

GLOBAL INFORMATION SOCIETY WATCH 2008

Focus on access to infrastructure



Global Information Society Watch

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CAMEROON

PROTEGE QV

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www.protegeqv.org



Introduction

With a gross domestic product (GDP) of USD 2,300 per capita (UNDP, 2008) and a population of about 16 million, the Central African country of Cameroon (otherwise known as “Africa in a shell”) seems to have all the strengths necessary for a boom in the development and use of information and communications technologies (ICTs).

The country enjoys access to a fibre-optic backbone along the Chad-Cameroon pipeline, and a SAT-3 submarine cable landing point at the port city of Douala, with a capacity of 2.5 gigabits per second (Gbps) (MINPOSTEL, 2006). ICTs are seen by the government as a “miracle” tool able to stimulate growth, and the president defined the vision of a country “bracing up to adapt to the requirements of the information society” – which has included offering training for ICT specialists in higher education.

But the economic crisis faced by the country since the early 1990s has consequences for public investment, and influences people’s physical access to ICTs, their ability to afford them, and their capacity to use them. As the national policy for the development of ICTs notes, “despite...the quality of its human resources, and the political stability it enjoys, the country remains one in which ICT penetration and usage are relatively low” (NAICT, 2007).

Physical access to technology

Audiovisual

The signals of 33 public radio broadcasting stations, managed by Cameroon Radio and Television (CRTV), reach 85% of the country (NAICT, 2007), while 39 private radio stations and 26 community stations help in improving country coverage and the diversification of programming (MINPOSTEL, 2006). Cameroon has one public television station, six private television stations and more than 200 private cable distributors (NAICT, 2007).

Teledensity

In the past five years, mobile networks operated by two private operators, Mobile Telephony Network (MTN) and Orange Cameroon, and since 2006, Cameroon Network (or CAMNET, a public operator), have expanded very fast, with the mobile penetration rate increasing from 7.1% in 2003 (MINPOSTEL, 2006) to 22% today (Bambou, 2008). The fixed telephone network covers 107 localities, and is operated exclusively by the semi-public corporation Cameroon Telecommunications (CAMTEL) (MINPOSTEL, 2006).

Internet services

Since 1998, users have been connected by very small aperture terminal (VSAT) satellite, public switched telephone network (PSTN), or by wireless. About 25 internet service providers (ISPs) offer services like website hosting, email, forums and internet protocol (IP) telephony. Access to broadband services has been easier since 2005, with fibre-optic cable laid along the Chad-Cameroon pipeline (MINPOSTEL, 2006) and the link to the SAT-3 cable. CAMTEL, the exclusive provider of SAT-3 bandwidth, operates eight internet nodes (Lange, 2008) and provides access of two megabits per second (Mbps) to ISPs. Cameroon has no internet exchange point (IXP) (NAICT, 2007). To improve access in rural areas, the government has set up a project to equip more than 180 telecentres by 2008 (MINPOSTEL, 2006).

Infrastructure

Generally, public and private administrations do not have a rational approach to their information management systems (NAICT, 2007). But the Ministry of Finance has improved the collection, processing and preservation of data by operating integrated systems for the management of public finances (called SIGEFI), the salaries of state personnel (SIGIPES) and customs (SYDONIA).

Production and services industry

All ICT access and maintenance equipment is imported. However, many small and medium enterprises (SMEs) offer design, production and marketing services. Content production in the audiovisual sector is rudimentary, and much of it is pirated. Videos and DVDs sold for 1,000 CFA francs (about USD 2) per unit come from neighbouring Nigeria.

Table 1: Cameroon telecom market statistics 2006

Number of national telecom operators	1
Number of mobile operators	2 (now 3)*
Number of ISPs	approx. 25 plus many informal ones
Fixed-line penetration	0.6%
Mobile penetration	14.5%
Internet user penetration	1.4%
Internet subscriber penetration	<0.1%

*Updated by the authors

Source: Lange (2008), BuddeComm

Affordability

Access to equipment

Around 53% of the population lives in urban areas (Tetang Tchinda, 2007) and radio penetration is relatively high, with 75% of urban homes and 55.1% of rural ones owning a radio (MINPOSTEL, 2006). The average radio set is affordable, costing about USD 6. It can be used in areas without electricity and does not require any expertise. Listening to radio programmes in English, French and local languages is a very popular pastime for families.

