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## FOREWORD

This report presents the findings of the Survey on Information and Communication Technology (ICT) Access by Rural Households and Use by Individuals whose reference period was the 12 months ending 30 September, 2010. The survey was conducted during October, 2010. This is the first survey of its kind to be carried out in Zimbabwe. The objective of the survey was to collect data on access and use of ICTs by households and individuals in order to measure the digital divide. The digital divide is defined as the gap between individuals, households, businesses and geographical areas at different socio-economic levels with regard to both their opportunities to access ICTs and their use of the Internet for a variety of activities. The digital divide reflects various differences among and within countries in terms of access to physical infrastructure, mobile switching centres, fixed network, base stations, international gateways and fibre optic links.

The Ministry of Information and Communication Technology (MICT) has unveiled a visionary Strategic Plan (2010-2014) which will guide and consolidate the priorities to transform Zimbabwe into a knowledge society, and pull the entire nation around a single game plan for execution. The Ministry's vision is to act as a catalyst for national socio-economic growth thereby propelling Zimbabwe into a knowledge society with ubiquitous connectivity by 2014.

The results of the survey will provide concrete evidence and facts upon which national ICT policy and strategies can be formulated. In this regard the survey data will provide information to help monitor progress towards global development goals, in particular the Millennium Development Goals (MDGs). The survey findings will provide essential information for planning at all levels.

Furthermore, the survey findings will be used to benchmark future surveys and will also provide a basis for monitoring and evaluation of ongoing ICT initiatives.

In 2005 the Partnership on Measuring ICT for Development (a consortium of 10 United Nations and other developmental agencies involved in ICT measurement) developed a list of core ICT indicators to standardize and harmonize ICT statistics at a global level. The main purpose of the core indicators is to help countries that are developing ICT surveys or adding ICT questions to existing collections, to produce high quality national statistics that are internationally comparable.

These core indicators are divided into *access indicators* applying to households and *use indicators* applying to individuals. There is also a reference indicator on households' access to electricity. It is important to understand the difference between ICT access and ICT use as this is fundamental. ICT access refers to the availability of ICTs within the home. Use of ICTs refers to use of ICTs by one or more individuals of the household, whether at home or elsewhere, e.g. at work, at place of education, at another person's home and Internet cafe. Countries are encouraged to use the core list in their data collection programmes. The ICT Rural Household Survey 2010 questionnaire incorporated the Partnership's core indicators on access to, and use of, ICT by households and individuals as recommended.

**M. Dzinotizei**  
**Director General, ZIMSTAT**

**August 2011**

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Finally, special thanks go to all members of the rural community who gave a few moments of their valuable time to respond to the questionnaires.

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## List of Abbreviations

3G	Third-generation (mobile technology)
4G	Fourth-generation (mobile technology)
ADSL	Asymmetric digital subscriber line
CDMA	Code Division Multiple Access
CIAC	Community Internet Access Centre
ECD	Early Childhood Development
FTTH	Fibre-to-the-home
GPRS	General Packet Radio Service
GSM	Global System for Mobile Communications
ICT	Information and Communication Technology
ICTs	Information and Communication Technologies
ILO	International Labour Organisation
IP	Internet Protocol
ISCED	International Standard Classification of Education
ISP	Internet Service Provider
IT	Information Technology
ITU	International Telecommunications Union
Mbit/s	Megabits per second
MICT	Ministry of Information and Communication Technology
MDGs	Millennium Development Goals
NSDS	National Strategy for the Development of Statistics
NSO	National Statistical Office
OECD	Organisation for Economic Co-operation and Development
LSCF	Large Scale Commercial Farms
PC	Personal computer
PDA	Personal digital assistant
PIAC	Public Internet Access Centre
POTRAZ	Postal and Telecommunications Regulatory Authority of Zimbabwe
PSTN	Public Switched Telephone Network
SIM	Subscriber Identification Module
SSCF	Small Scale Commercial Farms
TV	Television

UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNECA	United Nations Economic Commission for Africa
UNECLAC	United Nations Economic Commission for Latin America and the Caribbean
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNESCWA	United Nations Economic and Social Commission for West Africa
UNSC	United Nations Statistical Commission
UNSD	United Nations Statistical Division
URL	Universal Resource Locator
VoIP	Voice over Internet protocol
WAP	Wireless Application Protocol
WB	World Bank
WCDMA	Wideband Code Division Multiple Access
Wi-Fi	Wireless fidelity
WiMax	Worldwide interoperability for microwave access
WSIS	World Summit on the Information Society
WWW	World Wide Web
ZESA	Zimbabwe Electricity Supply Authority
ZIMSTAT	Zimbabwe National Statistics Agency

## **Executive Summary**

### **Context and Justification**

Information and Communication Technology (ICT) has emerged as a tool for sustaining economic growth and delivering essential services to the populace in all spheres and sectors of the national economy.

It is for these reasons, among others that today there is a high demand for information and communication technologies (ICTs) and information society statistics to help lay the foundation in the monitoring of progress in the aforementioned areas. However, there cannot be a jump into monitoring progress without having a benchmark and a common and standardised framework in place.

In 2005 the Partnership on Measuring ICT for Development developed a list of core ICT indicators to standardize and harmonize ICT statistics at global level. The main purpose of these core indicators is to help countries produce high quality and internationally comparable ICT statistics. The core ICT indicators were endorsed by the United Nations Statistical Commission at its 38<sup>th</sup> Session in March 2007. The emerging ICT sector is so dynamic driven by rapid changes in technology. Indicators have to be revised continuously.

### **Methodology**

The survey was conducted throughout the six agricultural sectors in the eight rural provinces of the country. The scope of the survey was rural households and individuals classified by geographic location. The objective of the survey, among others, was to collect data on household access to, and Individual use of ICTs. The sample had 26 483 rural households. Data collection was carried out for a period of fifteen days during the months of October 2010.

### **ICT Infrastructure**

Appendix C has a detailed table, by courtesy of the Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ) that shows the ICT infrastructure available in the country. The digital divide, i.e. differences between countries, regions and individuals

with different levels of ICT development, remains high on the agenda of national and international ICT policy makers, and one of the key objectives of the ICT Development Index (IDI) is to help monitor and assess the digital divide, and highlight areas for improvement. The digital divide is also required to track progress towards achieving international development goals, such as the World Summit on the Information Society (WSIS) targets and the Millennium Development Goals (MDGs).

### **Households Access to Electricity**

Electricity is not an ICT commodity, but it is an important prerequisite for using many ICTs. Results of the ICT Rural Households Survey show that about 24% of rural households have access to electricity.

### **Household Access to ICTs**

Access by definition is the opportunity to make use of ICTs (technology, knowledge and information). According to the survey results radio uptake in rural areas was 35.8% while television (TV) penetration was 12.5%. The percentage of rural households that reported having access to a fixed line telephone was 0.44%. Access to a mobile cellular telephone at home was 42.5%. The percentage of households that reported having access to a computer at home was 0.51%.

The percentage of rural households with access to the Internet at home was 0.07%. Rural households with Internet access at home classified by type of Internet access technology reported the following percentages: dial-up 0.02%, mobile broadband 0.04%, other fixed broadband 0.01%; Integrated Services Digital Network (ISDN) and Digital Subscriber Line (DSL) although available in the country had insignificant availability in rural areas.

The percentage of rural households falling within the following distance ranges from the nearest Post Office were: less than five kilometres 6.2%; between five to less than ten kilometres 10.3%; ten to less than fifteen kilometres 9.9%; fifteen to twenty kilometres 13.4% and 60% were more than twenty kilometres from a Post Office.

The percentages of rural households who used postal services classified by frequency of use were as follows: 1.9% for less than once a month; 1.2% for about once a month 0.1% for weekly and 0.01% for daily.

The percentages of rural households who used courier services classified by frequency of use were: 0.4% for less than once a month; 0.1% for about once a month; 0.01% for weekly and none for daily.

### **Use of ICTs by Individuals**

Mobile cellular telephone uptake by males and females in rural areas was 8.9% and 10.3% respectively. The percentage of males and females who used a computer from any location in the last 12 months was 1.5% and 1.1% respectively. Males and females in rural areas who used the Internet from any location in the last 12 months constituted 0.37% and 0.22% respectively. The percentage of males and females in rural areas who used the Internet classified by highest education level attained was 0.38% and 0.25% respectively.

Females had the highest percentage 25% of Internet users at Internet cafes. Individuals who accessed the Internet at their work place recorded 16%; and through a mobile cellular telephone 9%. Males had the highest percentage of 16% of Internet users at other people's homes compared to 13% of females. Seventeen percent of females accessed the Internet at their place of education compared to 16% of males. Females recorded higher percentages in Internet activities such as sending or receiving e-mail 17%; reading or downloading online newspapers or magazines, electronic books 16%; and playing or downloading video games 11%. Males recorded higher percentages in the following Internet activities: education or learning activities 18%; downloading movies, images, music, watching TV or video, or listening to radio or music 12%; and getting information about goods and services 9%.

Individuals in rural areas who used the Internet in the last 12 months were classified by Internet activity and age group. Those in the 15-24 age group recorded higher percentages in the following activities: Education or learning activities 21%; playing or downloading video games 14%; and reading or downloading online newspapers or magazines, electronic books 13%. The 25-74 age group had higher percentages in the following activities: getting information about goods and services 10%; posting information or instant messaging 7%; purchasing or ordering goods or services 6% and getting information related to health or health services 5%. The 75 and above age group had higher percentages in sending or receiving e-mail 35%; telephoning over the Internet/VoIP 34%; and downloading movies, images, music, watching TV or video, or listening to radio or music 31%.

Individuals who did not use the Internet in the last 12 months reported that they did not know a computer. Some indicated that they did not know how to use a computer. Others cited lack of electricity as a major constraint to accessing Internet at home and some noted that Internet cafes were too far away.

### **Limitations to access to ICTs**

The reasons given by households for not having access to the Internet were: lack of knowledge, skills and confidence; costly equipment; lack of interest or need; costly subscription to the Internet; some have access to the Internet from elsewhere and lack of electricity

### **Suggestions and recommendations**

ICT statistics is an exciting new area on which there is on-going research on common methods of measurement and survey approaches.

- A National ICT Household Survey might give a clearer picture of the digital divide between urban and rural households.
- Making radio and television services widely available is important for enhancing national identity, providing an outlet for domestic media content and informing the public about important news and information.
- Household Internet uptake is key to achieving several of the ICT for development related targets (WSIS Targets and MDGs) and is important not only for the economic but socio-economic benefits associated with it, such as digital inclusion, access to knowledge and information, acquisition of skills increasingly demanded in a range of occupations and sectors, and school performance.
- Increase competition to lower the cost of access to Internet. [The cost of international bandwidth is one of the main underlying causes of high Internet (especially broadband Internet) prices in developing countries and needs to be reduced through greater competition in wholesale markets].

- Government to adopt appropriate policies and provide the necessary resources to encourage the establishment of sufficient public access points for Internet access, particularly in rural areas, e.g. at Post Offices and Schools.
- School curricula should be adapted to meet the challenges of the information society.
- Government can help by developing appropriate online services that will attract users to utilize the Internet and by encouraging local content development through partnerships with the private sector, development agencies, non-governmental organizations, the academic and research institutions and other partners.

**M. Dzinotizei**  
**Director General, ZIMSTAT**

**August 2011**

## CHAPTER 1: INTRODUCTION

### 1.1 Geographical Background

Zimbabwe lies to the north of the Tropic of Capricorn between the Zambezi and Limpopo rivers. The country is landlocked, bordered by Mozambique on the east, South Africa on the south, Botswana on the west and Zambia on the north and north-west. It is part of the great-plateau, which constitutes the major features of the geology of Southern Africa. Almost the entire surface area of Zimbabwe is more than 300 metres above sea level, with nearly 80 percent of the land lying more than 900 metres above sea level and about 5 percent lying more than 1 500 metres above sea level.

### 1.2 Population Size

In 2002, the population of the country was 11 631 657. There were 5 634 180 males and 5 997 477 females. The sex ratio, the average number of males per 100 females, was 94. The percentages of the male and female population were 48 and 52 percent respectively. According to the 2008 Inter-Censal Demographic Survey (ICDS), the population of the country was 12.4 million people. The percentage of the male and female population remained at 48% and 52% respectively, as at the 2002 Census.

### 1.3 Status of ICT Infrastructure in Zimbabwe as 31 March 2010

According to the World Economic Forum's Global Information Technology Report, Zimbabwe ranks 105th out of 115 economies in 2005-2006, based on a networked readiness index, which measures the degree of preparation of a nation to participate in and benefit from ICT developments. *See Appendix C for a detailed list of the ICT infrastructure in the country.*

## 1.4 Background to Core ICT Indicators

In 2005 the Partnership on Measuring ICT for Development (a consortium of United Nations and other developmental agencies<sup>1</sup>) developed a core list of ICT indicators to standardize and harmonize ICT statistics at a global level. The main purpose of the core list is to help countries produce high quality and internationally comparable ICT statistics. The core list of ICT indicators were endorsed by the United Nations Statistical Commission at its 38<sup>th</sup> session in March 2007. Countries are encouraged to use the core list in their data collection programmes. The ICT Rural Household Survey 2010 questionnaire incorporated the Partnership's core indicators on access to, and use of, ICT by households and individuals as recommended.

## 1.5 ICT Rural Households Survey 2010

The survey on Access to Information and Communication Technology (ICT) by Rural Households and Use by Individuals is the first to be carried out by the Zimbabwe National Statistics Agency (ZIMSTAT). The survey was conducted to obtain statistical information on ICT access by rural households and use by individuals.

## 1.6 Survey Objective

The main objective of the survey was to collect data on access and use of ICTs by households and individuals in order to provide information for measuring the digital divide.

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<sup>1</sup> *The International Telecommunication Union (ITU), Organization for Economic Co-Operation and Development (OECD), United Nations Conference on Trade and Development (UNCTAD), United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics, UN ICT Task Force, the World Bank, UN Economic Commission for Africa (ECA), UN Economic Commission for Latin America and the Caribbean (ECLAC), UN Economic and Social Commission for Asia and the Pacific (ESCAP), UN Economic and Social Commission for Western Asia (ESCWA), and EUROSTAT.*

## CHAPTER 2: SAMPLE DESIGN AND SURVEY METHODOLOGY

### 2.1 Sample Design

The ICT Rural Household Survey collected information from 26 483 rural agricultural households and in-scope individuals (for ICT usage questions) that live in the following areas:

- Communal Lands
- Old Resettlement Schemes (Models A, B2 and E)
- A1 Farms
- A2 Farms
- Large Scale Commercial Areas
- Small Scale Commercial Farming Areas

The sampling units used followed the structure of the sectors. Sampling units for Large Scale and Small Scale Commercial Farms were farms, for Communal Lands sampling units were households while for A1, A2, Models (A, B2 and E) sampling units were plot holders

In Communal Lands, Enumeration Areas (EAs) were selected using probability proportional to size (PPS) from a sampling frame stratified by province and district. The measure of size being the number of households enumerated in the 2002 Population Census. A complete listing of households in the selected EAs was carried out. The list was then used to select sample households using systematic random sampling.

In Large Scale Commercial Farms, sample farms were selected from the register of all Large Scale Commercial Farms which is stratified by province and district. The selection of farms was done using probability proportional to size, the measure of size being the farms area. The sample of farms is selected by systematic random sampling.

In Small Scale Commercial Farms, farms were selected from the register of Small Scale Commercial Farms. The selection of farms was done using probability proportional to size, the measure of size being the number of farms in the district. The sample of farms is selected by systematic random sampling.

A register of A1 Farms stratified by province and district was used for selection of A1 Farms. Selection of farms was done using probability proportional to size, the measure of size being the number of plot holders in each farm. A complete listing of plot holders is done and is used for the second stage sampling which is selection of plot holders using systematic random sampling.

A sample of A2 Farms is selected from a register of A2 Farms which is stratified by province and district. Selection of farms is done using probability proportional to size the measure of size being the number of plot holders in each farm. A complete listing of plot holders was done and was used for the second stage sampling which is selection of plot holders using systematic random sampling.

A sample of Model A Resettlement Schemes was selected from a register of Model A Resettlement Schemes which was stratified by province and district. Schemes are selected from each stratum using probability proportional to size, the measure of size being the number of villages in each scheme. Villages were then selected from each selected scheme using probability proportional to size the measure of size being the number of plot holders in each village. A complete listing of all plot holders in the selected villages was carried out. The list was used for the third stage sampling of plot holders using systematic random sampling from each of the selected village plot-holder list.

For Model B2 Resettlement Schemes a complete census was carried out. A complete listing of all plot holders in the schemes is carried out and the list is used for the selection of plot holders using systematic random sampling.

For Model E Resettlement Schemes a complete census is carried out. A complete listing of all plot holders in the schemes was carried out and the list was used for the selection of plot holders using systematic random sampling.

## **2.2 Questionnaire (See Appendix B)**

One questionnaire was used. Questions to address specific issues relevant to Zimbabwe were included. The household composition section was used to list all the usual members of the selected households. Basic information on the characteristics of each person listed including his/her name, age and sex were collected. The household composition information was used to identify persons eligible for the individual interviews. Other sections of the questionnaire collected information on educational status, labour force status, occupation, electricity access and access to and use of information and communication technologies (ICTs) by households and individuals.

## **2.3 Training**

ZIMSTAT and POTRAZ staff participated in a 4 day Training of Trainers (TOT) workshop in early August 2010. Immediately following the TOT, the training of enumerators and pre-test fieldwork took place from mid-August 2010 to end of the month. The pre-test and fieldwork was conducted in Gweru and surrounding areas where both Ndebele and Shona speaking households could easily be identified. Debriefing sessions were held with the pre-test field staff and modifications were made drawing from lessons learnt. The main training consisted of instructions regarding interviewing techniques and field procedures, a detailed review of items on the questionnaire and all the relevant instructions.

## **2.4 Fieldwork**

About 470 enumerators collected data over a period of fifteen days. ZIMSTAT head-office statisticians, provincial supervisors and team leaders supervised the data collection exercise.

## **2.5 Data Coding, Editing, Cleaning and Processing**

Questionnaires were brought to ZIMSTAT head office for data processing which consisted of editing, coding, data entry and secondary editing of computer identified errors. The secondary editing involved checking and if necessary resolving inconsistencies in the data. CSPRO and SAS were used for data processing.

## **2.6 Survey Funding**

The successful completion of the Survey on Information and Communication Technology (ICT) Access and Use by Rural Households and Individuals project was made possible through funding by POTRAZ.

## 2.7 Response Rates Classified by Province and Sector

**Table 1: Sample Households Classified by Province and Corresponding Response Rates: ICT Survey 2010**

Province	Sampled Households	Interviewed Households	Response Rates
Manicaland	4 471	4 163	<i>0.93</i>
Mashonaland Central	3 514	3 363	<i>0.96</i>
Mashonaland East	4 458	4 290	<i>0.96</i>
Mashonaland West	4 938	4 134	<i>0.84</i>
Matabeleland North	1 935	1 794	<i>0.93</i>
Matabeleland South	2 231	2 205	<i>0.99</i>
Midlands	3 516	3 028	<i>0.86</i>
Masvingo	3 633	3 506	<i>0.97</i>
<b>Total</b>	<b>28 696</b>	<b>26 483</b>	<b><i>0.92</i></b>

**Table 2: Sample Households Classified by Sector and Corresponding Response Rates: ICT Survey 2010**

Sector	Sampled Households	Interviewed Households	<i>Response Rate</i>
Communal Lands	11 139	10 741	<i>0.96</i>
SSCF	2 259	1 898	<i>0.84</i>
LSCF	447	242	<i>0.54</i>
A1 Farms	7 244	6 500	<i>0.90</i>
A2 Farms	2 478	1 973	<i>0.80</i>
Old Resettlement Schemes	5 129	5 129	<i>1.00</i>
<b>Total</b>	<b>28 696</b>	<b>26 483</b>	<b><i>0.92</i></b>

## 2.8 Geographical Distribution of Respondents Classified by Province, Sector and Sex of Head of Household

The survey was conducted in the eight rural provinces of Zimbabwe namely: Manicaland, Mashonaland Central, Mashonaland East, Mashonaland West, Matabeleland North, Matabeleland South, Midlands and Masvingo. The results showed 808 950 of the households headed by males while 609 433 were headed by females.

Table 3, shows that Mashonaland West had the highest number of male headed households 67.2%, while Masvingo had the highest number of female headed households of 50.9%. Figure 1, shows the same results.

