

Information and Communication Technology (ICT) Household Survey 2014: Zimbabwe's Experience

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K.R.N.SHONIWA

Director of the Production Division
Zimbabwe National Statistics Agency

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Introduction to the ICT Household Survey 2014, Zimbabwe

- The Zimbabwe National Statistics Agency (ZIMSTAT) conducted its first stand-alone Information and Communication Technology (ICT) Household Survey in 2014.
- **The objective: to collect data on access to ICTs by households and use by individuals in order to measure the digital divide.**
- **The scope: all private households and individuals** in urban and rural areas across the 10 provinces of Zimbabwe.
- **Designed to: provide estimates at district, provincial and national levels** (and estimates by land use sector and urban/rural divide).
- **Users include: Sector Ministries (MOFED, MEPIP), ICT Industry, Telecommunications Operators, National Regulatory Agencies (POTRAZ), Policy-Makers, General Public, Research Institutions, and International Organizations (ITU)**

The ICT Household Questionnaire

- **Household questionnaire was used to collect basic demographic data** on de jure basis (all household members who usually reside at the household and the dwelling).
- The questionnaire was responded to by a **chief respondent** who in most cases is the head of household. Section A of the questionnaire was on Identification.
- **Enumerators were trained** in concepts, definitions, contents of the questionnaire, procedures, interviewing techniques and procedures to be followed in the field.

Sample Design

- A **two-stage stratified sampling design** was used for the selection of sampling units/households.
- At the first stage, Enumeration Areas (EAs) were selected using Probability Proportional to Size (PPS) sampling method, the measure of size being the number of households according to the 2012, Zimbabwe Population Census.
- The EAs, with an average of about 100 households, constituted the primary sampling units (PSUs).
- The second stage involved the selection of households in selected EAs.

Data Collection and validation

- The personal **face to face interview data collection method** was used.
- **Identifying a competent respondent** before administering the questionnaire.
- **Checking for completeness** and consistency of responses before leaving the household.
- Continuous **monitoring and evaluation of the data collection** process through the three levels of survey management, that is, Head Office supervisors, Provincial supervisors and Team leaders
- **Identifying incomplete questionnaires** to be referred back to provinces
- **Publicity of the ICT survey** ran before and throughout the Survey process through field staff, local leadership, press and electronic media.

Verification and Data Cleaning

- An **editing and coding manual** was developed with clear instructions on how to handle responses for each indicator.
- **Verification of edited questionnaires** was carried out.
- **Double data entry** was done on every questionnaire by two different data entry clerks to verify entries.
- Comparisons would be made between the first entry and second data entry files.
- Differences between the two files were rectified. The process would continue until there were no differences between the two electronic files.
- **Call backs on respondents** to verify on missing or conflicting data were made

Importance of measuring ICT skills

- The indicator on computer related activities (HH15) is **appropriate in measuring and tracking the level of proficiency of computer users.**
- This information may be used, for example, to **adapt ICT literacy courses** in schools, **identify barriers** to certain uses of computers as well as potential applications and services that could be accessed over the Internet.
- The indicator also **provides information on the differences in ICT skills among men/women**, children/adults, employed/unemployed, etc.
- The data may be used to **inform targeted policies to improve ICT skills, and thus contribute to an inclusive information society.**

Experience with collecting ICT skills indicator (HH15)

Question Asked: Which of the following computer-related activities have you carried out in the last three months?

- **Response Categories in line with [ITU Manual for Measuring ICT Access and Use by Households and Individuals](#)** (the activities were ordered from simpler tasks to more complex).
- Most individuals carried out more than one activity, therefore, multiple responses were/ are expected. Care was taken during interviews to link an individuals' highest level of education and some levels of computer skills.
- The youth age standard in Zimbabwe is all individuals aged less than 18 years.

Response Categories

- Copying or moving a file or folder.
- Using copy and paste tools to duplicate or move information within a document.
- Sending e-mails with attached files (e.g. document, picture, video).
- Using basic arithmetic formulae in a spreadsheet.
- Connecting and installing new devices (e.g. a modem, camera, printer).
- Finding, downloading, installing and configuring software.
- Creating electronic presentations with presentation software (including text, images, sound, video or charts).
- Transferring files between a computer and other devices.
- Writing a computer program using a specialized programming language.

