



**review of recent opportunities and challenges in  
developing and deploying the ultra low-cost handset  
Bruxelles, December 6, 2005**

# **Evaluating the cost of the handset and mobile telephony as a barrier to uptake**

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The views expressed in this presentation are those of the author and may not necessarily reflect the opinions of the ITU or its membership

# ITU



- o founded in 1865
- o an impartial, international organization that helps governments and the private sector to work together to coordinate the operation of telecommunication networks and services, and to advance the development of communications technology
- o 189 member states and over 600 (primarily private) sector members

## helping the world to communicate



- o as a United Nations agency, the ITU has an obligation to produce statistics covering its sector. This is in line with other specialized agencies that publish statistics covering their respective field of operations. This forms part of the global statistical system of the UN.
- o inside ITU, it has been called upon "...to survey countries and produce world and regional reports, in particular on...world telecommunication developments."

# data collection



## how?

- o two Telecommunication Indicator Questionnaires per year addressed to government agencies in charge of ICT/telecom, or operator
- o online research
- o annual reports

## what?

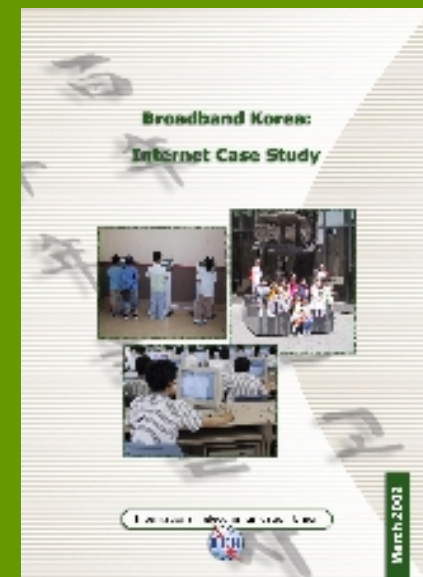
- o telephone network
- o mobile services
- o traffic/tariff
- o quality of service/staff
- o revenues & investment
- o broadcasting
- o information technology
  - pc
  - internet subscribers/users
  - broadband/bandwidth

data is entered into the World Telecommunication Indicators Database

# beyond statistics



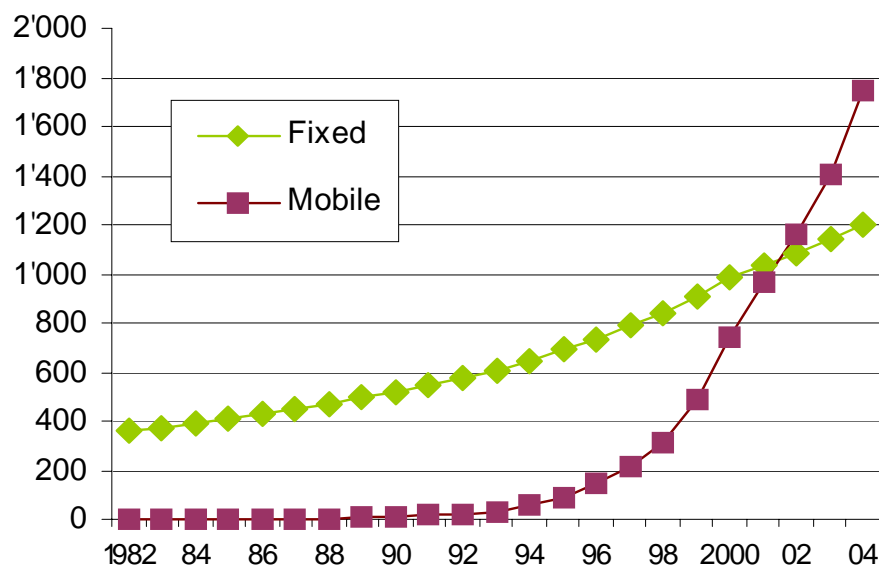
- world telecommunication development report
- regional reports on ict/telecom developments
- case studies ([www.itu.int/ict/cs](http://www.itu.int/ict/cs))