**Table 3: Percentage Distribution of Rural Households Classified by Province and Sex of Head Household: ICT Survey 2010**

Province	Households	Males	<i>% Males</i>	Females	<i>% Females</i>
Manicaland	277 306	143 631	<i>51.8</i>	133 673	<i>48.2</i>
Mashonaland Central	143 086	94 371	<i>66.0</i>	48 716	<i>34.0</i>
Mashonaland East	204 943	117 993	<i>57.6</i>	86 951	<i>42.4</i>
Mashonaland West	147 360	98 983	<i>67.2</i>	48 378	<i>32.8</i>
Matabeleland North	102 889	57 370	<i>55.8</i>	45 519	<i>44.2</i>
Matabeleland South	110 720	54 490	<i>49.2</i>	56 228	<i>50.8</i>
Midlands	209 268	132 650	<i>63.4</i>	76 616	<i>36.6</i>
Masvingo	222 813	109 462	<i>49.1</i>	113 352	<i>50.9</i>
<b>Total</b>	<b>1 418 385</b>	<b>808 950</b>	<b><i>57.0</i></b>	<b>609 433</b>	<b><i>43.0</i></b>

**Figure 1: Percentage Distribution of Rural Households Classified by Province and Sex of Head of Household: ICT Survey 2010**

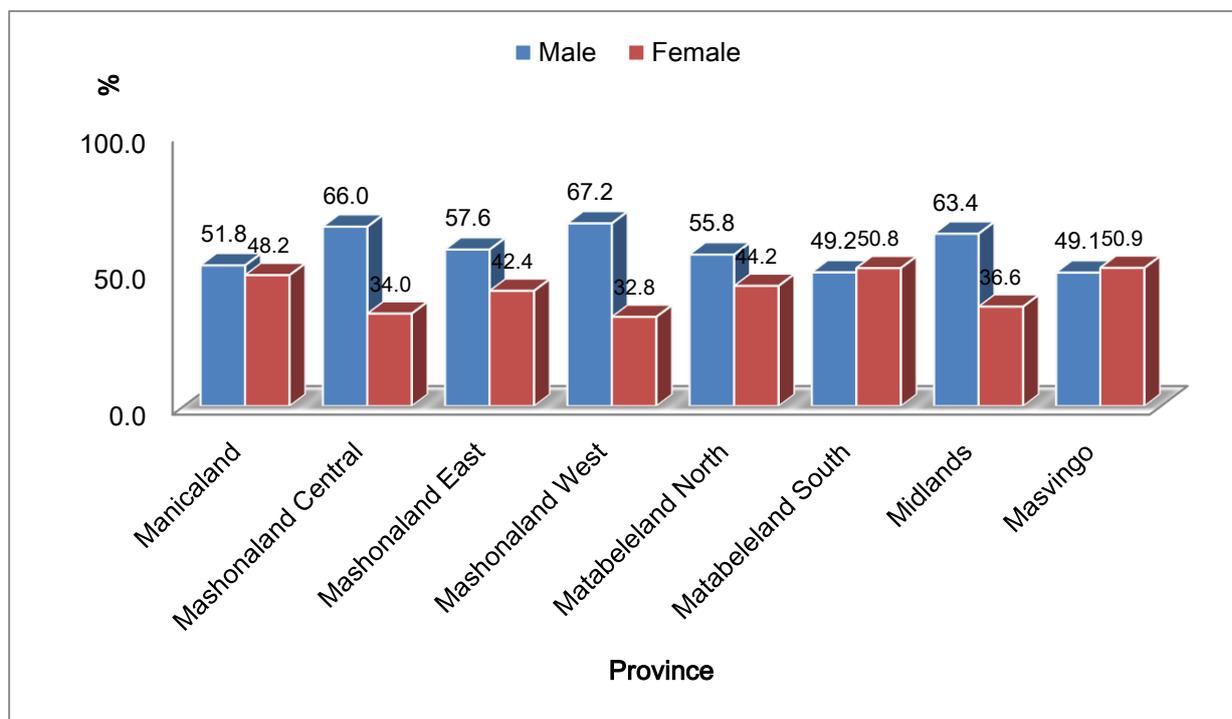
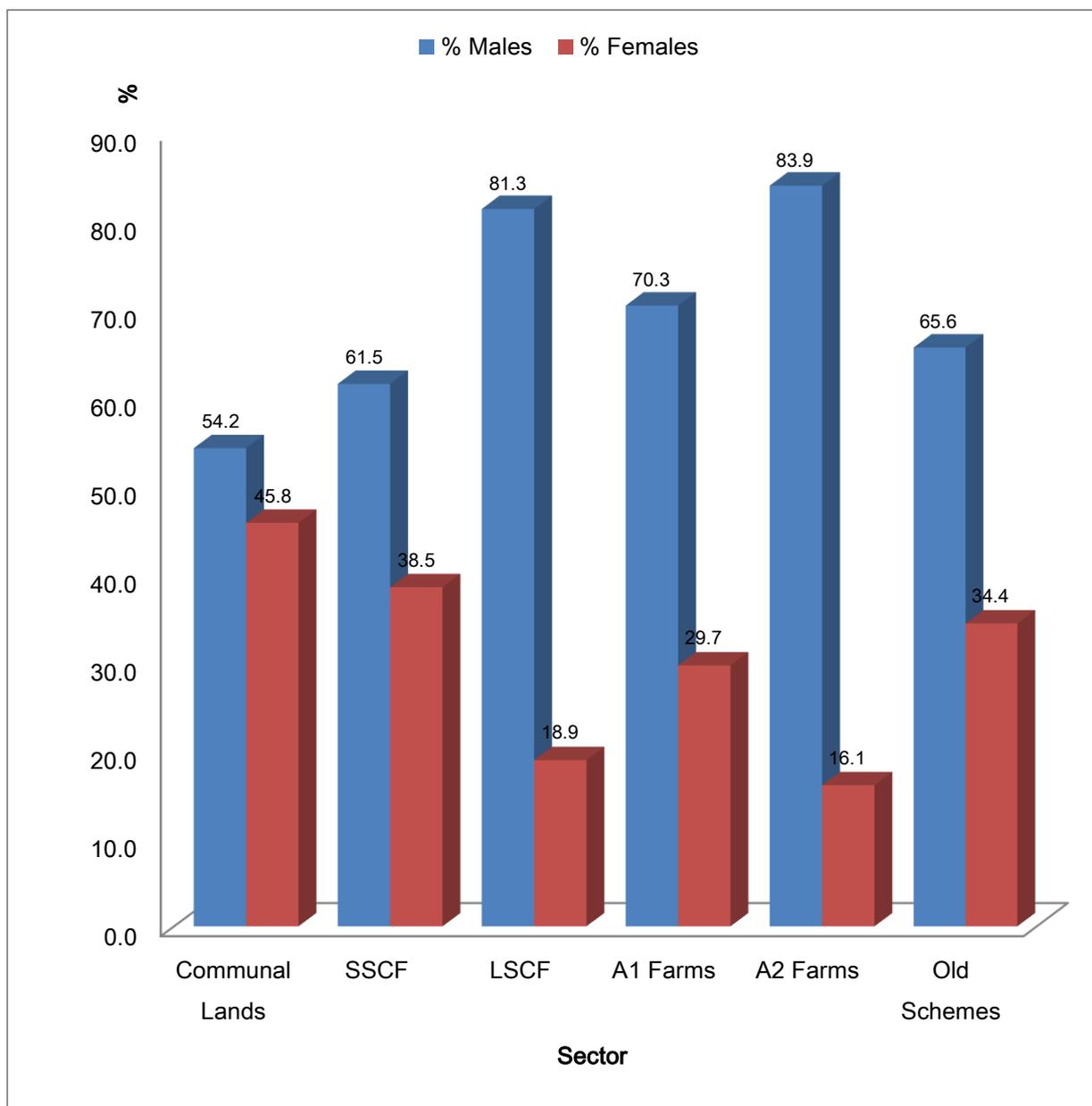


Table 4, shows that 83.9% of households in A2 Farms are male headed while 16.1% are female headed. The same results are shown in Figure 2.

**Table 4: Percentage Distribution of Rural Households Classified by Sector and Sex of Head Household: ICT Survey 2010**

Sector	Households	Males	% Males	Females	% Females
Communal Lands	1 152 163	62 4665	54.2	527 497	45.8
SSCF	11 479	7058	61.5	4 419	38.5
LSCF	966	785	81.3	183	18.9
A1 Farms	127 076	89 387	70.3	37 689	29.7
A2 Farms	21 548	18 079	83.9	3 471	16.1
Old Schemes	105 153	68 976	65.6	36 174	34.4
<b>Total</b>	<b>1 418 385</b>	<b>808 950</b>	<b>57.0</b>	<b>609 433</b>	<b>43.0</b>

Figure 2: Percentage Distribution of Rural Households Classified by Sector and Sex of Head of Household: ICT Survey 2010



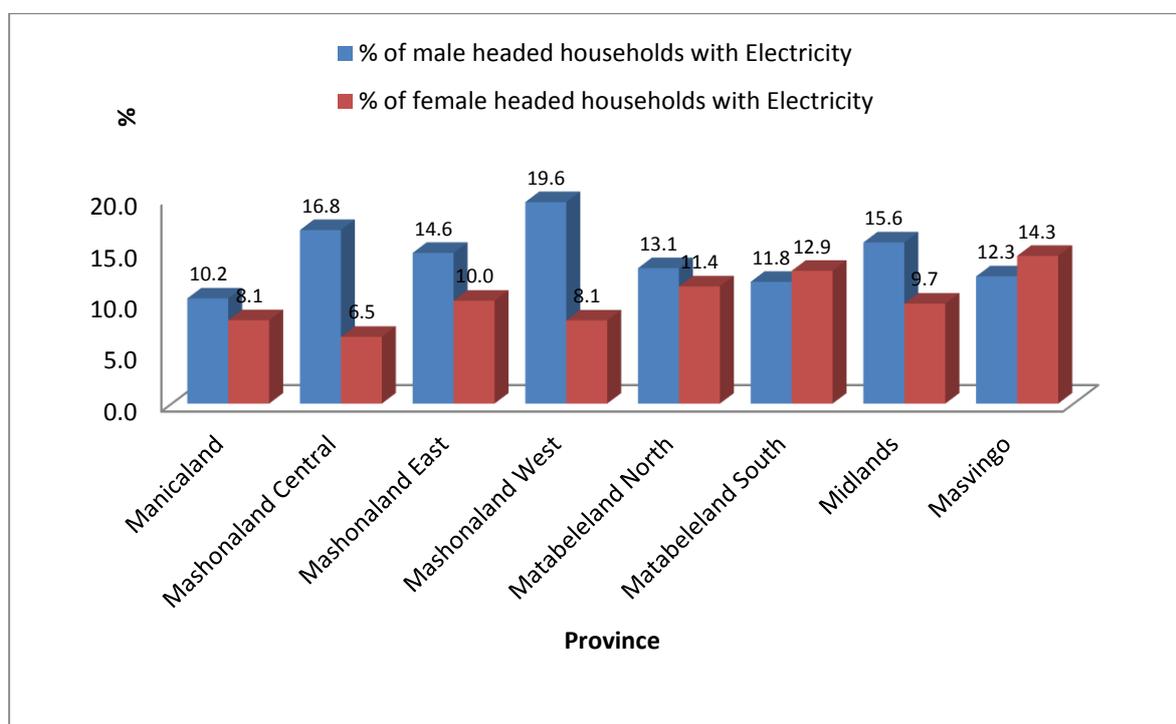
## CHAPTER 3: SURVEY RESULTS

### 3.1: Rural Households with Access to Electricity by Province, Sector and Sex of Head of Household

Electricity is an important prerequisite for using many ICTs. The lack of it is such a significant barrier in many developing economies that monitoring trends of its provision is as relevant as monitoring the supply and use of ICTs. Electricity access may be by a grid/mains connection, i.e. Zimbabwe Electricity Supply Authority (ZESA), or from power generated locally (including at the dwelling). Local power includes electricity generated by a fuel-powered generator, or from renewable resources such as wind, water or solar. It excludes use of energy storage devices, such as batteries (though these may be used to store electricity from other sources).

Figure 3, shows the distribution of households with access to electricity by province and sex of head of household. Masvingo recorded the highest percentage 14.3% of female headed households with access to electricity. Mashonaland West had the highest percentage 19.6% of male headed households with access to electricity. Table 5, shows the distribution of households with access to electricity by sector and sex of head of household.

**Figure 3: Percentage Distribution of Rural Households with Access to Electricity Classified by Province and Sex of Head of Household: ICT Survey 2010**



**Table 5: Percentage Distribution of Rural Households with Access to Electricity  
Classified by Sector and Sex of Head of Household: ICT Survey 2010**

<b>Sector</b>	<b>Households</b>	<b>Males</b>	<b>%with Electricity</b>	<b>Females</b>	<b>% with Electricity</b>
<b>Communal Lands</b>	1 152 163	136 414	11.8	117 063	10.2
<b>SSCF</b>	11 479	2 464	21.5	1 455	12.7
<b>LSCF</b>	966	680	70.4	149	15.4
<b>A1 Farms</b>	127 076	28 657	22.6	11 795	9.3
<b>A2 Farms</b>	21 548	8 596	39.9	1 747	8.1
<b>Old Schemes</b>	105 153	21 223	20.2	10 039	9.5
<b>Total</b>	<b>1 418 385</b>	<b>198 034</b>	<b>14.0</b>	<b>142 248</b>	<b>10.0</b>

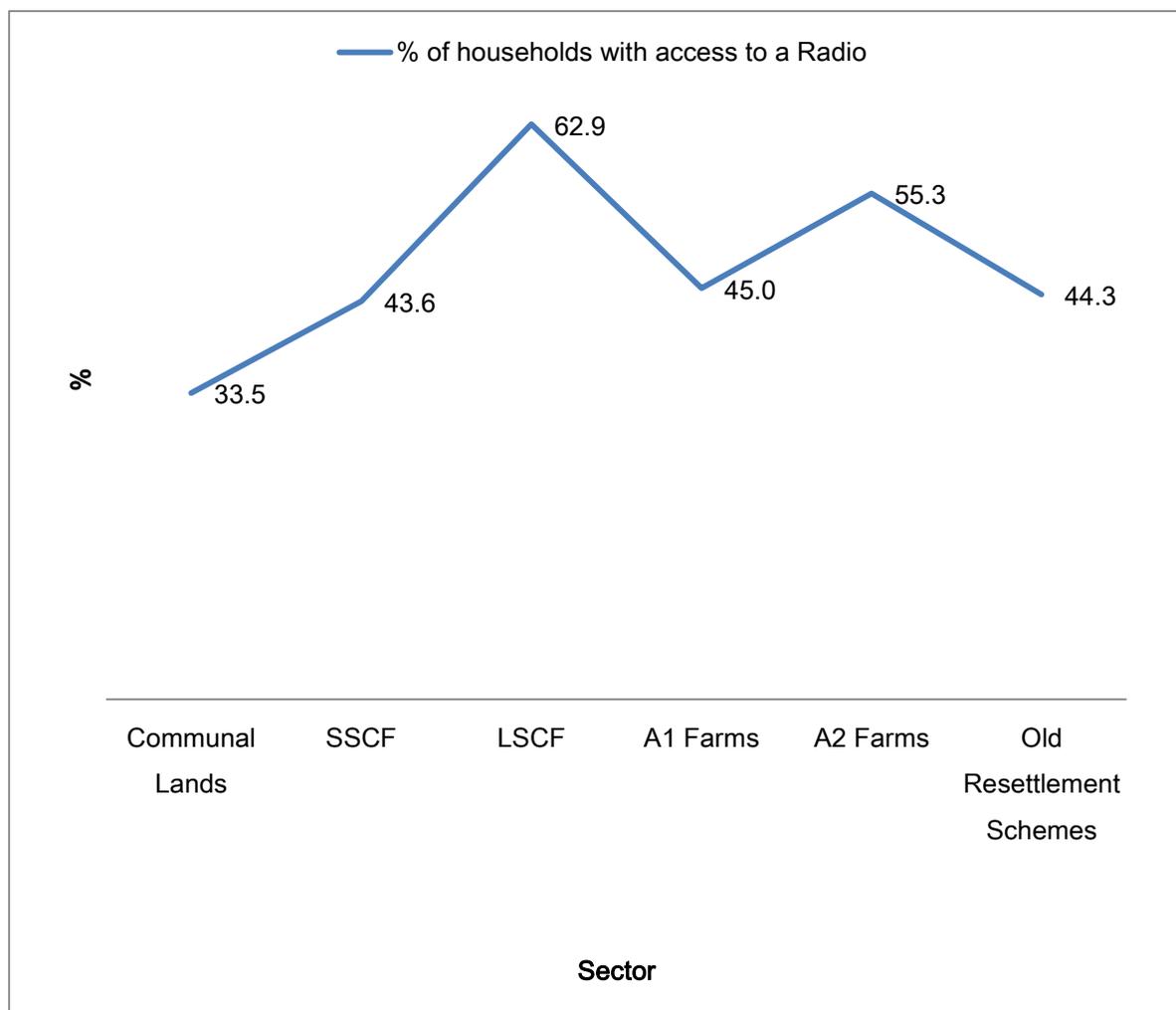
### 3.2: Rural Households with Access to a Radio by Province and Sector

A radio is a device capable of receiving broadcast radio signals, using popular frequencies, such as FM, AM, LW and SW. It includes a radio set integrated in a car or an alarm clock but excludes radios integrated with a mobile phone or in a computer. Radios play an important role particularly in rural areas where incomes tend to be relatively low and where electricity is limited. The survey found Mashonaland West to have the highest percentage of households with access to a radio, recording 39.3%. The lowest percentage of households with access to a radio was 33.4% in Mashonaland East. Table 6, shows the percentage distribution of radio access by province. Figure 4, shows the percentage distribution of radio access by sector. Traditional communication technologies, such as radio broadcasting, remain potentially important ICT tools as they convey important information to households.

**Table 6: Percentage Distribution of Rural Households with Access to a Radio  
Classified by Province: ICT Survey 2010**

Province	Households	Access to Radio	<i>Percentage with Radio Access</i>
Manicaland	277 306	98 297	<i>35.4</i>
Mashonaland Central	143 086	52 168	<i>36.5</i>
Mashonaland East	204 943	68 481	<i>33.4</i>
Mashonaland West	147 360	57 863	<i>39.3</i>
Matabeleland North	102 889	35 575	<i>34.6</i>
Matabeleland South	110 720	37 648	<i>34.0</i>
Midlands	209 268	74 959	<i>35.8</i>
Masvingo	222 813	82 188	<i>36.9</i>
<b>All Households</b>	<b>1 418 385</b>	<b>507179</b>	<b><i>35.8</i></b>

**Figure 4: Percentage Distribution of Rural Households with Access to a Radio  
Classified by Sector: ICT Survey 2010**

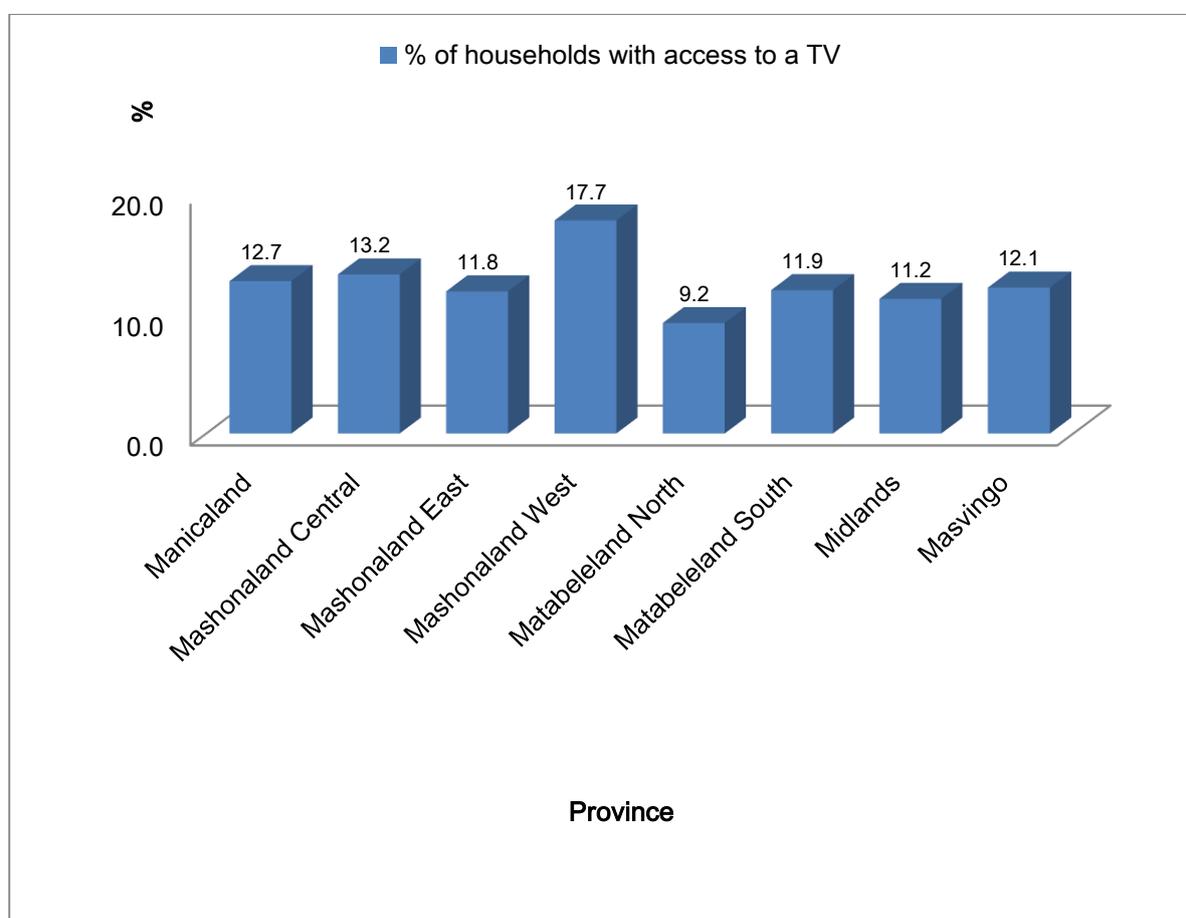


### 3.3: Rural Households with Access to Television by Province and Sector

A television (TV) is a stand-alone device capable of receiving broadcast television signals, using popular access means such as over-the-air, cable and satellite. It excludes TV functionality integrated with another device, such as a computer or a mobile phone.

As shown in Figure 5, Mashonaland West had the highest percentage of 17.7% of households with access to a television. Matabeleland North had the lowest percentage of 9.2% of households with access to a television. Table 7, shows the percentage distribution of rural households with access to a television by sector.

**Figure 5: Percentage Distribution of Rural Households with Access to a Television Classified by Province: ICT Survey 2010**



**Table 7: Percentage Distribution of Rural Households with Access to a Television  
Classified by Sector: ICT Survey 2010**

<b>Sector</b>	<b>Households</b>	<b>With access to a TV</b>	<b><i>% with Access</i></b>
<b>Communal Lands</b>	1 152 163	123 907	<i>10.8</i>
<b>SSCF</b>	11 479	2 271	<i>19.8</i>
<b>LSCF</b>	966	654	<i>67.7</i>
<b>A1 Farms</b>	127 076	23 773	<i>18.7</i>
<b>A2 Farms</b>	21 548	7 389	<i>34.3</i>
<b>Old Schemes</b>	105 153	19 517	<i>18.6</i>
<b>Total</b>	<b>1 418 385</b>	<b>177 511</b>	<b><i>12.5</i></b>

### 3.4 Rural Households with Access to a Radio only or a Television only by Province

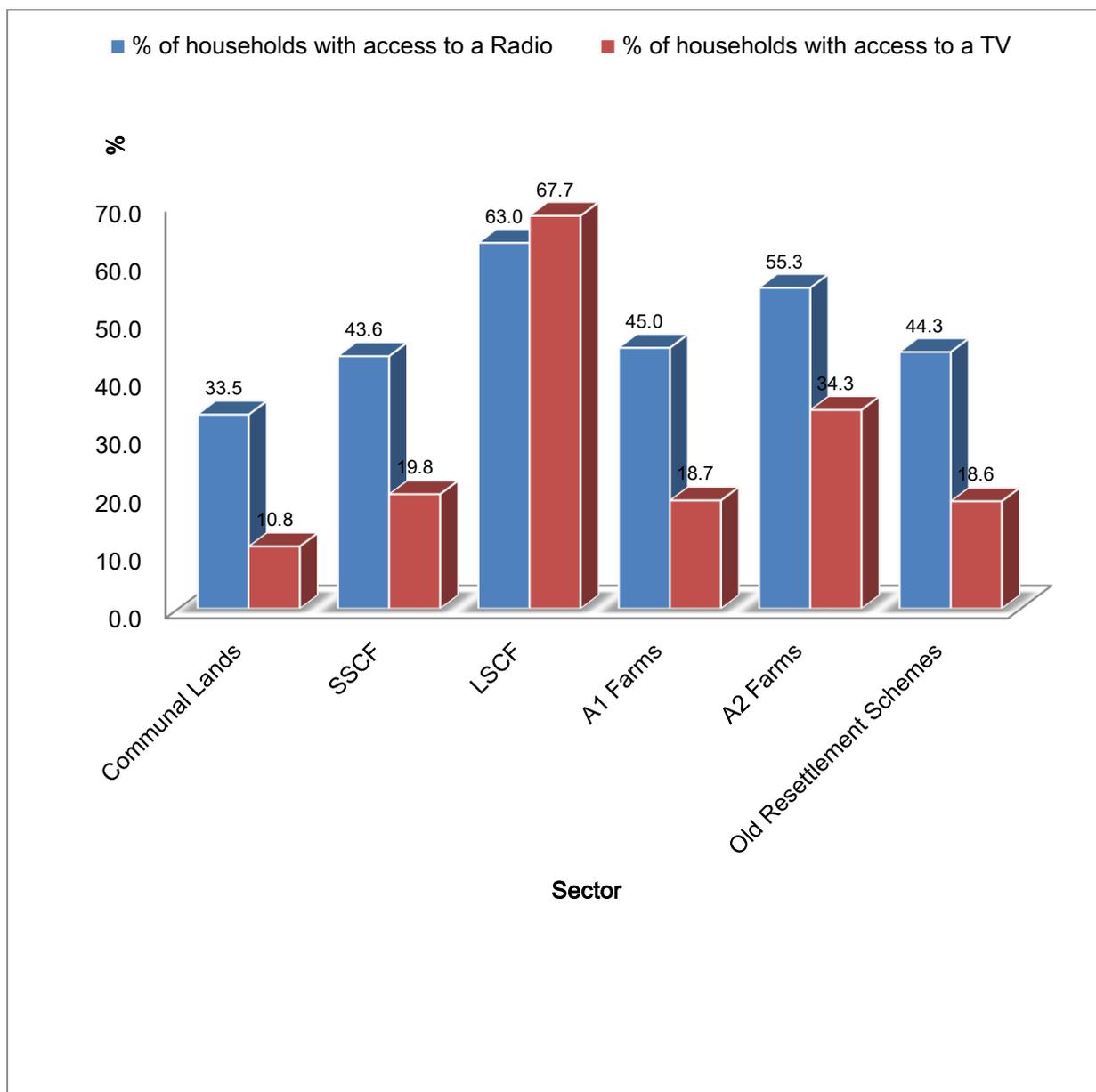
Table 8, shows rural households with access to a radio or a television only classified by province. Figure 6, shows rural households with access to a radio or a television only classified by sector. Radio and television intensity is high in Large Scale Commercial Farms with percentages of 63% and 67.7% respectively. This could be attributed to the sophistication required in this agricultural sector. Communal Lands recorded 10.8% television diffusion which is the lowest percentage.

