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The Internet comes to Africa

The Internet is now alive in most urban parts of Africa, and what a difference it makes for visitors. My family spent 2 years in Egypt during the pre-Internet era, and the isolation was intense. The local papers were heavily censored and international papers arrived a week late, TV programs were available only in Arabic and round-trip mail to and from Canada took at least a month. The *BBC World Service* on shortwave was my only real-time link with the Western world.

Fast forward a few years. Today we live in Harare, Zimbabwe, and can watch CNN or the BBC anytime, and through the Internet the world is at our fingertips and friends and family are but a mouse click away. I still listen to my shortwave radio, but only for pleasure — it is now an artifact.

Of the world's 150 million Internet users, about 800 000, or 0.5%, are in Africa, and 95% of these are in South Africa. Zimbabwe is third in continental Internet use, with about 10 000 users (0.1% of the population). Comparable guesstimates for usage in Canada range from 5 to 9 million people, and 15% to 30% of the population.

Here in Africa you don't surf the net — you wade through it. In Zimbabwe there are major technical limitations, since local telephone connections and networks are notoriously unreliable. As well, maximum data transmission rates are painfully slow — 9600 bps — outside the cities. All Internet activity in Zimbabwe is provided by 2 T1 satellite links, which is very tiny considering the number of users. The result? Internet applications such as audio or video are es-

sentially unusable, and downloading software applications from the Net is seldom successful because of frequent line interruptions.

A year of unlimited Internet service in Zimbabwe costs about \$300, plus local phone charges of 2 cents per minute. This is approximately equal to the annual pay of a local worker earning the minimum wage. Computer equipment is subject to high import duties and is much more expensive than in Canada, and this effectively excludes 99% of Zimbabweans from the Internet. Most Africans are concerned about having enough to eat and worry little about choosing the best Internet service provider. The digital revolution has indeed opened the vast world of Internet information to Africa, but only to the rich and privileged. Ironically, this availability actually widens the already huge gulf between rich and

The Internet has great potential for providing medical information here, but little of it is being realized. The medical library at the University of Zimbabwe has 4 computer access points and has been online for a year. However, equipment failures, shortages of computer parts and a collapsing Zimbabwean dollar mean that the system has been down and offline for 10 of these 12 months. It is not functioning as I write this and when it will again is anybody's guess. However, computers have been a real boon to the local medical library because of cheap and up-to-date CD-ROM reference materials.

Of course, Africa's communication king is still the printed page. After all, when you are sitting on the floor of a bedroom you share with 3 others, and a candle is your only source of light, reading is a real possibility but the Internet remains a dream.

For all of the Stanleys and Livingstons anxious to explore the Dark Continent, an excellent general starting point is Africa South of the Sahara, from the Electronic Technology Group of the African Studies Association (www-sul.stanford.edu/depts /ssrg/africa/guide.html). It catalogues and links to many African Internet sites by topic and region. The Electronic African Bookworm (www.hanszell.co.uk/navtitle.htm) is a Web navigator leading to African literature and newspapers. Neither site originates in Africa, and the same holds true for sites on African tropical diseases. Bodies such as the CDC and WHO have excellent Internet resources, but consider beginning your tour of Africa at the University of Zambia Medical Library (www .medguide.org.zm). This is a terrific launchpad for searches with an African flavour, and this well-maintained site offers a glimpse of the future of the Internet in Africa. — Dr. Garth Dickinson, garth@icon.co.zw