Data disaggregation

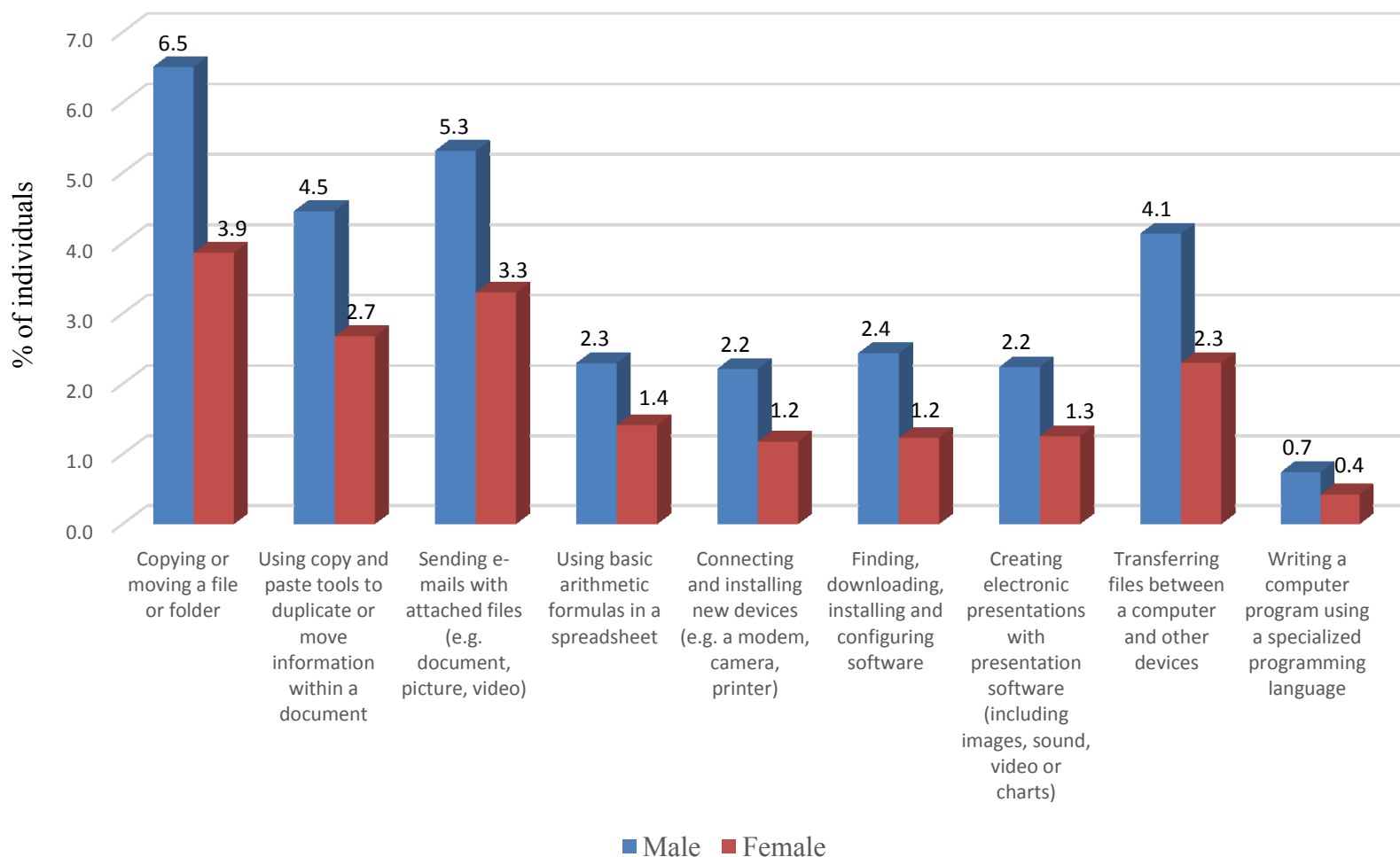
The ICT skills indicator was reported as follows:

- ICT usage by occupation and gender
- ICT usage by labour force status and gender;
- ICT usage by highest level of education attained and gender;
- ICT usage by age and gender
- ICT usage by gender and urban/rural

Classifications that were used for the variables: highest level of education attained, labour force status, occupation and economic activity are **based on international standards**.

