



INFORMATION AND COMMUNICATION TECHNOLOGY: AN HISTORIC DIVIDE, AN HISTORIC OPPORTUNITY

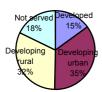
FIXED PHONE TELEPHONY: THE FIRST BIG COMMUNICATIONS TOOL

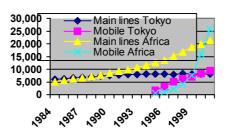
The glaring gap in telecommunications access between developed and developing countries was first exposed in a ground-breaking ITU report, "The Missing Link" in 1984. Since then, boosting telecommunications coverage in underserved economies has been a top global priority for governments and international agencies. In two decades enormous progress in fixed phone infrastructure has been achieved.

- Fixed telephone lines in developing countries make up 43% of the world's total today, up from 12% in 1984
- In the last four years 1.5 billion phone lines were added to the billion laid in the all the years before
- Three out of four new telephone users are in the developing world

Yet...

- Fewer than 3% of all Africans can access telecommunications of any kind
- Of 1.5 billion families worldwide, one-third have only poor access to telecommunications
- Only one in 39 Africans had a fixed line phone in 2001





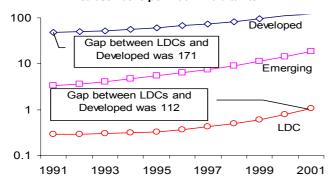
THE MOBILE MIRACLE: BY 2002 MOBILE ECLIPSES FIXED

Mobile phones captured the world's attention by the millennium thanks to their portability and other services like short-messaging. Their low-cost, quick installation and wide reach appealed to emerging economies with little or no infrastructure and led to more callers doing so on-the-go than from stationary phones.

- Between 1992 and 2002, mobile users in developing nations soared from 3 million to over 530 million
- In China, there are 5 million new mobile phone users each month
- Mobile phones have a density of five times more than fixed line phones in Morocco, Cameroon and Uganda
- 75 million short messages are sent a day in the Philippines

But... only one in 35 Africans had a mobile phone in 2001

Total telephone (fixed-line + mobile) subscribers per 100 inhabitants



THE LATE '80s: PCs PAVE WAY FOR OTHER TECHNOLOGIES

By the late '80s computers emerged in richer countries as a powerful tool for data retention, word processing, spreadsheets and presentations. They also served as the gateway for acquiring basic computer skills and Internet access. Some benchmarks:

- PC numbers shot up more than fourfold from 1992 to 2002 to 586 million
- The number of PCs in developing countries soared 12-fold to 157 million, over that time

Still

- Only 27% of developing country residents has a personal computer
- In India, touted for its software developing prowess, well under 1% of the population has a computer
- A paltry one in 130 Africans had a computer in 2001

That's why a new divide emerged in the '90s reflecting a scarcity of computers, Internet access and technology training. The world recognized that the most impoverished economies were missing out on the economic and social benefits of such powerful knowledge-based tools.

THE '90s: INTERNET REVOLUTIONIZES WORK, SCHOOL, PLAY

The Internet, trailed by its offshoot, the Web, revolutionized work, home and entertainment as data and images shot across the world in seconds. Its creation brought about new ways of teaching, selling and exchanging information. Some milestones:

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- Internet users worldwide have almost tripled, from just over 200 million at the start of 2000 to more than 600 million in 2002 with two billion projected by 2005
- Internet users in low-income countries from 2001 to 2002 more than doubled, for the highest global growth rates.
- E-commerce is growing by 35% a year while trade growth is only 4-5%

But...

- Internet penetration touches only 1% in the world's poorest countries
- Only around one third of developing country inhabitants are Internet users
- One in 160 Africans used the Internet in 2001
- 1 million villages around the world are unconnected.

A HIGH-SPEED CENTURY: BROADBAND ENABLES TRUE TELE-WORKING, EDUCATION, MEDICINE

Much of the latest buzz has been around broadband, the high-speed version of the Internet. Its lighting-fast delivery of images, video and data enables doctors, teachers and colleagues to work together in real-time across the world. It also significantly cuts the costs of communication through the bigger bandwidth it brings.

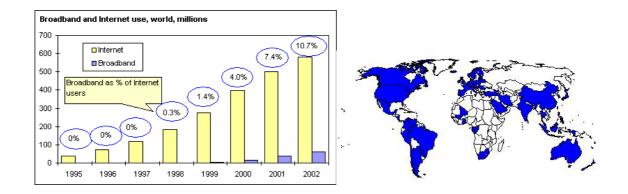
Wireless broadband, which is less costly and cumbersome to install than traditional copper holds great promise for countries with little or no telecommunications infrastructure. The digital world allows them to leapfrog into the heart of the information society. New "Wi-Fi" technologies have a longer reach and could potentially cover unconnected pockets of underserved economies.

Some success stories:

- Broadband subscribers shot up 72% in 2002, led-by Asia
- Korea, Hong Kong, China, Taiwan and Japan are four of the world's top ten broadband economies
- Pockets of wireless broadband are popping up in India, Brazil, China, Mongolia, Bangladesh and Cameroon
- Broadband connections are expected to grow to 159 million by 2007 from 4 million in 1999.

But...

- Only 1% of the world, or 10% of all Internet users do so at high-speeds
- 94% of subscribers are in high-income countries
- At end-2002 commercial broadband services were only available in about 82 of 200 economies
- The 400,000 citizens of Luxembourg share more international Internet bandwidth than Africa's 760 million citizens



<u>In sum</u>, powerful information and communication technology tools have great potential to improve lives and boost peace and prosperity across the planet if their use is shaped for an information society.

A few human examples are:

- Senegalese doctors swapping vital medical information on primary care, surgery and obstetrics.via a telemedicine network linking hospitals
- The 3500-strong members of the African Women's Business Association marketing their products and services worldwide through a wireless system
- Rapid epidemic and crop disease diagnosis in remote villages in India through e-mail and video conferencing through a low-cost Internet kiosk kit
- South Africa shantytown residents selling sandals using rubber from discarded tires over the Ecosandals.com portal
- Faster traditional mail delivery in Bhutan's remote rural regions through hybrid postal services building on the Internet
- Hong Kong's government short-messaging health updates
- Vietnamese businesses perusing legal documents, economic data, and the latest trade news via the country's Global Electronic Commerce Portal
- Coffee and sugar cane farmers in India bypassing middlemen, set fair prices, sell their goods and stay abreast of agro-news via online databases
- Rural Bolivian residents accessing cash through an ATM services system using smart cards spearheaded by NGO Prodem FFP