The price of TV sets starts at about USD 80, depending on the type and features offered. The use of a TV set is quite common – 26% of households have one, compared to 14% in the sub-Saharan African region as a whole (World Bank, 2006).

A computer costs about USD 560, inaccessible to the majority in a country where 48% of the population lives below the poverty line. In 2006, there were only 1.1 computers per 100 persons (World Bank, 2006), and 66.2% of institutions have no computer (MINPOSTEL, 2006).

The growth of mobile telephony has been rapid. Kits comprising a mobile handset, a SIM card and about USD 2 in airtime are sold by operators at less than US 45. In 2006, there were 12.7 mobile phone subscribers per 100 people, compared to 13.5 in sub-Saharan Africa in general (World Bank, 2006).

Services

Radio and TV signals are broadcast free of charge. Very diverse programmes and packages are offered by the private cable distributors at different prices, from a minimum of USD 11 per month.

Connectivity to the internet is offered by public and private operators at about USD 68 per month for households. Internet services are also offered by different operators through wireless technologies, but at very expensive rates: code division multiple access (CDMA) is sold by CAMTEL at USD 225, “Livebox” by Orange at USD 450, and WiMAX by MTN at USD 326. Navigation on the internet is now possible through mobile phones, but it is also expensive (e.g., USD 2.70 per hour with CAMTEL during daytime hours).

As a consequence, 86.1% of internet users say they use cybercafés, as against 28.2% accessing the internet in their workplace or at home. The cost of access in cybercafés is about USD 0.67 per hour (the cost of two loaves of bread), and affordable to the majority.

In urban areas, voice over internet protocol (VoIP) services are offered for between USD 0.06 and USD 0.12 per minute for a call to the United States and Canada, making it more affordable than local calls.

Regarding fixed-line phones, the cable network has a total capacity of only 164,000 lines (NAICT, 2007). Residential telephone installation charges have been reduced to USD 90 since 2005 and the rate for local calls during peak hours is USD 0.04 per minute (MINPOSTEL, 2006). So-called “call boxes”,

or points managed by one person owning two or three mobile phones and offering call services at USD 0.22 per minute for local calls, are very common in urban areas: there were about 20,000 in 2005 (Nana Nzepa & Tankeu, 2005).

Human capacity and training

Apart from radio and television sets, which do not need specific skills to operate, people are trained either in the formal training system or by informal means to use ICTs.

Formal education system

In 2003 the Ministry of National Education passed a decree making ICTs an obligatory part of the curriculum. Consequently, the National Pedagogy Support Unit created in the ministry was in charge of ensuring capacity building for teachers, including through distance learning (Tetang Tchinda, 2007). However, a great majority of teachers in the educational system are computer illiterate.

While the formal educational system does not provide adequate training in ICTs, major achievements are noticeable; for example, the establishment of sixteen Multimedia Resources Centres (MRC) in universities and some schools, and the interconnection of six state universities.

In higher education institutions (public or private), such as the African Informatics Institute, Nsiantou Institute, Ndi Samba Institute, and the Yaoundé I, Buea and Douala Universities, and many others offering training for ICT specialists, graduates are either specialised technicians (G.C.E. A Level + 2/3), engineers (G.C.E. A level + 4/5), or bachelors or masters in computer sciences.

Other solutions

Many employees of libraries, hospitals, civil society organisations, government and business do not have basic technical skills to use ICTs in their daily work. According to the National Agency for Information and Communication Technologies (NAICT), with current national training capacities, Cameroon can train about 35 engineers and 300 technicians annually, more or less. At this rate, and unless strong action is taken, Cameroon will not be able to have a critical minimum of specialists to sustain wide-scale ICT development and deployment (NAICT, 2007).

To overcome the inadequacies of the formal educational system, and to meet current demands, many “rapid training centres” of various calibres have been set up and offer different curricula. Among them:

- PROTEGE QV provides e-learning initiatives through radio-based training for women entrepreneurs.¹
- ASAFE, a non-governmental organisation (NGO) located in Douala, seeks to advance and expand entrepreneurship among women by enabling them to access international markets.²

1 www.protegeqv.org

2 www.asafe.org

- Agence Universitaire de la Francophonie (AUF) offers distance learning programmes to university students and lecturers.³
- SchoolNet Cameroon is an NGO that engages in collaborative educational projects using ICTs.⁴
- UNDP/TICAD (Tokyo International Conference on African Development) are undertaking a joint initiative to close the digital divide by equipping schools and NGOs with refurbished computers.

