

## **PAPER ON MEASURING ICT ACCESS AND USE IN HOUSEHOLDS AND BUSINESSES IN ZIMBABWE**

### **INTRODUCTION**

1. In recent years, information and communication technologies (ICTs) have gained an increasing role in national development strategies in many countries, including Zimbabwe, which have put in place ICT policies in order to develop their information and knowledge societies. Zimbabwe has launched a National ICT Strategic Plan (2010 – 2014). As a result, there is an increasing need for reliable data and indicators on the access and use of ICTs, and their impact on development. Such data and indicators help governments design and evaluate ICT policies and strategies, compare their ICT developments with those in other countries, and adopt solutions to reduce the digital divide.

### **STATUS OF ICT STATISTICS**

2. The Zimbabwe National Statistics Agency (ZIMSTAT) has not conducted a stand alone census/survey on ICT statistics. Some ICT questions were included in traditional censuses/surveys conducted by the office but were not material for publication. With the inauguration of the All Inclusive Government there is now a Ministry of Information and Communication Technology that regulates the ICT sector. The Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ) has been providing only infrastructure statistics to the International Telecommunications Union (ITU). ZIMPOST and Tel\*One provide postal and fixed network statistics to POTRAZ. Other ICT subject matter experts (network operators and service providers – Mobile Cellular Telephone Companies) namely: Net-One, Econet, Telecel, etc. provide subscription statistics. The Internet Service Providers (ISPs) include ZARnet, Ecoweb, ZOL and Africa Online among others. The National Strategy for the Development of Statistics in Zimbabwe (NSDS) recognizes the need to keep abreast of new technological developments by interacting, co-operating and collaborating with professionals involved with ICT technology at every stage.
3. It is understood that the level of statistical capacity is unequal (in developing economies) with respect to adherence to internationally recommended standards and methods, data collection systems and collection frequency, and the availability of key social and economic indicators. ICT statistics is a new area of measurement for most countries and so is the development of the necessary statistical standards and collection methodologies. It is important to benchmark and measure progress towards the information society through internationally comparable statistical indicators.

## **ICT STATISTICS ON HOUSEHOLDS AND INDIVIDUALS**

4. This year ZIMSTAT will conduct the Survey on ICT Access by Households and Use by Individuals. The survey will be piggy-backed to the Agriculture and Livestock Survey (ALS). All the partnership's 12 core indicators on ICT Access and Use by Individuals have been adopted and included in the final questionnaire. Data collected using an ICT household survey offer a number of advantages. First, the data provide information on both the household's and individuals' access and use of ICTs. Data collected from a household survey also provide an indication of actual use of mobile cellular phones, mobile broadband and Internet. At the same time, it is possible to cross-tabulate user data with other variables including age, gender, education, employment, purpose of Internet use, rural-urban, technology used, etc. This will enable more detailed analyses and comparisons which will prove extremely valuable for the formulation of focused and targeted policies.
5. The International Telecommunications Union (ITU) Manual on Measuring ICT Access and Use by Households and Individuals aims at increasing the availability and quality of data on access to, and use of, ICT by households and individuals. It is an authoritative reference tool for ICT data producers worldwide, the Manual aims at assisting national statistical offices in collecting, processing, evaluating and disseminating ICT household statistics. One of the key challenges at the global level is the lack of ICT household statistics and the relatively poor state of ICT household measurement. Other challenges include the lack of comparability between statistics collected by countries, lack of information about surveys (metadata), and, in some areas, lack of adherence to the core ICT indicator standards. The Manual provides detailed information on survey design, survey planning, survey implementation, data analysis, and data dissemination.

## **ICT STATISTICS ON BUSINESSES**

6. The Survey on ICT Use by Businesses is already underway. It has been piggy – backed to the Census of Industrial Production (CIP) and the Quarterly Employment Inquiry (QEI). This is the first time the country is carrying out ICT statistics on businesses surveys. The Partnership's 12 core indicators on ICT Use by Businesses were adopted and included in the final questionnaire. The United Nations Conference on Trade and Development (UNCTAD) Manual on the Production of Statistics on the Information Economy's objective is to serve as a reference document for statisticians responsible for collecting ICT data. It includes technical information related to survey design, methodology, data dissemination and reporting. The Manual is a practical tool that takes users through every step necessary to conduct an ICT business survey and to analyse the survey results. It also provides technical information on key issues and includes model questionnaires and definitions.

## **ZIMSTAT INFRASTRUCTURE**

7. ZIMSTAT has a Permanent Sample Survey Unit (PSSU) under the National Household Survey Capability Programme (NHSCP) which has data collection staff at Provincial, District, Ward and Enumeration Area level. This enabling framework strategically positions the office to undertake censuses/surveys on a vast array of indicators provided funds are available.
8. The Census and Statistics Act [Chapter 10:29] provides for the establishment of the Zimbabwe National Statistics Agency (ZIMSTAT) which will replace the Central Statistical Office (CSO); to provide for the collection and processing of statistics. The National Statistical System (NSS) is defined as:
  - (a) The group of all stakeholders involved in the production of official statistics, whether in their capacity as users or producers of statistics or statistical trainers and researchers or as bulk suppliers of data; and
  - (b) The manner in which the stakeholders referred to in paragraph (a) relate to each other and the Agency in the production of official statistics; and
  - (c) The rules governing the designation of producers of official statistics.