Radio delivery is relatively cheap; radio signals can penetrate remote geographic regions; any person with access to a radio set can receive information, regardless of literacy or education level; and it can provide region specific information, easily incorporate local concerns and feedback and can operate in local languages. The lack of electricity and content are major barriers to overcoming the broadcasting divide.

**Table 8: Percentage Distribution of Rural Households with Access to a Radio or a Television only Classified by Province: ICT Survey 2010**

Province	Households	Radio	<i>% with a Radio only</i>	TV	<i>% with a TV only</i>
Manicaland	277 306	98 297	<i>35.4</i>	35 136	<i>12.7</i>
Mashonaland Central	143 086	52 168	<i>36.5</i>	18 921	<i>13.2</i>
Mashonaland East	204 943	68 481	<i>33.4</i>	24 229	<i>11.8</i>
Mashonaland West	147 360	57 863	<i>39.3</i>	26 075	<i>17.7</i>
Matabeleland North	102 889	35 575	<i>34.6</i>	9 463	<i>9.2</i>
Matabeleland South	110 720	37 648	<i>34.0</i>	13 203	<i>11.9</i>
Midlands	209 268	74 959	<i>35.8</i>	23 447	<i>11.2</i>
Masvingo	222 813	82 188	<i>36.9</i>	27 037	<i>12.1</i>
<b>Total</b>	<b>1 418 385</b>	<b>507179</b>	<b><i>35.8</i></b>	<b>177 511</b>	<b><i>12.5</i></b>

**Figure 6: Percentage Distribution of Rural Households with Access to a Radio or a Television only Classified by Province: ICT Survey 2010**



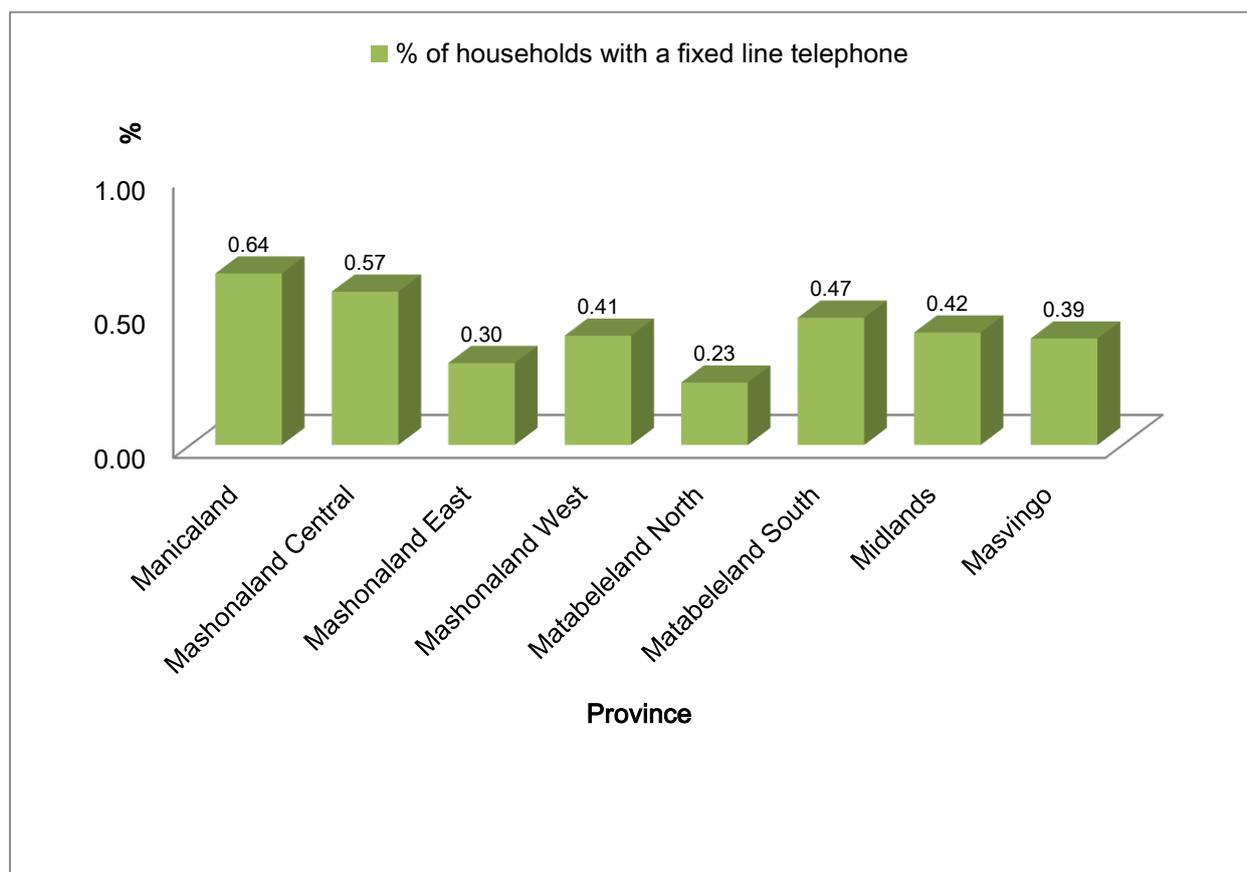
### 3.5: Rural Households with Access to a Fixed Line Telephone Classified by Province and Sector

A fixed telephone line refers to a telephone line connecting a customer's terminal equipment (e.g. telephone set, facsimile machine) to the public switched telephone network (PSTN) and which has a dedicated port on a telephone exchange. Tel-One is the sole fixed network provider in Zimbabwe. The fixed telephone infrastructure has been vandalised, is unreliable and non-existent in some areas.

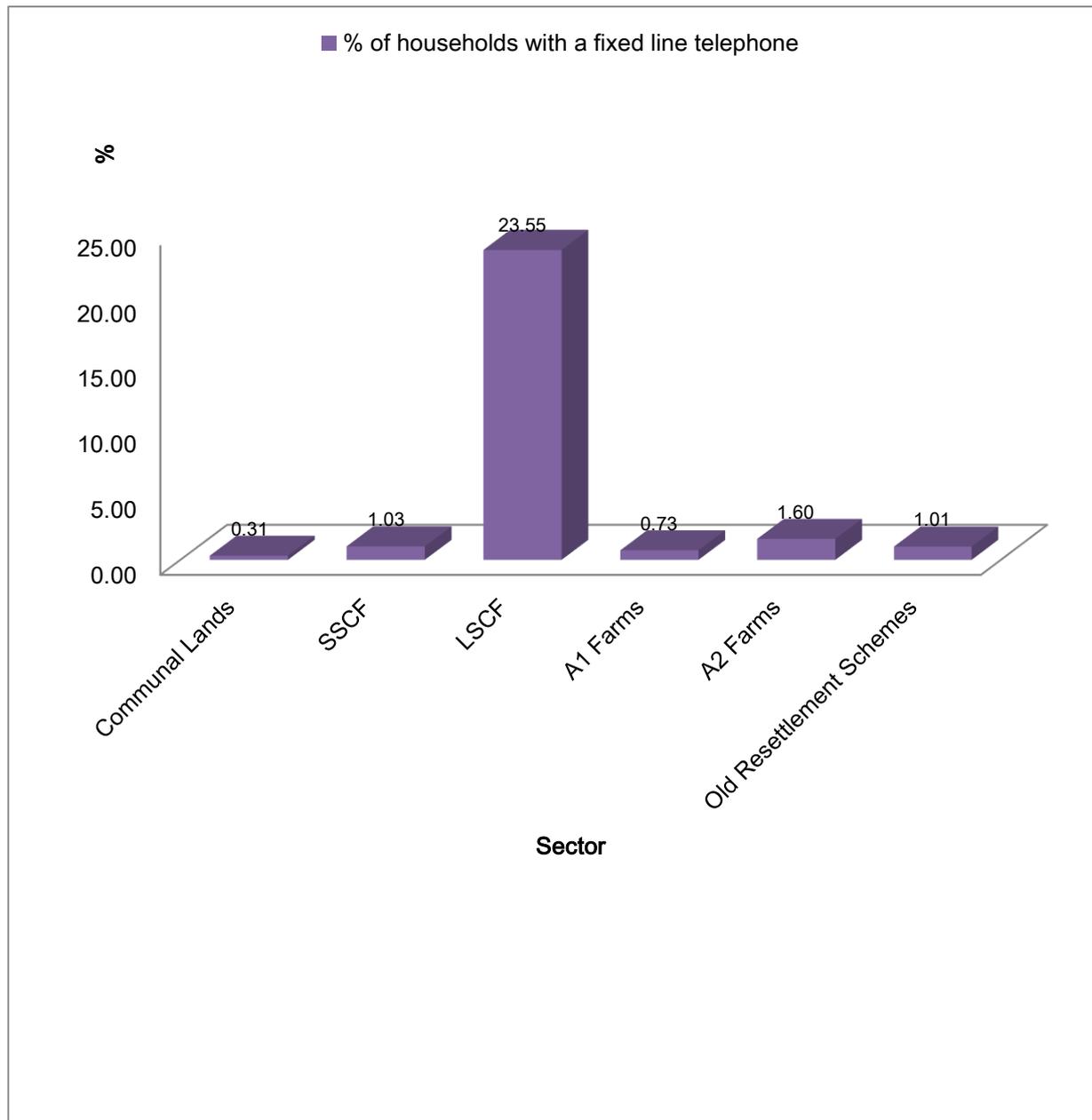
Figure 7, shows rural households with access to a Fixed Line Telephone classified by province. Households in Manicaland that have access to a Fixed Line Telephone constituted 0.64% as compared to Matabeleland North that had 0.23%.

Figure 8, shows the percentage distribution of rural households with access to a fixed line telephone classified by sector.

**Figure 7: Percentage Distribution of Rural Households with Access to a Fixed Line Telephone Classified by Province: ICT Survey 2010**



**Figure 8: Percentage Distribution of Rural Households with Access to a Fixed Line Telephone Classified by Sector: ICT Survey 2010**

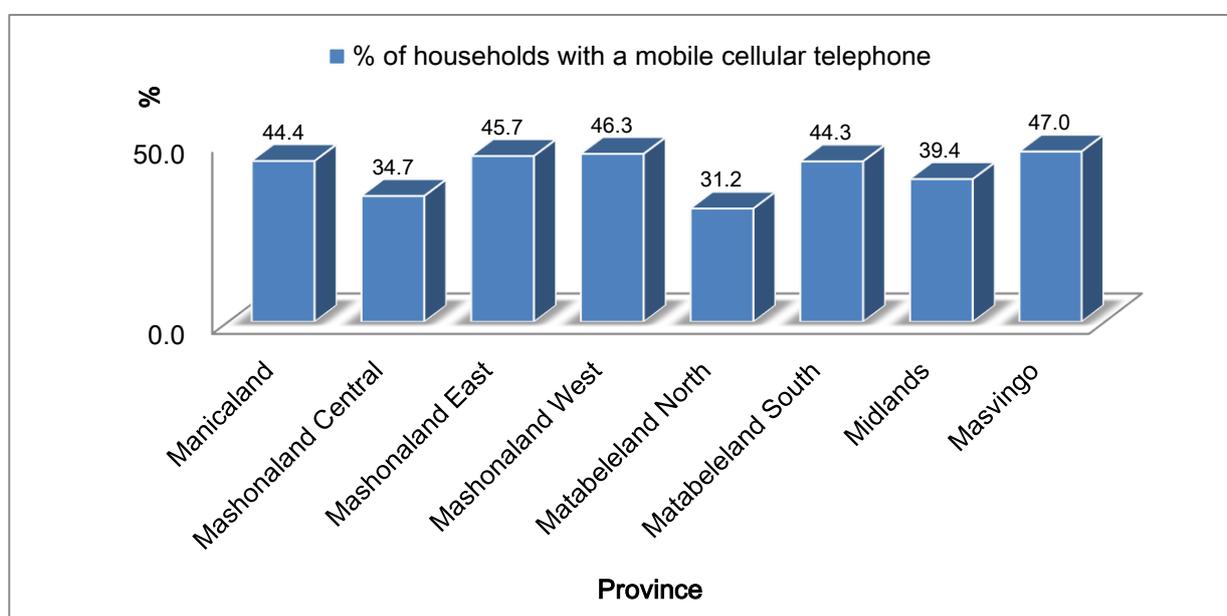


### 3.6: Rural Households with Access to a Mobile Cellular Telephone at Home by Province and Sector

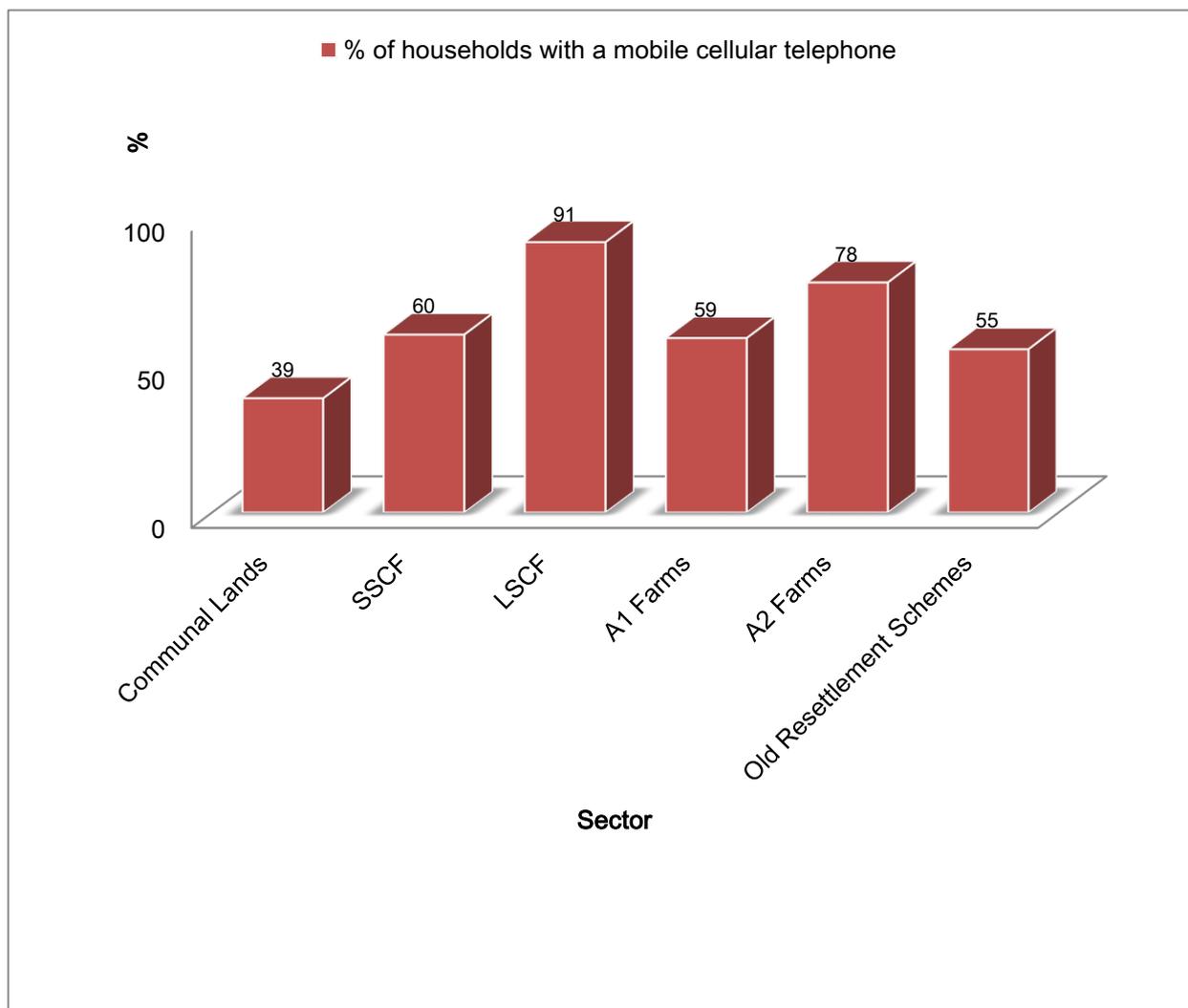
At home, means that the mobile telephone can be used by members of the household, though it is not restricted to home use only. A mobile (cellular) telephone refers to a portable telephone subscribing to a public mobile telephone service using cellular technology, which provides access to the PSTN. This includes analogue and digital cellular systems, as well as IMT-2000 (3G). Users of both post-paid subscriptions and pre-paid accounts are included. There are 3 Mobile Telephone Operators in Zimbabwe, namely: Econet Wireless, Net-One and Telecel and all are digitalised.

Figure 9, shows the distribution of households with access to a Mobile Cellular Telephone classified by Province. Households in Masvingo had 47% mobile cellular telephone access. Access to mobile cellular telephones in Matabeleland North was 31.2%. The survey results show that more households have access to a mobile cellular telephone than a fixed line telephone. Mobile technology is currently the most widely diffused ICT. Figure 10, shows the percentage distribution of rural households with access to a mobile cellular telephone classified by Sector.

**Figure 9: Percentage Distribution of Rural Households with Access to a Mobile Cellular Telephone at Home Classified by Province: ICT Survey 2010**



**Figure 10: Percentage Distribution of Rural Households with Access to a Mobile Cellular Telephone Classified by Sector: ICT Survey 2010**



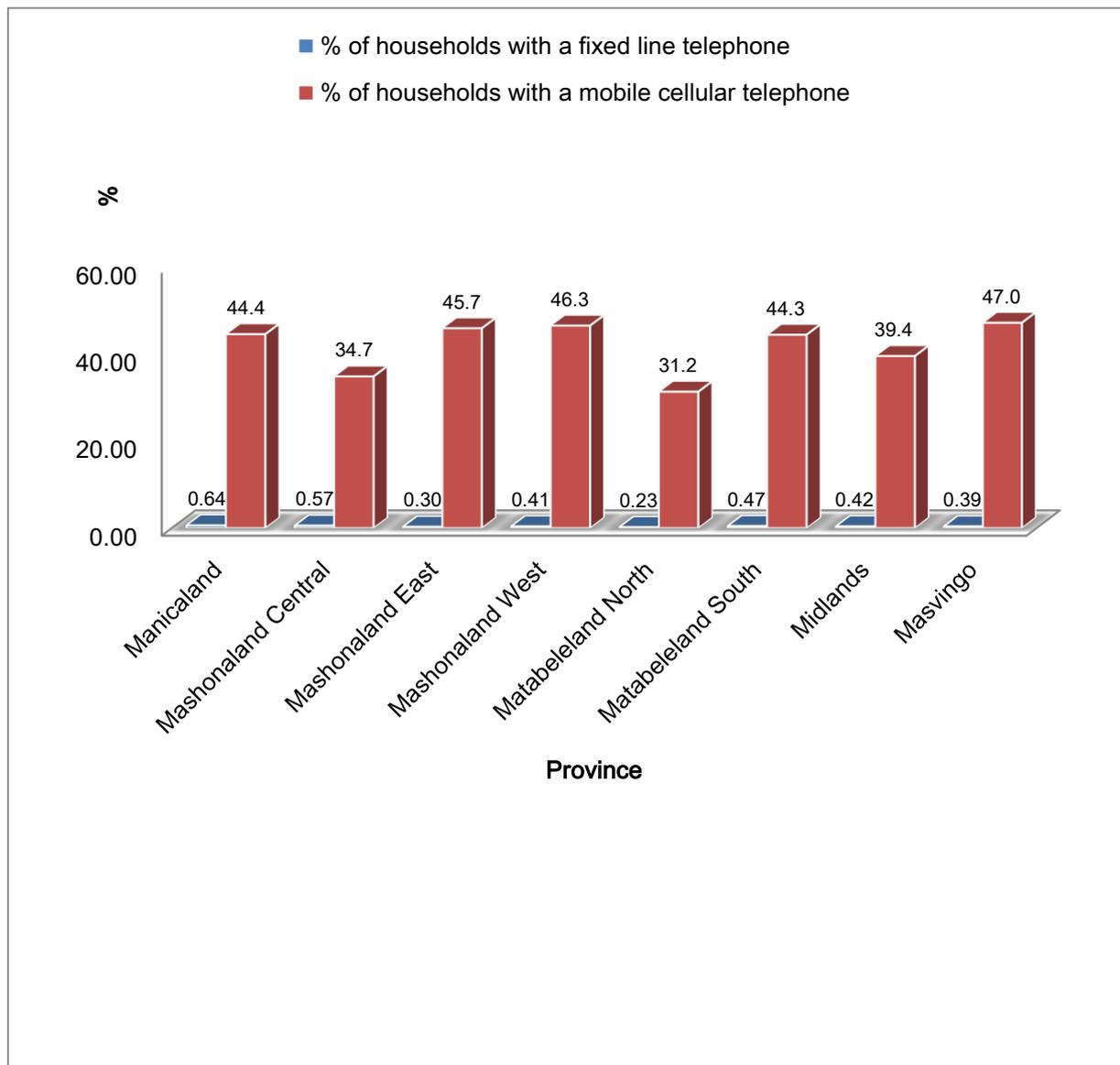
### 3.7 Rural Households with Access to a Fixed Line Telephone or a Mobile Cellular Telephone only Classified by Province: ICT Survey 2010

Today, mobile communications have become the most prevalent form of communication in almost every country in the world. A single mobile antenna can bring mobile services to a number of localities than fixed telephone access. Mobile telephony has low barriers to entry (e.g. declining handset and SIM Card prices). Household telephone penetration is the basic measure of universal services and is an unambiguous measurement, since a household is a well-defined statistical concept. Fixed line telephone growth has stagnated and has been overtaken by wireless communication. The cost of installing wireless systems is far less than that of fixed telephony. Figure 11, however, shows Manicaland with 0.64% of households having access to fixed line telephones. Masvingo had the highest percentage of 47% of households with access to a mobile cellular telephone. Table 9, shows the same results.