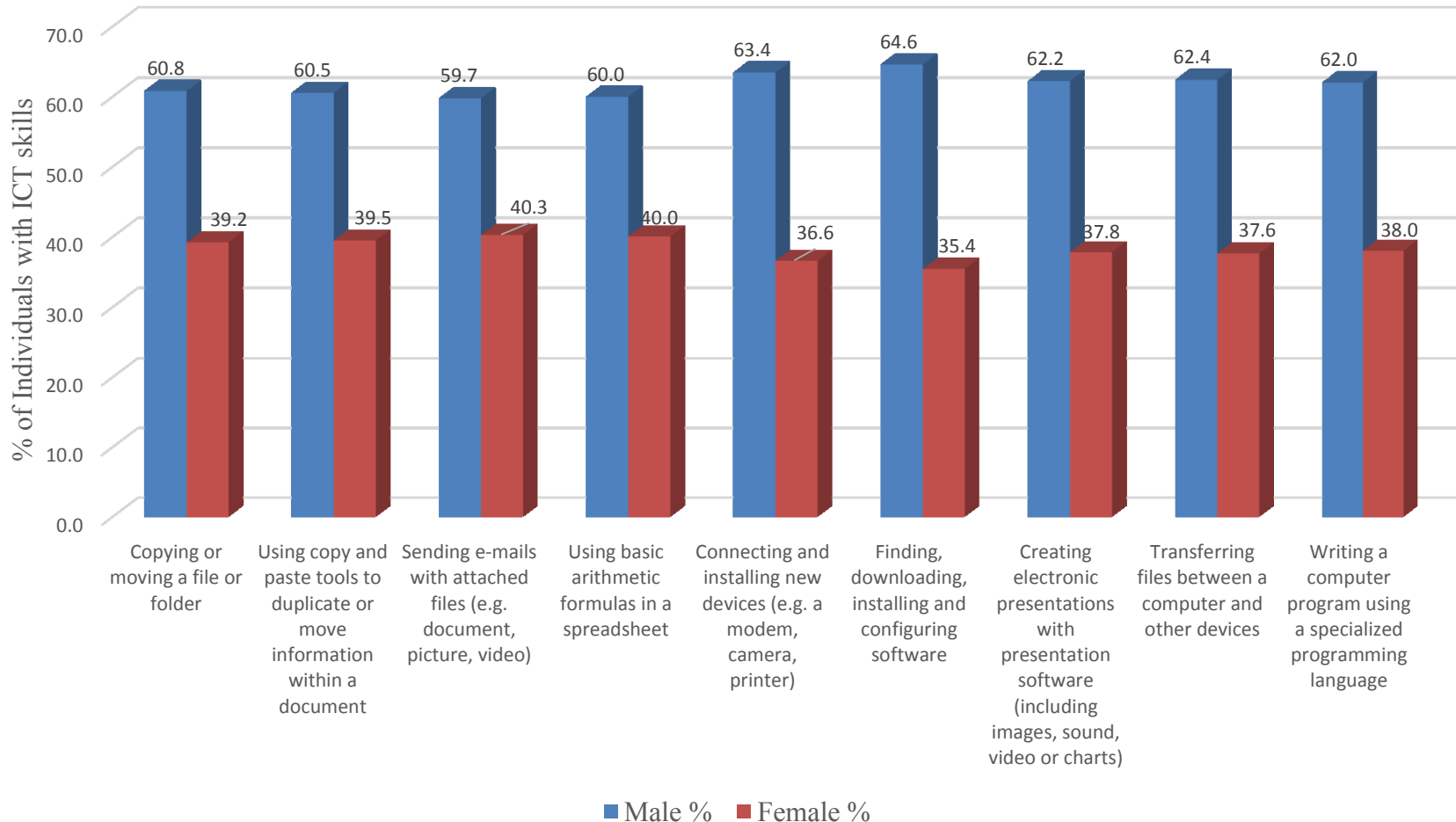
Results: ICT Skills by gender (1/2)

Percent of Individuals who used the Computer Classified by Computer Related Activity, Type of Activity and Sex: ICT Household Survey 2014, Zimbabwe