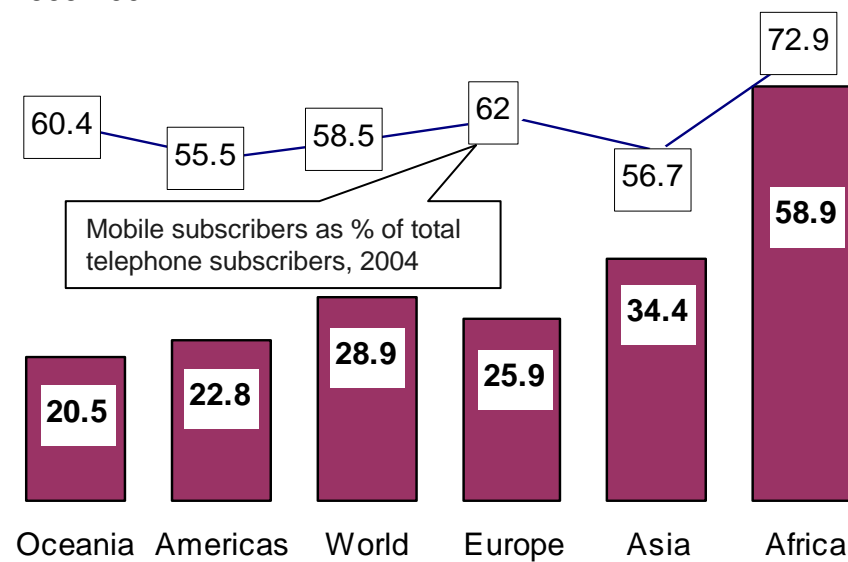
# mobile boom



Telephone subscribers, world, millions



Annual average growth rate in mobile subscribers, 1999-2004

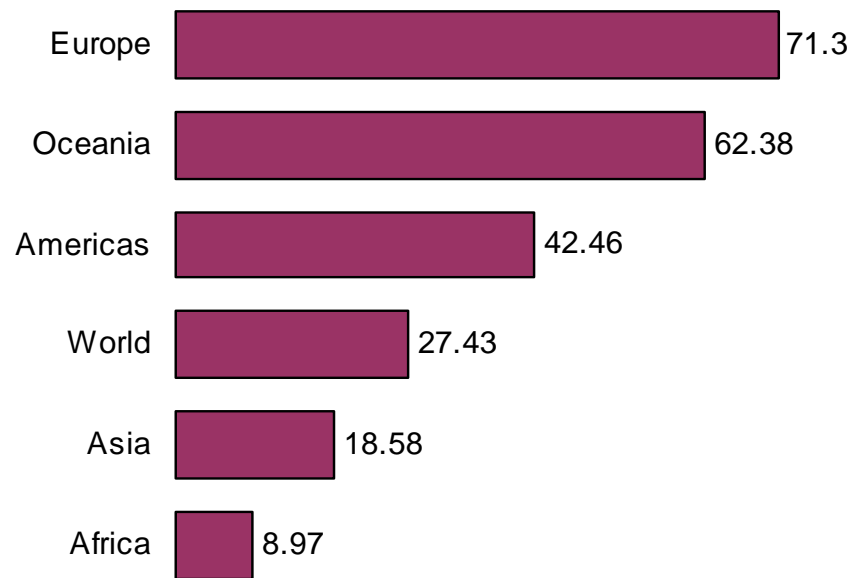


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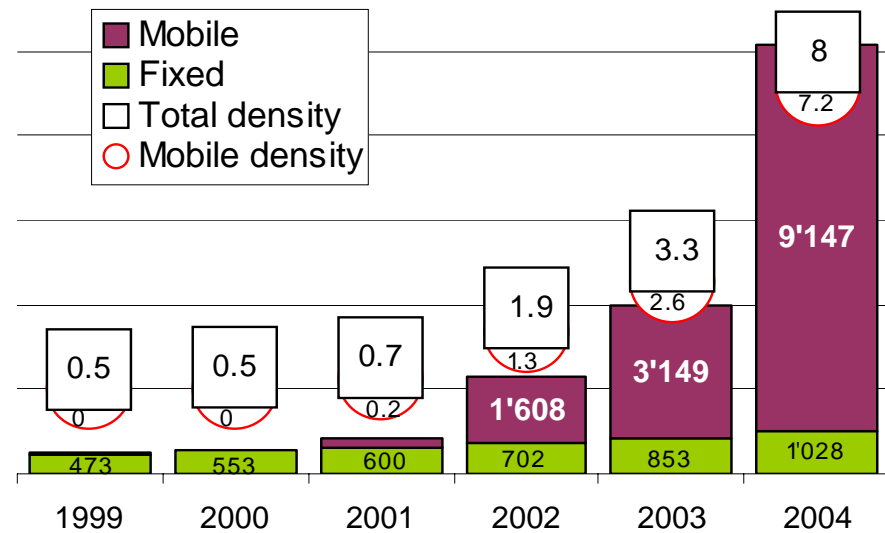
# mobile creates digital opportunities