**Table 9: Percentage Distribution of Rural Households with Access to only a Fixed Line Telephone or a Mobile Cellular Telephone only Classified by Province: ICT Survey 2010**

Province	Households	Fixed line telephone	<i>% with a fixed line telephone</i>	Mobile cellular telephone	<i>% with a mobile cellular telephone</i>
Manicaland	277 306	1 763	0.64	123 076	44.4
Mashonaland Central	143 086	813	0.57	49 653	34.7
Mashonaland East	204 943	622	0.30	93 758	45.7
Mashonaland West	147 360	597	0.41	68 298	46.3
Matabeleland North	102 889	238	0.23	32 132	31.2
Matabeleland South	110 720	522	0.47	49 011	44.3
Midlands	209 268	872	0.42	82 414	39.4
Masvingo	222 813	879	0.39	104 705	47.0
<b>Total</b>	<b>1 418 385</b>	<b>6 306</b>	<b>0.44</b>	<b>603 047</b>	<b>42.5</b>

**Figure 11: Percentage Distribution of Rural Households with Access to only a Fixed Line Telephone or only a Mobile Cellular Telephone Classified by Province: ICT Survey 2010**

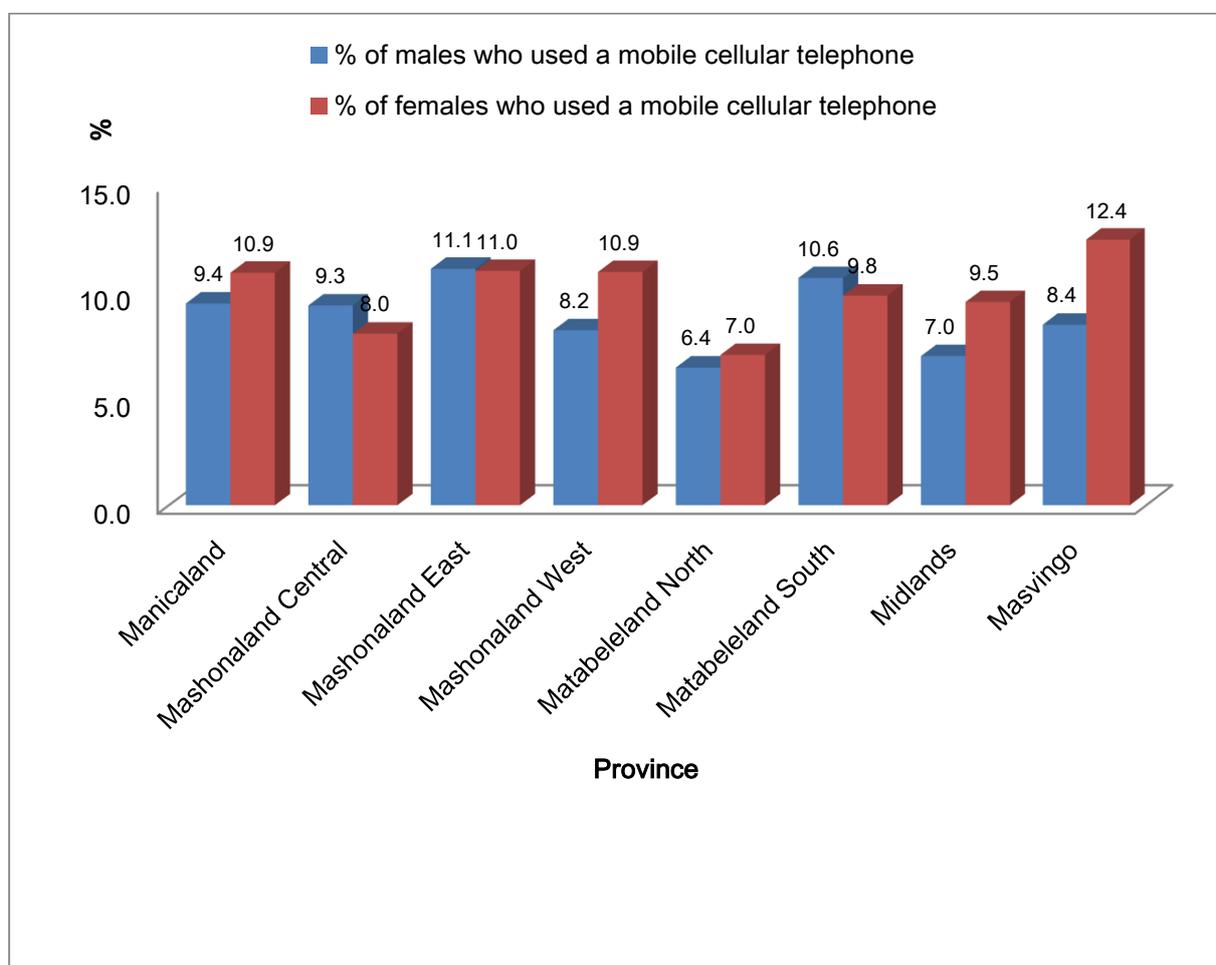


### 3.8 Use of Mobile Cellular Telephones by Individuals in Rural Areas classified by Province, Sector and Sex

Figure 12, shows mobile telephone use by individuals classified by province and sex. Mashonaland East had the highest percentage 11.1% of male users of the mobile telephone. Masvingo had the highest percentage 12.4% of female users of mobile telephones.

Table 10, shows the percentage distribution of individuals in rural areas who used the mobile cellular telephone classified by sector and sex. Mobile cellular telephone usage in Large Scale Commercial Farms saw males at 34.3% and females at 31.3% respectively.

**Figure 12: Percentage Distribution of Individuals in Rural Areas who used the Mobile Cellular Telephone Classified by Province and Sex: ICT Survey 2010**



**Table 10: Percentage Distribution of Individuals in Rural Areas who used the Mobile Cellular Telephone Classified by Sector and Sex: ICT Survey 2010**

<b>Sector</b>	<b>Individuals</b>	<b>Males</b>	<b><i>% of males who used a mobile cellular telephone</i></b>	<b>Females</b>	<b><i>% of females who used a mobile cellular telephone</i></b>
<b>Communal Lands</b>	3 237 503	243 873	<i>7.5</i>	312 511	<i>9.7</i>
<b>SSCF</b>	36 133	6 505	<i>18.0</i>	4 778	<i>13.2</i>
<b>LSCF</b>	2 773	951	<i>34.3</i>	867	<i>31.3</i>
<b>A1 Farms</b>	367 269	55 961	<i>15.2</i>	44 240	<i>12.0</i>
<b>A2 Farms</b>	63 782	15 886	<i>24.9</i>	9 934	<i>15.6</i>
<b>Old Schemes</b>	327 160	34 223	<i>10.5</i>	41 499	<i>12.7</i>
<b>Total</b>	<b>4 034 620</b>	<b>357 399</b>	<b><i>8.9</i></b>	<b>413 829</b>	<b><i>10.3</i></b>

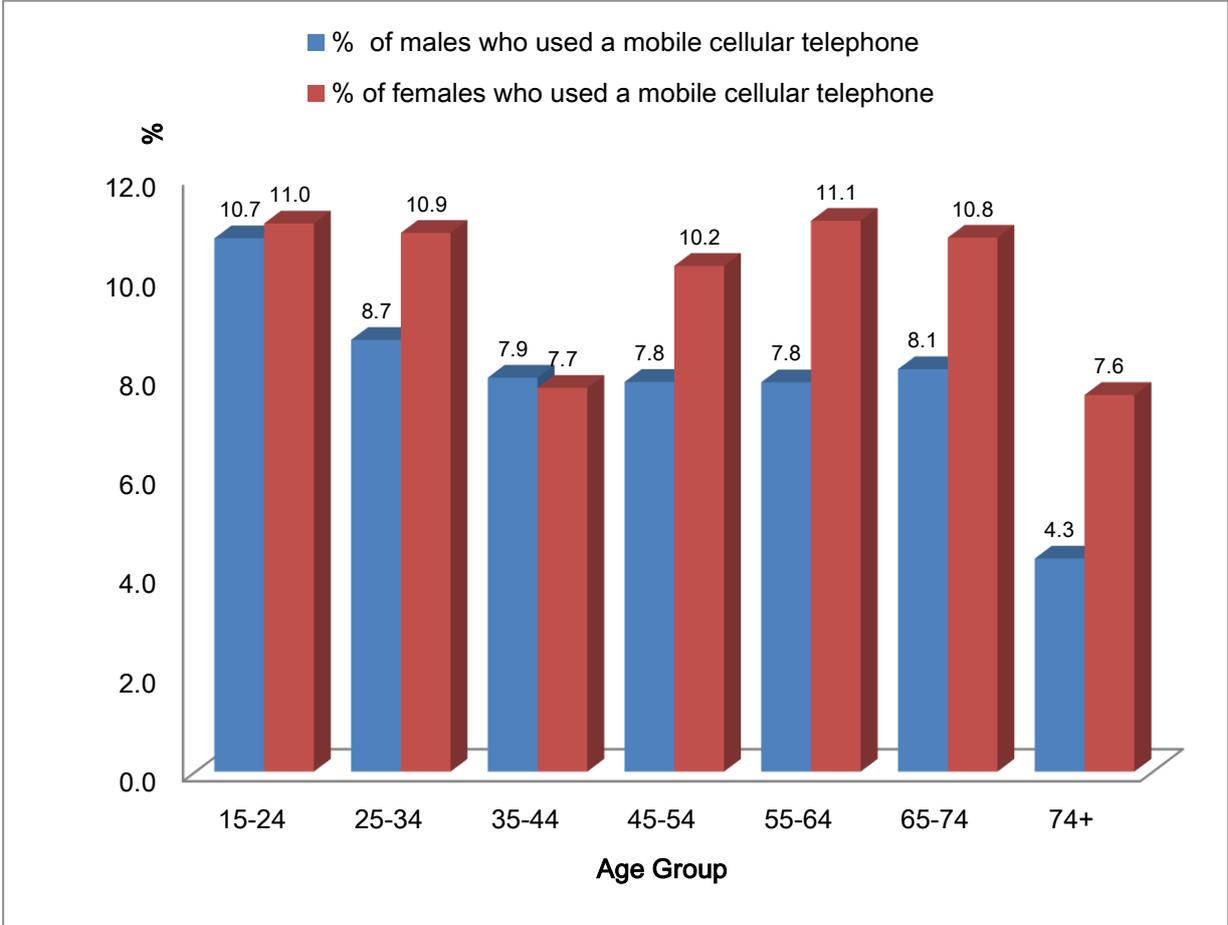
### 3.9 Individuals in Rural Areas who used the Mobile Cellular Telephone in the Last 12 Months Classified by Age Group and Sex.

Table 11, shows the percentage distribution of Individuals in rural areas who used the mobile cellular telephone classified by age group and sex. The age group 55-64 had the highest percentage 11.1% of female mobile cellular telephone users compared to 7.8% for males in the same age group. Females used mobile phones more than males in most of the age groups except in the 35-44 group. Figure 13, shows the same results.

**Table 11: Percentage of Individuals in Rural Areas who used the Mobile Cellular Telephone in the last 12 Months Classified by Age Group and Sex: ICT Survey 2010**

Age Group	Individuals	Males	<i>% of males who used a mobile cellular telephone</i>	Females	<i>% of females who used a mobile cellular telephone</i>
15-24	1 449 013	155 726	10.7	160 057	11.0
25-34	715 475	62 228	8.7	77 674	10.9
35-44	543 790	43 155	7.9	42 037	7.7
45-54	445 388	34 961	7.8	45 386	10.2
55-64	402 226	31 543	7.8	44 654	11.1
65-74	242 569	19 666	8.1	26 102	10.8
74+	236 160	10 125	4.3	17 915	7.6
<b>Total</b>	<b>4 034 621</b>	<b>357 404</b>	<b>8.9</b>	<b>413 825</b>	<b>10.3</b>

**Figure 13: Percentage Distribution of Individuals in Rural Areas who used the Mobile Cellular Telephone Classified by Age Group and Sex: ICT Survey 2010**

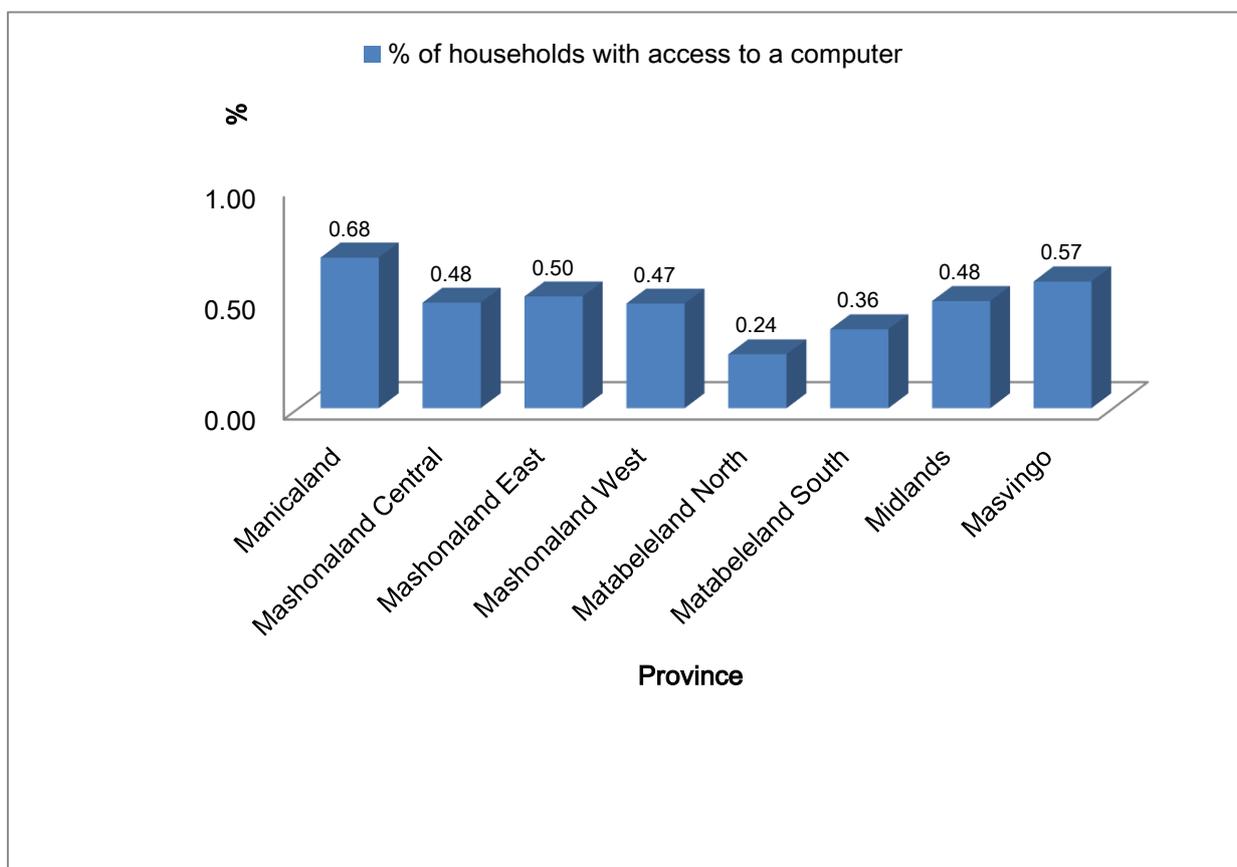


### 3.10 Rural Households with Access to Computers by Province

A computer refers to a desktop or a laptop computer. It does not include equipment with some embedded computing abilities such as mobile cellular phones, personal digital assistants (PDAs) or TV sets.

Figure 14, shows the percentage distribution of rural households with access to computers at home classified by province. Manicaland had the highest percentage 0.68% of households with access to computers at home. Matabeleland North recorded the lowest percentage 0.24% of households with access to a computer at home.

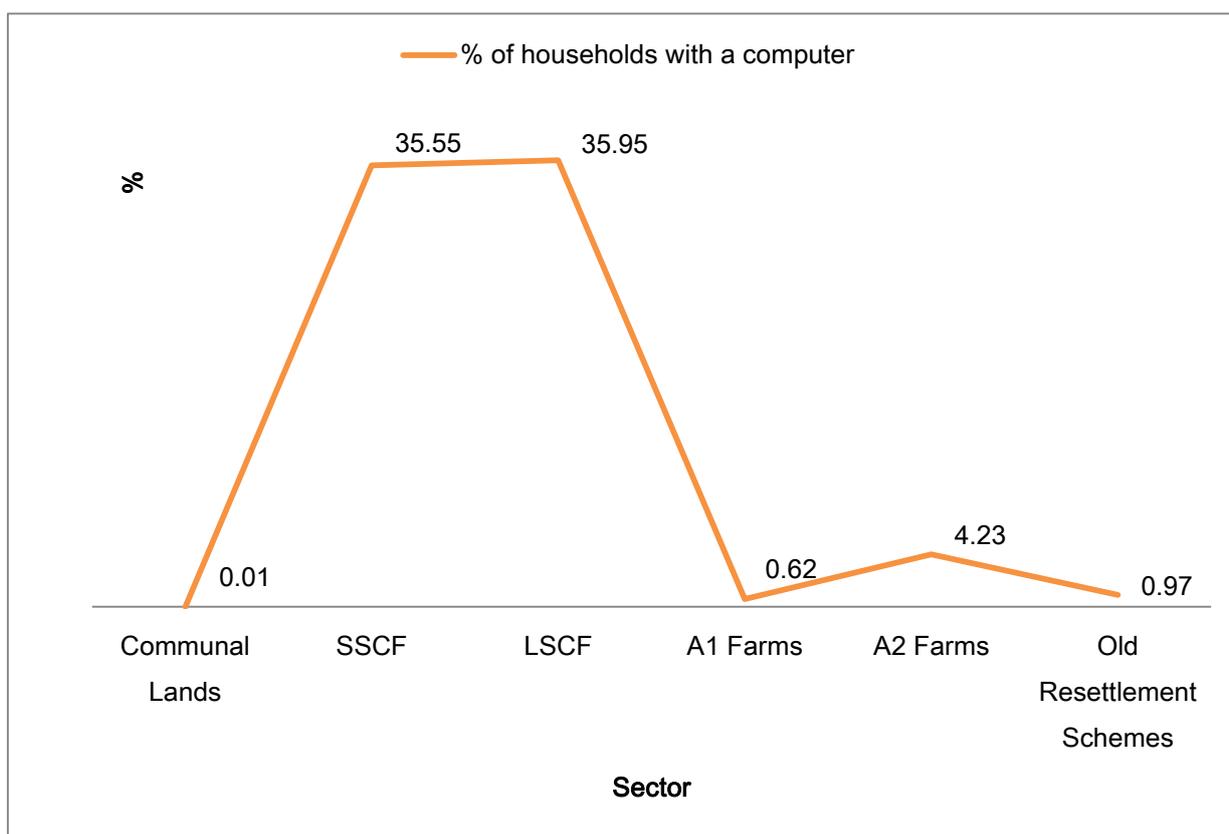
**Figure 14: Percentage Distribution of Rural Households with Access to Computers at Home Classified by Province: ICT Survey 2010**



### 3.11 Rural Households with Access to Computers by Sector

Figure 15, shows rural households with access to Computers at Home classified by sector. Large Scale Commercial Farms had the highest percentage of households with access to computers at 35.95% followed by Small Scale Commercial Farms that had 35.55%. Communal Lands had the lowest percentage 0.01% of access to computers at home.

