacity to use information and services offered*

What is the overall capacity of the users to take advantage of public access to information and communication resources, differentiating by applicable Equity of Service variables (Form 1c)?

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Students -the main users- are able to take advantage of few services that libraries provide. Municipal libraries normally have general collections –not specialized or scientific- then general public can access and use such materials if they are not illiterate.

#### *4.1.3.10 Training courses for users*

Describe training courses offered to the public at this venue, and if they offer some kind of testing and certification.

Training courses: During the summer, when the schools are closed, municipal libraries offer courses for kids called “vacaciones útiles” (useful vacations); these courses include mathematics, painting, dance, origami, etc.

ICT specific training courses: Libraries with access to Internet have basic courses in Microsoft programs (Word, Excel, and Power Point) and information search in Internet. They do not offer any certification.

#### *4.1.3.11 Integration into daily routines*

How easy is it for users to integrate the information and services offered in this type of venue into their daily lives? (offer concrete solutions to their needs and problems, make it easier to solve them at this venue than in other places)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Few libraries are plenty of public that usually visit them because they can find there the information they are looking for (mostly related to studies). But most of municipal libraries collections are outdated and that left them empty. If there are cabinas (cybercafés) users prefer them because they find updated information.

#### *4.1.3.12 Users perceptions about the venue*

What is the general perception or opinion of the population about the venue (not necessarily its specific services, but the venue itself: i.e., what do people generally think about libraries? Are they places that are “cool” or “only for elites” etc?), differentiating by applicable Equity of Service variables (Form 1c)? This includes perception by people who do not use the venue...

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The general perception is that libraries do not have updated information, but this perception does not affect the social value that libraries have by themselves; nobody think or say that libraries should be closed, except for some Majors. For a lot of communities, public library is the unique point to access information, that usually are not updated, but is the unique available. Public libraries are perceived as places for kids to do their school homework.

#### *4.1.3.13 Social appropriation of information and generation of new knowledge*

What activities, products and services are users undertaking that exhibit new levels of social appropriation of technologies and generation of knowledge? For example, how are users generating and disseminating new knowledge, products and services through their use of this venue? (see category 13 in Real Access Framework for Social Appropriation of Technology).

If relevant, indicate any specifics that apply to Digital ICT services alone.

Cultural extension activities associated with ICT training would led to appropriation of technologies and generation of knowledge, but those services are provided by a minority of libraries.

#### *4.1.3.14 Trust, safety, and privacy*

What is the general perception or opinion of the population about the safety, security and privacy (TRUST) of the information and services offered in this venue?

Libraries are trusted as a “cultural place” and considered safe, but the general perception about the information they offer is that it is outdated.

#### *4.1.3.15 Gaps and opportunities in information and services offered*

What other information gaps and opportunities exist, which are not being met? (other information/services people need that are not being met there and could be offered, especially through Digital ICT services)

Public libraries are mostly oriented to serve school students information needs. This happens because a lack of adequate school libraries but also because local authorities believe libraries are for kids and not for adults who are not so used to read. Then, most of libraries are not developing services or collections to address information needs of the rest of the population.

Libraries could develop services for adults focused in their information needs that are related basically with their economic activities, health care, job seek, etc. The most successful strategy to introduce adults at the library is offer newspapers; after that other contents and services can be designed and developed for them.

#### 4.1.4 Enabling environment

2–3 Paragraphs:

What is your overall assessment of the ENVIRONMENT ecosystem in this type of venue (local economy, national economy, legal and regulatory framework, political will and public support, regional and international context)?

Public libraries environment is not favorable for their development. Progress in national economy are not reflected in more investment in libraries, but eventually economic constraints in local governments are reflected in reducing library's budget and services.

There is regulation that establishes that having a library is a must for municipalities, but this obligation is not monitored and most of local governments do not accomplish it.

Public libraries do not have political support at national level; there are few local governments that support their libraries and their results constituted an example (see case presentation). Public support is really low, in exceptional cases when libraries have an important role by their communities, public defend them and claim when services and resources are reduced.

##### 4.1.4.1 Local and national economy

Describe the local and national economic environment and how it affects public access to information and communication in this type of venue (refer to and complement economic summary in country assessment, section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The improvement of national economy do not affect libraries situation. Municipalities have low budgets –except for those having mines in their territories or located in the richest neighborhoods- and they use such budget in building infrastructure that would be seen by citizens next time they come to vote. There are some big cultural center buildings having poor, non-well staffed and outdated libraries inside, so better budgets will not necessarily means better libraries, but worst budgets will surely means worst or closed libraries.

##### 4.1.4.2 Legal and regulatory framework

Describe the legal and regulatory framework and how it affects public access to information and communication in this type of venue (refer to and complement economic summary in country assessment, section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The law establishes the obligation of municipalities to have a public library, but for 2006 60% of municipalities do not have one and they did not received any sanction.

In January 2008, a Law on librarian professional practice was approved. This law establishes that libraries having more than 3000 volumes should employ licensed librarians. Big public libraries would be affected because they do not count with professional librarians and do not have budget to hire one.

#### *4.1.4.3 Political will and public support*

What is the level of political will and public support for this type of venue? (refer to and complement section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

There are not national policies oriented to improve infrastructure and information resources in public libraries; National Library System try to support public libraries, but they do not count with enough staff and resources to do that. Local governments perceive spending resources in libraries as expend, not as investment.

#### *4.1.4.4 Organization and networking*

Describe if the facilities in this type of venue organized in any network, association or other collective body? (i.e., national public library system, telecentre franchise or network, etc)?

Municipal libraries are part of the Sistema Nacional de Bibliotecas (SNB). SNB is an office of the National Library which coordinates with public libraries to develop capacities, provide bibliographic resources, and develop standards in order to make resources and services available to the public. [http://www.bnp.gob.pe/bib\\_publicas/index.html](http://www.bnp.gob.pe/bib_publicas/index.html)

#### *4.1.4.5 Partnerships*

Describe notable public-private partnerships in support of this type of venue.

If appropriate, indicate any specifics that apply to Digital ICT services alone.

There are some libraries in Lima that updated their collections thanks to agreements subscribed with individual publishing and the national publishing body called “Cámara Peruana del Libro”; those libraries are the richest in the country: San Isidro and Miraflores.

#### *4.1.4.6 Other environment factors*

Other factors in the environment that affect access and use of information in this kind of venue, not covered above?

The use of municipal libraries is going down in the last years because most of the school students that used to go to the libraries are now accessing to information through cabins. Some local government offer Internet services free of charge at their libraries or cultural centers, but it is not possible for most of them. Local governments and their libraries would provide Internet service if they make it financially sustainable, but they face bureaucratic and regulatory limitations to do so. Local governments can not charge for a service without giving an invoice, it does not make difference if the cost of the service is \$0.30 or \$300 and most of local governments just have one place to receive payments which make so inefficient for Internet connection renting compared with cybercafés. To overcome this problem some libraries had decided to rent a part of their building to small entrepreneurs so they may provide Internet service near the library.

#### 4.1.5 For publicly funded venues only: Revenue streams

This section is meant specifically for publicly-funded venues (public libraries, national connectivity programs, etc).

##### 4.1.5.1 Budget

What is the total budget for this public access venue system (applies especially for libraries, answer for other venues if applicable and if available)?

Total Budget for Fiscal Year

Local currency name                      amount (local currency)

Approx. equivalent in USD                      based on exchange rate of                      on date                      .

There is not information about budget for Public Libraries in the country. Public libraries are supported by local governments; every local government distribute budget between offices described in their ROF (Reglamento de Organización y Funciones – functions and organization regulation), but libraries are not described there. Libraries budget are include in cultural or education office, so their budget depends of the decision of office's manager and is not registered.

##### 4.1.5.2 Relative size of budget

How large (or small) is this budget in relation to other funding streams? (this is a way to show, in financial terms, how much the government cares about information and public access as compared to a variety of other issues in the country).

Relative Size of Budget for same year	Total budget (local currency)	Comments
<b>Total national budget</b>	71049'786,794	
<b>Education</b>	11291'800,000	3.1% of General Domestic Product
<b>National Library</b>	13'845,501	
<b>Public libraries</b>		

##### Other Comments:

As the National Library budget shows, investment in public access is not important for national government.

##### 4.1.5.3 Sources of funding

What are the sources of funding for this public access venue system?

Sources of funding:	Approximate % of total budget	Comments
<b>Government sources:</b>	100%	
<b>International donors:</b>		



**National donors:**

**User fees/services:**

**Other Comments:**

Public libraries fees are really low, only the National Library has resources for specialized services and fees (S/. 1427,000 estimated for 2008 equivalent to US\$500,000).

*4.1.5.4 Paths and flows of resources*

How do resources get allocated and disbursed to the actual venues? For the principal funders, and especially for the public sources, what is the flow of funds? How are the funds raised (what tax stream), what path do the tax streams flow before they get to the specific venues? Who makes decisions about this funding?

Public libraries are funded by municipal governments; municipal governments get funds from taxes, fees, and transfers from national government. Libraries do not manage funds directly; they make requirements for everything they need. Managers of office from which the library depends (education and cultural office are more commons) decide about funding.

*4.1.5.5 Fees and cost recovery*

Describe if there are user fees or any other type of cost recovery. How does it affect service delivery and usage?

Fees paid for services in public libraries go to the local government common account. Funds got in such way are not directly invested in libraries. If the staff made efforts to raise more resources they may be lost some way, so they do not raise funds.

*4.1.5.6 Cost categories*

What are the main cost categories in the operation of this kind of venue? (% of total annual budget)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Cost Categories for Operation:	Approximate % of total budget	Comments
Staff (salaries, benefits)	90%	
Building infrastructure	8%	
Utilities	2%	
Staff Training		
Computers/technology		
Total	100%	

**Other Comments:**

The percentages described are estimations made by experts interviewed. Public libraries in general do not have a budget to buy bibliographic material.

#### 4.1.5.7 Recent changes and future trends

Describe any recent changes and anticipated future trends in the funding and revenue streams for this type of venue in the country. Have funding levels risen or decreased dramatically over the past few years? What is the outlook for the foreseeable future?

Libraries funds have been decreased last years because the amount of libraries user's decreased too. This tendency would continue if there are not deep changes in public library performance. There are exceptions to this tendency associated with introduction to ICT services at libraries that made this space more dynamic and could get support from their municipalities.

#### 4.1.6 Case example for Public Libraries

Provide a short descriptions and commentary for each type of venue, offering a realistic sense of what the venue looks and feels like in its day to day operation, the kind of people who visit, and the kind of services they receive. Also, the case example indicates what makes the case unique or what features are commonly shared with other venues. A photo and short quotes will make it even more real.

