

REGIONAL WORKSHOP ON ICT INDICATORS AND MEASUREMENTS FOR AFRICA

Addis Ababa, Ethiopia

Main findings & recommendations

ICT Data and Statistics Division and ITU Regional
Office for Africa

BDT/ITU

Workshop Objectives

1. Information sharing/training on international standards and methodologies on ICT measurement
 - International Goals & Indicators- Sustainable Development Goals (SDG), Broadband Commission and ITU Connect 2020
 - Telecommunication/ICT indicators
 - ICT statistics in household surveys
2. Review of methodologies and parameters used in the ICT Development Index (IDI) and ICT price basket
3. Stocktaking of existing sources of ICT indicators and identification of data gaps and measurement challenges in the region
4. Assessment of priority data needs for policy making in the African region
5. Assessment of national coordination mechanisms on ICT statistics in the region
6. **Formulation of conclusions and recommendations**

International Goals and Indicators

- ITU together with the Partnership on Measuring ICT for Development has proposed 8 ICT indicators to support the tracking of the SDGs. The final list of indicators is expected to be agreed in **March 2016**.
- Data availability for the ICT indicators proposed for the SDGs in the countries participating in the workshop:

| | Household survey ICT indicators | | | | ICT indicators from operators | | | |
|---------------------|---|--|--|-------------------------------------|-------------------------------|--|--|---|
| | % hh with broadband Internet access, by urban/rural | % of individuals with ICT skills, by type of skills and by sex | % of individuals owning a mobile phone, by sex | % of individuals using the Internet | Broadband Internet prices | % of the population covered by a mobile network, by tech | Fixed broadband subscriptions broken down by speed | International Internet bandwidth per inhabitant |
| Availability | Low | Very low | | 70% | 50% | 15% | 50% | |

International Goals and Indicators

- ITU Member states have also agreed (in PP-14) to a number of goals and targets under the ITU Connect 2020 Agenda.
- The Connect 2020 Targets require ICT household access and individual use indicators, as well as coverage and price indicators.

Recommendations

1. Member States should consider the global ICT targets in developing national ICT policies, plans and strategies and incorporate the global indicators within the national ICT measurement frameworks.

ICT Development Index (IDI)

- MIS Report 2015 to be launched in November 2015, at the 13th WTIS to be held in Hiroshima Japan.
- 2014 MIS reports analyzed 166 countries of which 38 are in the ITU/BDT Africa region, out of a total of 44 countries in the region.
- The 14 African countries participating in the workshop submitted **52% of the data needed for the IDI 2014**. For the countries with sufficient data, missing values were estimated.

Recommendations

1. Members are encouraged to participate in ITU meetings on indicators (WTIS, EGTI and EGH) and ITU is urged to continue supporting their participation.
2. Members are encouraged to register on the online Expert Group Forum and contribute proposals on the IDI.
3. Proposals for the IDI should consider the conceptual framework and global data availability.

ICT Price Indicators

- Mid/low response rate to ITU IPB questionnaire. ITU completes the dataset by checking operator's websites.
- Supply-side data on prices for telecommunication/ ICT services can be easily sourced from operators websites.
- Regular publications of pricing information and comparisons by NRAs enhances tariff transparency and price awareness for consumers.

Recommendations

- Regulators encouraged to develop price monitoring tools to aid in measuring parameters such as value for money (price and quality assessment), affordability and price comparisons at national and regional level (RECs).

Telecommunication administrative data

- Overall data availability in African countries attending the workshop:
 - **Mid response rate** to ITU questionnaires: 63% for the Short Questionnaire 2015, 42% Long Questionnaire 2014 and 37% price data questionnaire 2014.

Recommendations

- Plan in advance the data submission: dates, country focal points, coordination between national data producers, in particular between NSOs and regulators/Ministries.

Telecommunication administrative data

- Indicator issues in Africa:
 - Mobile broadband taking off in the region, data on 3G coverage missing in several countries and no data on mobile data traffic.
 - LTE networks are being deployed, new indicators are needed to monitor this technology, as well as data on M2M to monitor the Internet of Things.

Recommendations

- NRAs encouraged to engage with operators to ensure compliance with activity criteria in the reporting of active mobile-broadband data.
- Prepare with operators the reporting of subscription data for LTE/mobile WiMAX networks in advance of their launch.
- Collect data on 3G and LTE/mobile Wimax coverage, mobile data traffic and M2M subscriptions.

Telecommunication administrative data

- Fixed broadband and bandwidth indicators:
 - Limited international Internet bandwidth in many African countries, need to precisely measure this.
 - Low fixed-broadband penetration, but no information on the traffic it generates, nor breakdown by tech or speed.
 - Relevance of fixed-wireless broadband (e.g. fixed WiMAX) in some African countries, but data on this technology missing in several countries.

