

ICT in Education in Djibouti

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Source: World Fact Book¹

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.

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Overview

Djibouti boasting a digital telecommunications network and connections to the rest of the world through undersea optical fibre that are much admired in the region. Two-thirds of the population is urban, and ICT services are readily available in urban areas. The country has a good relationship with most western donors. All these factors support Djibouti's efforts to modernise their education sector.

With an ongoing reform programme, Djibouti has mostly focused on developing and improving the physical infrastructure and other non-ICT resources, including building new classrooms and providing textbooks. In higher education, a key focus has been on producing skilled teachers and encouraging out-of-school youths to get vocational training. At a policy level, ICT is a component of the national ICT policy, which was developed by the Ministry of Communication. Djibouti needs a sector-specific policy for the adoption of ICT in education, together with an implementation plan that will take advantage of the available enablers including the telecommunication network.

Country Profile

Djibouti is strategically located on the northeast coast of the Horn of Africa, separating the Red Sea from the Gulf of Aden. Small in size, Djibouti is bordered by Eritrea to the north, Ethiopia to the west and southwest, and Somalia to the south. The country is one of the newest in Africa having gained independence from the French in 1977, changing its name from the French Somaliland to Djibouti.

Djibouti covers a land mass of 23,000 square kilometres with a 370 kilometre coast line. The economy is based on service activities connected with the country's strategic location and status as a free trade zone in northeast Africa. Two-thirds of the inhabitants live in the capital city; the remainder are mostly nomadic herders. Scanty rainfall limits crop production to fruits and vegetables, and most food must be imported. Djibouti provides services as both a transit port for the region and an international transshipment and refuelling centre.

Table 1 provides some selected socio-economic indicators for the country.^{1,2}

Table 1: Socio-economic Indicators: Djibouti

Indicator	
Population	779,000
Languages	French, Arabic, Somali, and Afar
GDP per capita (US dollars)	\$1000 (2005)
Human Development Index	Position 148 out of 177
Human Poverty Index	52 (out of 102 countries)
Expenditure on education (% of GDP)	20.5%

The Education System

The education sector is a priority for the Djiboutian government, accounting for 20.5% of its budget. The policy for the education system and its plan of action for 2006-2008 comply with two targets of the Millennium Development Goals (MDGs): to ensure that by 2015 children everywhere will be able to complete a full course of primary schooling and that girls and boys will have equal access to all levels of education.

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

Table 2: Selected Education Statistics

Indicator	
Net primary enrolment	39% (2004)
Net secondary enrolment	22% (2004)
Gross tertiary enrolment	2% (2004)
Adult literacy	67.9%

The Djibouti educational system was originally developed to meet a limited demand for education. It is essentially elitist in its design and borrows heavily from the French system, which stood isolated from its environment and was not adapted to the country's realities. Efforts deployed during the 1990s have resulted in an increase in enrolment, but it is still below people's expectations and the needs of a developing nation.

In 1999 the government revisited its educational policies and launched a consultative process that included all players (administration, teachers, parents, national assembly, and NGOs). The process led to wide consensus regarding the sources of the problems and recommendations for the policies needed to address them. Building on the consensus and the recommendations that followed, the government developed a 10-year master plan for education (2000-10). In August 2000 it passed an Education Planning Act and prepared a medium-term plan of action (2000-05).³

The Education Planning Act represents a considerable departure from the old system. A restructured fundamental education system comprised of nine years (five years of primary education followed by four years of middle school) is now mandatory. Entry into the secondary educational system of three years requires a Certificate of Fundamental Education. The Act has also introduced secondary-level vocational education and has established university facilities in Djibouti.

Since the medium-term development plan and the Planning Act were implemented, noticeable progress has been achieved at all levels of education, thanks to the mobilisation of external and internal resources for the financing of construction, equipment purchases, and teacher recruitment.