Mobile subscribers per 100 inhabitants, 2004



Telephone (fixed and mobile) subscribers in Nigeria, (000s)

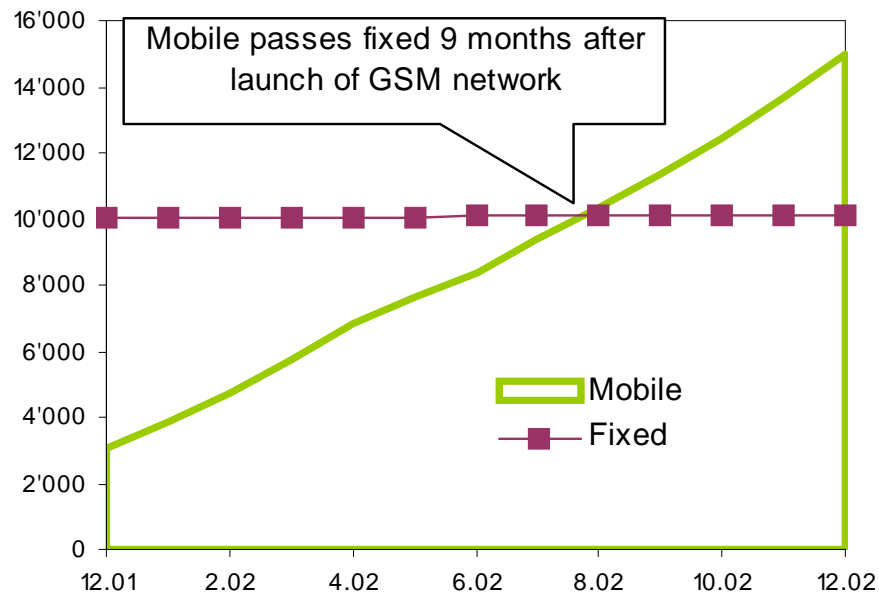


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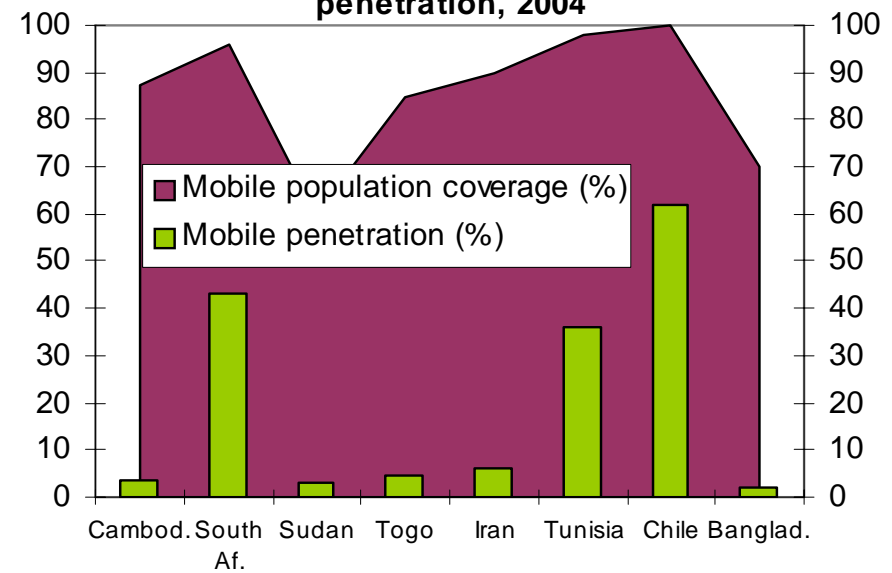
# the least wired continent on earth..



