



PARTNERSHIP ON  
MEASURING ICT  
FOR DEVELOPMENT

Third Workshop on Information Society Measurements  
in Latin America and the Caribbean  
Panama City, November 22-24, 2006

# **Importance and challenges of measuring the information society: ITU and Partnership advances and perspectives**

Vanessa Gray  
Market, Economics, Finance Unit  
Telecommunication Development Bureau  
International Telecommunication Union



# ITU's telecommunication/ICT statistics

- 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.
- Over 30 years of data collection and dissemination: country-, and regional and international data and reports



# ITU

## World Telecommunication Indicators

### HOW?

- Annual telecommunication Indicators questionnaire addressed to government agencies responsible for ICT/telecom (regulators or ministries) or operators
- Annual reports
- Online research

### WHAT?

- Fixed and mobile telephone network
- Internet
- Traffic
- Tariffs (fixed, mobile, internet)
- Staff
- Quality of Service
- Revenue & Investment
- Public Access
- Broadcasting

**ITU data covers more than 200 economies; data provided annually**



# Administrative data: use & limits

## Can

- Market trends, service analysis and market opportunities
- International benchmarking: ICT Opportunity Index
- Identify and measure the digital divide
- Informed policy making

## Cannot

- Administrative data is limited mainly to 'access'
- Who is actually using ICTs, where, why (not): = limits to the understanding of the digital divide
- Limits in terms of policy making
- Impact of ICTs



## PARTNERSHIP ON MEASURING ICT FOR DEVELOPMENT

- Global, multi-stakeholder partnership launched in June 2004 to identify a core set of ICT indicators and help guide countries in collecting and disseminating ICT statistics
- Includes key stakeholders working on ICT statistics
- Coordinates ongoing and future activities based on partners' expertise
- A framework for raising additional resources to assist developing countries





# The need to measure the information society: WSIS (Geneva)



- WSIS Geneva Plan of Action (para 28) called for “A realistic international performance evaluation and benchmarking ... through comparable statistical indicators...All countries and regions should develop tools so as to provide statistical information on the Information Society...Priority should be given to setting up coherent and internationally comparable indicator systems...”

Recognized that ICT statistics are needed:

- To support policy making and guide decision-makers
- To compare countries over time and to each other (benchmarking)
- To set and evaluate targets and objectives



# The need to measure the information society: WSIS (Tunis)



Tunis Agenda calls for periodic evaluation, using an agreed methodology...:

- The development of ICT indicators is important for measuring the digital divide. We note the launch...of the Partnership on Measuring ICT for Development, and its efforts:
- A) to develop a common set of core ICT indicators; to increase the availability of internationally comparable ICT statistics as well as to establish a mutually agreed framework for their elaboration...
- B) to promote capacity building in developing countries for monitoring the information society
- C) to assess the current and potential impact of ICTs on development and poverty reduction



## objectives

1. Analyse the availability of internationally comparable ICT statistics and identify a common set of core ICT indicators
2. Assist developing countries to produce ICT statistics by promoting ICT policies, enhancing capacity of NSOs and by providing methodologies
3. Set up a global database for ICT indicators



# Stocktaking

- **Global ICT indicators stocktaking exercise, 2004**
- To find out what ICT data (households and businesses) countries collect/ have planned
- Carried out through metadata survey addressed to all NSOs in Africa, Asia-Pacific, Latin America/Caribbean, Central-Eastern Europe, Western Asia



Result: ICT data scarce in developing regions

Results published in:

**Measuring ICT:  
the global status of ICT indicators**  
Partnership on Measuring ICT for Development





# Core list of indicators & methodological material



## In 2005:

- Adoption of a core list of ICT indicators
- Methodological material on the collection of ICT statistics





## Core list: type of indicators

	Basic core	Extended core	Total
<b>ICT infrastructure and access</b>	<b>10</b>	<b>2</b>	<b>12</b>
<b>ICT access and usage by households and individuals</b>	<b>10</b>	<b>3</b>	<b>14</b>
ICT access and usage by businesses	8	4	12
ICT sector	4	-	4
Total	32	9	42

Source: Partnership on Measuring ICT for Development



# Basic ICT infrastructure & access indicators: already covered by ITU



## Basic core

- A-1 Fixed telephone lines per 100 inhabitants
- A-2 Mobile cellular subscribers per 100 inhabitants
- A-3 Computers per 100 inhabitants
- A-4 Internet subscribers per 100 inhabitants
- A-5 Broadband Internet subscribers per 100 inhabitants
- A-6 International Internet bandwidth per inhabitant
- A-7 Percentage of population covered by mobile cellular telephony
- A-8 Internet access tariffs (20 hours per month)
- A-9 Mobile cellular tariffs (100 minutes of use per month)
- A-10 Percentage of localities with public Internet access centres