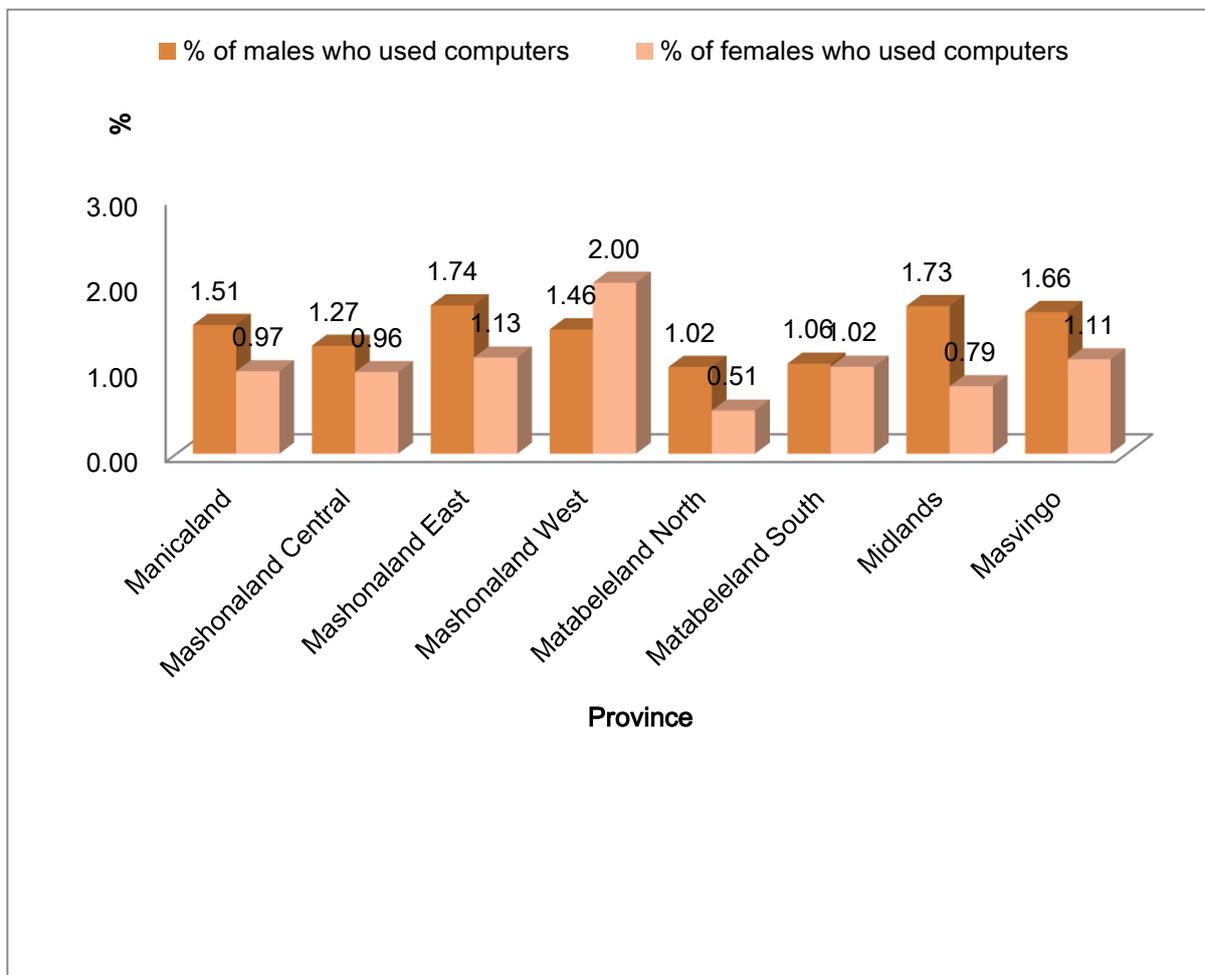
**Figure 15: Percentage Distribution of Rural Households with Access to Computers at Home Classified by Sector: ICT Survey 2010**



### 3.12 Individuals in Rural Areas who used Computers from any Location in the Last 12 Months Classified by Province and Sex: ICT Survey 2010

Figure 16, shows the percentage distribution of Individuals who used computers from any location in the last 12 months classified by province and sex. Mashonaland West had the highest percentage of 2% of females who used computers compared to 1.46% for males in the same province. Mashonaland East had the highest percentage of 1.74% of males who used computers compared to 1.13% for females in the same province. Matabeleland North had the lowest percentage of 0.51% of females who had use of computers from any location.

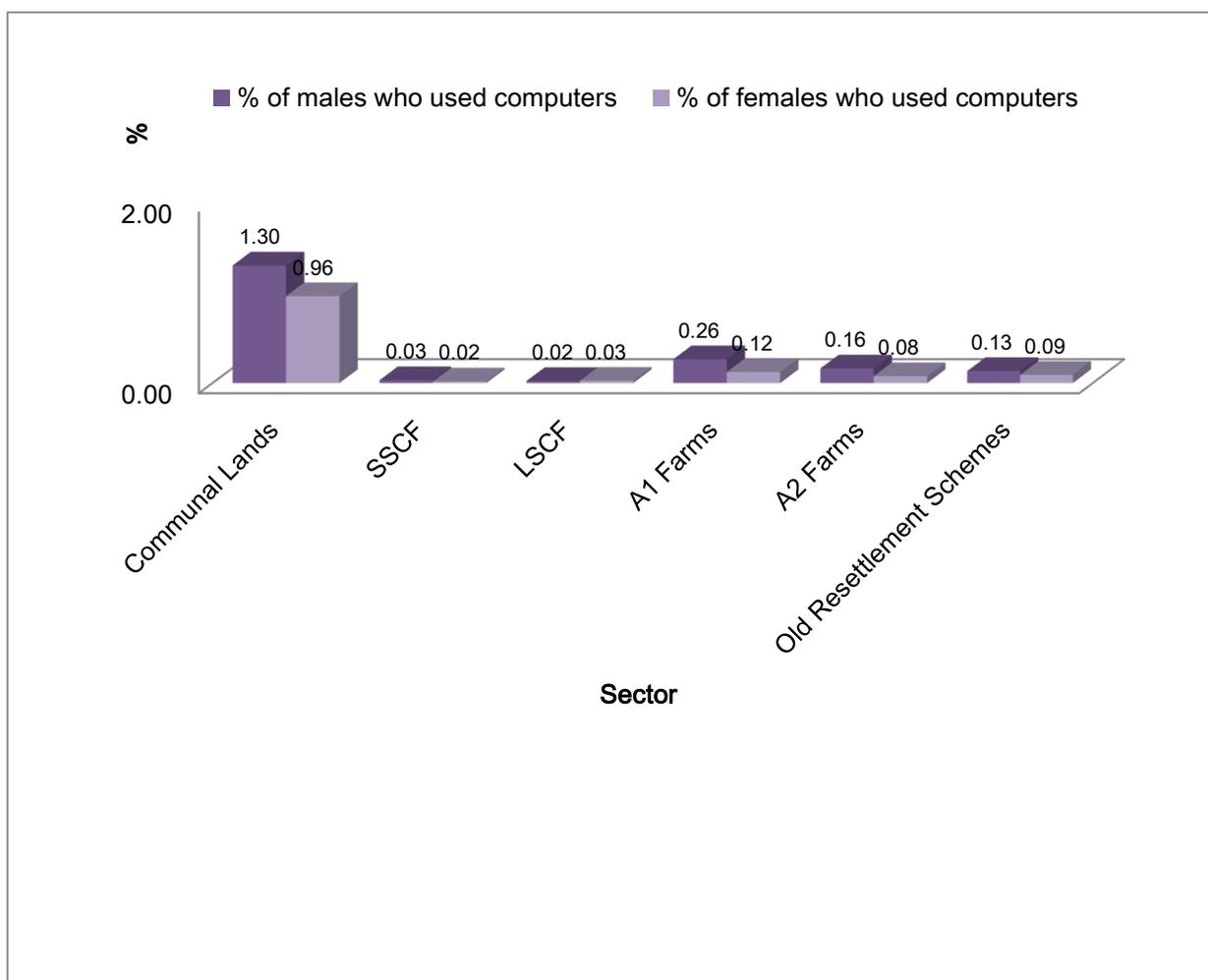
**Figure 16: Percentage Distribution of Individuals who used Computers from any Location in the Last 12 Months Classified by Province and Sex: ICT Survey 2010**



### 3.13 Individuals in Rural Areas who used Computers from any Location in the Last 12 Months Classified by Sector and Sex: ICT Survey 2010

Figure 17, shows Individuals who used computers from any location in the last 12 months classified by sector. In Communal Lands males who used computers made up 1.3% compared to 0.96% for females in the same sector.

**Figure 17: Percentage Distribution of Individuals in Rural Areas who used Computers from any Location in the Last 12 Months Classified by Sector and Sex: ICT Survey 2010**



### 3.14 Individuals in Rural Areas who used Computers from any Location in the Last 12 Months Classified by Age Group and Sex: ICT Survey 2010

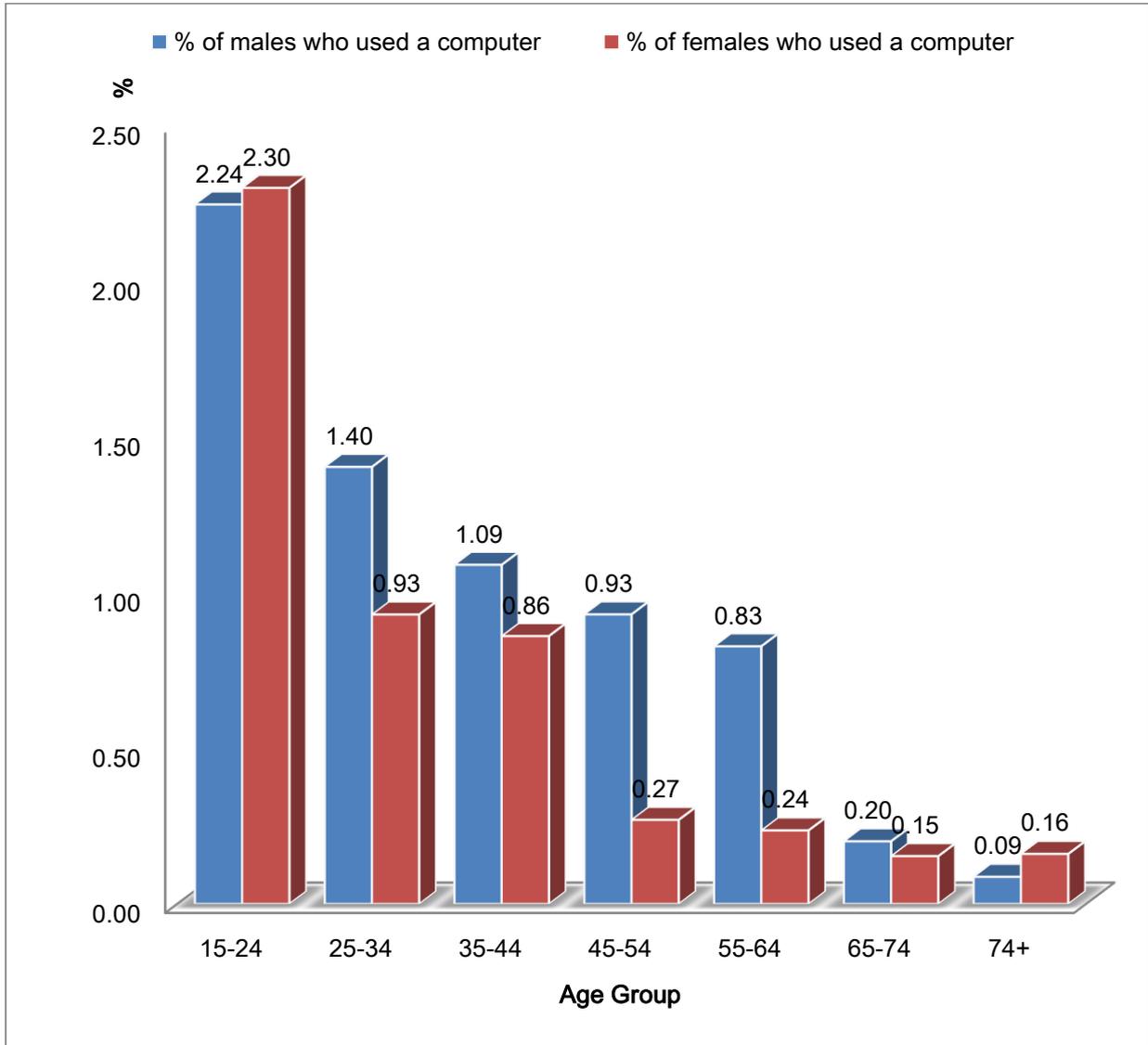
Table 12, shows Individuals who used computers from any location classified by age group and sex. The 15-24 age group had the highest percentage of computer users with females making up 2.3% and males 2.24%. In the 25-34 age group, males had the highest percentage of computer users at 1.4% compared to 0.93% for females.

Figure 18, shows Individuals who used computers from any location in the last 12 months classified by age group and sex.

**Table 12: Percentage Distribution of Individuals in Rural Areas who used Computers from any Location in the last 12 Months Classified by Age Group and Sex: ICT Survey 2010**

Age Group	Males	Males who used a computer	% who used a computer	Females	Females who used a computer	% who used a computer
15-24	801 191	17 970	2.24	647 822	14 874	2.30
25-34	319 404	4 475	1.40	396 071	3 673	0.93
35-44	235 160	2 556	1.09	308 630	2 649	0.86
45-54	151 751	1 408	0.93	293 637	790	0.27
55-64	157 246	1 298	0.83	244 980	576	0.24
65-74	101 293	203	0.20	141276	216	0.15
74+	103 655	90	0.09	132 505	212	0.16
<b>Total</b>	<b>1 869 700</b>	<b>28 000</b>	<b>1.50</b>	<b>2 164 921</b>	<b>22 990</b>	<b>1.06</b>

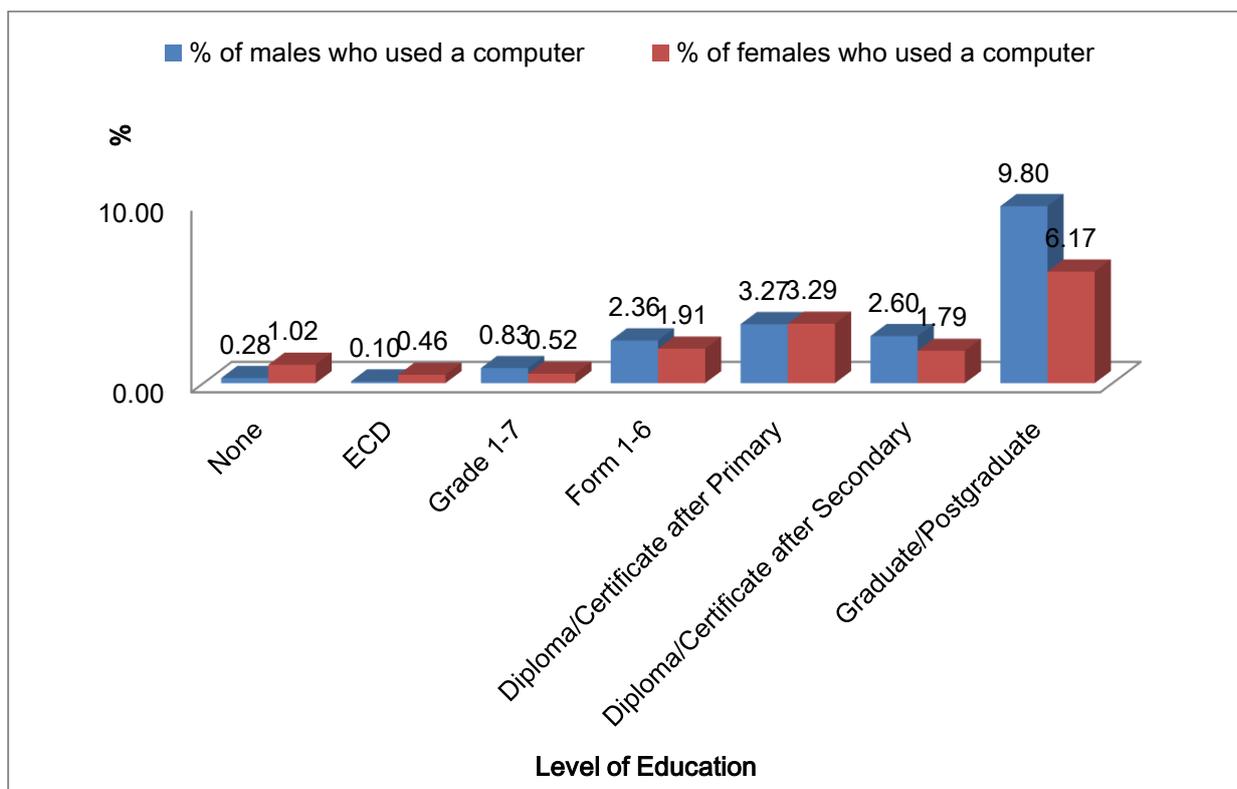
**Figure 18: Percentage Distribution of Individuals who used Computers from any Location in the last 12 Months Classified by Age Group and Sex: ICT Survey 2010**



### 3.15 Individuals in Rural Areas who used Computers from any Location in the Last 12 Months Classified by Highest Level of Education and Sex

Figure 19, shows Individuals in rural areas who used a Computer from any location in the last 12 months classified by highest level of education and sex. Male and female graduates and postgraduates were the highest users of computers recording 9.8% and 6.2% respectively. A computer refers to a programmable electronic device that can store, retrieve and process data, as well as share information in a highly structured manner. It performs high speed mathematical or logical operations according to a set of instructions. Computers include personal computers (PCs), laptops, notebooks, terminals connected to mainframes and minicomputers that are intended for shared use and are in working condition.

**Figure 19: Percentage Distribution of Individuals in Rural Areas who used a Computer from any Location in the Last 12 Months Classified by Highest Level of Education and Sex: ICT Survey 2010**



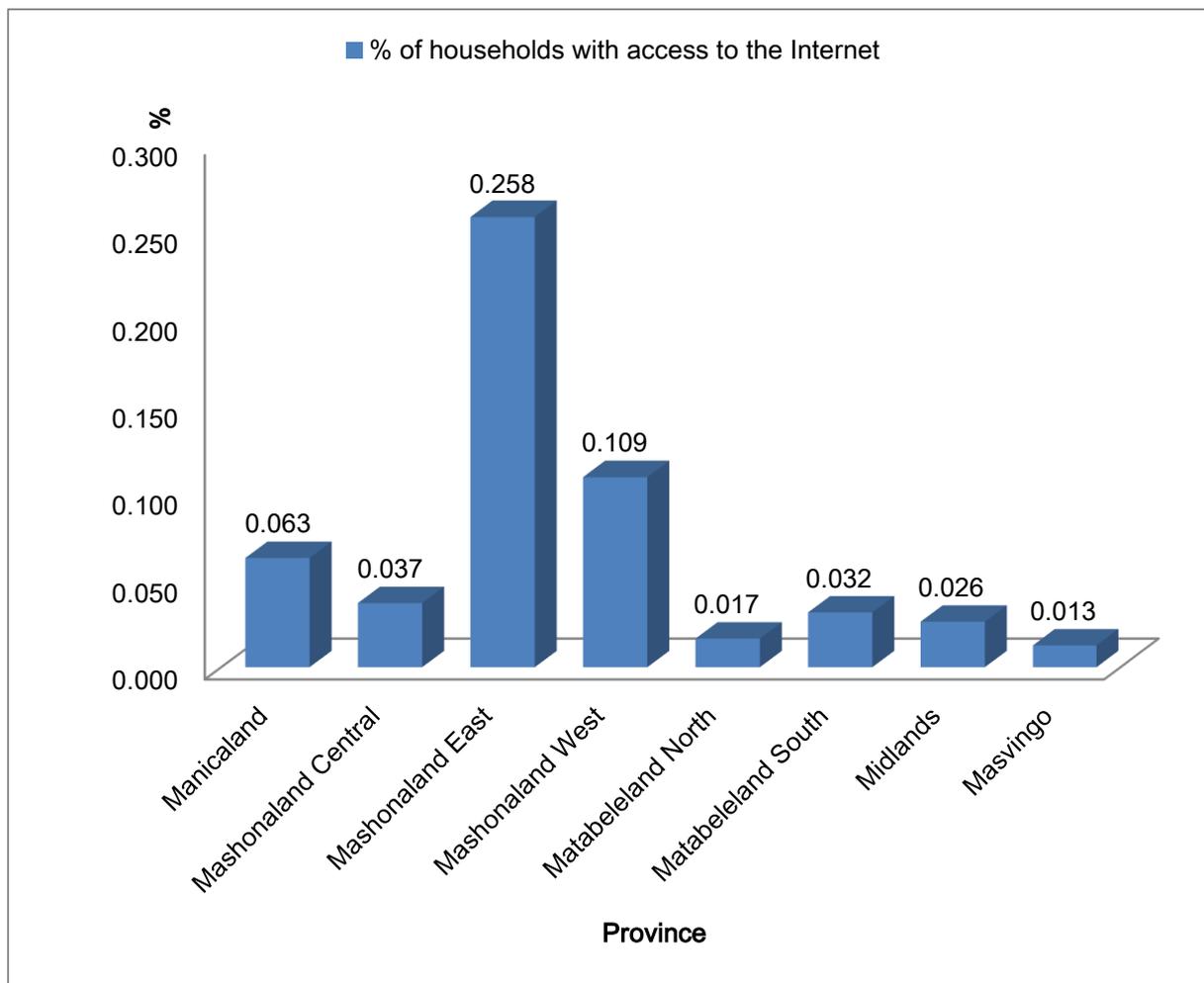
The WSIS target number two aims at connecting universities, colleges, secondary schools and primary schools with ICTs by 2015. The networked world of today is in the information age characterized by knowledge based societies. ICTs have in recent years propelled economic development in other nations through systematic and focused exploitation of the power of information and communication technologies. To this end, one of the key goals of the Ministry of Information and Communication Technology (MICT) is to ensure the upgrading of ICT literacy and availability of ICT resources at all levels of education. However, this cannot be achieved without every child in all the schools having access to a PC and the goal of MICT is to introduce a PC for each and every classroom in all schools in Zimbabwe.

The PC per classroom project is however no mean project but enhances the generous donations of PCs already made by His Excellency the President of Zimbabwe and the isolated initiatives of some schools either through former students, other organisations or the School Development Associations (SDA). The project already has a firm foundation on which to build from. With more than 3000 schools, and a population that is more than 90% literate, this strong educational base will give an enormous amount of leverage to a country that is striving to take its rightful place in the competitive global village. *(Source: MICT Strategic Plan 2010-2014)*

### 3.16 Households with Access to the Internet at Home by Province

Figure 20, shows the percentage distribution of rural households with access to the Internet classified by province. Mashonaland East recorded 0.26% of households with access to the Internet while Masvingo had only 0.01% of households with access to the Internet.