Government strategy covers basic education, vocational education, secondary education, higher education, adult education and, in particular, women's literacy. Specifically, every field of intervention focuses on five strategic objectives aimed at improving and strengthening access: equity, quality of education, institutional capabilities, managerial capabilities, and partnerships.

There are 81 public primary schools in the country, 24 registered private primary schools, 12 secondary schools and two vocational schools. An estimated 73% of eligible primary school children do not attend school.^{4,5} Only 8% of first graders will eventually reach the 12th grade. Girls' enrolment is more than 10% lower than that of boys.

Teacher attrition is very high and new teachers are scarce. The local teacher-training institute is unable to graduate more than 130 teachers per year. Textbooks are inadequate and there are not enough of them: on average, 20 primary school students will share a math textbook and three will share a French text. Several international agencies have come in to assist the Ministry of Education with its reform programme which aims at improving access and the quality of education. Some of the organisations involved in the Djibouti education sector include USAID, UNICEF, and the French government through the framework partnership between France and Djibouti.⁶

Infrastructure

National

Djibouti has an almost unique telecommunications network in Africa, with two earth stations and a landing point of three submarine cables linking Asia to the Middle East and Europe that gives it a key role as master station and traffic node. However, the country has not benefited from these assets. Telecommunications traffic and revenues have remained lacklustre for over a decade because of high tariffs and considerable delays in introducing new products.

The institutional and regulatory framework that governs this activity has not evolved either, in spite of major changes and transformations (liberalisation, privatisation, regulation) at the international level. Since ICTs are essential to the country's competitiveness and to its fight against poverty, the Ministry of Communication and Culture, which is in charge of posts and telecommunications, conducted an ICT awareness campaign beginning in May 2002. This resulted in a broad consensus and helped develop guidelines for a national policy on new technologies.^{7,8} The main objectives are to:

- Increase access to the new ICT services
- Further reduce telecommunication costs in order to increase Djibouti's external competitiveness
- Strengthen the role of telecommunications as a regional integration factor
- Fight poverty and promote employment by developing activities linked to ICT

The strategy was adopted by the counsel of ministers followed by the parliament. Its 10 objectives are as follows:

- Universal access (means of access for all to ICTs)
- Increased capabilities in human and logistical resources, especially in the field of education and research
- Modernisation of the state administrative apparatus
- Strengthening of institutional, legal, and governance capabilities
- Increased use of ICT capabilities to help grow the private sector and create a regional hub
- Development of digital content as well as Djibouti's Web presence
- Modernisation and strengthening of the public health care system
- Management of the environment, disasters, famines, and other ills using ICT
- General motivational activities to strengthen the ICT sector action plan
- Research development.

This 20-year ICT strategy, together with an action plan of over 30 projects, is meant to help transform the country while trying to deal with the fundamental issues of poverty, literacy, access to education and health services, and community development (community access centres and community radio) as well as the challenge of transforming and modernising the economy, government, and society in general using ICTs.⁹

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

Table 3: ICT in Djibouti

ICT	
Telephone lines	11,100 (2004)
Mobile subscribers	34,500 (2004)
Internet users	9,000 (2005)
Internet hosts	1,540 (2006)
Television stations	1
Radio stations	FM 2, AM 1 (2001)

Education

Although ICT has been recognised as a critical tool in modernising the education sector to cater for the diverse human resource needs for the country, Djibouti has yet to develop a sector-specific ICT for education policy. In its sectoral strategies for the Poverty Reduction Strategy, the country has committed to establishing a health and education network, improve the connectivity and build ICT training facilities at the university, implement a video-conferencing system, and strengthen the CISCO Academy and the SchoolNet project.³

The ministry also has made capacity-building a priority for teachers in the use of ICT through the National Education and ICT project and the automation of the ministry itself. There is also movement from the secondary school level to the national university. At the secondary school

level some schools, through donors and NGOs, have managed to equip computer labs and establish connectivity provided by the telecom incumbent Djibouti Telecom.¹⁰

Current ICT Initiatives and Projects

It is difficult to establish the exact number of the various projects and state of their implementation due to the scarcity of information. Communication with the respective Djibouti ministries was difficult from both Kenya and Tanzania.