##### Municipal Library of Jesus María

Jesus Maria is one of the 42 districts in Lima (capital of Peru). The Municipal library of Jesús María was created in 1970 as a public service that the municipality offers to their neighbors. In 2003 the library was declared in reorganization because few people use it; authorities consider that the collection and the services offered need to be modernized. They changed furniture and open an Internet room; this improved infrastructure did not mean an increase in the users, this was the reason to hire a professional librarian in 2005, since then new services were provided. They offer reference service, reading room loans, Internet access and cultural extension programs as:

Mundobus: it is an itinerant library (Bibliobus) that have 2,500 books, video and audio equipment, and didactic games, the program started at 2006. The Bibliobus visits different schools in the district and staying for 3 months in each one. It goes to the school in the morning (between 8:30 to 13:00) and its staff develops workshops oriented to promote reading and prevent drugs use between children and young. In the afternoon (between 14:30 to 17:00) the Bibliobus visits parks; staff and volunteers develop activities as reading comprehension workshops, puppets functions, story telling, etc. This program allows attend needs of school students in the district, because of that the library is not visited for this group of users.



Reading club: a group of around 30 kids go to the library once a week to read and discuss around a text. This activity runs from April to November, and the participants are kids that assisted to a

reading comprehension workshop in the school or the park.

**Biblioteca Viajera:** It is a collection of 120 books that the library borrows to a school for 1 month, and then the same collection goes to another school. The objective is to offer information to the students, familiarizing them with the use of books, and make that school authorities realize how important a school library is.

The library has a training program in computing, they offer free courses specially oriented to older people (more than 65 years old) from the district; this courses include and introduction to computing and Internet, basic Word, Excel and Power Point. 40% of the students are older people, 30% adults, and 30% young. This program was opened answering a request by older people in the district. The program is a success; they have people registered for the courses for the next 3 months.



The library promotes other activities as writers' conferences (poets and novelist) at the library and at the schools, workshops with parents to promote reading kids, library tours oriented to school students, etc.

The library has 12,000 items with information focused to satisfy the needs of young people who is studding to apply to enter in a university and university students. Despite of the fact that the library do not has a specific budget to buy books, they keep the collection updated with gifts and campaigns to collect books.

Library collection's users are 50% students that want to apply for a university, 25% university students, 15% school students, and 10% adults and older people; the amount of users by month are around 1200. School students pay S/.3.10 (US\$ 1.10) and adults S/.6.10 (US\$ 2.20) for annual registration fee. 60% of the users are residents of Jesus María and the other 40% are mainly students of education centers in the district.

Eight professional are part of the library staff: a librarian as head of library, a lawyer and a teacher as reader's advisors, a computer technician in charge of the library database, an informatics' engineering in charge of the training program, and 3 professionals working at Mundobus program (a teacher, a social worker, and a psychologist).

[http://www.munijesusmaria.gob.pe/info03\\_servicios/ser\\_biblioteca.asp](http://www.munijesusmaria.gob.pe/info03_servicios/ser_biblioteca.asp)

## 4.2 Venue 2: Special Libraries

### 4.2.1 Overall venue assessment

Provide a broad picture of the public access information landscape in this venue, informed by the results of this research.

2–3 Paragraphs:

What is your overall assessment of public access information in this type of venue?

Special libraries are those “that depend on a association, official service, department, research centre, scholarly society, professional association, museum, company, or any other institution, and whose collections are focused in a particular theme, for example: social science, natural science, history, etc.” (Garcia, 1988). Some of those libraries offer services to a particular community and others are publicly accessible; this research only includes those that are opened to the public access.

Special libraries have an important function because they are most of the time the unique channel to access specialized information on certain issue or subject. Most of the users of special libraries are professionals, practitioners and students, and the materials they have got are appropriate for those communities, but not necessarily to underserved communities. However, some of them – because of the nature of its mother institution- try to address specific needs of underserved communities. There is a tendency between special libraries to provide more on-line services.

### 4.2.2 Access

2–3 Paragraphs:

What is your overall assessment of ACCESS ecosystem in this type of venue (physical access, appropriate technology, affordability)?

Special libraries are concentrated in Lima, just few of them are located in other cities, this fact difficult the access to their services for large segments of population; this problem is trying to be solved offering more information through on-line services.

Special libraries are not know by the population in general, their services do not have enough diffusion, but, for people that know them, they are an important point to access specialized information that is not possible find in another venue.

The nature of their services and of the information they offer made them more appropriated for professionals and university students.

#### 4.2.2.1 Physical access

Describe how accessible this venue is to various population segments, differentiating by applicable Equity of Service variables (Form 1c), especially the differences between urban and non-urban settings.

If appropriate, indicate any specifics that apply to Digital ICT services alone.

This venue is physically inaccessible at most of the country regions because 90% of those libraries are in Lima; nevertheless, the information they offer by using ICT (web, e-mail) allows people in other regions to access if they have Internet connection.

Rural people, in general terms, do not have physical access to the facilities in this kind of venue because they have not Internet access in most of the cases and/or because at the places where they occasionally access Internet nobody knows about these services.

High educated people as students, professionals and practitioners from the cities where these services are located have no problem to access.

#### *4.2.2.2 Appropriate technology and services*

Describe how appropriate the technologies, services and information offered in this venue are to the population, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Considering that the target group of this venue is educated people, it would be said that the services and technology used are appropriate for them in general terms. People with high education level demand and consume information in digital formats; according with these demands, the special libraries are increasing services through Web, they are developing digital collections that include usually their bibliographical production and free access resources.

#### *4.2.2.3 Affordability*

Describe how affordable the technologies and services offered in this venue are to the population, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

The most of the services offered by special libraries are free of charge, nevertheless the cost related to transport to have physical access to the services, and the cost to use services by web can not be paid by most of people in rural areas and for people with very low income.

#### *4.2.2.4 Fees for services*

What fees or other requirements exist in order to access and use the information in the venues? (registration, user fees, restrictions to certain populations)

If there are fees: What do these fees buy?

Users pay for registration and use only in eight of the 106 libraries identified

Indicate amount in local currency Between 5 and 20

Equivalent in US Dollars: Between 1.8 and 7.2

Date of estimate 15th July 2008

and local currency name Nuevo Sol

#### Cost for burn a CD

Indicate amount in local currency 2.5

Equivalent in US Dollars: 1.9

Date of estimate 15th July 2008

and local currency name Nuevo Sol

#### Cost for print a page

Indicate amount in local currency 0.5

Equivalent in US Dollars: 0.18

Date of estimate 15th July 2008

and local currency name Nuevo Sol

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Explain any salient differences in the services offered in different regions, sizes or other variables of significance:

#### *4.2.2.5 Geographic distribution*

What is the distribution of the venues in terms of their geographic location?

Complement any details not already included in section 2.1: Venue Selection.

Region	Number Special Libraries	Number offering Digital ICT services
Lima	95	87
Cusco	3	2
Loreto	2	2
Piura	1	1
Madre de Dios	1	0
San Martín	1	1
Callao	2	2
Huanuco	1	1

#### 4.2.2.5.1 Map

If available, insert a map that displays the geographic distribution of this type of venue in the country (expand to the size you need).



Description of map:

#### 4.2.2.6 Other factors affecting access

Other factors that affect equitable access to public information in this type of venue, not covered above?

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Special libraries services have not a good diffusion, most of people do not know that they exist and probably have information about specific topics that they need (about production activities for example).

#### 4.2.3 Capacity and relevance

2–3 Paragraphs:

What is your overall assessment of CAPACITY ecosystem in this type of venue (human capacity, locally relevant content, integration into daily routines, socio-cultural factors, trust in technology, social appropriation of technology)?

Special libraries have staff able to offer specialized information but this service is commonly restricted to people with high education level because the information is not appropriate in terms of language, format or kind of language to the majority of population.

Contents have great relevance in human development topics, but they are used eventually for educational and research purpose. Institutions that support these libraries are trying to make available part of the information they produced through their Web pages to make it more useful for large segments of population.

#### 4.2.3.1 Staff size

How many people work in a typical facility for this type of venue? (full time-equivalent employees or contractors; describe any significant variations, i.e., large, medium and small libraries in the country)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Two employees work in most of the special libraries, in the small ones just one, and in the largest five or more; only the larger libraries have employees exclusively to provide digital ICT service.

#### 4.2.3.2 Staff training

What is the overall capacity of the staff (i.e., librarians, telecentres operators) to help users access and use

public access to information and communication services offered in this venue? Differentiate by applicable Equity of Service variables (Form 1c).

(iii) If appropriate, indicate any specifics that apply to Digital ICT services alone.

(iv) For Public Libraries, indicate if Library School training is available and/or required for librarians.

The staff in these libraries normally has a university degree; they are librarians or professionals in the issues of institution topic. They have a high capacity to help different kind of users to access and use the public information and communication services related with the themes in which the library is specialized.

#### 4.2.3.3 Services offered

What kind of services does this type of venue offer to the public? (i.e., access to books, magazines; meeting and conference rooms; audio/video programs, computers, Internet, other). Include Digital ICT services if offered.

Services Offered	Comments
11. Access to books, magazines	
12. Access to audio/video programs	Some Institutions have digital videos produced by themselves
13. On-line catalog	
14. Internet	
15. Bookstore	Most of these institutions have bibliographic production
16. Reference and research assistance	
17. Access to digital library and data bases	Most of the institution have full text documents produced by themselves (accessible in their Web pages)
18. Selective dissemination of information and bibliographic alerts	Some institutions use e-mail and web page for this services
19. Photocopies	
20. Interlibrary loan	
Explain any salient differences in the services offered in different regions, sizes or other variables of significance:	
The smallest libraries do not have online catalog, but they usually have lists, local PC data bases or	



manual catalogs.

The access to digital libraries and databases is more common in libraries that are member of networks in health or agrarian issues.

The interlibrary loan is a service offered at the biggest libraries.

#### *4.2.3.4 Programs for underserved communities*

Describe if this venue has programs specifically intended to reach underserved communities, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Special libraries are oriented to groups of people interested on their particular issue. In most of the cases those are groups of practitioners, professionals or students. However, some of those libraries are also oriented to provide information and communication services to underserved communities, as for example:

Young people are the focus of information programs about AIDS in which the information services specialized in sexual health play an important role. For example, the Instituto de Educación y Salud developed a Web page with information about sexuality for young people (<http://www.puntoj.com.pe/index.asp>)

Institutions focused in women and gender have support and information services oriented to women in danger situations.

#### *4.2.3.5 Relevant content*

What type of locally relevant content is available? What else is needed? Who is doing it?