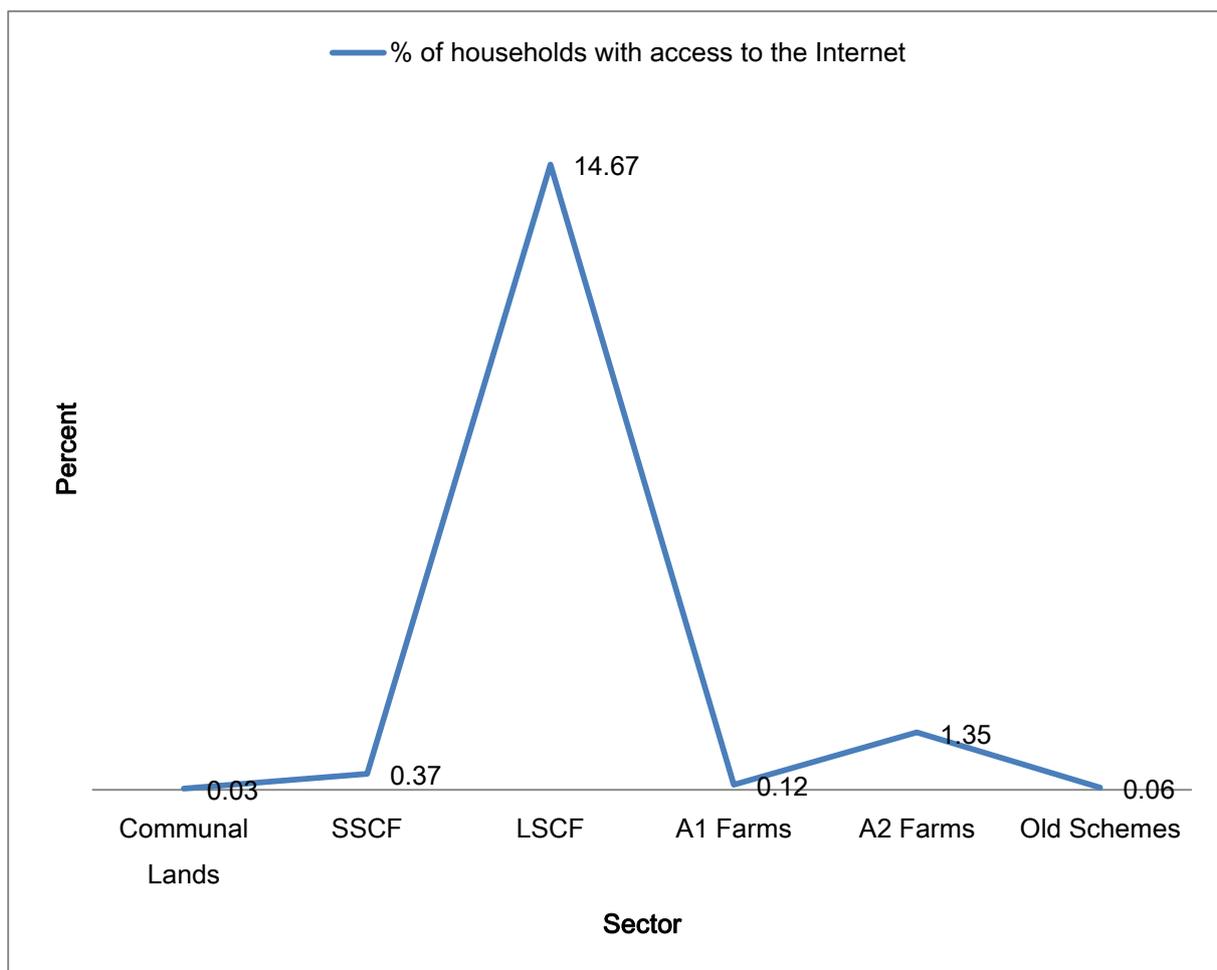
**Figure 20: Percentage Distribution of Rural Households with Access to the Internet at Home Classified by Province: ICT Survey 2010**



### 3.17 Rural Households with Access to the Internet at Home by Sector

Figure 21, shows rural households with Access to the Internet at Home classified by sector. Large Scale Commercial Farms had the highest percentage 14.67% of households with access to the Internet. Communal Lands had the lowest percentage 0.03% of households with access to the Internet. Table 13, shows the internet access technology available.

**Figure 21: Percentage Distribution of Rural Households with Access to the Internet at Home Classified by Sector: ICT Survey 2010**



### 3.18 Rural Households with Access to the Internet Classified by Province and Type of Internet Access Technology

Table 13, shows the type of Internet access technologies used by rural households to access the Internet. Households in Mashonaland West that had access to the Internet at home indicated that 0.05% used dial-up. Dial –up is a connection to the Internet via a modem and telephone line, which requires that the modem dial a phone number when Internet access is needed.

In Mashonaland East 0.18% of households with access to the Internet at home used mobile broadband. *Mobile broadband refers to mobile cellular networks with access to the Internet at speeds greater than or equal to 256 kbit/s, in one or both directions, such as Wideband CDMA (W-CDMA), Universal Mobile Telecommunications System (UMTS); High-speed Downlink Packet Access (HSDPA), complemented by High-Speed Uplink Packet Access (HSUPA); CDMA2000 1xEV-DO and CDMA 2000 1xEV-DV. Access can be via any device (handheld computer, laptop or mobile cellular telephone etc.).*

Integrated Services Digital Network (ISDN) is a telecommunication service that turns a traditional copper telephone line into a higher speed digital link. ISDN is usually considered narrowband. This technology is affected by the limited number of working fixed line telephones.

Digital Subscriber Line (DSL) Internet access technology was used in Mashonaland East and West who recorded 0.01 and 0.02 respectively. DSL is a wire line transmission technology that transmits data faster over traditional copper telephone lines already installed to homes. With the emergence of fibre technologies an increase in FTTH (fibre-to-the-home) connections will improve DSL connectivity. Fibre optic technology converts electrical signals carrying data to light and sends the light through transparent glass fibres about the diameter of a human hair.

Mashonaland East and West Provinces had the highest percentage of households that used other fixed broadband Internet access technology both recorded 0.01%.

Other fixed broadband *includes technologies at speeds greater than or equal to 256 kbit/s, in one or both directions, such as leased lines, fibre-to-the-home, satellite, fixed wireless, Wireless Local Area Network and WiMAX.*

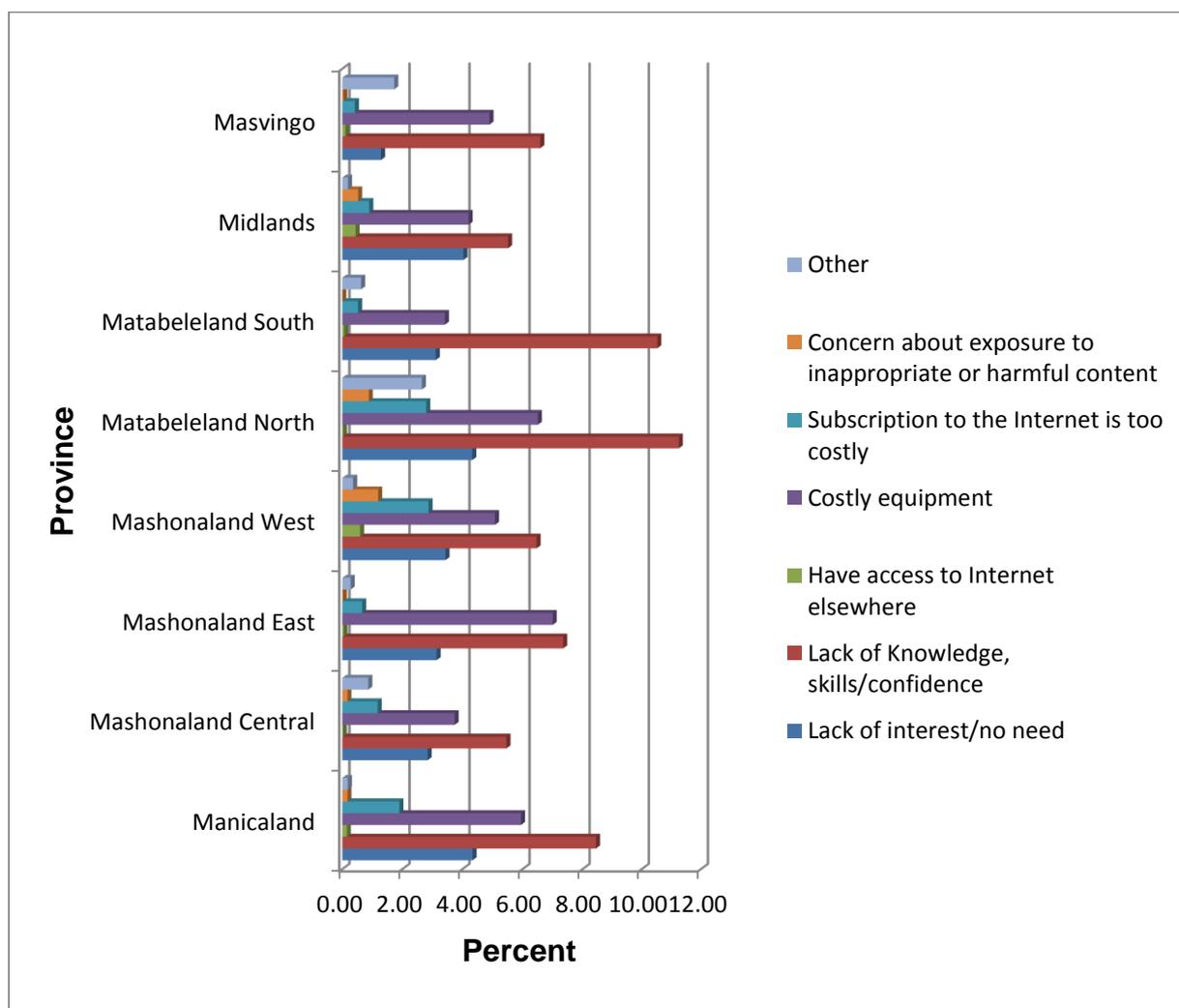
**Table 13: Percentage Distribution of Rural Households with Access to the Internet at Home Classified by Province and Type of Internet Access Technology: ICT Survey 2010**

Province	Dial-up	ISDN	DSL	Other fixed broadband	Mobile broadband
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Manicaland	<i>0.038</i>	<i>0.000</i>	<i>0.003</i>	<i>0.009</i>	<i>0.009</i>
Mashonaland Central	<i>0.000</i>	<i>0.000</i>	<i>0.002</i>	<i>0.002</i>	<i>0.027</i>
Mashonaland East	<i>0.034</i>	<i>0.004</i>	<i>0.010</i>	<i>0.012</i>	<i>0.184</i>
Mashonaland West	<i>0.052</i>	<i>0.003</i>	<i>0.015</i>	<i>0.011</i>	<i>0.025</i>
Matabeleland North	<i>0.000</i>	<i>0.002</i>	<i>0.002</i>	<i>0.000</i>	<i>0.013</i>
Matabeleland South	<i>0.000</i>	<i>0.000</i>	<i>0.003</i>	<i>0.003</i>	<i>0.023</i>
Midlands	<i>0.008</i>	<i>0.000</i>	<i>0.000</i>	<i>0.000</i>	<i>0.012</i>
Masvingo	<i>0.004</i>	<i>0.000</i>	<i>0.000</i>	<i>0.000</i>	<i>0.008</i>
<b>Total</b>	<b><i>0.020</i></b>	<b><i>0.001</i></b>	<b><i>0.004</i></b>	<b><i>0.005</i></b>	<b><i>0.039</i></b>

### 3.19 Reasons Rural Households did not have Access to Internet at Home Classified by Province

Figure 22, shows rural households without Internet access at home and the reasons for not having access classified by province. Households in all the provinces reported lack of knowledge, skills and confidence; some cited costly equipment; and others cited lack of interest and no need; some noted that subscription to the Internet was too costly; and some reported that they have access to Internet from elsewhere. Lack of electricity was a major constraint to accessing Internet at home especially in Matabeleland North Province.

**Figure 22: Percentage Distribution of Rural Households without Internet Access at Home and Reasons for not having Access Classified by Province: ICT Survey 2010**

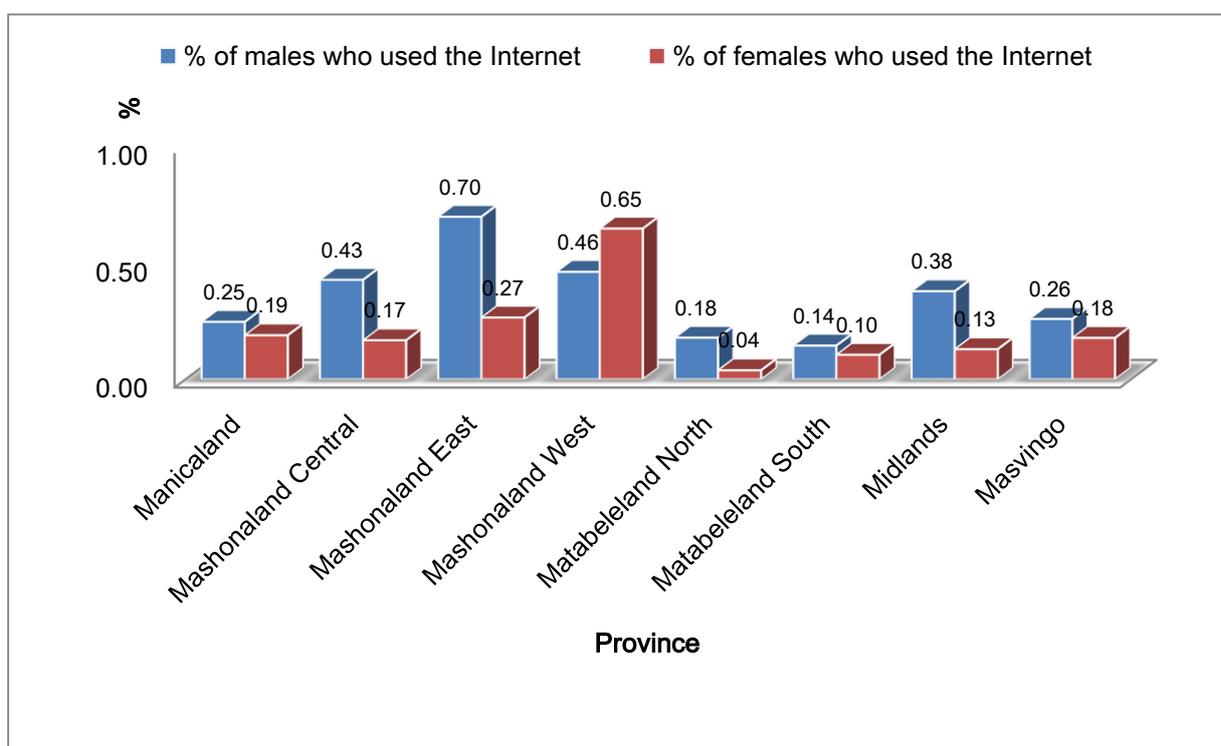


According to figure 22, policy-makers need to achieve the right mix between universal access and universal service strategies. Getting infrastructure to rural areas is just the first step. The population then needs to have access to services. While initially this might be through the public telephone service (whether mobile or fixed), eventually households will want to have their own access. Policy-makers must find the right balance between public access and facilitating home access

### 3.20 Individuals in Rural Areas who used the Internet from any Location in the Last 12 Months Classified by Province and Sex

Figure 23, shows Individuals in rural areas who used the Internet from any location in the last 12 months classified by province and sex. Males in Mashonaland East had the highest percentage 0.7% of Internet users from any location in the last 12 months compared to 0.27% for females in the same province. Mashonaland West had the highest percentage 0.65% of females who used the Internet from any location in the last 12 months compared to 0.46% for men in the same province.

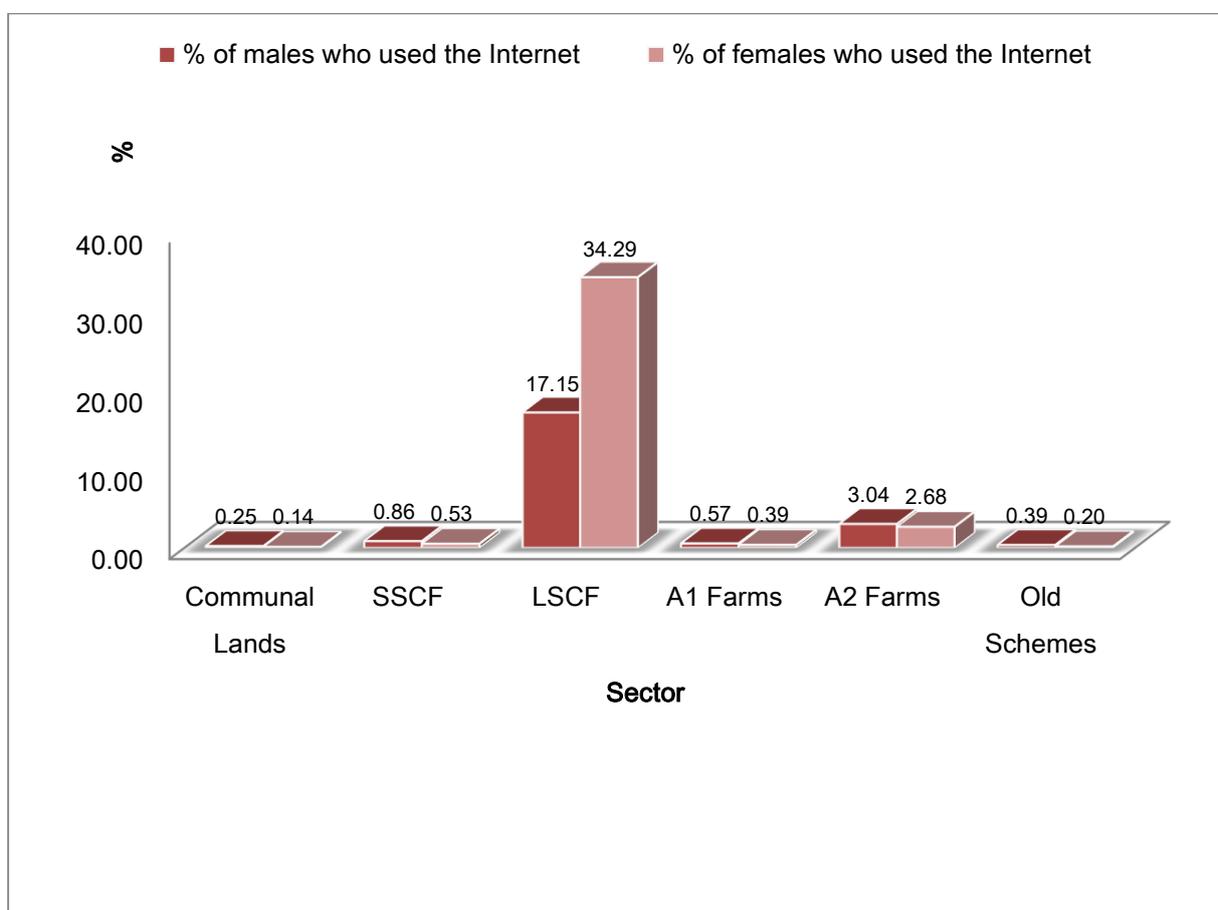
**Figure 23: Percentage Distribution of Individuals in Rural Areas who used the Internet from any Location in the Last 12 Months Classified by Province and Sex: ICT Survey 2010**



### 3.21 Individuals in Rural Areas who used the Internet from any Location in the last 12 Months Classified by Sector and Sex

Figure 24, shows males and females who used the Internet from any location in the last 12 months by sector. In the Large Scale Commercial Farming sector, female Internet users constituted 34.29% and males 17.15% respectively. Communal Lands recorded the lowest Internet usage with males and females recording 0.25% and 0.14 respectively.

**Figure 24: Percentage Distribution of Individuals in Rural Areas who used the Internet from any Location in the Last 12 Months Classified by Sector and Sex: ICT Survey 2010**



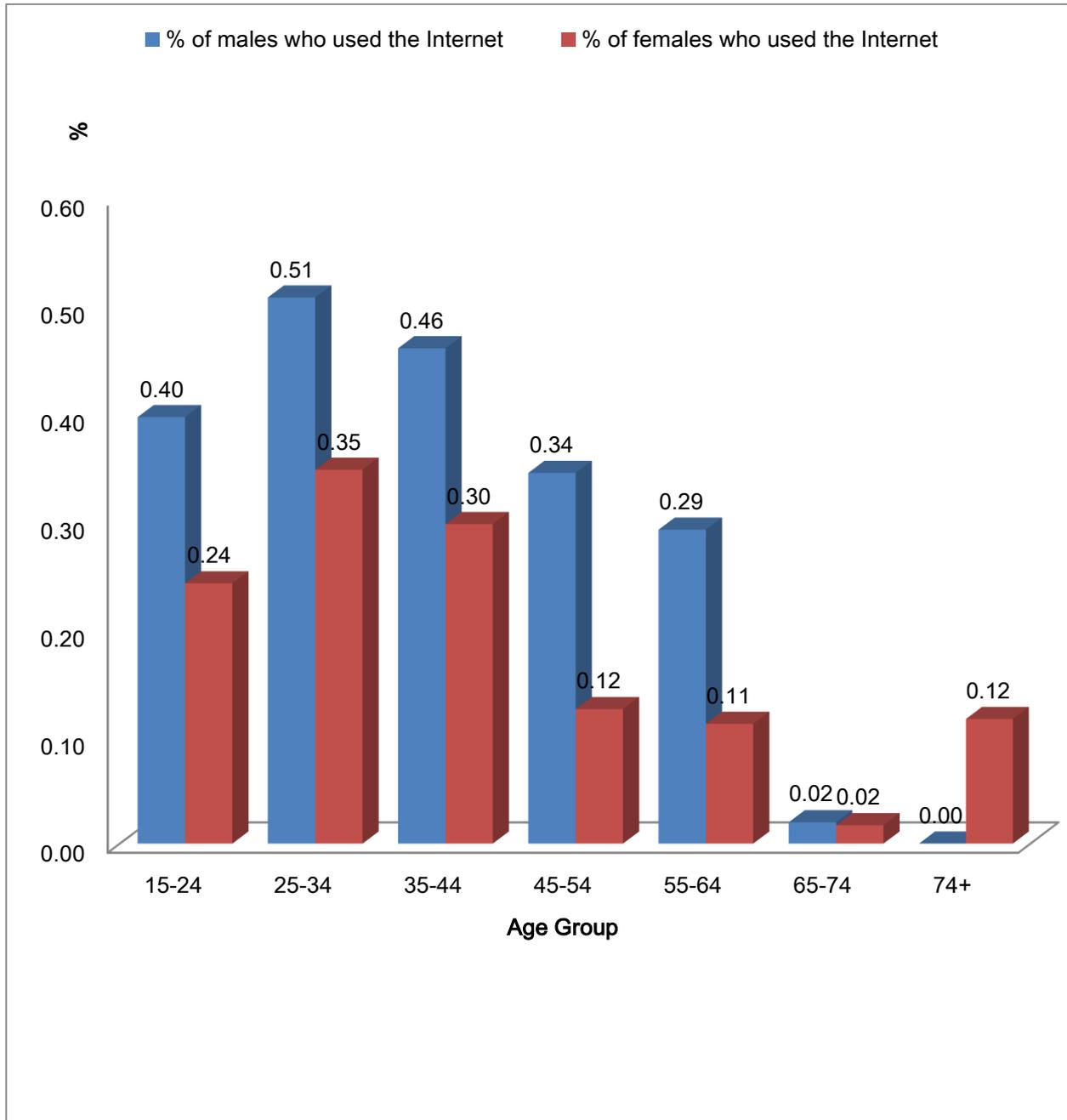
### 3.22 Individuals in Rural Areas who used the Internet from any Location in the last 12 Months Classified by Age Group and Sex

Figure 25, shows Internet use from any location in the last 12 months classified by age group and sex. Males in the 25-34 years age group had the highest percentage 0.51% of Internet users compared to 0.35% for females. Female internet users in the 74 years and above age group recorded 0.12% compared to nil for males in the same age group. The 65-74 years age groups had equal percentages 0.02% of Internet users from both sexes respectively. Table 14, shows the same information.

