

ICT in Education in Chad

by Babacar Fall
May 2007



Source: *World Fact Book*¹

Please note:

This short *Country Report*, a result of a larger *infoDev*-supported *Survey of ICT in Education in Africa*, provides a general overview of current activities and issues related to ICT use in education in the country. The data presented here should be regarded as illustrative rather than exhaustive. ICT use in education is at a particularly dynamic stage in Africa; new developments and announcements happening on a daily basis somewhere on the continent. Therefore, these reports should be seen as “snapshots” that were current at the time they were taken; it is expected that certain facts and figures presented may become dated very quickly.

The findings, interpretations and conclusions expressed herein are entirely those of the author(s) and do not necessarily reflect the view of *infoDev*, the Donors of *infoDev*, the World Bank and its affiliated organizations, the Board of Executive Directors of the World Bank or the governments they represent. The World Bank cannot guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply on the part of the World Bank any judgment of the legal status of any territory or the endorsement or acceptance of such boundaries.

It is expected that individual *Country Reports* from the *Survey of ICT and Education in Africa* will be updated in an iterative process over time based on additional research and feedback received through the *infoDev* web site. For more information, and to suggest modifications to individual *Country Reports*, please see www.infodev.org/ict4edu-Africa.

Overview

Chad and its partners in development have adopted a 10-year strategy called Education and Training in Liaison with Employment (EFE), and the process for setting up a national ICT policy is underway.

Most of Chad's initiatives involve training and continued education through ICT. Although distance training is difficult, it is not impossible. New goals and initiatives are currently being explored by the national Ministry of Education to set up programmes to benefit both teachers and students. The main obstacle to overcome is the financial need.

Country Profile

Chad is a Sahelo-Saharan country of 1.28 million square kilometres. Located in the heart of Africa, Chad is bordered by Libya on the north, Sudan on the east, the Central African Republic on the south, and Niger, Nigeria, and Cameroon on the west. It is an isolated and landlocked country with a harsh climate. Its mineral-rich soil is a potential source of exploitation.²

There are many ethnic groups speaking various languages. The population live mainly in the south of the country with a density of 54 persons per square kilometres in the Logone River basin. In the north, a desert region that is larger than France, the density drops to 0.1 persons per square kilometre. The capital city N'Djaména is situated at the confluence of the Chari and Logone Rivers; it is cosmopolitan, with a current population nearing one million people.³

The majority of the population works in agriculture and livestock raising. Chad's main export products are cotton, livestock, and Arabic gum. Chad started exporting oil in 2004.⁴

Table 1 provides some selected economic indicators for the country.⁵

Table 1: Economic Indicators: Chad

Indicator	2000	2004	2005
Population			\$9.7 million
Gross National Income (US dollars)	\$1.5 billion	\$3.1 billion	\$3.9 billion
Gross National Income per capita (US dollars)	\$180.0	\$330.0	\$400.0
GDP (US dollars)	\$1.4 billion	\$4.3 billion	\$5.5 billion
GDP growth (annual %)	-0.4	29.5	5.6
Inflation, GDP deflator (annual %)	4.8	13.3	20.0

The Education System

Chad and its partners in development have adopted a 10-year strategy called Education and Training in Liaison with Employment (EFE). This strategy is based on an orientation plan adopted in May 1990. It defines options for Chad's economic and social policy for 2000, as well as the world declaration issued in Jomtien in March 1990.⁶

The education system is organised under the following categories.

Childhood Protection Programme

The Childhood Protection Programme combines three sub-programmes:

- Children and youth in dire straits
- Orphans and abandoned children
- Supervision of younger children: kindergarten for children aged three to five years

Elementary education

Elementary education is open to children between six and 11 years old and consists of six years of study (CP1, CP2, CE1, CE2, CM1, CM2). The cycle is completed upon the CEPE examination and an entrance exam that leads to junior high school.

Literacy

The offer of literacy is limited. In 2000, there were 113,856 learners.

General secondary education

General secondary education is taught in junior high schools and high schools. These schools are open to students who have passed their primary school exams.

Technical education, professional training, and employment

The availability of training is limited. The three main employment fields are auto repair, construction, and service work (over 80% of the total of technical and professional training).

Higher education

The training provision is limited and discriminatory. Higher education and scientific research has six institutions, two of which are new. In total, there are 6,765 students, with a low proportion of women (14.2%).