Telephone subscribers in Djibouti, 2001/2002



Mobile population coverage and penetration, 2004



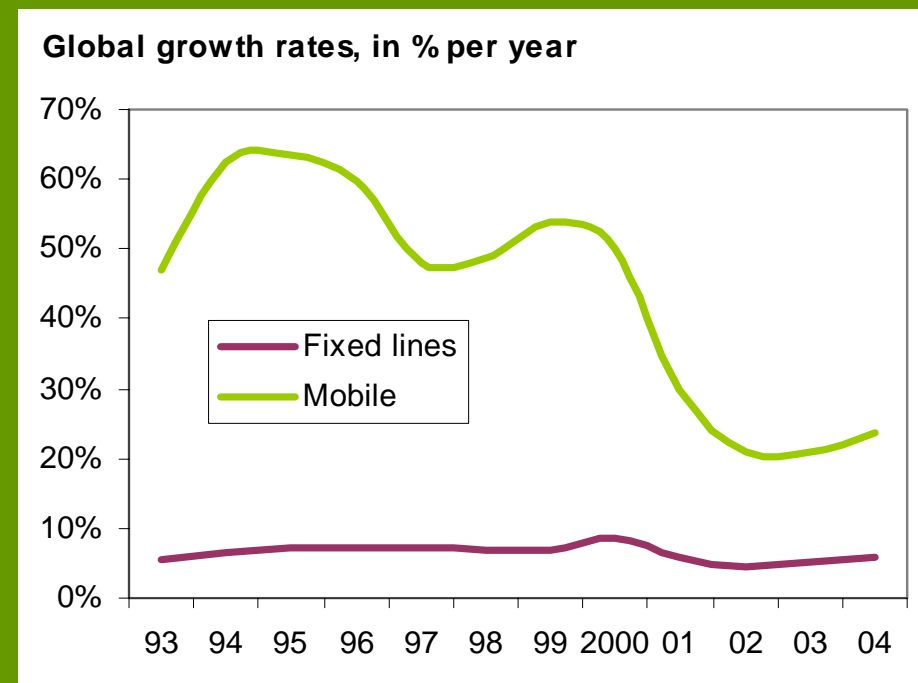
source: itu



# fixed to mobile substitution



- o cutting the cord
- o going straight to mobile



source: Itu

# reasons for mobile boom

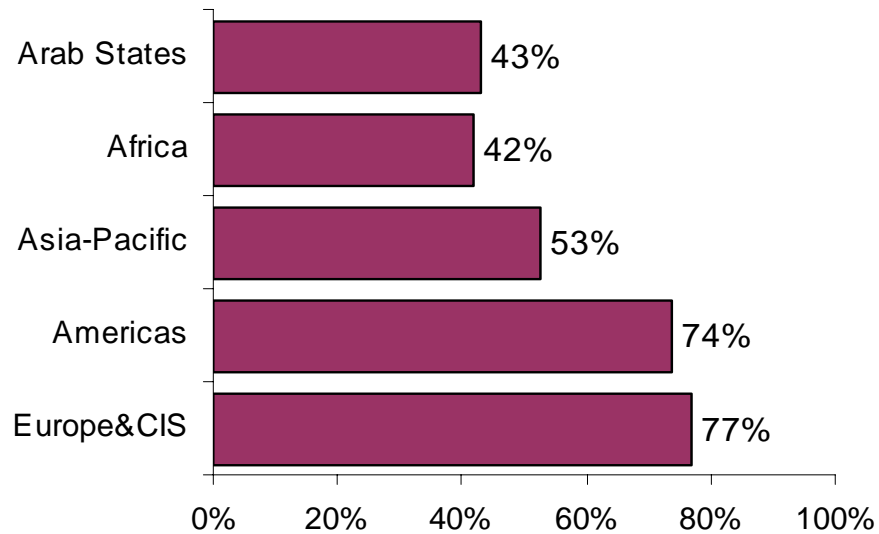


- regulatory
  - competition
  - privatization
- technical – easier to roll-out than fixed line network
- cost
  - decreasing mobile tariffs
  - pre-paid / no monthly subscription