Djibouti Assistance to Education Project (AIDE)

USAID Djibouti Assistance to Education Project, also known by its French name Project AIDE (Assistance Internationale pour le Développement de l'Éducation), is a three-year effort to improve student learning. The objective will be pursued through three separate but interlocking sets of interventions linked directly to the three intermediate results of increased access to basic education, improved quality of teaching and learning, and increased opportunities for girls' education. The SchoolNet and Cisco Academy initiatives fall under this project.

Through this project USAID donated 40 computers, printers and UPS's to four schools in rural Djibouti. Djibouti Telecom, a partner in the project and the national telecommunications service provider, deployed local area networks and provided Internet connectivity to four schools.

For more information: www.usaid.gov/stories/djibouti/pc_dj_computers.html and www.equip123.net/webarticles/anmviewer.asp?a=70&z=16

AVU/AfDB Teacher Training

Djibouti is one of the beneficiaries of the AVU/African Development Bank (AfDB)/NEPAD, which initiated a teacher education programme that commenced in 2006. The programme revolves around the use of ICTs both in and across the curriculum, with a particular focus on mathematics and science education. The use of ICTs across the teaching curriculum will greatly contribute to improving the quality and increase the number of teachers through flexible delivery using open, distance, and e- learning methodologies at an affordable cost for diploma, undergraduate, and graduate levels.

For more information: www.avu.org/documents/Fact-Sheet.pdf

Education Radio Programmes

In order to increase access and quality of education, the National Education Production Information and Research Centre (in French, Centre de recherche d'information et de production de l'éducation nationale), through its School Radio project develops educational content that is broadcast through Djibouti Radio once a week. These programmes are mainly aired in French and cover secondary school subjects such as mathematics and science. Some of these programmes are also targeted to out-of-school youths.

For more information: www.education.gov.dj/cripen/index.htm, and http://educationsystems-international.dipf.de/bi_set_e.html?Id=4810.

Implementing ICT in Education: What Helps and What Hinders?

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

Table 4: ICT Initiatives and Projects

Factor	Enabling Features	Constraining Features
<i>Policy framework</i>		Djibouti does not have an ICT for education policy. All the ICT work and implementation that currently exists is a result of the national ICT policy which is not sector specific. Most of the initiatives are ad hoc and not guided by detailed policy with a SMART implementation plan.
<i>Infrastructure and access</i>	Djibouti has a relatively good telecommunications infrastructure including landing stations for submarine fibre optic cable and a couple of earth stations.	Access to ICT in Djibouti is complicated by the cost of access, especially for bandwidth. Despite having one of the best telecom networks in the region, the cost of connectivity is very high and out of reach of many, including schools and educational institutions. There is only one telecommunications service provider, Djibouti Telecom, which creates a monopolistic market for fixed lines, mobile, and Internet.
<i>Urban population</i>	Almost 70% of the population is urban, and most of the ICT services and supplies are concentrated in the urban areas.	
<i>Gender equity</i>	The government and its development partners have consciously put in place strategies to increase access for girls and women to quality education. In 2005 USAID provided support to expand opportunities for girls' education by providing incentives to schools for promoting girls' participation and by supporting and expanding existing literacy centres in targeted areas and funding ICT programmes focused on girls' adolescent health and social concerns. ¹¹	
<i>Resources to invest in ICT</i>		Despite having an urban population and a good telecommunications

		network, Djibouti is one of the poorest countries of the world, which means resources in the education sector are focused on constructing new classrooms, and funding textbooks and teacher-training. ICT has to compete with these very visible and fundable priorities.
<i>Skills and capacity to utilise ICT</i>		ICT skills are low, especially in the education sector where there is scarcity of teachers.
<i>Donor friendly</i>	Djibouti has good relations with most of the development partners from the West, including the EU and the US. With a good ICT for education policy in place, the country can easily win support to implement it.	

Notes

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