Table 2 provides a quantitative perspective of some selected system indicators.⁷

Table 2: Selected Education Data

Indicator	2000	2004
Primary school enrolment (% gross)*	66.7	71.0
Secondary school enrolment (% gross)*	11.0	15.1
Tertiary school enrolment (% gross)*	0.8	...
Ratio of girls to boys in primary and	55.4	58.0

secondary education (%)**		
Total adult literacy rate (% of people over 15)	...	25.7

*Percent of gross is the number enrolled as a percentage of the number in the eligible age group.

**Ratio of girls to boys is the percentage of girls to boys enrolled at primary and secondary levels in public and private schools.

ICT Policies

There is no formal ICT policy in Chad. However, there is a high level of awareness of the importance of this technology thanks to the Centre National d'Appui à la Recherche (CNAR), a branch of the Ministère de l'Enseignement Supérieur et de la Recherche Scientifique, a UNDP partner. CNAR co-ordinates national research and operates an e-mail service via a direct connection to UNDP in New York.⁸

A Telecommunication Act was promulgated on August 17, 1998. As a result, a new company was established to run basic telephony, namely the Société des Télécommunications du Tchad (SOTEL Tchad), which has been granted a five-year period of exclusivity. The Office Tchadien de Régulation des Telecommunications (OTRT) is responsible for regulating the telecommunication sector. SOTEL Tchad is expected to be privatised in 2001. CLTEL Tchad and Tchad Mobile are about to be launched. Internet access had not yet been liberalised as of 2006.

Infrastructure

- Chad has been connected to the World Wide Web since November 1997 through the Bagnolet Paris node. Additional nodes are expected in Moundou, Sarh, and Abeche. ChadNet, an affiliate of SOTEL Chad, exercised a monopoly over Internet service until 2006. The use of VoIP to maximise its satellite bandwidth has reduced connection fees by 25%. In 2003, Chad had around 60,000 Internet users, 3,000 of which were subscribers.
- N'Djamena has three cyber cafés, but they suffer from slow speed and frequent power cuts. The most constraining factor is the price for connection, FCFA100 (about USD\$0.20) per minute. Since it takes about 20 to 30 minutes to send an e-mail, the Internet is primarily reserved for the elite.⁹
- The fixed telephone network is monopolised by the public society SOTEL Chad. It has a network of 13,000 lines transmitted exclusively via satellite.

Table 3 provides a snapshot of the state of national ICT infrastructure in Chad.¹⁰

Table 3: ICT in Chad

Indicator	
Televisions per 1,000 people	1
Radios per 1,000 people	236

Fixed phone lines per 1,000 people	1
Cellular phones per 1,000 people	3
Personal computers per 1,000 people	1.6
Internet users per 1,000 people	4

ICT in Education

Inaugurated February 6, 2001, in the presence of Mme. Michele Gendreaux-Massaloux, Superintendent of the AUF, N'djamena's Centre of Access to Information has progressively been transformed into a francophone digital campus (CNF) which officially began running October 13, 2003. It is located in the University of N'Djamena Board of Education.

The CNF is equipped with three servers (DNS/Web, Backup, Parefeu) and 31 work stations distributed among the training and rooms, the Infotheque, the resource centre, and the administration offices. The following activities are carried out at the CNF:

- Training trainers to master techniques and concepts for the design of ICT projects
- ICT intensive and in-service training sessions for university staff
- Using the available platform to acquire on-line educational resources

Current ICT Initiatives and Projects

Distance education is important in the country for the following reasons:

- To upgrade and enhance the initial training that teachers receive
- To avoid having teachers miss classroom teaching time for training activities
- To respond to the needs for pedagogical training of the bulk of teachers, in particular assistant schoolmasters and community teachers
- To improve the teaching capacity of teachers in the primary and the first cycle of the general secondary
- To motivate educators and give them opportunities to work at their own pace

Ways and means are currently being explored by the National Ministry of Education to set up distance training to benefit both teachers and students. The main challenge is funding; it is hoped that the Programme to support the Renovation of Chad's Education Sector (PARSET) will be of assistance. This programme will provide certified in-service training to community teachers in some selected teacher training centres. Distance training will be the method used to ensure practical training of those teachers, supported by the Inspections of Basic Education (IEB), Centre of In-service Training (CFC), and Sectors for Teaching Support (SAP). It is hoped that the exploitation of Chad's petroleum resources will drive this vision to reality.

ENTP/ENTC

The National School of Public Works in N’Djamena (ENTP), along with the National School of Telecommunications (ENTC) in Sarh and the University of N’Djamena, are the principal institutions involved in ICT training.