If appropriate, indicate any specifics that apply to Digital ICT services alone.

#### **Available Content:**

Special libraries as a whole cover thematically information about all the relevant areas for human development, as education, health, gender, natural resources, science and technology, human rights, law, democracy, etc.

#### **Other Content Needed:**

More than other content, it is necessary reshape content that libraries offer to make it more accessible for large segments of population.

#### **Local Initiatives to build needed content:**

Institutions that promote special libraries are constantly building new content, but now there are more initiatives to make it more accessible for population in general.

**Source:** Web browsing, interviews

#### *4.2.3.6 Services and information available in local languages*

Describe the availability of services and contents relevant to human development that are available in **local languages** in this type of venue? (i.e., info on health, education, government services, etc)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Special libraries provide some of the most relevant services and contents to human development, but all of them are in Spanish (or sometimes in other European languages). In general terms this venue does not provide contents and services in Quechua, Aymara or Amazonian languages. We could identify just one institution (Defensoría del Pueblo) that offer information in Quechua through the web.

#### *4.2.3.7 Types of uses*

What do people USE the venues for (most frequent kinds of information and services people seek in them, activities they carry out in them)?

(ii) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Refer to section 3.4 Charts: Information Needs and complement here as needed.

Special libraries are used for education and research purpose. Topics sought by users depend of in which ones library are specialized. ICT are used in order to obtain information produced or compiled by the institution that supports the library.

#### *4.2.3.8 Number, type, and frequency of users*

Refer to section 3.4 Charts: Information Needs. Complement here as needed.

Majority of users of special libraries have college or university degree (87%), they are in general middle class professionals and there are not significant difference with regard of gender.

Frequency of use of special libraries is low because they are used to solve specific information requirements that are not permanents.

#### *4.2.3.9 Users capacity to use information and services offered*

What is the overall capacity of the users to take advantage of public access to information and communication resources, differentiating by applicable Equity of Service variables (Form 1c)?

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The more common users of this venue are students, practitioners and professionals; most of them have experience and training using information and communication resources, so they have a high capacity to take advantages of theses resources. The few users from rural areas or with a low education level have lower capacity to do so.

#### *4.2.3.10 Training courses for users*

Describe training courses offered to the public at this venue, and if they offer some kind of testing and certification.

This venue does not offer training courses to the public.

<p>Training courses:</p> <p>ICT specific training courses:</p>
<p><i>4.2.3.11 Integration into daily routines</i></p> <p>How easy is it for users to integrate the information and services offered in this type of venue into their daily lives? (offer concrete solutions to their needs and problems, make it easier to solve them at this venue than in other places)</p> <p>If appropriate, indicate any specifics that apply to Digital ICT services alone.</p>
<p>The specialized information offered by these libraries is consulted to solve particular requirements of students, practitioners and professionals. For external users of the services this looking for information is an occasional activity and not part of their daily routine. When students, practitioners and professionals are part of the institution that support the information service, they are in the possibility to use the information and services offered at any time, their frequency to use services is higher.</p>
<p><i>4.2.3.12 Users perceptions about the venue</i></p> <p>What is the general perception or opinion of the population about the venue (not necessarily its specific services, but the venue itself: i.e., what do people generally think about libraries? Are they places that are “cool” or “only for elites” etc?), differentiating by applicable Equity of Service variables (Form 1c)? This includes perception by people who do not use the venue...</p> <p>(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.</p>
<p>Population with low income and education level can not value these services and information because they, in general, ignore that them exist or that they are accessible.</p> <p>Population with high education knows about these services and their opinion is that they have a high social value despite of the fact that most of this segment of the population never uses them. Population with high education considers that special libraries are for students and for researchers.</p>
<p><i>4.2.3.13 Social appropriation of information and generation of new knowledge</i></p> <p>What activities, products and services are users undertaking that exhibit new levels of social appropriation of technologies and generation of knowledge? For example, how are users generating and disseminating new knowledge, products and services through their use of this venue? (see category 13 in Real Access Framework for Social Appropriation of Technology).</p> <p>If appropriate, indicate any specifics that apply to Digital ICT services alone.</p>
<p>It is not common to monitor what users are doing with the information they gather at libraries. However, some information services at research institutions try to do so in order to show their importance to accomplish institutional goals.</p>
<p><i>4.2.3.14 Trust, safety, and privacy</i></p> <p>What is the general perception or opinion of the population about the safety, security and privacy (TRUST) of the information and services offered in this venue?</p>

Users of these services consider them as being safe and secure, and the information they get is trustable for them.

#### *4.2.3.15 Gaps and opportunities in information and services offered*

What other information gaps and opportunities exist, which are not being met? (other information/services people need that are not being met there and could be offered, especially through Digital ICT services)

Lot of special libraries would like to reach underserved communities. However they do not necessarily have the appropriate information (in terms of language, format or kind of language) and they do not have the appropriate means. They are trying to do so through putting information on Internet and it is undoubtedly helping some people to find some information. In order to make information at special libraries more available and usable for underserved communities some information should be 'translated' or 'adequated' and web services should be made more usable for this new public.

#### *4.2.4 Enabling environment*

2 – 3 Paragraphs:

What is your overall assessment of the ENVIRONMENT ecosystem in this type of venue (local economy, national economy, legal and regulatory framework, political will and public support, regional and international context)?

Special libraries do not count with any political or public support; they exist and are sustained because the diffusion of information is an objective for institutions that support them. Because this absents of external support, they are extremely vulnerable to any budget constrain in their institutions; when costs have to be reduced libraries are the first affected.

By other side networks strengthen libraries because allow them access to resources that their institutions are not able to offer (bibliographic material, training, cooperative work, etc.).

##### *4.2.4.1 Local and national economy*

Describe the local and national economic environment and how it affects public access to information and communication in this type of venue (refer to and complement economic summary in country assessment, section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

As long as these libraries rely on their institution funding they may be affected by national environment if it affects the institution. The first budget to cut use to be acquisition budget. Most of new books come to these libraries through exchange program with other institutions, so they do not buy too much but expend a lot in mail, so an increase in mail cost may affect them.

##### *4.2.4.2 Legal and regulatory framework*

Describe the legal and regulatory framework and how it affects public access to information and communication in this type of venue (refer to and complement economic summary in country assessment, section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

In January 2008 a Law on librarian professional practice was approved. This law establishes that libraries having more than 3000 volumes should employ licensed librarians. Lot of special libraries had other professionals with some library training or non-licensed librarians working there. If this Law reaches to be strictly applied it will affect services at this type of venue.

#### *4.2.4.3 Political will and public support*

What is the level of political will and public support for this type of venue? (refer to and complement section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The institutions which host libraries and their users support them. There are occasional mentions in the media about the utility of them; they are referred as information sources by university or technical institutions teachers. In general terms, there are not public policies to support them.

#### *4.2.4.4 Organization and networking*

Describe if the facilities in this type of venue organized in any network, association or other collective body? (i.e., national public library system, telecentre franchise or network, etc)?

These libraries participate in different national and international networks according to the issues in which they are specialized. These networks also involve special libraries with services restricted to a specific community of user (internal users, researcher, students, etc.). The more important networks are:

Red Peruana de Intercambio de Información Agraria (AGRORED): Network created to exchange information between researchers, practitioners, technological transfer agents, agrarian and rural development agents, businessmen, producers and everyone related with the agrarian sector; 50 institutions are part of this network. <http://www.agroredperu.org/>

Red de Bibliotecas Agropecuarias del Perú (REBIAPE): the objective of this network is to make available agrarian information to produce knowledge through the cooperation between institutions from the sector; and to satisfy the information needs of rural, educational, practitioners and science communities. 30 institutions are being part of this network, including universities, research and development centers and governmental organizations. <http://tumi.lamolina.edu.pe/rebiape/integrantes.htm>

Red Peruana de Bibliotecas en Salud (REPEBIS): integrated by libraries and documentation centers related with health. Its objective is to organize the health information in Peru. This network is supported by BIREME (Centro Latinoamericano de Información en Ciencias de la Salud) and joint 49 governmental and non governmental institutions <http://www.upch.edu.pe/duiict/repebis/Repebis1.html>

Red de Información sobre la Mujer (RIM): promoted by CENDOC-Mujer this network joint a group of documentation centers through the country specialized in women and gender issues.

<http://www.cendoc-mujer.org.pe/rim/>

#### 4.2.4.5 Partnerships

Describe notable public-private partnerships in support of this type of venue.

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Biblioteca Virtual de la Cooperación Internacional is a new initiative to digitalize and integrate information offer for this libraries in a common data base; this project are result of an alliance between National Library, PNUD and Agencia Peruana de la Cooperación Internacional.

<http://pnud.bnp.gob.pe:8080/dspace/>

#### 4.2.5 For publicly funded venues only: Revenue streams

This section is meant specifically for publicly-funded venues (public libraries, national connectivity programs, etc).

#### 4.2.6 Case example for venue 2: Special Library

Provide a short descriptions and commentary for each type of venue, offering a realistic sense of what the venue looks and feels like in its day to day operation, the kind of people who visit, and the kind of services they receive. Also, the case example indicates what makes the case unique or what features are commonly shared with other venues. A photo and short quotes will make it even more real.

Instituto de Investigación de la Amazonía Peruana (IIAP)

IIAP is a governmental organization specialized in Amazonian area located at 2.5 Km from Iquitos (capital of Loreto Region) in the Peruvian rainforest. The library was created in 1983 with the purpose to support the research, teaching, and technical and scientific learning about the Amazonian area.

10 years ago, through an institutional project with Brazilian consultants, IIAP created the Information Centre with 3 areas:

Informatics Unit created to support the projects and institute staff with informatics' tools to maximize the productivity and quality of their work.

Geographic Information Unit to process data using Geographic Information Systems (GIS) and produce information about Amazonian area.

Documentation and Information Unit (Library) with the mission of provide scientific and technical information to optimize the development in the Amazon.

The library has around 9,000 titles in environment, ecology, ecosystems, forest, biodiversity, biotechnology, fishery, aquiculture, agriculture, traditional knowledge, and native population in the Amazon. The collection is kept upload by donations and publications exchange. As part of the politics of development collections, they are digitalizing the IIAP's bibliographic production and



making it full text available in their Web.



The library is visited by around 300 users per month, most of them are students (80%). The services offered are free of charge and include reading room loans, interlibrary loan, on-line catalog, and Internet search.

The library has a special program called “Bibliomaloca Intinerante” (itinerant “maloca” library, “maloca” refers to a typical house in the rainforest); this program brings access to scientific information in rural areas. A small collection of documents, videos and didactic games are transported to rural areas to stay available for a rural community during a month; the IIAP staff develops workshops oriented to promote reading and offers short training courses about how to create school and rural communitarian libraries.