**Table 14: Percentage Distribution of Individuals who used the Internet from any Location in the Last 12 Months Classified by Age Group and Sex: ICT Survey 2010**

Age Group	Males	Males who used the Internet	% who used the Internet	Females	Females who used the Internet	% who used the Internet
15-24	801 191	3 171	0.40	647 822	1 564	0.24
25-34	319 404	1 619	0.51	396 071	1374	0.35
35-44	235 160	1 081	0.46	308 630	915	0.30
45-54	151 751	522	0.34	293 637	366	0.12
55-64	157 246	458	0.29	244 980	272	0.11
65-74	101 293	20	0.02	141 276	24	0.02
74+	103 655	-	-	132 505	153	0.12
<b>Total</b>	<b>1 869 700</b>	<b>6 871</b>	<b>0.37</b>	<b>2 164 921</b>	<b>4 668</b>	<b>0.22</b>

**Figure 25: Percentage Distribution of Individuals in Rural Areas who used the Internet from any Location in the last 12 Months Classified by Age Group and Sex: ICT Survey 2010**



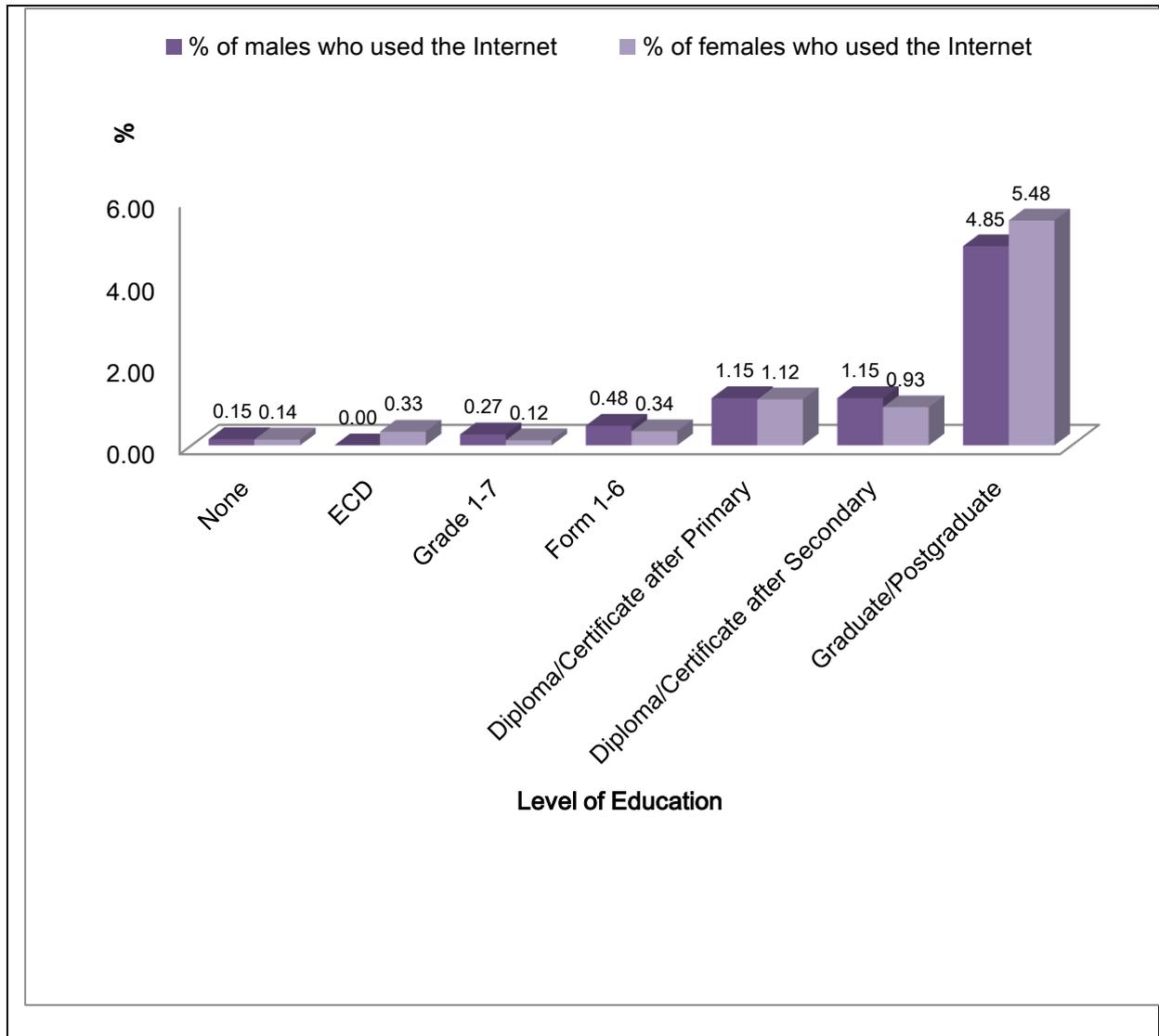
### 3.23 Individuals in Rural Areas who used the Internet (from any Location) in the Last 12 Months classified by Highest Level of Education and Sex

Figure 26, shows Internet use from any location in the last 12 months classified by highest level of education and sex. Female Internet users who are graduates or postgraduates made up 5.5% compared to 4.9% for males with the same qualifications. Table 15, shows the same information as in figure 26.

**Table 15: Percentage Distribution of Individuals who used the Internet from any Location in the last 12 Months Classified by Highest Level of Education and Sex: ICT Survey 2010**

<b>Level of Education</b>	<b>Males</b>	<b>Males who used the Internet</b>	<b>% who used the Internet</b>	<b>Females</b>	<b>Females who used the Internet</b>	<b>% who used the Internet</b>
None	142 709	216	0.15	187 753	267	0.14
ECD	13 071	-	-	15 921	53	0.33
Grade 1-7	790 224	2 114	0.27	814 546	1 007	0.12
Form 1-6	841 399	4 040	0.48	836 820	2 873	0.34
Diploma/Cert. after Primary	6 611	76	1.15	6 774	76	1.12
Diploma/Cert. after Secondary	15 052	173	1.15	13 138	122	0.93
Graduate/Postgraduate	5 236	254	4.85	4 875	267	5.48
<b>Total</b>	<b>1 814 302</b>	<b>6 873</b>	<b>0.38</b>	<b>1 879 827</b>	<b>4 665</b>	<b>0.25</b>

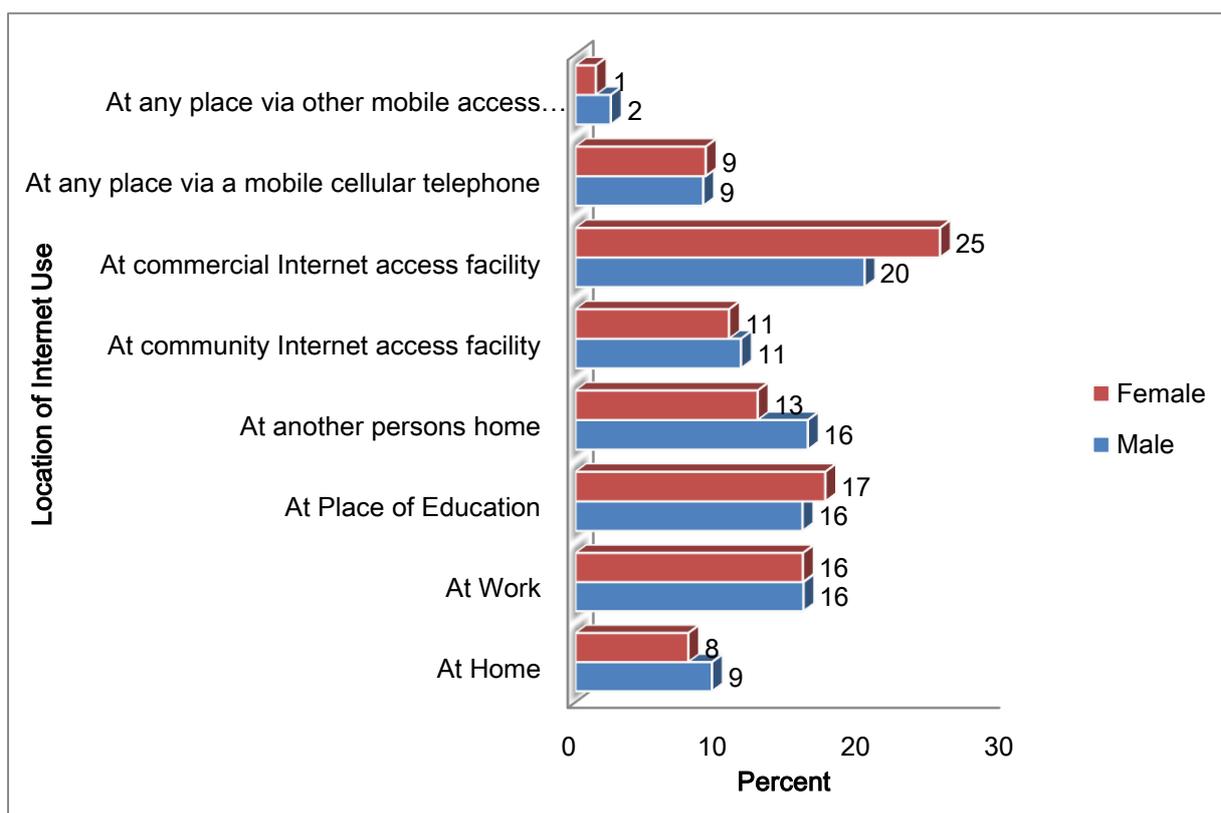
**Figure 26: Percentage Distribution of Individuals who used the Internet from any Location in the Last 12 Months classified by Highest Education Level and Sex: ICT Survey 2010**



### 3.24 Individuals in Rural Areas who used the Internet in the Last 12 Months by Location of Internet Use and Sex

Figure 27, shows the percentage distribution of Individuals who used the Internet in the last 12 months classified by location of Internet use and sex. Twenty five percent of the female Internet users, the highest, accessed Internet at an Internet cafe (Commercial Internet Access Facility). Both males and females who accessed the Internet at work, community Internet access facility or through a mobile cellular telephone had equal percentages with 16%, 11% and 9% respectively. Males were the highest users of the Internet at other people’s homes making up 16% compared to 13% for females. Seventeen percent of females accessed the Internet at their place of education compared to 16% for males. Levels of home computer ownership and Internet access are extremely low in most provinces. Higher levels of ICT access can be achieved through public facilities such as Community Internet Access Centres (CIAC), libraries, Internet cafes and schools.

**Figure 27: Percentage Distribution of Individuals in Rural Areas who used the Internet in the last 12 Months Classified by Internet Activity and Sex: ICT Survey 2010**



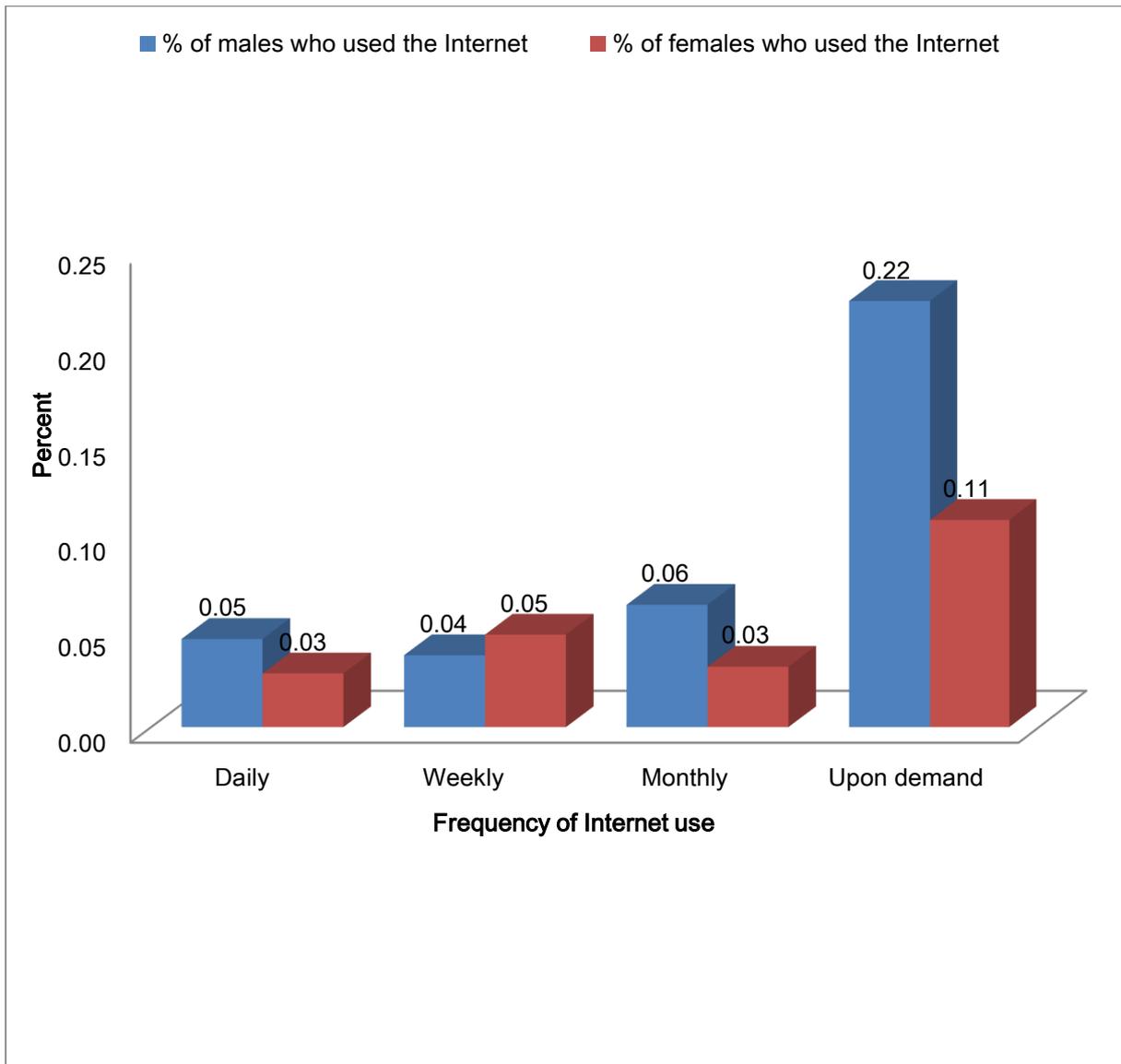
### 3.25 Individuals in Rural Areas who used the Internet in the Last 12 Months Classified by Frequency of Internet use and Sex

Figure 28, shows how often Individuals in rural areas used the Internet in the last 12 months. Males and females constituted 0.05% and 0.03% respectively of those who used the Internet daily. Weekly Internet users constituted 0.04% for males and 0.05% for females. Those who used the Internet upon demand, i.e. when they felt like using it recorded 0.22% for males and 0.11% for females respectively. Those who used the Internet monthly recorded 0.06% for males and 0.03% for females respectively. Table 16, shows the same information in figure 28.

**Table 16: Percentage Distribution of Individuals in Rural Areas who used the Internet in the last 12 Months Classified by Frequency of Internet Use and Sex:  
ICT Survey 2010**

Frequency of Internet Use	Males	Who used the Internet	% who used the Internet	Females	Who used the Internet	% who used the Internet
Daily	1 869 701	861	0.05	2 164 919	607	0.03
Weekly	1 869 701	702	0.04	2 164 919	1 046	0.05
Monthly	1 869 701	1 195	0.06	2 164 919	683	0.03
Upon demand	1 869 701	4 163	0.22	2 164 919	2 344	0.11
Total	1 869 701	6 921	0.37	2 164 919	4 680	0.22

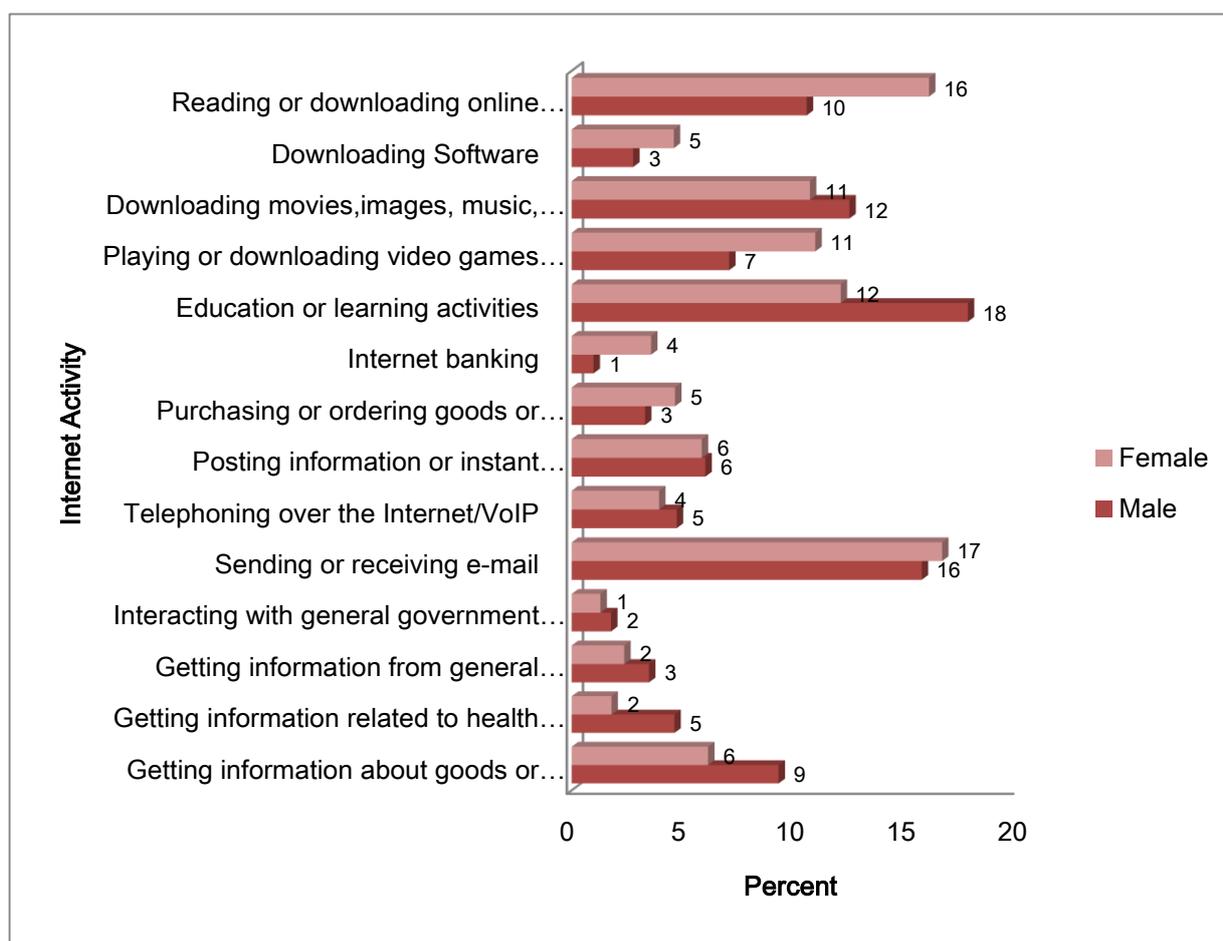
**Figure 28: Percentage Distribution of Individuals in Rural Areas who used the Internet in the last 12 Months Classified by Frequency of Internet Use and Sex: ICT Survey 2010**



### 3.26 Internet activities undertaken from any Location in the Last 12 Months

Figure 29, shows Individuals in rural areas who used the Internet in the last 12 months classified by Internet activity and sex. Basic Internet services such as sending or receiving e-mail, looking for information on goods and services and reading or downloading online newspapers are largely related to need. Females had the highest percentages in internet activities such as sending or receiving e-mail 17%; reading or downloading online newspapers or magazines, electronic books 16%; and playing or downloading video games or computer games 11%. Males had higher percentages in the following activities: Education or learning activities 18%; Downloading movies, images, music, watching TV or video, or listening to radio or music 12%; and getting information about goods and services 9%.

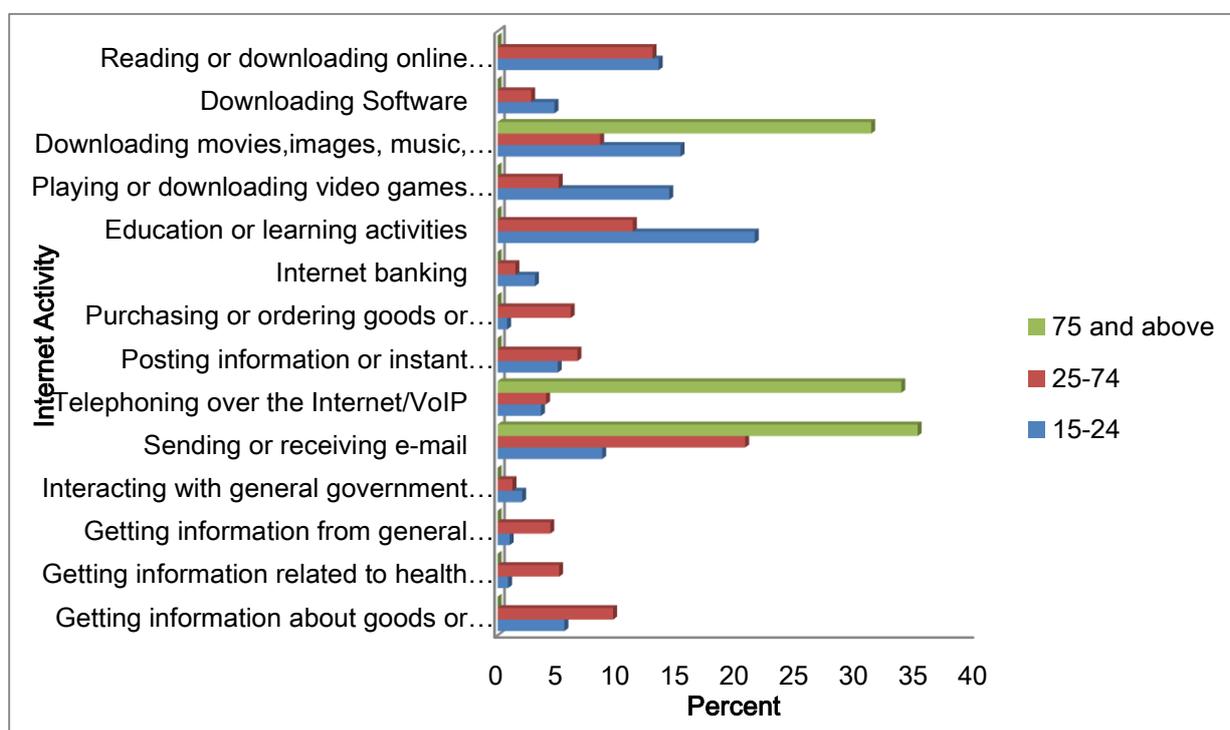
**Figure 29: Percentage Distribution of Individuals in Rural Areas who used the Internet in the last 12 Months Classified by Activity and Sex: ICT Survey 2010**



### 3.27 Internet activities undertaken classified by activity and age group in the Last 12 Months

Figure 30, shows Individuals in rural areas who used the Internet in the last 12 Months classified by activity and age group. Young people in the age group 15-24 years are called the “digital natives”. They are the most intensive users of recreational Internet services. Those in the 15-24 years age group recorded high percentages in the following activities: Education or learning activities 21%; playing or downloading video games 14%; and reading or downloading online newspapers or magazines, electronic books 13%. The 25-74 years age group had high percentages in the following activities: getting information about goods and services 10%; posting information or instant messaging 7%; purchasing or ordering goods or services 6% and getting information related to health or health services 5%. The 75 years and above age group had high percentages in sending or receiving e-mail 35%; telephoning over the Internet/VoIP 34%; and downloading movies, images, music, watching TV or video, or listening to radio or music 31%.