## Extended core

- A-11 Radio sets per 100 inhabitants
- A-12 Television sets per 100 inhabitants



# ICT access and usage by households and individuals



## Basic core

- HH-1 Proportion of households with a radio
- HH-2 Proportion of households with a TV
- HH-3 Proportion of households with a fixed line telephone
- HH-4 Proportion of households with a mobile cellular telephone
- HH-5 Proportion of households with a computer
- HH-6 Proportion of individuals that used a computer
- HH-7 Proportion of households with Internet access at home
- HH-8 Proportion of individuals that used the Internet
- HH-9 Location of individual use of the Internet
- HH-10 Internet activities undertaken by individuals

## Extended core

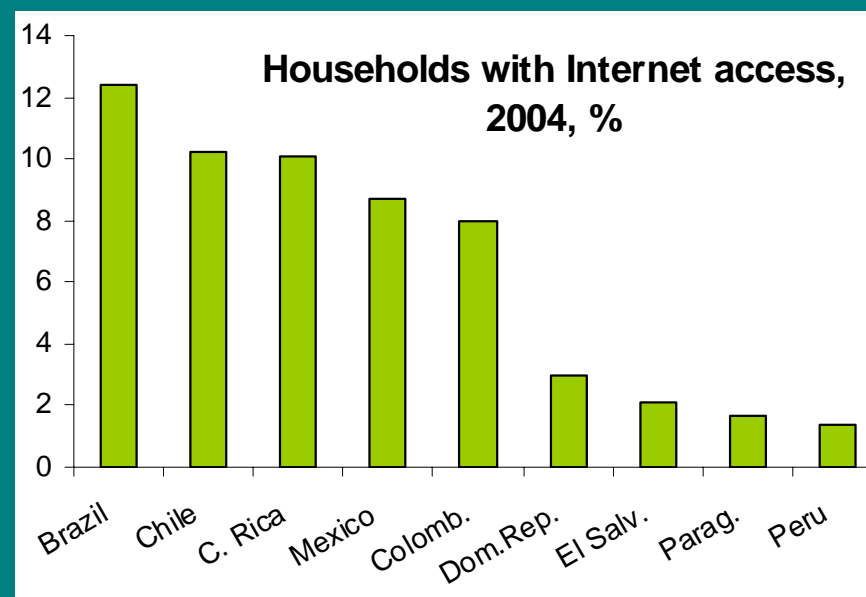
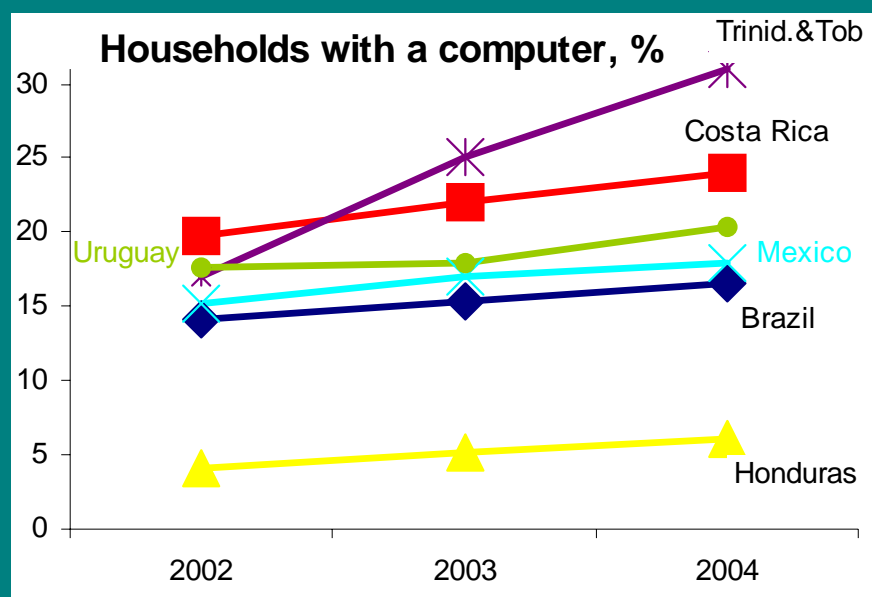
- HH-11 Proportion of individuals with use of a mobile telephone
- HH-12 Proportion of households with access to the Internet by type of access from home
- HH-13 Frequency of individual access to the Internet in the last 12 months



# ITU collecting household data

- Annual **ICT Household and individual** questionnaire addressed to NSOs
  - To collect statistics on access to and use of ICTs by households and individual
  - Collection started in 2005
  - First results published in WTDR 2006
  - Part of the Partnership on Measuring ICT for Development
- Online research
- Next collection by beginning 2007
- Limited availability – not many countries collect data using official surveys

