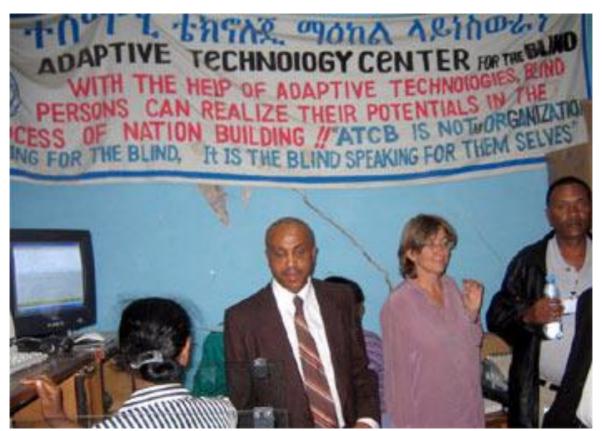# ADAPTIVE TECHNOLOGY CENTER FOR THE BLIND

PROVIDING VISUALLY IMPAIRED ETHIOPIANS WITH INTERNET ACCESS AND ICT TRAINING

Adaptive Technology Center for the Blind, Addis Ababa. Photo credit: UNESCO

EXECUTIVE SUMMARY

The International Telecommunication Union (ITU) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) launched the Adaptive Technology Center for the Blind (ATCB) in 2003 in Addis Ababa, Ethiopia to provide access to information and communication technologies for the blind and visually impaired people. The ITU and ATCB provided the training equipment and software that produces Braille by computerized embossers to its users for the first two years. The center is now a non-profit resource and information technology center open to all visually impaired Ethiopians.

Keywords: accessibility, skills training, Ethiopia

CONTEXT

Ethiopia is one of the world's untouched telecom markets, with complete state control over Internet access. Ethio Telecom is the sole provider of Internet access in the country. Mobile phone penetration is close to 40 percent, well below the continent-wide average of 75 percent. Less than 2 percent of the Ethiopians have access to fixed line internet connections.

According to the United States-based International Eye Foundation (IEF), there are about 45 million blind people in the world, the vast majority of them living in Africa. In Ethiopia, the latest census indicates that there are well over 500,000 blind people in the country. In June 2000, ATCB was established to bring information accessibility to the blind and visually impaired people in Ethiopia.

Ethiopia			
Population (UN, 2015)	98,942,102	**Fixed broadband subscriptions (%) (ITU, 2016)**	0.55
Population density (people per sq. km) (UN, 2015)	89.6	**Mobile cellular subscriptions (%) (ITU, 2016)**	50.51
Median household income (Gallup, 2006-2012)	N/A	**Individuals using the Internet (%) (ITU, 2016)**	15.4
Education (mean years of schooling) (UNDP, 2013)	Male: 3.6 Female: 2.4	**Individuals using the Internet by gender (%) (ITU, 2016)**	N/A

PROJECT DESCRIPTION

In 2003, UNESCO built partnership with ATCB to support their efforts with the blind and visually impaired in Ethiopia, and to draw attention to the blind-focused initiatives in Africa. The Adaptive Technology Center for the Blind set up the Pioneers Collegiate for the Blind, which trains blind and visually challenged users through vocational training in basic computer skills. In 2008, the Center received a license to operate as a Technical Vocational and Education Training (TVET) institute. Each year, a cohort of 20-30 students graduates from this institute.

The Center also has a Braille Transcription Center that has converted over 2000 text books and other literature into both English and Amharic text. It is collaborating with the Global Digital Resource Libraries to make online information accessible to visually challenged individuals.

Additionally, the Adaptive Technology Center for the Blind also organizes workshops in collaboration with the International Telecommunications Union, UNESCO, and Internet Society to spread awareness and engage in local capacity building in assistive technologies.

The Adaptive Technology Center for the Blind has also set up an Internet café at a central location in Addis Ababa, which has over 10 computers that are equipped with adaptive technologies and text-to-speech translation software that enables visually challenged users to utilize the Internet at their ease.

Project Details			
Technology	Braille Embossers	**Training**	Training in use of ICTs for visually impaired people
Year program started	2000	**Cost to users**	Modest fees for use of computers
Geography	Urban	**Total cost of program**	Not disclosed
User profile	Visually impaired people of all ages	**Associated organizations**	UNESCO, ITU

PROGRESS AND RESULTS

The Adaptive Technology Center for the Blind has trained more than 200 visually challenged people in basic computer skills. Since 2008, a cohort with an average of about 25 students has graduated from the Pioneer Collegiate.

CHALLENGES

Regulatory challenges – The Ethiopian government requires all internet access centers to be licensed under the law. Bureaucratic hurdles involved in petitioning the appropriate agency for the grant of such license exist, which consumes time and delays the deployment of cyber cafés. Further, there is no clear policy on both the Federal and Regional levels that addresses the rights of the blind and visually impaired to information accessibility and other opportunities

Lack of skilled manpower – IT administrators and technicians trained in adaptive technologies to aid users are in short supply, which delays staffing for the maintenance of initiatives for the integrated internet access center.

ATCB'S SUGGESTIONS FOR FUTURE PROJECTS

Capacity building is key – ATCB conducts a course for trainers and students at five technical schools across Ethiopia. Proceeds from the sale of Braille publications such as training manuals, newspapers and other materials, as well as fees and charges from individuals and organizations contribute to sustaining the initiative In order to expand the existing ICT services for beneficiaries, and to make sure that the vision and mission of ATCB are glued, ATCB engages in consultations with policy makers, project-partners and curriculum designers through regular workshops and individual mentoring.

SOURCE

Project website: http://www3.sympatico.ca/tamru/