In the library works four employees, 3 librarians (one as library head, one in charge of cataloging and classification, and other in charge of collection development) and a technician to assist users.

<a href="http://www.iiap.org.pe/Servicios/ServiceMostrar.aspx?ServicioId=7&amp;TabId=3">http://www.iiap.org.pe/Servicios/ServiceMostrar.aspx?ServicioId=7&amp;TabId=3</a>



### 4.3 Venue 3: Cabinas (Cybercafés)

#### 4.3.1 Overall venue assessment

Provide a broad picture of the public access information landscape in this venue, informed by the results of this research.

2–3 Paragraphs:

What is your overall assessment of public access information in this type of venue?

Cabinas were introduced by the Red Científica Peruana (RCP) in mid 90s. It has a development purpose which included appropriation of technology, but small entrepreneurs trained by RCP installed cabinas as pure business and pure Internet connection. Firsts cabinas were installed in Lima and then in touristy cities as Cusco. In the late 90s the phenomena exploit and there were cabinas at any big or medium city and at any place in Lima. Cabinas give access but do not give much more than that; they no even train people who do not know how to use computers. Now it may be guess that any urban place (more than 2000 inhabitants according INEI) had at least one cabina.

Cabinas users are mainly young people; they go there to solve necessities of communication, information and entertainment. Adults and older people do not use this venue in a significant proportion, cabina's owners do not consider them as part of their target group.

Cabinas are more concentrated in urban areas, but their expansion to small town and villages in rural areas would be accelerated thanks to a governmental program that has as objective install around 5000 cabinas.

#### 4.3.2 Access

2–3 Paragraphs:

What is your overall assessment of ACCESS ecosystem in this type of venue (physical access, appropriate technology, affordability)?

Cabinas are the main point to access Internet in Peru, 75% of total users of Internet according INEI (2008). For people without internet connection at home or without computer (the most of the population), cabinas solve their requirement of this service.

When firsts cabinas opened fees were 7 times higher than today; fees prices were going down because connection cost was going down too, and because more cabinas opened. Now cabinas are distributed in almost every city at the country, but in rural areas there are few of them.

The success of cabinas offering access to internet is recognized, now a public program that promote the creation of cabinas in small towns and villages is been developed, with this program the distribution of cabinas in rural areas will be increased.

#### 4.3.2.1 Physical access

Describe how accessible this venue is to various population segments, differentiating by applicable Equity of Service variables (Form 1c), especially the differences between urban and non-urban settings.

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Cabinas are more concentrated in urban areas, the access to them is more difficult for rural people; according with INEI (2007b) in 54% household in urban areas has one or more members that use cabinas, and in rural areas is only 17%.

Young people have more access to cabinas, 35% of population between 6 to 24 years old uses cabinas, whilst only 11% of population older than 24 do that.

Education level mark differences too. 40% of population with high education use cabinas and only 16% of population with intermediate education or less do that.

#### 4.3.2.2 Appropriate technology and services

Describe how appropriate the technologies, services and information offered in this venue are to the population, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

The services and technology are more appropriated to young people; they learn easily to use them. The adults and seniors have few courses available to learn how to use computers, so is difficult for them to use the services offered by cabinas; there are not services developed for them because they are not the main customers.

People from rural areas do not find in Internet useful information in appropriated format (language, style, extension, etc.) to cover their specific information needs.

#### 4.3.2.3 Affordability

Describe how affordable the technologies and services offered in this venue are to the population, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

The cost to use cabinas is low, and in general is affordable for most of the population, but there are some differences in how much people spend to use Internet in cabinas, it is show in the following table:

Variables	Categories	Monthly expense to use Internet in Cabinas January-June 2007	
		Nuevos Soles	US\$
<b>Total</b>		<b>9.7</b>	<b>3.33</b>

Sex	Male	10.1	3.47
	Female	9.0	3.09
Age group	6-11 years old	5.6	1.92
	12-18 years old	8.8	3.02
	19-24 years old	12.4	4.26
	25-40 years old	10.1	3.47
	41-59 years old	9.7	3.33
	60 and more years old	9.1	3.13
Education level	Basic education	6.2	2.13
	Intermediate education	8.9	3.06
	High education non University	10.0	3.44
	High education University	14.2	4.88
Location	Lima	10.0	3.44
	Urban (less Lima)	9.9	3.40
	Rural	7.3	2.51

Source: INEI, 2007b

It should be noted that, as was mentioned above, cost of using Internet in rural areas use to be higher than in urban areas, then it means that rural people access less frequently.

#### *4.3.2.4 Fees for services*

What fees or other requirements exist in order to access and use the information in the venues? (registration, user fees, restrictions to certain populations)

If there are fees: What do these fees buy?

#### Cost for one hour Internet access

Indicate amount in local currency 1.10

Equivalent in US Dollars: 0.39

Date of estimate 15th July 2008

and local currency name Nuevo Sol

#### Cost for typing a page

Indicate amount in local currency 0.70

Equivalent in US Dollars: 0.25

Date of estimate 15th July 2008

and local currency name Nuevo Sol

#### Cost for burn a CD

Indicate amount in local currency 2

Equivalent in US Dollars: 1.7

Date of estimate 15th July 2008

and local currency name Nuevo Sol

#### Cost for print a page

Indicate amount in local currency 0.4

Equivalent in US Dollars: 0.15

Date of estimate 15th July 2008

and local currency name Nuevo Sol

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Explain any salient differences in the services offered in different regions, sizes or other variables of significance:

The Internet access cost is more expensive if the cabina uses satellite connection, this is common in place with geographic barriers like mountains or in the jungle, where the price can be 7 Nuevos Soles ( US\$ 2.5)

#### *4.3.2.5 Geographic distribution*

What is the distribution of the venues in terms of their geographic location?

Complement any details not already included in section 2.1: Venue Selection.

There is not official information about the number or distribution of cabinas in the country. According with an Apoyo's survey there are 9483 cabinas in Lima. About the country in general,

according with experts opinion, cabinas are more concentrated in urban areas in the coast, followed by cities and important towns in highlands (specially those where tourism and mining are important, as Cusco, Puno, Cajamarca), but in the jungle the services are concentrated only in the big cities (Pucallpa, Iquitos, Tarapoto) because the connection cost is higher.

#### 4.3.2.5.1 Map

If available, insert a map that displays the geographic distribution of this type of venue in the country (expand to the size you need).



Description of map:

### 4.3.3 Capacity and relevance

2–3 Paragraphs:

What is your overall assessment of CAPACITY ecosystem in this type of venue (human capacity, locally relevant content, integration into daily routines, socio-cultural factors, trust in technology, social appropriation of technology)?

Where cabinas are available, their use is completely integrated to people routine, especially for young people that look for information related with education and perform entertainment activities. Older people are minority among users because they did not develop abilities using computers and do not consider useful this tool to solve their particular needs of information and communication.

Despite of adults are not common user's, they consider cabinas have a great value because the technology is valuable by itself and because the benefits for their child education.

Cabinas offer just connectivity, they do not develop contents. Some cabinas offer training as part of their business strategies, but their interest is not the development of user's capacities.

#### 4.3.3.1 Staff size

How many people work in a typical facility for this type of venue? (full time-equivalent employees or contractors; describe any significant variations, i.e., large, medium and small libraries in the country)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

In most of the cabinas work two employees, in the small ones just one, and in the largest 3 or more. Most of the times staff are relatives of the owner.

#### 4.3.3.2 Staff training

What is the overall capacity of the staff (i.e., librarians, telecentres operators) to help users access and use public access to information and communication services offered in this venue? Differentiate by applicable

Equity of Service variables (Form 1c).

(v) If appropriate, indicate any specifics that apply to Digital ICT services alone.

(vi) For Public Libraries, indicate if Library School training is available and/or required for librarians.

The 26% of cabina's operators in Lima have intermediate education and 73% high education. According to our survey 40% have intermediate education and 60% high education. Cabina's operators in general just charge for the services and control time, despite of the fact they have knowledge and experience using ICT, they do not assist customers to search information and use the services; adults and older people are specially affected for this non assistance, they do not feel comfortable in cabins because they can not ask anybody if do not know how to do something.

#### 4.3.3.3 Services offered

What kind of services does this type of venue offer to the public? (i.e., access to books, magazines; meeting and conference rooms; audio/video programs, computers, Internet, other). Include Digital ICT services if offered.

Services Offered		Comments
21.	Internet Access	There are 6% of cabins that offer just access to Internet and not other services.
22.	Printing	Available in 76%
23.	CDs Burning	Available in 54%
24.	Scanning	Available in 53%
25.	Typing	Available in 60%
26.	Computer games	Available in 44%
27.	Photocopies	Available in 32%
28.	International phone calls by computer	Available in 31%
29.	Video Conference	Available in 16%
30.	Training courses	Available in 2%

Explain any salient differences in the services offered in different regions, sizes or other variables of significance:

The services of photocopies, videoconference and international phone calls (VoIP) are more commons in medium and large cabins; the training courses are offered in small and medium cabins but not in the large ones (Apoyo, 2007).

#### *4.3.3.4 Programs for underserved communities*

Describe if this venue has programs specifically intended to reach underserved communities, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

The cabinas are businesses, so they do not have interest in developing services for underserved communities unless this supposes more income. There are cabinas opening in small and far away rural towns, offering connectivity where there are not before because is a good business, but they are contributing to offer access to Internet in rural areas.

One development project (GAMA) has a strategy to “telecentrize cabinas” because they realize that it would be worth to use such infrastructure for their purpose instead of expending on not sustainable infrastructure, see <http://geco.mineroartesanal.com/tiki-index.php?page=estrategia+de+telecentrizaci%C3%B3n+de+cabinas>

#### *4.3.3.5 Relevant content*

What type of locally relevant content is available? What else is needed? Who is doing it?

If appropriate, indicate any specifics that apply to Digital ICT services alone.

##### **Available Content:**

Cabinas do not offer contents; they just offer access to Internet.

##### **Other Content Needed:**

##### **Local Initiatives to build needed content:**

##### **Source:**

#### *4.3.3.6 Services and information available in local languages*

Describe the availability of services and contents relevant to human development that are available in **local languages** in this type of venue? (i.e., info on health, education, government services, etc)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Cabinas do not develop contents; they offer connection to Internet and related services. Some cabinas (in agreement with the tax department) offer access to e-services related with taxes (tax questions, transactions, etc), but this is the unique service associated to human development and is provided in Spanish.