## **9. FUNCTIONS OF ZIMSTAT**

- a) Conduct the national census or any other censuses and surveys in terms of sections 12 and 13 of the Act; and
- b) Co-ordinate and supervise the National Statistical System; and
- c) Advise the Government on all matters related to statistics; and
- d) Develop and promote the use of statistical standards and appropriate methodologies in the National Statistical System; and
- e) Collect, compile, analyse, interpret, publish and disseminate statistical information alone or in co-operation with other Government Ministries or Institutions; and
- f) Develop and maintain a central business register in relation to establishments, containing such particulars as may be prescribed; and
- g) Develop and maintain a comprehensive national statistics database; and
- h) Provide a focal point of contact with international agencies on statistical matters; and

- i) Perform any other function that may be conferred or imposed upon the Agency by this Act or any other enactment.

ZIMSTAT reports to the Ministry of Finance.

## **10. THE NATIONAL STRATEGY FOR THE DEVELOPMENT OF STATISTICS (NSDS)**

### **The NSDS:**

- Is a mechanism for statistical advocacy and communication (intra and inter-institutional)
- Provides a framework for forging/strengthening partnerships for statistical development.
- Provides a vision of where we want to go
- Provides a “road map” and milestones for getting there
- Provides a comprehensive and unified framework for assessing and meeting user needs
- Provides mechanisms for feedback and learning
- Provides a framework for mobilizing, harnessing and leveraging resources (both national and international)
- Provides for the creation of statistical quality awareness and enhancement.
- Basis for effectual strategic management

## **11. COMPONENTS OF THE NSS**

### **Data users:**

- Governments and international organizations
- Private Sector
- Academia and other research entities
- Press

- Public

## **12. DATA PRODUCERS:**

- National Statistical Office (NSO)
- ICT Ministries and Regulators
- ICT service providers
- Private Sector
- Academia and other research entities.

## **13. DATA SUPPLIERS:**

- Households
- Farmers
- Individual businesses
- ICT service providers and regulators
- Other providers of administrative data e.g. Zimbabwe Revenue Authority (ZIMRA), etc.
- Research/Training Institutions: Universities.

## **14. THE NSDS:**

- Covers the entire National Statistical System (NSS).
- Is integrated into development and national poverty reduction policies.
- Takes into account all national, regional and international data needs,
- Involves all statistical production units, and serves as a framework for various sectors,
- Serves as a coherent framework for international and bilateral assistance,
- Integrates existing activities, and draws on past experiences of other countries,
- Conforms to international standards, including those related to data quality.

The NSDS caters for issues on responsibility of data collection and dissemination. Information collected is strictly confidential and only aggregated figures will be published.

## **15. CAPACITY BUILDING**

The Partnership on Measuring ICT for Development, launched by the international community, is a multi-stakeholder initiative to improve the availability and quality of ICT data and indicators, particularly in developing countries. The (ITU) and (UNCTAD) are playing a leading role in the Partnership in developing internationally comparable ICT indicators, establishing an ICT global database, organizing workshops and seminars on ICT measurement, and helping countries through technical assistance projects. ZIMSTAT was represented at the 7<sup>th</sup> World Telecommunications/ICT Indicators Meeting in Cairo, 3-5 March 2009 and the COMESA 2<sup>nd</sup> Meeting of the Working Group on e-Readiness Assessment and Information Society Measurement, 3-6 March 2009. Two statisticians from ZIMSTAT also attended the Addis Ababa "Training Course on Measuring ICT Access and Use in Households and Businesses from 13-24 July 2009.

## **16. CONCLUSION**

THE COMMON MARKET FOR EASTERN AND SOUTHERN AFRICA (COMESA) E-READINESS INITIATIVES

### **OBJECTIVE OF THE 2<sup>ND</sup> MEETING OF THE WORKING GROUP ON E-READINESS ASSESSMENT AND INFORMATION SOCIETY MEASUREMENT.**

1. The objective of the working group was to review background documents on e-readiness assessment and information society measurement, agree on frameworks for harmonized national and regional indicators and indices and develop a roadmap for implementation of ICT e-readiness assessment, benchmarking and information society measurement in Eastern and Southern Africa (ESA). The activities of the working group were restricted to e-readiness assessment and information society measurement issues in the ESA region.

### **MEMBERSHIP OF THE WORKING GROUP**

2. Membership of the Working Group included one representative from each of the following member states: Seychelles, Mauritius, Uganda, Madagascar, Zambia, Kenya, Malawi and Zimbabwe. The selection was based on members' contribution to the e-readiness assessment and information society measurement and monitoring framework during the Nairobi workshop.

## **TASKS OF THE WORKING GROUP**

3. Review background documents produced by a consultant and provide input for their finalization: In SCAN-ICT Phase II, UNECA developed a comprehensive framework for the development of information society measurement indicators. A toolkit was built on the methodology developed as part of the Scan-ICT Phase I pilot project. It incorporates a framework for the development of suitable indicators for assessing the status of the development, deployment and use of ICT in African countries. The methodology is based on the so-called 'CUT' model which classifies ICT4D indicators into three categories:
  - Capacity indicators: targeted at measuring the level and the extent of development and deployment of ICT infrastructure and related resources;
  - Usage indicators: aimed at assessing and measuring the extent of use of the ICT infrastructure and related resources by households, business and government entities; and
  - Transformation or impact indicators: indicators targeted at measuring the social and economic impact of ICT infrastructure and use within the economy and society.

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