The ENTP provides the following programmes:

- Basic training on the use of computers and computer tools: Windows
- Using word processing software: WINWORD
- Using spreadsheets: Excel level 1
- Using spreadsheets: Excel level 2
- Computer Assisted Drawing: Autocad level 1
- Computer Assisted Drawing: Autocad level 2

Africa Computing Association

In order to support local initiatives and to facilitate the acquisition and mastery of information technologies, the Africa Computing Association offers technical and personal capacity-building to African partners.

The Global Education and Learning Community¹¹

The Global Education and Learning Community (GELC), was created in March 2004 in collaboration with Sun Microsystems Inc. Its goal is to improve education in the entire world by offering teachers, students, and parents Web content with a free code source (study and evaluation programmes), combined with the best practices for improving academic achievement for students. GELC’s mission is to facilitate a first-rate education and encourage support and development of the community simply by clicking on a keyboard a mouse.

More specifically, this project focuses on developing ICT skills and local content and enhancing a national awareness of the role of ICT. This will be achieved using delivery strategies that demonstrate how ICT can support socio-economic development. The project is attaining its objectives and could easily last until 2015.

Implementing ICT in Education: What Helps and What Hinders?

Table 4 provides a summary of the current stage of ICT development in Chad in terms of enabling or constraining features in the education system.

Table 4: Factors Influencing ICT Adoption

Factors	Enabling Features	Constraining Features
<i>Policy framework and implementation</i>		There is no formal ICT policy in Chad.
<i>Advocacy leadership</i>	The Investments Code of 1987 is in the process of being	

Factors	Enabling Features	Constraining Features
	adjusted to fit the context of the Investments Charter of the CEMAC.	
<i>Gender equity</i>		Access between genders is unequal. The Internet is primarily reserved for the elite.
<i>Infrastructure and access</i>		There is insufficient development of computer technology resources. High costs continue to limit accessibility.
<i>Learning resources</i>		Available learning resources are still in need of development.

General References

Annual Statistics 99/00: Country Balance Statement for Chad, 2000. Demographic Survey of Health in Chad, 1997, and World Report on Human Development (IDH), 2002.

Economic and Social Context: UNDP and World Bank; ICT sector structure: ITU, WEF; ICT sector performance: Global Insight/WITSA, ITU, Netcraft, UNDESA, UNPAN, and World Bank. Produced by the Global Information and Communication Technologies Department and the Development Economics Data Group.

Observatoire des politiques des TIC en Afrique (<http://afrique.droits.apc.org>)

http://devdata.worldbank.org/ict/tcd_ict.pdf

<http://fr.wikipedia.org/wiki/Tchad>

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

<http://www2.unesco.org/wef/countryreports/tchad/contents.html>

<http://www.itu.int/partners/flash/index.asp?id=TCD>

http://www.novatech2006-proinvest.org/fiches_pays/Fiche_Tchad_Novatech.pdf

Notes

1. The World Factbook 2007. <https://www.cia.gov/cia/publications/factbook/geos/cd.html>
2. Republic of Chad National Action Plan of Universal Education (PAN/EPT) by the year 2015. Diagnostic and Strategies N'Djamena. September 2002.
3. Background Note: Chad. U.S. Department of State. <http://www.state.gov/r/pa/ei/bgn/37992.htm>
4. Tchad. Wikipédia. <http://fr.wikipedia.org/wiki/Tchad>
5. World Development Indicators 2006. The World Bank. <http://devdata.worldbank.org/external/CPProfile.asp?CCODE=TCD&PTYPE=CP>
6. Wayor, Moussa & al. L'évaluation de l'éducation pour tous à l'an 2000 : Tchad. UNESCO. <http://www2.unesco.org/wef/countryreports/tchad/contents.html>
7. World Development Indicators database. April 2006. <http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20535285~menuPK:1192694~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html>
8. Chad. United Nations Economic Commission for Africa (UNECA). http://www.uneca.org/aisi/nici/country_profiles/Chad/chadab.htm
9. Medjamia, T. Le Tchad-Présentation succincte du pays et de l'état actuel des TIC. 10 Décembre 2002. Africa Computing. <http://www.africacomputing.org/africaweb/article438.html>
10. ICT Policy Observatory in Africa, <http://afrique.droits.apc.org>

11. Connect the World: Chad. International Telecommunication Union (ITU).
<http://www.itu.int/partners/flash/index.asp?id=TCD>

Given the constantly changing nature of the Internet, we suggest that you copy the document or web site title (and author or organization name, as appropriate) of a resource below into your favorite search engine if a link on this page is not working.