#### *4.3.3.7 Types of uses*

What do people USE the venues for (most frequent kinds of information and services people seek in them, activities they carry out in them)?

(iii) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Refer to section 3.4 Charts: Information Needs and complement here as needed.

People use cabinas as point to access Internet; the most common use of Internet in cabinas is for Web browsing (67%) followed by communication uses (email 61% and chat 51%) and entertainment activities (blogs & social networking 25% and games 22%).

Education (54%) and entertainment (45%) are topics more seek for users because most of them are young and students; related with this profile, others important uses (that not show up in our survey) are typing and printing, those activities are perform for 28% of user in cabinas according with Apoyo's survey.

#### *4.3.3.8 Number, type, and frequency of users*

Refer to section 3.4 Charts: Information Needs. Complement here as needed.

Cabina's users are more male (60%) than female (40%), and more than 70% of all of them are between 15 to 35 years old, according with our survey. User's have a high education level, in urban places 60% have college or university level and 37% high school; in rural areas the percentages are inverse, 66% with high school level and 29% with college or university.

The frequency of use is higher in urban than in rural places; 40% of urban user go daily, and 54% of rural users go frequently.

#### *4.3.3.9 Users capacity to use information and services offered*

What is the overall capacity of the users to take advantage of public access to information and communication resources, differentiating by applicable Equity of Service variables (Form 1c)?

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

As explained above, capacity building of users is on their own hands. Staff at cabinas use to help clients to open Hotmail® accounts and some of them in using Office® programs, but no more. Then, kids and young people learn to use computers by using them and asking friends or relatives but older people had big problems to learn. The same happen with less educated people, people with non-Spanish mother language and, especially when combined with above mentioned variables, women.

#### *4.3.3.10 Training Courses for Users*

Describe training courses offered to the public at this venue, and if they offer some kind of testing and certification.

Training courses:

ICT specific training courses: Some cabinas, just 5% in Lima according Apoyo (2007), offer courses in basic computing, that courses include how to use Word, Excel, Messenger and search in



internet. They do not give any certification.

#### *4.3.3.11 Integration into daily routines*

How easy is it for users to integrate the information and services offered in this type of venue into their daily lives? (offer concrete solutions to their needs and problems, make it easier to solve them at this venue than in other places)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Big cities are plenty of cabinas near universities and commercial places; in such places they are more often than drugstores or bakeries. Then, it is easy to get to a cabina -much more than to any other venue analyzed in this document- and people get there when they need or want to do so. The use of the cabina is completely integrated on daily lives of users and every day more and more people become cabinas users', we may imagine they are solving needs or problems.

#### *4.3.3.12 Users perceptions about the venue*

What is the general perception or opinion of the population about the venue (not necessarily its specific services, but the venue itself: i.e., what do people generally think about libraries? Are they places that are "cool" or "only for elites" etc?), differentiating by applicable Equity of Service variables (Form 1c)? This includes perception by people who do not use the venue.

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Cabinas are generally considered very valuable because they provide access to Internet to people without any other possibility. In such reason, cabinas are more valued by people without computer or connection at home. Lot of cabinas had become social places where young people meet; they are definitely "cool" for them. Cabinas in general are valued because ICT is perceived as symbol of progress; this perception is common in adults despite of the fact that most of them do not use ICT, but all of them want their children use it.

#### *4.3.3.13 Social appropriation of information and generation of new knowledge*

What activities, products and services are users undertaking that exhibit new levels of social appropriation of technologies and generation of knowledge? For example, how are users generating and disseminating new knowledge, products and services through their use of this venue? (see category 13 in Real Access Framework for Social Appropriation of Technology).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Cabinas are private business so they can not be socially appropriated as a whole. But technologies would and are being appropriated by their users. Cabinas -as Internet- are mostly used for chat, email and web search, there is no big production of content. In some way, cabinas do not look to be appropriated for generation of knowledge because of circulation of clients and noise, but lot of people would write in noisy places.

#### *4.3.3.14 Trust, safety, and privacy*

What is the general perception or opinion of the population about the safety, security and privacy (TRUST) of the information and services offered in this venue?

Cabinas are perceived as unsafe for children because of the pornography contents available in Internet, and the child pornography networks that use Internet to contact children. Some cabina's owners use filters and promote their places as safe for children, there is a law that mandates that, but is not adequately enforced.

#### *4.3.3.15 Gaps and opportunities in information and services offered*

What other information gaps and opportunities exist, which are not being met? (other information/services people need that are not being met there and could be offered, especially through Digital ICT services)

Having more prepared personnel, cabinas would receive a varied public as some do. By other side, cabinas would become kind of business centers for small entrepreneurs as our case show (see below). More interestingly, cabinas would be used by development projects, local governments or central government offices to train people, make diffusion of information systems, provide help on e-government services and even to provide microfinance services. A few experiences of such kind of use are under course, it is needed to study and make diffusion of their results.

#### *4.3.4 Enabling environment*

2–3 Paragraphs:

What is your overall assessment of the ENVIRONMENT ecosystem in this type of venue (local economy, national economy, legal and regulatory framework, political will and public support, regional and international context)?

Cabinas have a favorable environment, they are recognized as a successful model to provide access to internet and their extension to places without connection is been supported by governmental projects. Government support is based in the conception that services have to be provided for private agents; under this conception there are not significant regulatory and legal barriers that affect cabina's performance.

Peruvian emergent economy contribute with favorable environment, there are places that are raising better income level and can expend more in information and communication access, so cabina's users are growing up constantly. Commercial agreements subscribed (specially with EEUU) will push down computers price in next years, this will benefit cabinas to serve low income users but would affect cabinas in upper and medium neighborhoods where more people will have access at home.

#### *4.3.4.1 Local and national economy*

Describe the local and national economic environment and how it affects public access to information and communication in this type of venue (refer to and complement economic summary in country assessment, section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The quick development of cabinas in Peru was, in part, product of the neo-liberal policies applied at '90; public employers lost their jobs and some of them use their compensations to open a small business as cabinas; since then, cabinas became familiar businesses and their persistence in the

time is usually short; small retractions in the consume of their clients affect deeply an individual cabina, but if it close, another is ready to be opened with small savings of another family.

Despite of the fragility of this business, cabinas as a whole are really integrated to economic and social functioning of the country. Nothing on the economic environment seems to affect them negatively as a whole. Computers will go down in price in next years because of commercial agreements with USA and APEC countries and tax reductions, it would affect some cabinas in upper or medium income neighborhoods because more people at those neighborhoods will have PCs and Internet at home, but it will not affect cabinas as a phenomena.

#### *4.3.4.2 Legal and regulatory framework*

Describe the legal and regulatory framework and how it affects public access to information and communication in this type of venue (refer to and complement economic summary in country assessment, section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The government tried to give some specific law to reduce child's exposition to pornography in Cabinas, but it showed to be inapplicable. The perspective from mostly cabinas owner is that filters are not completely effective, and that is not under their control and responsibility how customers use the tool (Internet connection) that they offer.

#### *4.3.4.3 Political will and public support*

What is the level of political will and public support for this type of venue? (refer to and complement section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

The national environment is very supportive with the increase of connectivity, in that way cabinas was and are the more successful venue; the governmental programs as "Internet Rural" and "Banda Ancha Rural" executed by FITEC (Investment in Telecommunication Found) promote creation of cabinas in towns without access to Internet.

#### *4.3.4.4 Organization and networking*

Describe if the facilities in this type of venue organized in any network, association or other collective body? (i.e., national public library system, telecentre franchise or network, etc)?

There were many associations during the last fifteen years; the following are the most important associations that remain:

Asociación Peruana de Servicios de Internet (ASPESI): Institution that groups owners of cabinas and related business. Its purpose is to enhance their own business; to reach that objective they organize meetings in order to discuss, remain update and share experiences related to ICT.  
<http://www.aspesi.net/>

Asociación Cabinas Peru: Their purposes are the professional development of cabinas, and consolidate it as a main access to Internet in Peru. <http://www.cabinasperu.org/index.php>

#### 4.3.4.5 Partnerships

Describe notable public-private partnerships in support of this type of venue.

If appropriate, indicate any specifics that apply to Digital ICT services alone.

The government is executing the program “Banda Ancha Rural” to provide connectivity to 2840 small rural settlements. This project is being implemented by private corporations and implied agreements with local small entrepreneurs that will provided the service. The program brings a subsidy that covers training and the development of a local web page. The program started in December 2007. <http://www.fitel.gob.pe/contenido.php?ID=30>

#### 4.3.4.6 Other environment factors

Other factors in the environment that affect access and use of information in this kind of venue, not covered above?

The cost of Internet access service is less in cities, with major level of income, that in rural small towns with low income because of the difficult geography in Peru (highlands, jungle) and that more used technology in rural areas (satellite) is more expensive.

It had been observed certain cases of cabinas been affected by the opening of telecenters by NGOs or local governments.

#### 4.3.5 For publicly funded venues only: Revenue streams

This section is meant specifically for publicly-funded venues (public libraries, national connectivity programs, etc).

#### 4.3.6 Case example for venue 3: Cabina (Cybercafé)

Provide a short descriptions and commentary for each type of venue, offering a realistic sense of what the venue looks and feels like in its day to day operation, the kind of people who visit, and the kind of services they receive. Also, the case example indicates what makes the case unique or what features are commonly shared with other venues. A photo and short quotes will make it even more real.

##### Electronic GIC Cyber Centro

Electronic GIC is a company located in Bellavista, one of the 6 districts of the Callao Region (region beside Lima).

The company, opened at November 1991, was the first cabina in Callao and one of just fifteen in Peru in that year. They began with 20 computers to offer Internet access, videoconference service with a connection by dial up that made the service seven times more expensive than today; the services related they developed was typing, prints, photocopies, scanning, fax services, and conferences explaining what was Internet and how it could be useful.

The main customers, as today in mostly cabinas, were young people, but the proliferation of cabinas pushed down the final price of the services, every year company’s income was going down; after 5

years they decided to offer services oriented to other customers.

This company is a step ahead with respect to a common cabina that offer just Internet access, their vision is to became in an e-office for their customers; now their services are oriented to companies that want to use Internet to improve their business; they offer web page design and maintenance, e-mail accounts, web pages hosting, office services related with Internet (fax services, typing, printing, scanning, photocopies, CDs burning, information search, e-tax declarations, etc.), training and advice.

Mailing service include an e-mail account and the staff can check it if a customer request it (by phone, or establishing some periodicity to do it), so they do not need to access directly to a computer to be connected; a customer can request to the staff to answer a mail in a specific way ('send a pro forma' for example).