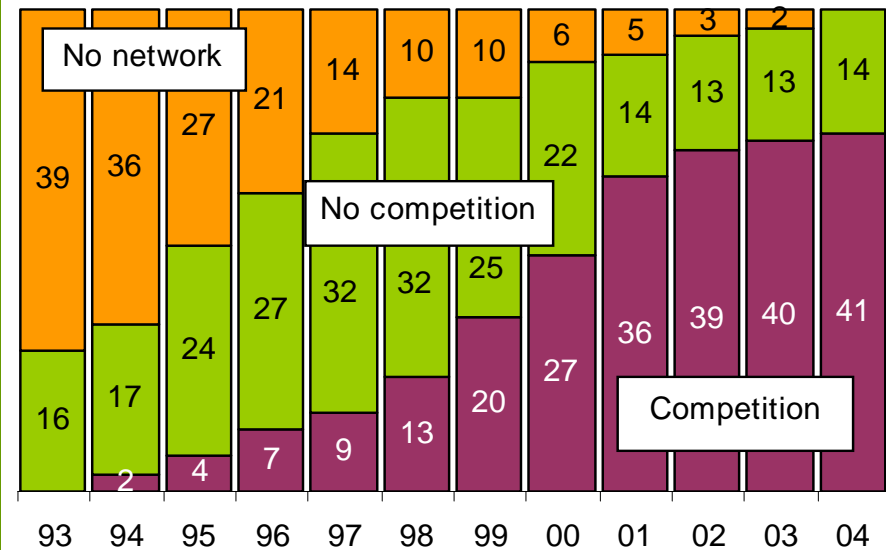
# privatization & competition



Percentage of countries with partly or fully private incumbents, by region, 2004



Mobile market structure in Africa, number of countries

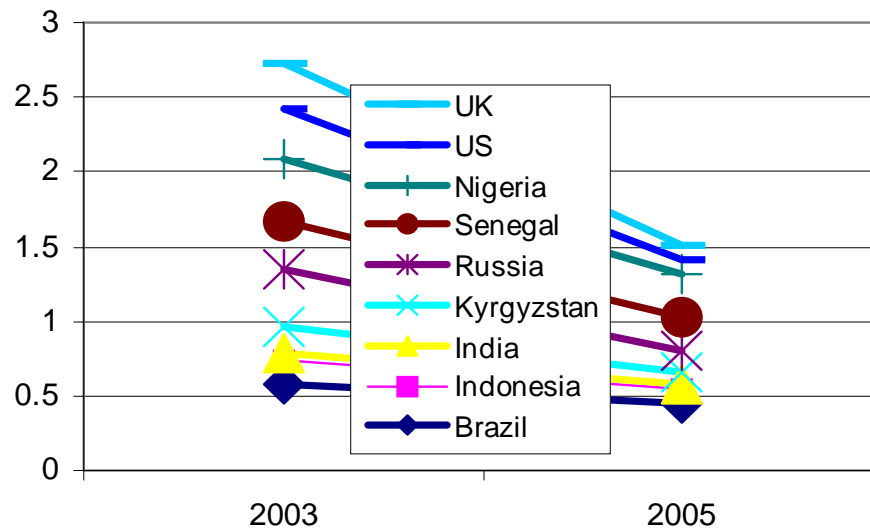


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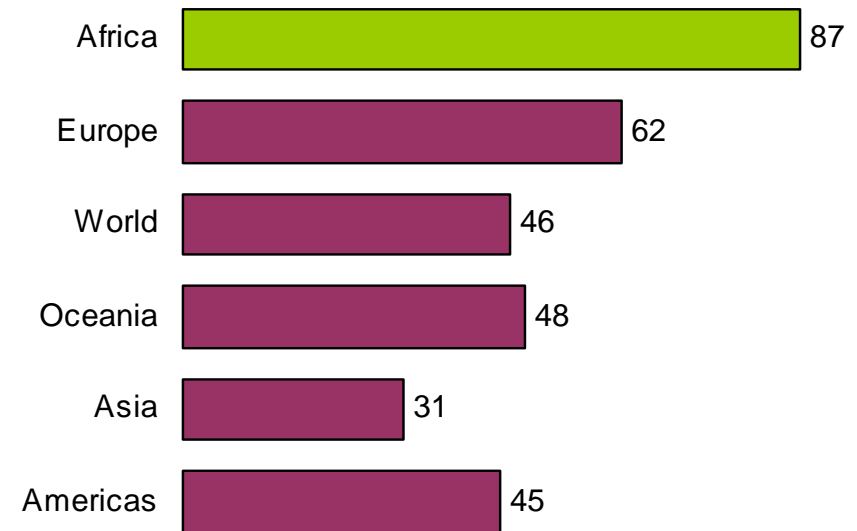
# cost of mobile