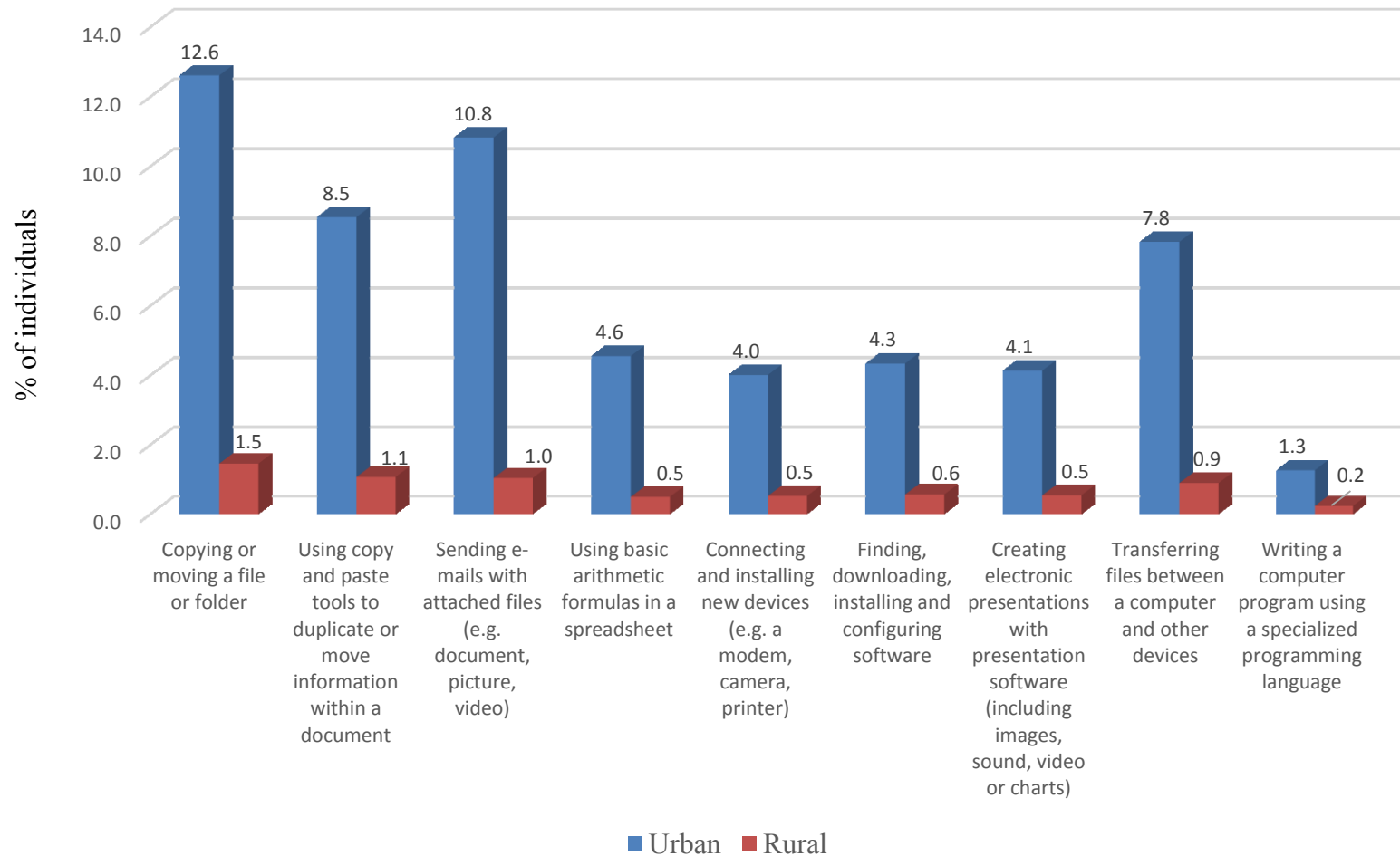
Results: ICT Skills by gender (2/2)

Percent Distribution of Individuals who used the Computer Classified by Computer Related Activity, Type of Activity and Sex: ICT Household Survey 2014, Zimbabwe



Results: ICT Skills by Urban/Rural

Percent of Individuals who used the Computer Classified by Computer Related Activity, Type of Activity Urban/Rural: ICT Household Survey 2014, Zimbabwe



Observations and challenges

- **The ICT subject matter is dynamic and exciting**, requiring constant monitoring in our efforts to measure the information society.
- **Enumerators had to take measures to minimize response bias** in respect of ICT use by children where responses are provided by proxies, i.e., parents or guardians, especially, for those aged from 3-10 years.
- **Production of results takes time due to centralised data processing.** Use of Computer Assisted Personal Interview (CAPI) is advised
- **Complete responses should be captured and stored whilst at the household.**

Conclusion

- The tracking of ICT indicators **informs targeted policies aimed at reducing the digital divide within a country**, such as rural/urban, socio economic divides, age and the gender gap between individuals, and **thus contribute to a more inclusive information society.**

Thank you