Training courses included use of Internet, and Microsoft Office ® programs (Excel, Word, and Power Point) and they design personalized courses under demand.

They frequently offer conferences to keep their customer upload in the new technology that can be applied in their business and technology that will be used in the future services that the company will develop.

Five employees are part of the staff: director, general manager, systems manager, manager, and a secretary.

<http://www.electrogic.com/index.htm>

## 4.4 Venue 4: Telecenters

### 4.4.1 Overall venue assessment

Provide a broad picture of the public access information landscape in this venue, informed by the results of this research.

2–3 Paragraphs:

What is your overall assessment of public access information in this type of venue?

In Peru, maybe because of the cabinas phenomena, there are not a lot of telecentres in place in the country and their service is restricted to the population at the localities they are or to special groups. Telecenter installation had been a strategy to provide access to those that have not access to Internet and computers. Most of telecenters in Peru are in rural zones or deprived places where it was not expected to have private installation of Internet, before large installation governmental projects that are now being carried out; there are also some attending special communities in urban areas, as blind people or housekeepers for example.

Telecenters are not significant in gross numbers and at national level, they are undoubtedly less significant in the quantity of people served than the rest of venues presented in this research. However, the importance of telecentres experience as a whole goes far away the sole service provided by each one. This experience had shown to policy makers and the public the usefulness of Internet for rural people and some factors of failure and success. That had contributed to shape policies and projects as those mentioned of installation of 5000 PIAPs in rural areas which include capacity building and content development aspects.

Most of telecenters face financial sustainability problems, such problems are currently exacerbated if a cabina comes to town. Lot of telecentres had closed when local entrepreneurs installed cybercafés (Cotahuasi AEDES's telecentre in rural areas or the telecentre of ALTERNATIVA in the north of Lima, for example) or reoriented its functioning to serve the institution or group for which they were created and not the public in general (as the majority of Huaral telecentres). Some projects that promoted telecenters are looking at ways to involve cabinas on provision of services they want telecenters to provide.

### 4.4.2 Access

2–3 Paragraphs:

What is your overall assessment of ACCESS ecosystem in this type of venue (physical access, appropriate technology, affordability)?

As mentioned, there are not a lot of telecenters and they attend a limited public which would access to them. Most of them are not prepared to receive people with disabilities, but they are proportionally more inclusive for them than cybercafés which rarely consider such issue. There are just one telecenter oriented to serve blind people.

Just a few telecenters offer services for free, some have special prices or concessions to certain groups, most of them charge services on “market” prices. However it should be pointed out that

telecenters services use to cost more because of satellite connection costs.
<p><i>4.4.2.1 Physical access</i></p> <p>Describe how accessible this venue is to various population segments, differentiating by applicable Equity of Service variables (Form 1c), especially the differences between urban and non-urban settings.</p> <p>If appropriate, indicate any specifics that apply to Digital ICT services alone.</p>
<p>Peru has few telecenters and most of them are in rural areas, they are accessible to people at those communities but not to the population at large. Telecenters are usually settled in places where there are not another point to access Internet. In terms of accessibility to disabled people, most of telecenters are not prepared for people with physical disabilities and just one special telecenter had hardware and software for blind people.</p>
<p><i>4.4.2.2 Appropriate technology and services</i></p> <p>Describe how appropriate the technologies, services and information offered in this venue are to the population, differentiating by applicable Equity of Service variables (Form 1c).</p> <p>If appropriate, indicate any specifics that apply to Digital ICT services alone.</p>
<p>One of the telecenter functions is to make technology appropriable. However, some telecenters have had more success than others doing so. It seems to be quite related with concepts in the project origin of telecenters: where projects are more centered in technological issues than in social issues appropriation of technology is less successful. The nature of the technology make it more appropriated for young and with formal education people, however experiences developing services and offering information useful oriented to segments as farmers and artisanal miners had made the technology more appropriated to people less educated and older.</p> <p>We categorize as telecenter the only place with ICTs appropriated to blind people (ATECNODIS).</p>
<p><i>4.4.2.3 Affordability</i></p> <p>Describe how affordable the technologies and services offered in this venue are to the population, differentiating by applicable Equity of Service variables (Form 1c).</p> <p>If appropriate, indicate any specifics that apply to Digital ICT services alone.</p>
<p>Services at telecenters are affordable for the population they aim to serve. Most telecenters charge users for using Internet. Some of them have special prices or concessions to certain groups: for example Huaral SIA telecenters do not charge farmers or their relatives when they are looking for agricultural information, Otocha and other telecenters do not charge for training, etc.</p> <p>Fees are reduced as possible and are normally similar to urban cybercafés fees despite that satellite connection (technology used by almost all) is quite more expensive.</p>

#### *4.4.2.4 Fees for services*

What fees or other requirements exist in order to access and use the information in the venues? (registration, user fees, restrictions to certain populations)

If there are fees: What do these fees buy?

##### Internet access by an hour

Indicate amount in local currency 1.5

Equivalent in US Dollars: 0.54

Date of estimate 15th July 2008

and local currency name Nuevo Sol

##### Typing service for page

Indicate amount in local currency 1

Equivalent in US Dollars: 0.36

Date of estimate 15th July 2008

and local currency name Nuevo Sol

##### Print for page

Indicate amount in local currency 0.50

Equivalent in US Dollars: 0.18

Date of estimate 15th July 2008

and local currency name Nuevo Sol

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Explain any salient differences in the services offered in different regions, sizes or other variables of significance:

According with the location (places with accidental geography, as mountains), some telecenters required a satellite connection, it produce an extra cost that make fees more expensive if the telecenter do not count with external funding.

#### *4.4.2.5 Geographic distribution*

What is the distribution of the venues in terms of their geographic location?

Complement any details not already included in section 2.1: Venue Selection.

Political Region	Number of telecenters
Ancash	7



Apurimac	6
Arequipa	4
Ayacucho	2
Cajamarca	2
Cusco	7
Huancavelica	17
Ica	3
Lima city	3
Lima Region	10
Piura	5
Puno	7

Geographical Region	Number of telecenters
Coast	18
Highlands	54
Jungle	0

#### 4.4.2.5.1 Map

If available, insert a map that displays the geographic distribution of this type of venue in the country (expand to the size you need).



Description of map:

#### 4.4.3 Capacity and relevance

2–3 Paragraphs:

What is your overall assessment of CAPACITY ecosystem in this type of venue (human capacity, locally relevant content, integration into daily routines, socio-cultural factors, trust in technology, social appropriation of technology)?

It is impossible to keep external technical staff for long time –especially if external funding comes to its end. But training local people in rural areas often helps the trainee to migrate, as reported by telecenter promoter from Arequipa. It is needed to develop capacities in a sustainable manner, making staff train people which would replace them when they leave. But it is also needed to recognize and value –in social and financial terms- the role of telecenter operator.

Such operators need training in much more than technology issues, including trainer capacities, book keeping and development issues. That is needed to meliorate social inclusion from telecenters by training groups that are not using them (the less educated, adults, women) and invite them to use telecenters.

Telecenters and their technology are more trusted and better appropriated when they are own by local organizations or have the support of them.

##### 4.4.3.1 Staff size

How many people work in a typical facility for this type of venue? (full time-equivalent employees or contractors; describe any significant variations, i.e., large, medium and small libraries in the country)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Most of the times there is just one or maybe two members of staff. Some telecenters have volunteers from abroad or from the community, in the last case they are usually “exchanging” their time for training or free time to use computers.

##### 4.4.3.2 Staff training

What is the overall capacity of the staff (i.e., librarians, telecentres operators) to help users access and use public access to information and communication services offered in this venue? Differentiate by applicable Equity of Service variables (Form 1c).

(vii) If appropriate, indicate any specifics that apply to Digital ICT services alone.

(viii) For Public Libraries, indicate if Library School training is available and/or required for librarians.

There are big differences in relation with formal qualification of telecenter operators. Some projects hire technicians from urban places to work at telecenters and other train local people. Looking at the experience, the last strategy seems to be better because is more sustainable, but when local organizations are compromised in selection of local people it seems to be even better. Local staff uses to be more receptive and warm attending local people, which feel more confident with them.

Lot of the projects that promote telecenters use to be centered in technology when select and train telecenter staff, but telecenters operations go far away technology. Operators need to know

how to train local people, how to include special groups, how to participate in local development. There is a project to establish a national academy for telecenters being planned by a group of organizations.

#### 4.4.3.3 Services offered

What kind of services does this type of venue offer to the public? (i.e., access to books, magazines; meeting and conference rooms; audio/video programs, computers, Internet, other). Include Digital ICT services if offered.

<i>Services Offered</i>		<i>Comments</i>
31.	Internet Access	All telecenters provide Internet access
32.	Printing	All the telecenters provide this service
33.	Typing	Most of telecenters provide this service
34.	Computer training	A minority provide “structured training” but all train users while using Internet
35.	Information search	Most of telecenters gives internet searching assistance, specially to certain groups
36.	Scanning	Most of telecenters provide this service
37.	CD coping	Half of telecenters provide this service
38.	Photocopying	Few telecenters provide this service
39.	Information Systems update	Few. It happens in telecenters associated to information systems projects as SIA Huaral and SIRA Arequipa
40.	Telephone services (VoIP and normal)	Few telecenters provide this service
41.	Reading promotion and cultural extension	Few. Chalhahuacho telecenter is linked to a public library
42.	Digital support for local projects, local governments or CBOs	Few telecenters provide this service
43.	Training of Web 2.0 tools	Few telecenters provide this service
44.	Computer games	Few telecenters provide this service

Explain any salient differences in the services offered in different regions, sizes or other variables of significance:

Differences in kind of services are more related to origin and/or goals of each telecenter or group of telecenters, some have developed services related with education and other with agrarian information systems, because their target groups –or the target group of the institutions that nurtured them- are local government or farmers associations.

#### *4.4.3.4 Programs for underserved communities*

Describe if this venue has programs specifically intended to reach underserved communities, differentiating by applicable Equity of Service variables (Form 1c).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Telecenters are by definition oriented to reach underserved communities or a specific underserved community. For example telecenters that serve blind people, housekeepers, small farmers, artisanal miner, rural population, etc.

#### *4.4.3.5 Relevant content*

What type of locally relevant content is available? What else is needed? Who is doing it?

If appropriate, indicate any specifics that apply to Digital ICT services alone.

#### **Available Content:**

Most of the institutions or projects that installed telecenters develop or organize relevant content for communities served by this telecenters. That happens in projects promoted by INICTEL, GAMA, CEPES, AEDES or SADA, for example. Telecenters staff themselves and communities are now participating more in content development thanks to kind of Web 2.0 tools.

