# The Status of Teleaccess: Inside Africa

**Teleaccess** encapsulates how people communicate using fixed-line telephones, mobile telephones, and the Internet. Teleaccess underpins the development of an information-based society and its indicators help to map the contours of the 'digital divide' challenge to connect every village in the world through at least one of these information and communication technologies (ICTs) before the World Summit on the Information Society (WSIS) — by 2005.

This map shows the current status of connectivity for people in Africa, depicting fixed lines, mobile and local Internet access superimposed on population density. It shows the geographic and cultural patterns of ICT penetration and uptake in Africa, and helps to identify areas of high population density that remain unconnected.

The circle in each country represents fixed lines. The size of the circle indicates, to exact size, teledensity in each country. The pie chart shows the split of fixed lines between the largest city (darker segment) and the rest of the country. The blue areas show the geographic extent of mobile GSM coverage. The small red and green dots show the locations of Internet points of presence (POPs) where Internet service providers have installed equipment for local access. The dots indicate at least one publicly accessible POP in the city or town, and do not include Internet access for private VSAT connections.

A total of 226 secondary cities and towns are now 'online' in Africa. Mobile subscribers have surpassed fixed lines (about 24m vs 20m in 2001) and mobile coverage has generally spread beyond the reach of fixed-line infrastructure. In most cases, fixed lines are concentrated in the capital city, leaving the vast majority of villages unconnected for Internet access due to the high cost of using mobile GSM phones. Internet growth is constrained by both these factors as well as the extent of the electricity grid, the availability of computer equipment, and low levels of literacy. Diversity of languages is also an important factor as there is little locally developed content — a 'chicken and egg' factor that will hopefully be addressed by the growing number of e-government and indigenous content development initiatives. Cost is still the key issue: with low incomes per head, in many countries the bulk of users who can afford a computer, telephone, and ISP subscription have already obtained connectivity.
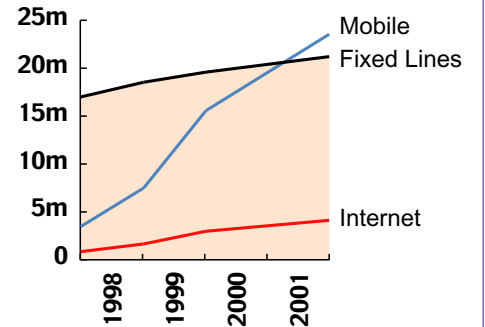
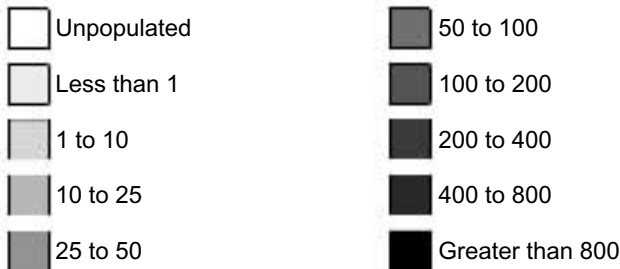## GSM coverage

- Mobile (GSM) coverage

## Internet POPs

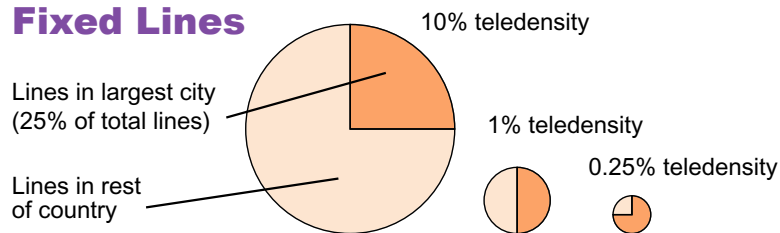- Internet POPs
- Internet POPs, with nationwide local dialup tariff

## Uptake of ICTs



Mobile
Fixed Lines
Internet

25m / 20m / 15m / 10m / 5m / 0

1998 1999 2000 2001

## Population per km²

- Unpopulated
- Less than 1
- 1 to 10
- 10 to 25
- 25 to 50
- 50 to 100
- 100 to 200
- 200 to 400
- 400 to 800
- Greater than 800

## Fixed Lines

10% teledensity

Lines in largest city (25% of total lines)
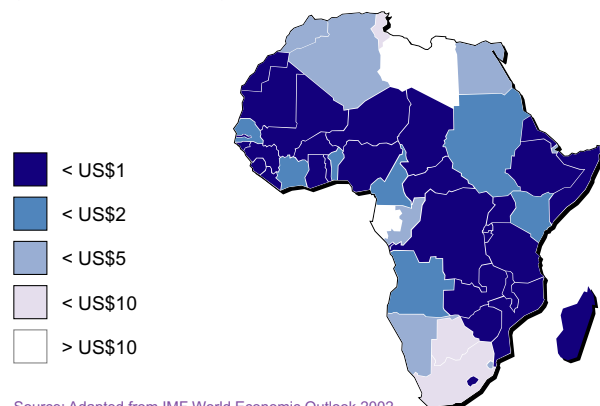
Lines in rest of country

1% teledensity

0.25% teledensity

Size of circle represents teledensity. Pie chart shows split of main lines between largest city and rest of country. Does not include payphones. Pie charts are not included for countries where data on lines in largest city is not available.
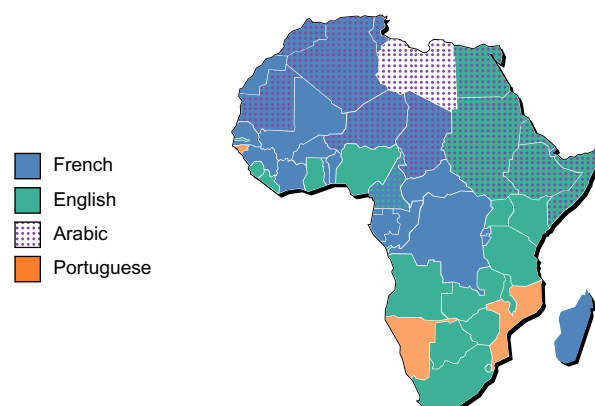


Sources: ESRI, GSM Association, ITU, Mike Jensen.

## Poverty
(GDP per capita per day)

- < US$1
- < US$2
- < US$5
- < US$10
- > US$10

Source: Adapted from IMF World Economic Outlook 2002

## Languages
(Official or main lingua franca languages)

- French
- English
- Arabic
- Portuguese

## Adult illiteracy rates
(% age 15 years and above)

- 50% and more
- 30% to 50%
- 10% to < 30%
- less than 10%
- data not available
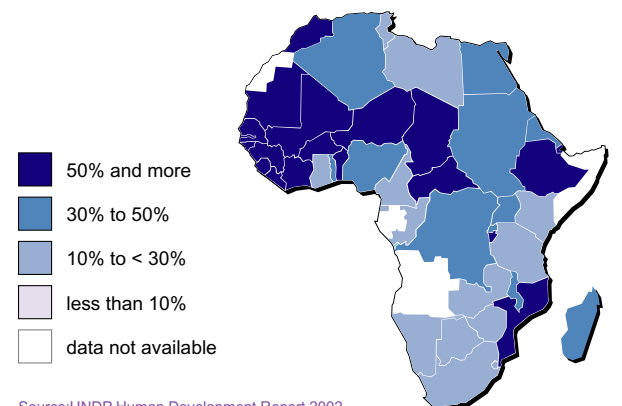
Source: UNDP Human Development Report 2002
UNESCO Institute for Statistics, estimates July 2002

IDRC ✳ CRDI            Acacia            www.idrc.ca/acacia            Canada