# Household access to ICTs



Source: ITU World Telecommunication Indicators database

Note: right chart: Paraguay, Peru and Chile: data refer to 2002/2003



## Partnership projets

- Awareness raising among policy makers on the importance of statistical indicators for monitoring ICT policies
- Expansion of core list of indicators (education, government)
- Capacity building (training material, technical workshops, assistance to NSOs)





## Capacity building in the region

- In Latin America 37% of countries have adopted the complete list of indicators on access to and usage of ICTs by households and individuals, and 16% have adopted part of it
- Several countries have indicated need for statistical training
- Capacity building questionnaire to identify technical assistance needs



# Challenges

- Secure funding and expertise
- Coordination between NSOs and national agencies involved in ICT measurement
- Drive for data has to come from national users of ICT data and policy makers; NSOs have to produce data according to national demands



## Our expectations are high

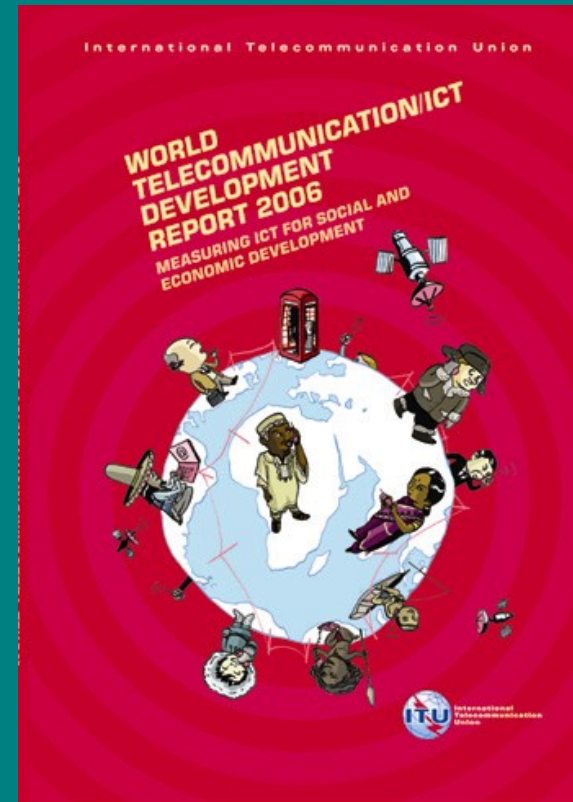
- Statistics help measure and overcome the digital divide & analyse and compare progress and help make better policies
- ICTs for social and economic development: highlighted through inclusion of ICTs in MDGs and the World Summit on the Information Society (WSIS)
- WSIS documents include over 20 references that say that ICTs can help achieve the MDGs, contribute to economic growth and sustainable development, create jobs, and improve the quality of life...

Note: WSIS documents refer to Geneva Declaration of Principles, Plan of Action and the Tunis Commitment and Tunis Agenda



# ITU World Telecommunication Development Report (WTDR) 2006

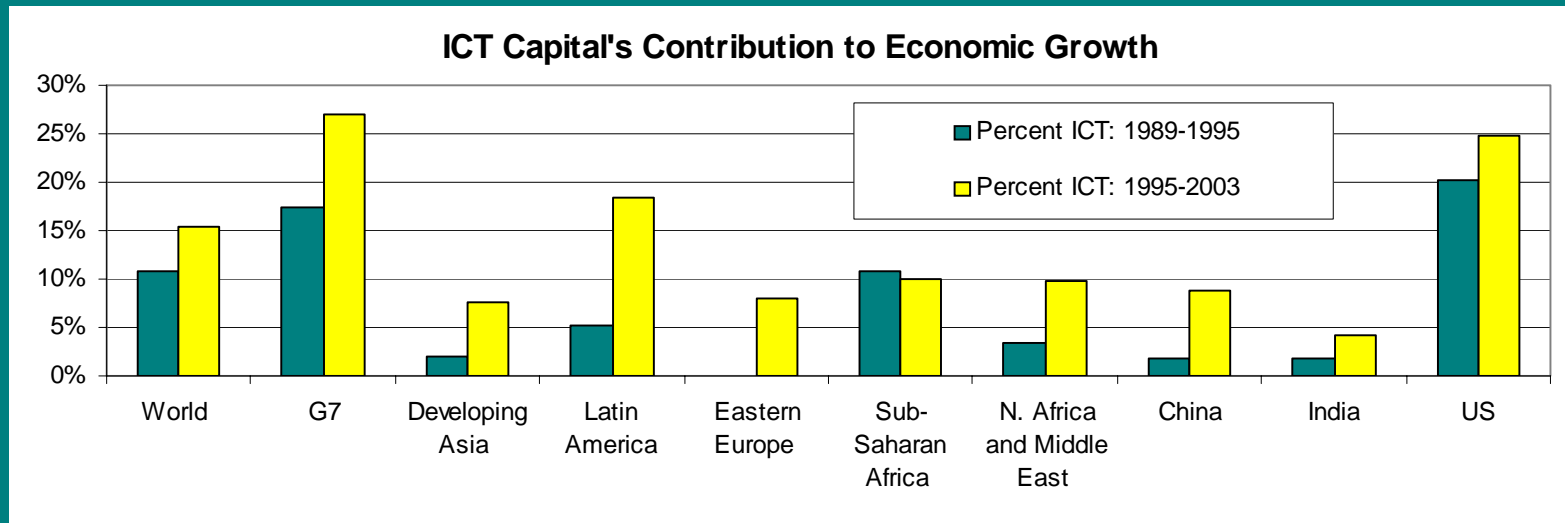
- Measuring ICT for social & economic development
- Economic impact
  - ICT sector
  - Productivity
- Social/human impact