Telecenters promoted and installed by INICTEL produce local web pages, but just one of those where INICTEL had left the telecenter in charge of the local government continues with such activity. Telecenters of rural information systems (SIRA in Arequipa and SIA in Huaral) contribute with local information to such systems. At telecenters promoted by GAMA some members of the communities (artisanal miners) contribute to their Wiki page.

#### **Other Content Needed:**

Content needed is vast, specific to the group served by the telecenter and dynamic too.

#### **Local Initiatives to build needed content:**

It is needed to develop capacities of telecenters staff and users to produce content, but it will not be enough. There have been information services and systems being developed to serve specific groups, those systems need to continue including Web 2.0 tools.

**Source:** *Interviews with key informants*

#### *4.4.3.6 Services and information available in local languages*

Describe the availability of services and contents relevant to human development that are available in **local languages** in this type of venue? (i.e., info on health, education, government services, etc)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

According with the national statistics in 1993, Spanish is the mother language for 79.8% of the population, Quechua 16.5%, Aymara 2.3%, and Amazonian languages 0.7%. But those figures are certainly different in places where some telecenters provide their services as Huancavelica, Abancay, Cusco or Puno. However, telecenters do not provided services in native languages.

#### *4.4.3.7 Types of uses*

What do people USE the venues for (most frequent kinds of information and services people seek in them, activities they carry out in them)?

(iv) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Refer to section 3.4 Charts: Information Needs and complement here as needed.

Information related with education is the most consulted in telecenters; this is related with user's age because they are studying (at school or technical institute). Communication uses (chat, email, social networking, and phone) are the next in importance followed by entertainment. The use of information in health and agricultural depends if the telecenter produce or compile it.

#### *4.4.3.8 Number, type, and frequency of users*

Refer to section 3.4 Charts: Information Needs. Complement here as needed.

Public of telecenters has male majority (especially in rural areas), is older than the rest of venues with the majority in the 36-60 years group. The remarkable gender difference would be explained by women education level in rural areas: women double men in illiteracy rates and in percentage of those that not speak Spanish. Telecenters had failed until now on including native languages speakers, as is shown in Huancavelica where CEPES is conducting a research which evaluates INICTEL telecenters.

Telecenters seems have a consolidated public because around 70% of the users go at least once a week; this situation is related with the fact that they are majority students.

#### *4.4.3.9 Users capacity to use information and services offered*

What is the overall capacity of the users to take advantage of public access to information and communication resources, differentiating by applicable Equity of Service variables (Form 1c)?

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

Kids learn easily, fast and by themselves at any place. But adults need to be invited and trained in special sessions to avoid that them could feel uncomfortable. People without formal education are less able to use services at telecenter; population that speaks only a local language (Aymara, Quechua) can not use the services and information, because there are not contents in their languages.

#### *4.4.3.10 Training courses for users*

Describe training courses offered to the public at this venue, and if they offer some kind of testing and certification.

Training courses: Some telecenters had offered local journalism training

ICT specific training courses: There are basic training courses in office software and internet at every telecenter. Some of them have offered more specific training courses as usage of particular information systems promoted by the organization behind telecenters, Web 2.0 tools, etc.

#### *4.4.3.11 Integration into daily routines*

How easy is it for users to integrate the information and services offered in this type of venue into their daily lives? (offer concrete solutions to their needs and problems, make it easier to solve them at this venue than in other places)

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Telecenters use to be at the center of rural settlements so people could get there when have time to do so. Telecenters in rural areas are mostly being used by kids, but some adults –at different velocities at different places- are starting to use telecenters.

#### *4.4.3.12 Users perceptions about the venue*

What is the general perception or opinion of the population about the venue (not necessarily its specific services, but the venue itself, i.e., what do people generally think about libraries? Are they places that are “cool” or “only for elites” etc?), differentiating by applicable Equity of Service variables (Form 1c)? This includes perception by people who do not use the venue...

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

People from localities with telecenters normally appreciate the utility of them. First conception by the community use to be “this is for children and young people”. It depends on telecenter operator to change such idea and convince community members that telecenters are for everyone.

#### *4.4.3.13 Social appropriation of information and generation of new knowledge*

What activities, products and services are users undertaking that exhibit new levels of social appropriation of technologies and generation of knowledge? For example, how are users generating and disseminating new knowledge, products and services through their use of this venue? (see category 13 in Real Access Framework for Social Appropriation of Technology).

If appropriate, indicate any specifics that apply to Digital ICT services alone.

There are interesting examples of appropriation of technologies at telecenters. For example the production of local web pages in Huaral, Huancavelica, Pallasca and artisanal miners telecenters. In the last case, a usable wiki page makes it possible to almost not educated adults to express themselves at the internet.

In several places where telecenters were installed there are now small local entrepreneur or telecom interested in installing cybercafés; this is an indicator about how telecenters contributed

with the appropriation of new technologies.
<p><i>4.4.3.14 Trust, safety, and privacy</i></p> <p>What is the general perception or opinion of the population about the safety, security and privacy (TRUST) of the information and services offered in this venue?</p>
<p>Telecenters are generally considered safe and secure. Lot of telecenters is not organized as cybercafés (where a client would usually use a computer without bee seen by anyone) and some of their users ask for privacy, it depends on telecenter policies to take decisions at every case. Most trustable telecenters are those conducted by local organizations.</p>
<p><i>4.4.3.15 Gaps and opportunities in information and services offered</i></p> <p>What other information gaps and opportunities exist, which are not being met? (other information/services people need that are not being met there and could be offered, especially through Digital ICT services)</p>
<p>Telecenters are not trying to become e-government services facilitators which they should. By other side, telecenters would give micro-financial services in their localities which normally lack of a Bank office, in order to do so they need to get associated to local or national financial institutions.</p>
<p><i>4.4.4 Enabling environment</i></p> <p>2–3 Paragraphs: What is your overall assessment of the ENVIRONMENT ecosystem in this type of venue (local economy, national economy, legal and regulatory framework, political will and public support, regional and international context)?</p>
<p>National environment (political, social, and economic) is a kind of neutral on telecenters. There are not too much telecenters and it is difficult to imagine that there will be much more considering FITEL installation of thousands of cybercafés in rural places. However, the installation of cabinas by FITEL consider local training and content development as part of the service to be provided by the telecom, then those thousands of new rural cabinas would be considered telecenters in a way and some will be certainly reshaped in such sense.</p> <p>Increasing access to Internet in rural areas would help telecenters to provide better services. However, such access increment would help small entrepreneurs to get into a more prepared market and some telecenters may fall.</p>
<p><i>4.4.4.1 Local and national economy</i></p> <p>Describe the local and national economic environment and how it affects public access to information and communication in this type of venue (refer to and complement economic summary in country assessment, section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)</p> <p>(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.</p>

As described in section 3.3.4 and others, economic development is not reaching most of rural areas. However, some telecenters near mines would be affected by them.

#### *4.4.4.2 Legal and regulatory framework*

Describe the legal and regulatory framework and how it affects public access to information and communication in this type of venue (refer to and complement economic summary in country assessment, section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

VoIP regulations would affect telecenters, of course, if there would be officers to enforce law in place.

#### *4.4.4.3 Political will and public support*

What is the level of political will and public support for this type of venue? (refer to and complement section 3.5 Economic, Policy, and Regulatory Environment, calling out what is specific to this venue)

(i) If appropriate, indicate any specifics that apply to Digital ICT services alone.

At local level there is political support for telecenters. More than a half of installed telecenters are owned or controlled by local governments. However, lot of those local governments see telecenters as cybercafés and expect that them will produce revenues.

At national level, telecenter experiences have been used as examples or models and have influenced in policy making. But telecenters have not got support from government.

#### *4.4.4.4 Organization and networking*

Describe if the facilities in this type of venue organized in any network, association or other collective body? (i.e., national public library system, telecentre franchise or network, etc)?

Telecenters promoted by one institution are networked with the rest of them. There have been attempts to build a national network of telecenters but they have not worked until now.

#### *4.4.4.5 Partnerships*

Describe notable public-private partnerships in support of this type of venue.

If appropriate, indicate any specifics that apply to Digital ICT services alone.

Every project started or developed at some moment a plan or strategy of long time sustainability which normally imply local appropriation. One of the most successful examples of that is the group of telecenters of Huaral which are now owned and supported by the local farmers' organization (BOSSIO 2007b and 2007c).

#### *4.4.4.6 Other environment factors*

Other factors in the environment that affect access and use of information in this kind of venue, not covered above?



Almost all telecenters face financial problems which made them difficult to enlarge their services.

Satellite connections are not always good. It does not only happen because of technical problems but also because telecenters are not priority for connection providers and because of lack of capacities of telecenter staff.

#### 4.4.5 For publicly funded venues only: Revenue streams

This section is meant specifically for publicly-funded venues (public libraries, national connectivity programs, etc).

#### 4.4.6 Case example for venue 4: Telecenters

Provide a short descriptions and commentary for each type of venue, offering a realistic sense of what the venue looks and feels like in its day to day operation, the kind of people who visit, and the kind of services they receive. Also, the case example indicates what makes the case unique or what features are commonly shared with other venues. A photo and short quotes will make it even more real.

##### Agrarian information system telecenters in Huaral

Huaral valley is in the coast of Peru, 90 Km north of Lima. The majority of its populations get livelihoods from agriculture which entirely depends on irrigation. The organization related to irrigation had always embedded social organization in this and other coastal valleys. Nowadays, water resource management and irrigation infrastructure is in hands of small farmers' organization: the Irrigation Board and irrigators' commissions.

The project developed by CEPES with the Board had installed 11 telecenters in rural communities in 2004 and set a web-based information system on water management and cultivation monitoring <http://www.huaral.org>. The project has one connection to Internet and a wireless network that connect 14 telecenters and offices; this technology permits giving telecommunications services, despite some regulation constraints.

Telecenters offer information about Huaral valley production and surroundings, price of agrarian products, agrarian law, local and international news relevant to farmers, water availability, etc. The role of local CBO shaping the project, accommodating it to changing environment and pressing policy makers had been crucial on achieving success and sustainability.

This project is now being replicated in other valleys in the Coast.





SIA web page.

## 5 Success Factors and Strategic Recommendations

### 5.1 Summary of Lessons in Country

#### 5.1.1 Information needs

What are the most critical information needs by underserved communities that are currently not being adequately met by public access to information and communication venues?