Cost for one minute call on mobile network,  
US\$



Prepaid mobile subscribers as % of total subscribers,  
2004



source: itu

# the potential of ULCH



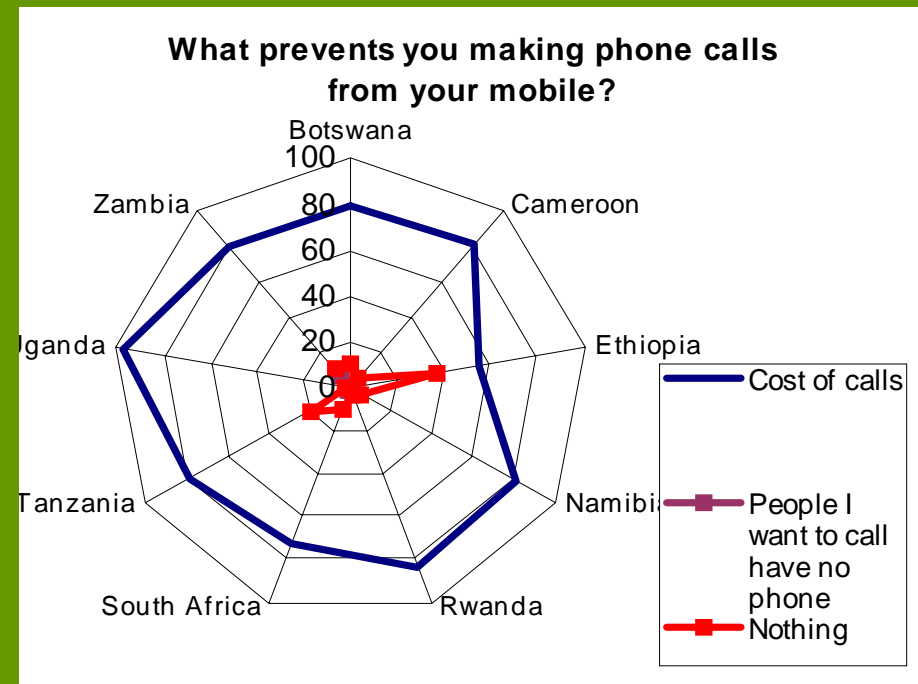
- o million €?: will low-cost handsets bring more growth, help bridge the divide and bring more & better business?
- o a number of reasons to believe so...

# mobile has fewer barriers



o the most important barriers to higher ict (telephone, internet etc) levels are

- infrastructure
- skills/education
- cost

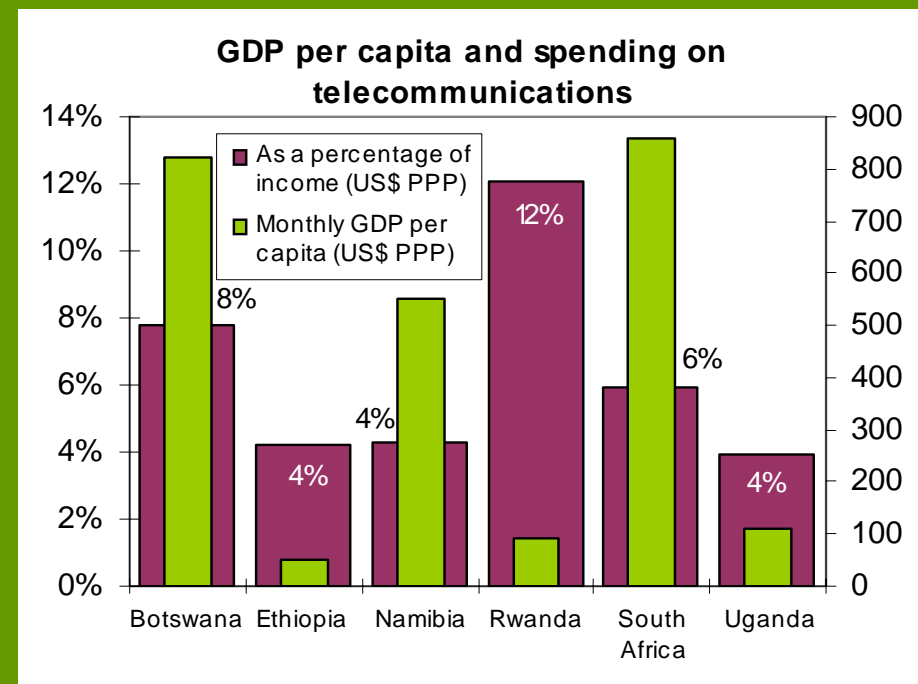


source: [researchICTafrica.net](http://researchICTafrica.net)

# here's some good news for operators & manufacturers



- o e-access study
- o people are prepared to pay relatively high price for mobile telephony
- o perhaps...
  - benefits of mobile phone compensates for cost
  - gdp per capita is not the perfect proxy to determine income levels and potential number of customers