The African Informatics Institute is also involved in a programme aimed at training 100,000 women by 2012, in partnership with the UNDP and the Ministry of Women's Affairs.

What hinders ICT take-up?

Economic situation: Since the economic crisis in the early 1990s, public spending on ICTs has not been optimal. The total telecommunications investment in 2005 was 16.8% of revenue, compared to 36.0% for sub-Saharan Africa (World Bank, 2006).

Unsuitable regulation: Regulation should normally facilitate competition, promote private initiatives and reduce prices. However, there is a monopoly in fixed-line telephony, and there is little space for small private sector initiatives to take root. Added to this, the regulator is not entirely independent: it reports to the ministry and a management board appointed by the head of state (Lange, 2008).

Market density: Due to the low purchasing power and low population density in rural areas, it is difficult for private operators to invest there.

Incomplete decentralization process: A complete transfer of decision-making authority to local governments would have stimulated each local council to develop its ICT sector in line with the need for local development.

Lack of real ICT manufacturing industry: The existence of a local ICT manufacturing industry would impact on the affordability of equipment and the integration of technology into the everyday lives of citizens.

Electricity availability: The access rate to electricity is high in urban areas – 89.8% in 2006 – compared to only 27.3% in rural areas. The grid, which is operated by AES Sonel, the national company, has regular outages, which can damage equipment.

Lack of sensitisation and training: For 22% of institutions (and most administrations) this is a major obstacle to the promotion of ICTs in Cameroon. Most students say they can afford ICTs, but because they do not know how to use them, they cannot benefit from them properly.

Costs of access to technology and services: A full 52% of institutions and more than 50% of professionals in the educational, health and civil society sectors agree that their low purchasing power constitutes a real obstacle to the

development of ICTs (MINPOSTEL, 2006). They also point out that there is an absence of political will to bring down prices, for instance, through lowering taxes. Most individuals (63.9%) think that poverty is a major factor blocking the development of ICTs in Cameroon (MINPOSTEL, 2006). According to a national survey on the level on penetration and usage of ICTs in Cameroon, an efficient strategy to reduce the costs of communication and equipment should include the reduction of taxes on goods and services in the sector.

The government says it is committed to reducing the cost of communication and ICT products (NAICT, 2007) by:

- Encouraging the setting up of multiple network operators with diversified products and services
- Reducing taxes and tariffs for the end-consumer
- Developing multiple access points and terminals.

Action steps

To expand the development and use of ICTs, the ministry in charge has set several objectives (MINPOSTEL, 2006). They include:

- Raising teledensity to 30% for fixed telephony and 50% for mobile telephony by 2015
- Achieving 100% radio and television coverage
- Reducing the cost of communications
- Implementing an effective infrastructure maintenance policy
- Raising the internet usage rate to 40% by 2015.

Our recommendations to improve access to ICTs coincide with some of these points. Our main points of action in order of priority are:

- Formulation and implementation of a suitable legal and regulatory framework to create a competitive environment
- Allocation of more funds to physical infrastructure in the public budget
- Reduction of customs and taxes on goods and services in this sector
- Training of personnel in use of ICTs
- Sensitisation of institutions to ICTs and popularisation of ICTs
- State subsidies to operators offering services in rural or remote areas
- The effective decentralisation of government to promote the provision of communication services at local levels. ■

³ www.foad.refer.org

⁴ www.iearn.org

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GLOBAL INFORMATION SOCIETY WATCH 2008 is the second in a series of yearly reports critically covering the state of the information society from the perspectives of civil society organisations across the world.

GLOBAL INFORMATION SOCIETY WATCH or **GISWatch** has three interrelated goals:

- **Surveying** the state of information and communication technology (ICT) policy at the local and global levels
- **Encouraging** critical debate
- **Strengthening** networking and advocacy for a just, inclusive information society.

Each year the report focuses on a particular theme. **GISWatch 2008** *focuses on access to infrastructure* and includes several thematic reports dealing with key access issues, an analysis of where global institutions stand on the access debate, a report looking at the state of indicators and access, six regional reports and 38 country reports.

GISWatch 2008 is a joint initiative of the Association for Progressive Communications (APC), the Humanist Institute for Cooperation with Developing Countries (Hivos) and the Third World Institute (ITeM).

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2008 Report

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