Information needs are precise and timely dependent. But in general it would be said that people need information on:

- Jobs opportunity, it is provided by the work department (Ministerio de Trabajo) and certain NGOs, but it needs better diffusion and usability.
- Micro-enterprises opportunities, it is provided by different actors without good relations or links.
- Health, there are some information systems on health issues and the media make some diffusion, but people still need accessible, understandable, opportune and precise information on health issues.
- Agricultural issues as market prices, sowing intentions, weather forecasts, business opportunities, technical issues and so. There are some agricultural information systems and services from governmental and non-governmental organizations.

#### 5.1.2 Where people go

Where do people go for public access to information and communication in the country, especially underserved communities?

People go to cabinas in order to get information, communicate and for entertainment. Its cost -low compared with other countries- is a barrier for frequent use of certain users, some students mention they went to public libraries for books because they can not afford to look for information for their courses in cabinas. Cabinas aren't a warm place for certain uses as study because their noisy environment and for people who do not know how to use new technologies -specially adults over 35, women, non-Spanish speakers and women- because this venue do not provide training and do not make newcomers confident to ask for help. Cabinas also lack of accessibility for people living with disabilities.

#### 5.1.3 How access, capacity, and environment affects public access

How do access, capacity and environment affect public access to information and communication venues in the country? (Refer to details under access, capacity and environment in research design)

document).

Public access to the above defined information and communication venues is affected by access, capacity and environment in different ways according to the type of venue, details were provided in respective sections. In general, it would be said that location is the most relevant variable for access issues, being people living in rural areas the group without access to any venue, but special libraries are also inaccessible for people at small cities. Political and economic environment would be considered as kind of neutral for most of the venues. But it means to be supportive to venues on the mood as cabinas and not supportive to venues loosing their public and role as public libraries.

From these 3 groups of factors, we consider capacity issues, including content issues, as the most relevant and the most affecting one. Capacity issues marginalize important groups of people from enjoying new ICTs at newest venues, there are also staff capacity issues explaining bad service or low motivation in public libraries or cabinas. While there is good work going on related to provision of appropriate information, especially through web information services, there is a lot to be done. Web information services should become more usable and their diffusion should be improved. There is a lot of useful information in different repositories –as special libraries for example- but it needs of reformatting or translation to simple terms.

#### 5.1.4 Role of ICT

What is the role of ICT in public access to information and communication? What untapped opportunities exist?

ICT –especially the Internet- had become the preferred way to access information in the country to young people, mostly in urban but also in rural areas. Those that do not use ICT continue using traditional ways to access information not integrated to other public venues. The Internet is being used to enrich such traditional ways –social networks- because some of its members use it. However, some groups are marginalized; the older people, non-Spanish speakers or readers, the illiterate, rural inhabitants and -especially when combined with just mentioned variables- women and disabled people.

The above mentioned groups would enjoy information services through public venues if specific policies and actions are carried out related to capacity building and content development, but also with access for the disabled.

### 5.2 Success Factors and Recommendations

#### 5.2.1 Where to invest resources

How could additional resources (money, people, time, knowledge) be best used to strengthen public access to information and communication venues and practices in the country? (i.e., solutions that would make it more accessible, affordable, appropriate?)

Underserved sectors would get benefits by accessing appropriate (opportune, relevant, usable and trustable) information through Internet, but it is needed:

- To produce, collect and organize such information.
- To connect sources having such information with social networks.
- To develop appropriate web information services.
- To train special groups on ICT usage.

Additionally, it would be important to invest funds on programs to:

- Revalue and enhance public libraries, so they would train or hire staff, update collections and develop them to solve public information needs.
- Look for ways of collaboration between venues. For example cabinas providing and promoting access to information produced in special libraries or offered by Web information systems.

### 5.2.2 Key success factors

What are the key success factors for public access to information and communication to meet information needs of the population, especially underserved communities, and especially through digital ICT?

Information should be reformatted, translated, organized and diffused in appropriate ways in order to meet information needs of the population. Such information should reach social networks by being accessible through web information services, or at public libraries and other venues. Success factors to connect information sources with social networks are social participation, CBOs engagement and appropriate diffusion. Usability studies have been identified as success factor in the development of appropriate information services. Underserved communities should develop capacities to use gotten information. Success factors on capacity development are purpose-oriented training, segregation of groups of interests and trainers' compromise.

Considering the venue functioning, it would be mentioned the following success factors: trained staff; motivation and compromise of staff and empathy with users; understanding of local needs and reality; raise local participation and/or support; collaboration and association with similar venues—as happen with special libraries in certain subjects; capacity to demonstrate –through statistics or story telling- the impacts of the service; having a business plan, specially for those that are business; determination of core business or public (small entrepreneurs, kids that play certain kind of games or other special groups of clients); marketing.

### 5.2.3 Role of ICT

How can public access to information and communication venues in the country be strengthened to offer more meaningful and equitable access to information, especially using digital ICT?

Libraries are venues that have not ICT integrated as their main tool to offer information and communication services.

ICT could be a strong tool to improve services of public libraries, but they need to reorient their target group to population in general and develop staff capacities and contents.

Special libraries could play a relevant role providing meaningful information using ICT to develop web information services, with their actual contents reformatted.

#### 5.2.4 Top ten recommendations

What are the Top Ten recommendations for public access to information and communication venues in your country? Make sure you include policy recommendations as part of them.

1. Understand how would be cabinas engaged into programs of provision and facilitation of useful and appropriate information in collaboration with other venues.
2. Implement pilot programs that make cabinas a place to access information for development to solve underserved communities information needs.
3. Develop training programs on ICT use addressing special groups, as women, illiterates, non-Spanish speakers and older people.
4. Develop information systems for underserved groups.
5. Public libraries should be reoriented in order to become more than big school libraries and solve needs of population in general.
6. Develop regulations that allow public libraries to obtain and use external funds.
7. Asses and improve information systems usability.
8. Adequate information available at special libraries and governmental services to be appropriate for marginalized groups.
9. Continue with programs that enlarge rural access to Internet.
10. Improve diffusion and accessibility of special libraries.

## 6 Appendices

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Please attach on the next pages any other relevant information, resources or materials that can help understand public access information venues in the country.

### 6.1 List of Countries Included in the Research

Algeria
Argentina
Bangladesh
Brazil
Colombia
Costa Rica
Dominican Republic
Ecuador
Egypt
Georgia
Honduras
Indonesia
Kazakhstan
Kyrgyzstan
Malaysia
Moldova
Mongolia
Namibia
Nepal
Peru
Philippines
South Africa
Sri Lanka
Turkey
Uganda

## 6.2 Overview of Research Design

The Center for Information & Society (CIS), in partnership with the Information School of the University of Washington, has as part of its core mission the investigation of how inequities in our global society can be reduced through improved access to information and communication technologies (ICT). As part of its research activities, CIS has brought together interdisciplinary teams of researchers to examine the needs, readiness and success factors for public access to information and communication venues through digital ICTs in 24 countries around the world.

### *Project Goal:*

- Understand information needs, and opportunities to strengthen institutions that offer public access to information and communication, especially to underserved communities, and especially through the use of digital ICT: What are the needs, barriers, opportunities and success factors for public access to information and communication to help human development in countries around the world? For the purpose of this study, research is primarily focused on Libraries and Other institutional venues for which access to information has a significant role. This research includes understanding venues where digital ICT is currently offered, *and* also where ICT is not currently offered but there is potential and strong institutional support to include ICT (for example, some public libraries where digital ICT services are currently not offered, but there would be strong interest in offering them).

**Libraries** include public libraries and other types of libraries that are open to the public. **Other venues** include national initiatives that offer public access to information, either with ICTs (telecentres, cybercafés and the like) or without ICTs (post offices, community centers and similar) and are of significant importance in local contexts.

### *Project Purpose:*

- Inform policy and funding decisions: Inform funders and government decision makers about future program direction and funding allocations
- Contribute to public knowledge: Disseminate results of in-depth country and comparative analyses, including research design and analytical models

To inform project design, CIS adapted the Real Access framework (Bridges.org), analyzing public access to information and communication through a total of 14 research categories grouped under the dimensions of **Access**, **Capacity & Relevance** and **Enabling Environments**. Adaptation was done in consultation with research partners around the world for the purposes of this study.

The implementation of this project is organized as a two-phase process:

### *Phase 1: Nov 07 – Feb 15, 2008*

During Phase 1, a **Draft Country Report** will be prepared by local research teams in each country. The Draft Country Report includes a Country Profile, a Country Assessment and an early draft of Lessons & Recommendations.

The *Country Profile* is a collection of 50 general descriptive data points drawn from readily accessible sources; CIS pre-populates the reports for each country, and offers them for validation and comments by local teams. Country Profiles provide primarily statistical data that is intended to offer a quick snapshot of each country, including geography, political environment, demographics, economy, education and ICT infrastructure.

Using a common approach to define research processes, local teams will conduct initial fieldwork to inform a *Country Assessment*. The Country Assessment includes both a scan of information needs, especially for underserved communities; and an assessment of public access to information and



communication venues (with or without digital ICT services) and their environment, resulting in a better understanding of gaps, opportunities, and readiness of public access to information initiatives in each country.

During Phase 1, each country team will also complete an early draft of *Success Factors and Recommendations* focused on strengthening public access to information in the country, and identify potential themes and issues for further study in Phase 2.

#### **Phase 1b: Feb 15-Mar 15, 2008**

During this period, CIS will conduct a preliminary comparative analysis based on the Draft Country Reports from all participating countries, and suggest feedback and guidance for Phase 2 of the study. The comparative analysis will look for salient trends, emergent themes, patterns, and threads across regions. During this period, next steps will be determined for in-depth country research for Phase 2.

#### *Phase 2: March 2008 – August 15, 2008*

Phase 2 will involve a deeper assessment of public access to information and ICTs across all 24 countries. In particular, CIS is interested in deeper probing of the emerging themes and scenarios identified in Phase 1. A **Final Country Report** will include high level analysis, success factors and recommendations to strengthen public access to information and ICTs in each country. Final comparative analysis across countries, with analytical models and scenarios, will be completed by CIS after receiving the Final Country Reports.

Findings will be disseminated publically through reports, academic publications, conferences and consortiums. Each country team is expected to produce at least one publishable paper on their research and findings, plus additional papers emerging out of the comparative analysis and global findings. Publications will be part of the public domain, with the CIS web site, partners' sites, and other publication channels to be identified.

### **6.3 Annotated Country Profile (Form 2)**

Attach here an updated copy of the annotated Country Profile (Form 2).

## 6.4 Other Appendices

- Peru special libraries list (attached)
- Peru public libraries list (attached)
- Peru telecenters list (attached)
- Peru Web information services (attached)
- Peru users' survey (attached)
- Peru operator's survey (attached)
- Peru users and operators survey results