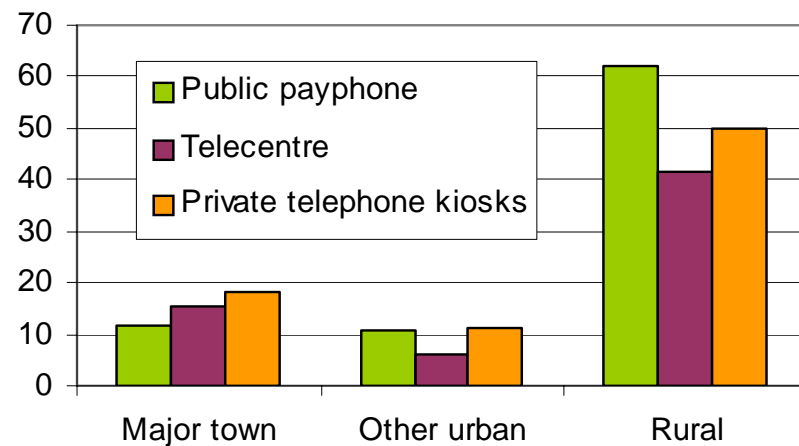


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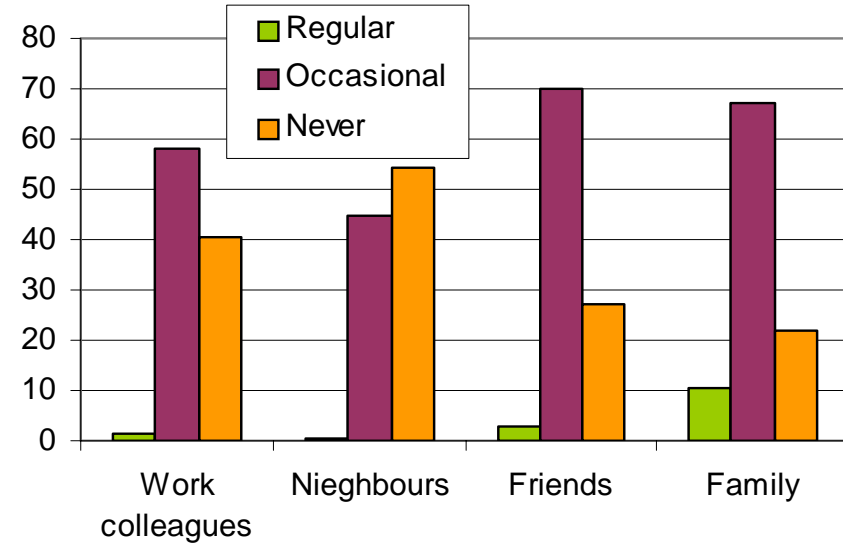
# other findings from the study



**Average time to reach the next phone from the house on foot, in minutes, Namibia, 2004**



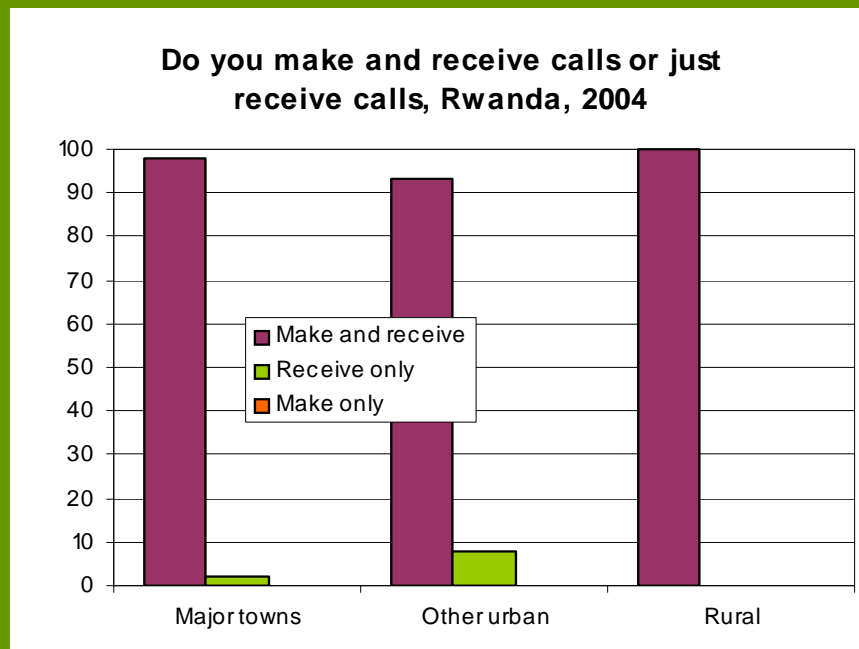
**Do you share your mobile phone? Rwanda, 2004**



source: [researchICTafrica.net](http://researchICTafrica.net)