# ICTs and productivity

WTDR highlighted that impact measurement is very limited and focused on 'productivity'



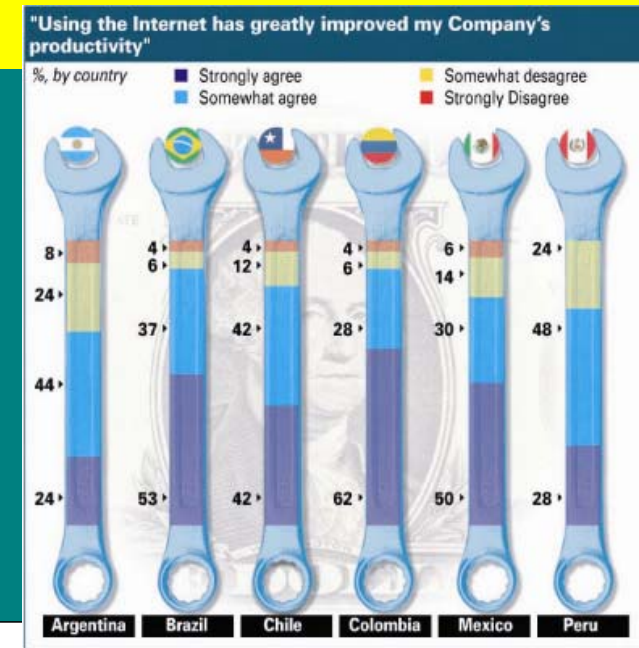
Source: ITU adapted from Jorgenson and Vu, 2005 (taken from WTDR 2006)



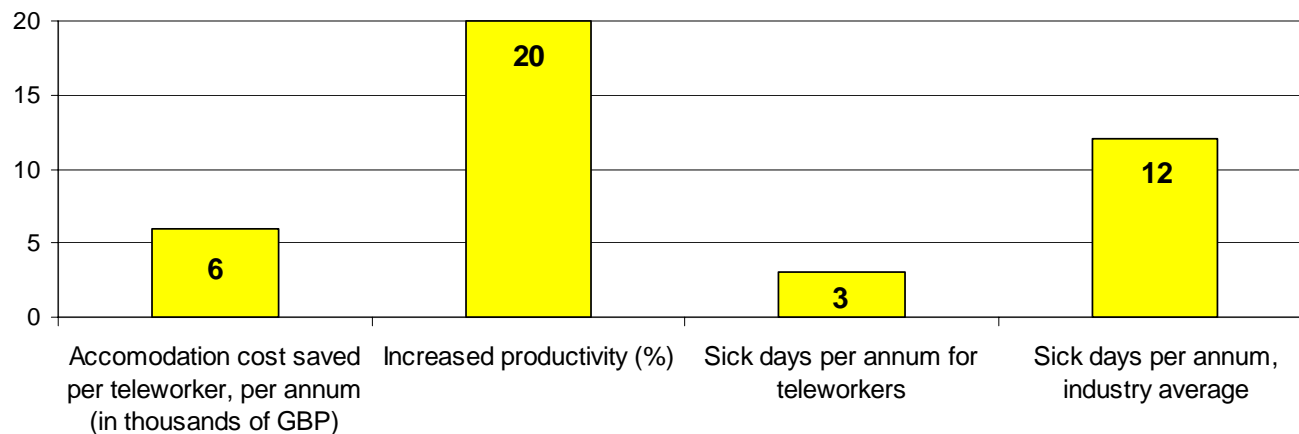
# WTDR: Impact measurement

Limited quantitative analysis & proof of how ICTs are impacting human development (including MDGs)

Importance of quality access (broadband)?



How telework saves British Telecom time and money



Need for more research and impact indicators



**Thank You  
Gracias**

[Vanessa.Gray\(at\)itu.int](mailto:Vanessa.Gray@itu.int)  
[www.itu.int/ict](http://www.itu.int/ict)