Recommendations

- Collect separate data on (i) lit/equipped and (ii) used international Internet bandwidth
- Start the collection of fixed-broadband subscriptions by speed tiers and by technology, as well as on fixed Internet traffic in order to inform broadband strategies

Household ICT statistics

- Response rate to ITU ICT household questionnaires too low:
 - HH long questionnaire 2014 was 10% (2 countries) and to HH short questionnaire 2015 was also 10% (2 countries).

Recommendations

- NSOs should report ICT-related statistics regularly through the ITU HH Questionnaires that are sent to the focal point in the NSO every year.
- NSOs should complete the long questionnaire for all years where information is available, even if it is only for one core indicator.
- ITU should inform the NRAs or the administrative data focal point of the schedule for the ICT household questionnaires (short and long).
- NRAs are encouraged to follow up with NSOs on the completion of the HH questionnaire and as much as possible capacitate NSO to conduct ICT HH surveys.

Household ICT statistics

- Main data gaps for household ICT statistics
 - HH4 and HH6 (households with computers/Internet) and HH7 (Internet users) needed for the IDI and SDG
 - Some household access indicators (HH1 to HH4 and HH6) are available for a few countries
- The individual usage indicators are not widely available from surveys.
- Data may exist but are not being disseminated

Recommendations

- Countries should consider including in their National Strategies for the Development of Statistics (NSDS) and in the Multiyear Programme on Statistics an item on ICT statistics, with assigned budget.
- Need to bring together users and producers of ICT statistics to discuss and agree on priority indicators for ICTs.
- Collect and disseminate data accompanied by classificatory variables (e.g. sex, age, education).

Household ICT statistics

- Current situation of survey vehicles and surveys:
 - Some regulators are conducting additional surveys (e.g. consumer satisfaction surveys) that do not relate to the Partnership ICT Core indicators.
 - Unreasonable time lag between surveys 5-10 years in some countries not ideal given the dynamism of the sector

Recommendations

- Consider conducting ICT household survey every two or three years depending on the availability of resources.
- Questions on the use of Internet, and household access to Internet and computer should be added to existing regular national households surveys, such as labour force surveys, household income expenditure surveys or general household surveys.

Household ICT statistics

- Main reasons for not having ICT household data:
 - Lack of financial resources
 - Lack of awareness at the high policy level of the importance of monitoring ICT indicators
 - Lack of cooperation between NSOs and Regulators and Ministries

Recommendations

- **Ministries, NRAs and NSOs should coordinate in terms of ICT measurement (see national coordination)**
- **Raise awareness of the utility and importance of households ICT indicators among high level representatives at NRAs and Ministries**

Household ICT statistics

Other general recommendations for H/H

- The ITU *Manual for Measuring ICT Access and Use by Households and Individuals 2014 edition* should be used as the main reference document for defining and collecting ICT household statistics
- Experts from countries are encouraged to join the ITU Expert Group on Household indicators (EGH) and its online discussion forum
- New indicators (not contained in the ITU Manual 2014) agreed by the EGH should be taken into account
- Countries may collect additional information relevant for national policy purposes

National coordination

- ICT data collection and dissemination involves a number of different stakeholders at the national level
- Coordination among ICT Ministries, NRAs and NSOs exists in some countries but not sufficiently effective

Recommendations

- Enhance multi-stakeholder partnership at the national level;
 - National coordination mechanism should be established (e.g. inter-agency committee), which brings together regularly all stakeholders involved in ICT statistics
 - ITU consider to collaborate with Member states and ICT4D Partners to develop a framework guideline and model for national coordination for adoption by Member States
- Enhance multi-stake holder partnership and coordination at Regional and international level

Other Recommendations

- Need to adopt the core list of ICT measurement indicators in line with the priorities of the African region.
- ITU should continue providing capacity to Member States on ICT measurement and provide focused support to countries with considerable data gaps.
- ITU should review the feasibility of developing a database solution that could be used by developing countries in collecting, storing and disseminating ICT statistics.
- ITU in collaboration with Member states and ICT Measurement Partners should consider developing a framework guideline and model for national coordination for adoption by Member States.
- Member States need to develop mechanisms for validating supply-side data at the country level.

Resources

- ITU statistics:
<http://www.itu.int/ITU-D/ict/>
- ITU data collections/questionnaires
<http://www.itu.int/en/ITU-D/Statistics/Pages/datacollection/default.aspx#questionnaires>
- ITU Handbook, Manual and Expert Groups:
<http://www.itu.int/ITU-D/ict/definitions/>
- Partnership on Measuring ICT for Development :
<http://www.itu.int/ITU-D/ict/partnership/index.html>