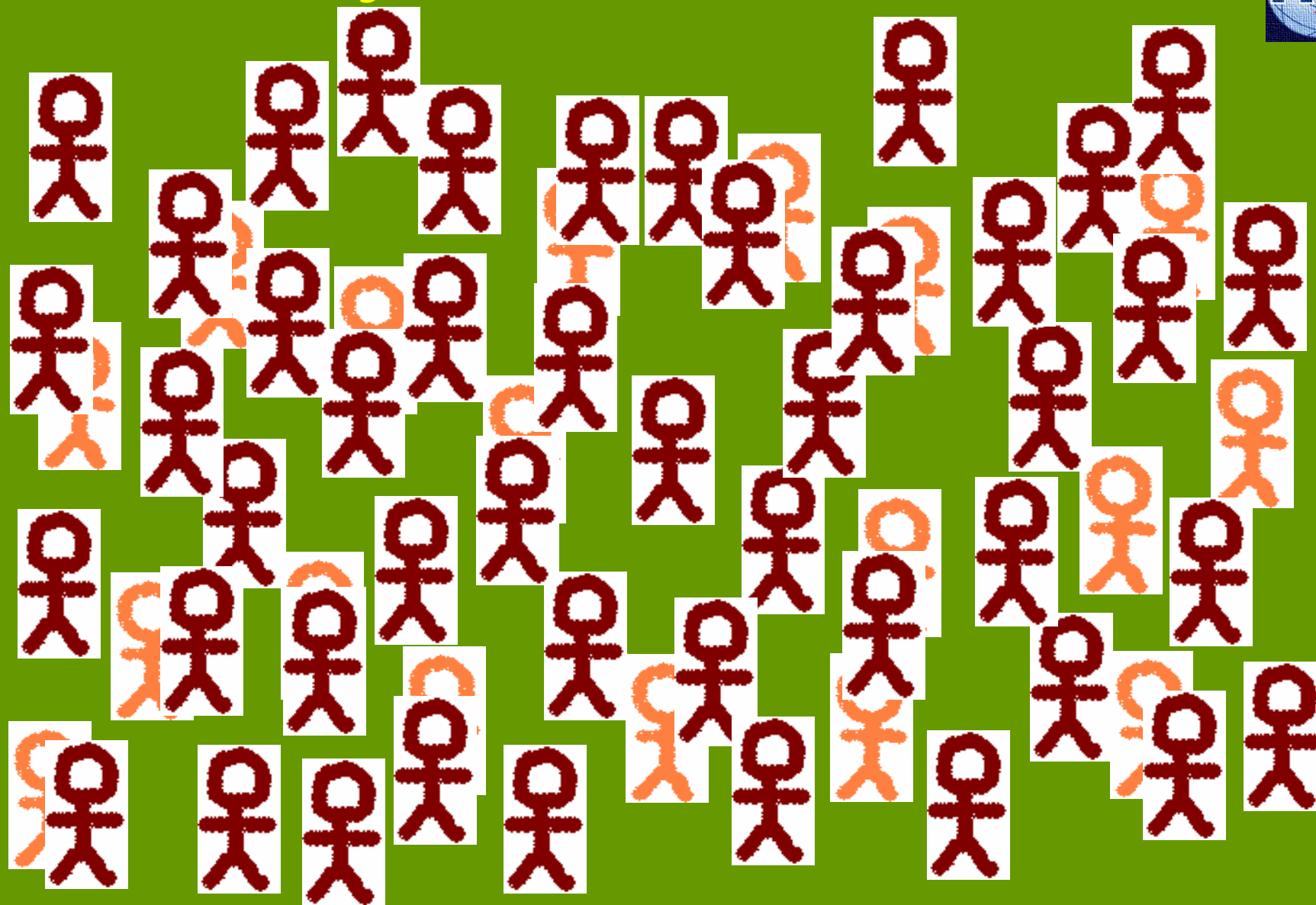
# findings highlight



source: [researchICTafrica.net](http://researchICTafrica.net)

- o the demand side for mobile phones is very high
- o there is little user information on handsets and how much (low-income) users are prepared to pay

# how many are still without a mobile?



Note:  = 100 million mobile subscribers,  = 100 million people that are not (yet) mobile subscribers

# evaluating demand and supply side benefits: cooperation for information



- o the users' point of view: evaluating the need & potential for mobile phones
  - household ict surveys that include questions to identify needs/barriers
- o the suppliers' point of view: handset manufacturers and operators
  - need to evaluate lowest possible cost (limit of profitability) based on subscriber numbers and ARPU
  - distribution/re-selling mechanisms
    - provide free/subsidized handsets
    - create local businesses (micro-credits etc)
  - increase « value » of mobile phone
    - applications, services and distribution mechanisms that address local needs