**Figure 30: Percentage Distribution of Individuals in Rural Areas who used the Internet in the last 12 Months Classified by Internet Activity and Age Group: ICT Survey 2010**

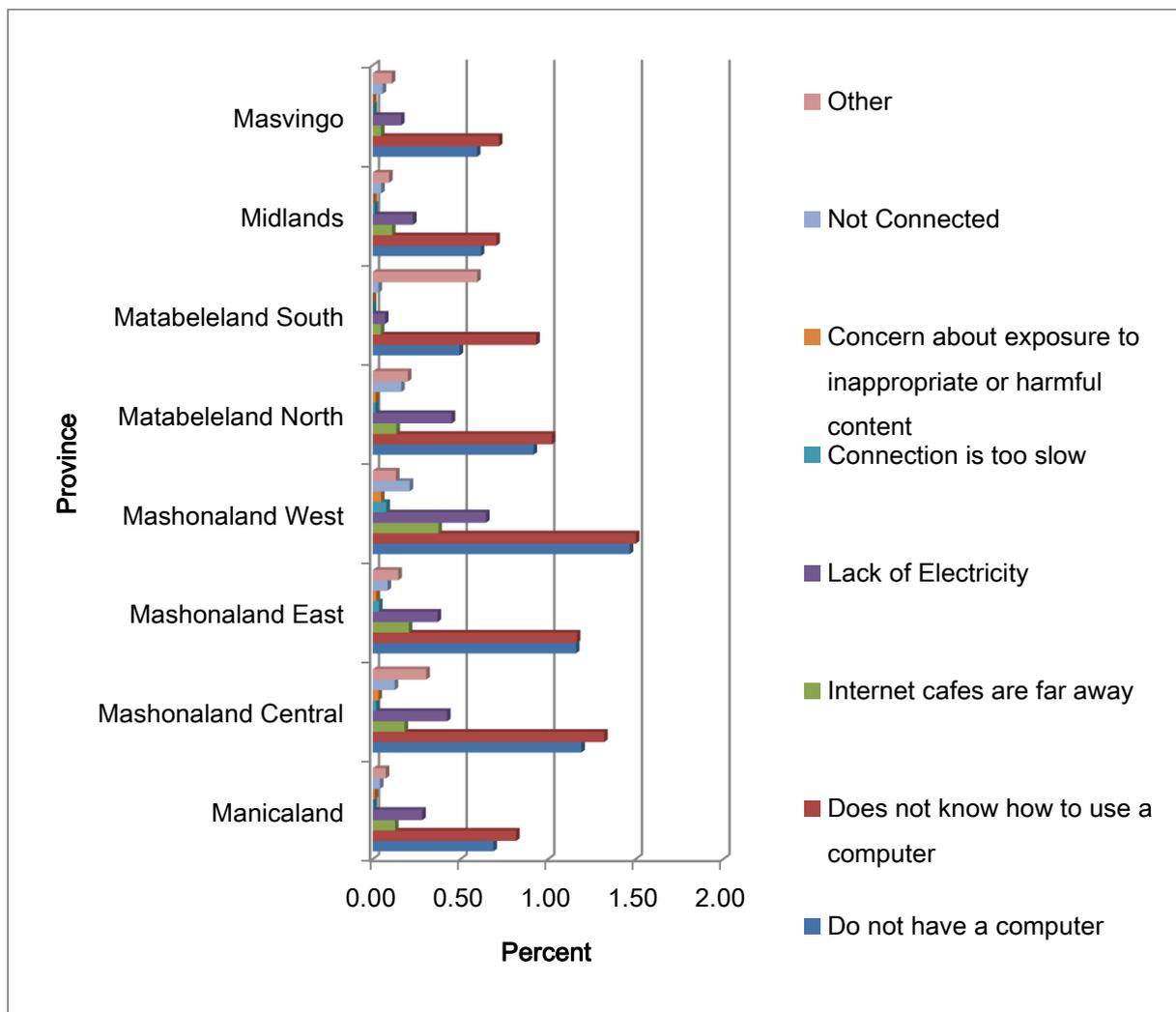


Services for which usage is lower among the young are: Getting information related to health or services, Internet banking and e-government. Finding jobs, training and education concern the young more since most are about to enter or have just entered the economically active population and therefore need both more training to find a job and more tools to look for it.

### 3.28 Reasons Individuals in Rural Areas did not use the Internet in the Last 12 Months

Figure 31, shows Individuals in rural areas who did not use the Internet in the last 12 months classified by province and reasons. Individuals in all the provinces who did not use the Internet reported that they did not know a computer; some indicated that they did not know how to use a computer, and others cited lack of electricity as a major constraint to accessing Internet at home and some observed that Internet cafes were too far away.

**Figure 31: Percentage Distribution of Individuals in Rural Areas who did not use the Internet in the last 12 Months Classified by Province and Reason: ICT Survey 2010**



### 3.29 Distance of Rural Households to the nearest Post Office

As shown in Table 17, the percentage of rural households in Manicaland that live less than 5 kilometres from a Post Office was 12.4%. In Matabeleland North 73.5% of households live more than 20 kilometres from the Post Office. Only 2.1% of rural households in Matabeleland North live within less than 5 kilometres from the nearest Post Office.

**Table 17: Percentage of Rural Households Classified by Province and Distance Ranges in Kilometres to the Nearest Post Office: ICT Survey 2010**

Province	0-<5	5-<10	10-<15	15-<20	(20 and above)
	%	%	%	%	%
Manicaland	12.35	14.56	13.43	19.78	39.88
Mashonaland Central	4.80	9.42	8.83	15.92	61.02
Mashonaland East	5.67	10.31	10.72	13.16	60.12
Mashonaland West	4.46	8.78	7.21	13.85	65.69
Matabeleland North	2.05	6.18	10.80	7.51	73.46
Matabeleland South	2.60	3.62	4.77	8.85	80.16
Midlands	4.55	10.89	5.51	9.38	69.67
Masvingo	6.48	11.10	13.70	12.39	56.33
Total	6.22	10.28	9.94	13.38	60.18

### 3.30 General Postal Services

The licensed operator (ZIMPOST) is authorised to offer postal services which include delivery of mail and parcels, provision of stamps, posting and letter boxes; and provision of financial services. As at 31 March 2010 ZIMPOST had 169 fully fledged post offices, 46 sub post offices, 15 postal agencies, 2 post shops and 5 mobile post offices.

Connecting Post Offices could significantly expand access to ICTs in previously unconnected areas which are nonetheless served by a Post Office.

### 3.31 Frequency of Use of Postal Service by Rural Households

Table 18, shows rural households classified by frequency of use of postal services by province. Midlands had the highest percentage 2.79% of households that used postal services for less than once a month compared to 0.39% for Matabeleland South. Households in Masvingo recorded 1.61% of households using postal services for about once a month compared to 0.63% for Matabeleland South. Weekly use of postal services by households in Mashonaland West was 0.17% as compared to 0.01% for Mashonaland Central. Households' daily use of postal services was recorded only in Manicaland (0.04%) and Matabeleland South (0.02%).

**Table 18: Percentage Distribution of Rural Households Classified by Province and Frequency of Use of Postal Services: ICT Survey 2010**

Province	<i>Less than</i>	<i>About once a</i>	<i>Weekly</i>	<i>Daily</i>
	<i>once a month</i>	<i>month</i>		
	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
Manicaland	1.96	1.09	0.03	0.04
Mashonaland Central	1.80	1.05	0.01	0.00
Mashonaland East	1.52	1.32	0.02	0.00
Mashonaland West	1.79	1.47	0.17	0.00
Matabeleland North	1.03	1.26	0.05	0.00
Matabeleland South	0.39	0.63	0.02	0.02
Midlands	2.79	0.64	0.08	0.00
Masvingo	2.41	1.61	0.08	0.00
Total	1.87	1.15	0.06	0.01

### 3.32 Frequency of Use of Courier Services Classified by Province

Table 19, shows rural households classified by frequency of use of courier services by province. Matabeleland South had 1.07% of households who used courier services less than once a month (at least once a month but not every week). Mashonaland West had 0.21% of households that used courier services about once a month. Households that used courier services every week were in Manicaland 0.02% and Mashonaland West 0.01%. Percentages for daily use of courier services could not be recorded as they were insignificant. Some of the licensed Courier Services providers are: DHL, Skynet, Swift, Mailnet, Courier Connect and Clan.

**Table 19: Percentage Distribution of Rural Households Classified by Province and Frequency of Use of Courier Services: ICT Survey 2010**

Province	<i>Less than once</i>	<i>About once a</i>	<i>Weekly</i>	<i>Daily</i>
	<i>a month</i>	<i>month</i>		
	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
Manicaland	0.35	0.18	0.02	0.00
Mashonaland Central	0.87	0.09	0.00	0.00
Mashonaland East	0.32	0.05	0.00	0.00
Mashonaland West	0.26	0.21	0.01	0.00
Matabeleland North	0.18	0.03	0.00	0.00
Matabeleland South	1.07	0.04	0.00	0.00
Midlands	0.22	0.16	0.00	0.00
Masvingo	0.52	0.01	0.00	0.00
Total	0.44	0.10	0.01	0.00

### 3.33 Domestic Commercial Courier Services

Operators are authorised to offer delivery (courier) of time sensitive documents within Zimbabwe only. As at 31 March 2010 there were 7 operators.

### 3.34 International Commercial Courier Services

Operators are authorised to offer delivery (courier) of time sensitive documents into and from Zimbabwe as well as within Zimbabwe. As at 31 March 2010 there were 7 operators.

## Appendix A. Glossary and Notes

Term or Abbreviation	Notes
3G	<p>3G (and 3.5G) is third generation mobile telephone technology. It includes: -<i>Wideband CDMA</i> (W-CDMA), an IMT-2000 3G mobile network technology, based on CDMA that presently delivers packet-switched data transmission speeds up to 384 kbit/s and up to 2 Mbit/s when fully implemented. It is known as <i>Universal Mobile Telecommunications System</i> (UMTS) in Europe.</p> <p>-<i>High-speed Downlink Packet Access</i> (HSDPA), an upgrade to W-CDMA to allow downlink data transmission at speeds of typically 8-10 Mbit/s. It is complemented by High-Speed Uplink Packet Access (HSUPA), which offers uplink speeds of around 5 Mbit/s.</p> <p>-<i>CDMA2000 1xEV-DO</i> (Evolution, Data Optimised), an IMT-2000 3G mobile network technology, based on CDMA that delivers packet-switched data transmission speeds of up to 4.9 Mbit/s.</p>
Accuracy	<p>Denotes the closeness of computations or estimates to the exact or true values. Statistics are not equal with the true values because of variability (the statistics change from implementation to implementation of the survey due to random effects) and bias(the average of the possible values of the statistics from implementation to implementation is not equal to the true value due to systematic effects).</p>
ADSL	<p>Asymmetric Digital Subscriber Line (ADSL) where more bandwidth is allocated to download than upload and High Rate Digital Subscriber Line (HDSL) are considering as dominant DSL technologies. Typically, individual connections will provide from 1.544 Mbps to 512 Kbps downstream and about 128 Kbps upstream. Actual bandwidth may vary significantly between the states as wells as within the state. A DSL line can carry both data and voice signals and the data part of the line is continuously connected. DSL connection is considered as one of the high capacity 'speed' permanent 'fixed' Internet connection (broadband).</p>
Analogue modem	<p>Dial-up is a connection to the Internet via an analogue modem and telephone line, which requires that the modem dial a phone number when Internet access is needed. The modem converts a digital signal</p>

	into analogue for transmission by traditional (copper) telephone lines. It also converts analogue transmissions back to digital.
Anti-spyware software	Anti-spyware software Software which detects and removes spyware from a computer system (spyware is tracking software which gathers information without the user's knowledge).
Bit	Abbreviation for binary digit and describing the smallest unit of information handled by a computer. One bit expresses a 1 or a 0 in a binary numeral, or a true or false logical condition. See also Byte.
Byte	Abbreviation for binary term. A unit of data, today almost always consisting of 8 bits. A byte can represent a single character, such as a letter, a digit, or a punctuation mark. See also kilobit and kilobyte.
Cable modem	Cable modem uses modems attached to cable television networks (cable TV lines) for permanent 'fixed' access to the Internet. A cable modem is a device that enables you to hook up a computer to a local cable TV line and receive data. It is considered as one of the high capacity 'speed' permanent 'fixed' Internet connection (broadband).
CAPI	Computer assisted personal interviewing.
CATI	Computer assisted telephoning interviewing.
CDMA 1x (Release 0)	CDMA 1x (Release 0) is a part of the IMT-2000 family of standards and provides an upgrade for CDMA users, but typically has a capacity of below 256 kbit/s.
CDMA2000 1x	CDMA2000 1x is an IMT-2000 3G mobile network technology, based on CDMA that delivers packet switched data transmission speeds of up to 144 kbps. Also referred to as 1XRTT.
CDMA2000 1xEVDO	CDMA2000 1xEV-DO (Evolution, Data Optimised), an IMT-2000 3G mobile network technology, based on CDMA that delivers packet-switched data transmission speeds of up to 4.9 Mbit/s.
Cellular mobile with access at broadband speeds	Cellular mobile networks with access to data communications (e.g. the Internet) at broadband speeds (defined as greater than or equal to 256 kbit/s in one or both directions) such as WCDMA, HSDPA, CDMA2000 1xEV-DO, CDMA 200 1xEV-DV etc. These services are typically referred to as 3G or 3.5G.
Cluster sampling	Sampling in which next-to-last stage is geographically-defined unit such as census enumeration area (EA).
Clustering;	Refers to tendency of sample units – persons or households – to have

clustered	similar characteristics.
Complex sample design	Refers to use of multiple stages, clustering and stratification in household survey samples, as opposed to simple random sampling.
Confidence level	Describes degree of statistical confidence with which precision or margin of error around the survey estimate is obtained, 95 per cent generally being regarded as the standard.
Dial-up	Dial-up is a connection to the Internet via a modem and telephone line, which requires that the modem dial a phone number when Internet access is needed.
DSL	Internet access using Digital Subscriber Line (DSL) technology. DSL is a technology for bringing high-bandwidth information to homes and small businesses over ordinary copper telephone lines. Speed should be equal to, or greater than, 256 kbit/s, in one or both directions.
GPRS	General Packet Radio Service (GPRS), a 2.5G mobile standard typically adopted by GSM operators as a migration step towards 3G (W-CDMA).
GSM	Global system for mobile communications. Household A household consists of one or more people, who may or may not be related to each other, who share accommodation and who make common provision for food.
HSDPA	High-speed Downlink Packet Access (HSDPA), an upgrade to W-CDMA to allow downlink data transmission at speeds of typically 8-10 Mbit/s. It is complemented by High-Speed Uplink Packet Access (HSUPA), which offers uplink speeds of around 5 Mbit/s.
ICT	Information and communication technology.
i-mode	i-mode, a packet-based means of wireless data transfer and uses Compact Wireless Markup Language (CWML) instead of WAP's WML for data display. I-mode was introduced in Japan in 1999 and was an early method available to browse the Web from a cellular phone.
Internet access via a games machine	Games machine with Internet connection, also known as a games console. OECD (2009) IP Internet protocol.
ISDN (Integrated Services Digital Network)	ISDN is a telecommunication service that turns a traditional (copper) telephone line into a higher speed digital link. ISDN is usually considered to be narrowband.
Kbit/s	Kilobits per second.
Kilobit (Kb)	A data unit of 1,024 bits and generally abbreviated as kb or kbit. Data

	speeds are generally referred to in kilobits (kbps) rather than kilobytes.
Kilobyte (KB)	A data unit of 1,024 bytes and generally abbreviated as KB or Kbyte.
Making on-line payments	Includes payment of fees, payments for purchases, taxation remittances etc. Online payments to government organizations may be made via an intermediary, for instance, a bank's website.
Master sample	A super sample intended to be used for multiple surveys and/or multiple rounds of the same survey, usually over 10-year time frame.
Mbit/s	Megabits per second. A data unit of 1,048,576 bits, sometimes interpreted as 1 million bits.
Measure of size, MOS	In multi-stage sampling a count or estimate of the size (e.g., number of persons) of each unit at a given stage.
Megabyte (MB)	A data unit of 1,048,576 bytes, sometimes interpreted as 1 million bytes.
Modem	Device that modulates outgoing digital signals from a computer or other digital device to analogue signals for a conventional copper twisted pair telephone line and demodulates the incoming analogue signal and converts it to a digital signal for the digital device.
Non-sampling error	Bias in survey estimate arising from errors in design and implementation; refers to accuracy <sup>150</sup> or validity of an estimate as opposed to its reliability or precision.
OCR	Optical character recognition.
OSILAC	Observatory for the Information Society in Latin America and the Caribbean
Primary sampling unit, PSU	Geographically-defined administrative unit selected at first stage of sampling
Probability sampling	Selection methodology whereby each population unit (person, household, etc.) has known, non-zero chance of inclusion in the sample
Public Internet access centres (PIAC)	A PIAC is a site, Location, or centre of instruction at which Internet access is made available to the public, on a full-time or part-time basis. This may include telecentres, digital community centres, Internet cafés, libraries, education centres and other similar establishments, whenever they offer Internet access to the general public. All such centres should have at least one public computer for Internet access.
PWLAN	Public Wireless Local Area Network (PWLAN), based on the IEEE 802.1b standard, commonly referred to as WiFi.
RSE	Relative standard error (coefficient of variation). Standard error as

	percentage of survey estimate, i.e. standard error divided by estimate.
RSE Sample frame(s)	Set of materials from which sample is actually selected, such as a list or set of areas.
Sample size	Number of units (households or persons) selected.
Sampling error (standard error)	Random error in survey estimate due to the fact that a sample rather than entire population is surveyed; square root of sampling variance.
Sampling in stages	Means by which sample of administrative areas and households/persons is chosen in successive stages to pinpoint geographic Locations where survey is conducted.
Sampling variance	Square of standard error or sampling error.
Satellite	A satellite stationed in geosynchronous orbit that acts as a microwave relay station, receiving signals sent from a ground based station, amplifying them, and retransmitting them on a different frequency to another ground-based station. Satellites can be used for high-speed transmission of computer data.
Stratified sampling	Technique of organizing sample frame into sub-groupings that are internally homogeneous and externally heterogeneous to ensure sample selection is spread properly across important population sub-groups.
Systematic sampling	Selection from a list, using a random start and predetermined selection interval, successively applied.
Target population	Definition of population intended to be covered by survey; also known as coverage universe.
UMTS	Universal Mobile Telecommunications System (UMTS) is one of the third generation (3G) mobile phone technologies. It uses W-CDMA as the underlying standard, is standardized by the 3GPP, and represents the European answer to the ITU IMT-2000 requirements for 3G Cellular radio systems. It presently delivers packet switched data transmission speeds up to 384 kbps and up to 2 Mbps when fully implemented.
VoIP	Voice over Internet Protocol, VoIP is a family of transmission technologies for delivery of voice communications over the Internet or other packet-switched networks. It is more generally referred to as IP (or Internet) telephony.
WAP	Wireless Application Protocol (WAP), a protocol for wireless communications that makes it possible to create advanced telecommunications services and to access Internet pages from a

	mobile telephone.
W-CDMA	Wideband CDMA (W-CDMA), an IMT-2000 3G mobile network technology, based on CDMA that presently delivers packet-switched data transmission speeds up to 384 kbit/s and up to 2 Mbit/s when fully implemented. Known as Universal Mobile Telecommunications System (UMTS) in Europe.
Website	Location on the World Wide Web identified by a web address. Collection of web files on a particular subject that includes a beginning file called a home page. Information is encoded with specific languages (Hypertext mark-up language (HTML), XML, Java) readable with a web browser, like Netscape's Navigator or Microsoft's Internet Explorer.
Weight	Inverse of probability of selection; inflation factor applied against raw data; also known as design weight.
WiFi	Wi-Fi (or Wi-fi, WiFi, Wifi, wifi), short for Wireless Fidelity, is a set of Ethernet standards for wireless local area networks (WLAN) currently based on the IEEE 802.11 specifications. New standards beyond the 802.11 specifications, such as 802.16 are currently in the works, they offer many enhancements, anywhere from longer range to greater transfer speeds. Wi-Fi was intended to be used for wireless devices and LANs, but is now often used for Internet access (one of the main international standards for wireless broadband Internet access and networking, with widespread use in business, homes and public spaces). It is based on radio signals with a frequency of 2.4 Ghz and capable of speeds of up to 11 Mbps. It enables a person with a wireless-enabled computer or personal digital assistant to connect to the Internet when in proximity of an access point called a hotspot.
xDSL	xDSL (Digital Subscriber Line) refers to a family of a high-bandwidth (broadband), local loop technologies that provide a digital permanent Internet connection over the copper wires of the local telephone network. Digital Subscriber Line. DSL technologies are designed to increase bandwidth available over standard copper telephone wires. Includes IDSL, HDSL, SDSL, ADSL, RADSL, VDSL, DSL-Lite.
ZIMSTAT	Zimbabwe National Statistics Agency

**CONFIDENTIAL**

**Appendix B: Questionnaire**



**ZIMBABWE**

**ZIMBABWE NATIONAL STATISTICS AGENCY  
(ZIMSTAT)**

**SURVEY ON INFORMATION  
AND COMMUNICATION TECHNOLOGY (ICT)  
ACCESS BY RURAL HOUSEHOLDS AND USE BY  
INDIVIDUALS IN ZIMBABWE:  
2009**

**QUESTIONNAIRE**

**CONFIDENTIAL**

Serial Number:

**SURVEY ON ACCESS TO INFORMATION AND COMMUNICATION TECHNOLOGY ( ICT) BY RURAL HOUSEHOLDS AND USE BY INDIVIDUALS: 2009**

**SECTION A: IDENTIFICATION**

**COMMUNAL LANDS (CL) ICT HH**

IDENTIFICATION	PROVINCE	DISTRICT	WARD	SECTOR		E.A NUMBER			HOUSEHOLD NUMBER			YEAR			MONTH	
				1	1											

INTERVIEWER NAME: \_\_\_\_\_

SUPERVISOR NAME: \_\_\_\_\_

TOTAL USUAL HOUSEHOLD MEMBERS

TOTAL HOUSEHOLD MEMBERS AGE 15 YEARS AND ABOVE

START TIME      \_\_ \_\_

***AFTER COMPLETING THE QUESTIONNAIRE, FILL IN THE FOLLOWING INFORMATION:***

NUMBER OF HOUSEHOLD INTERVIEWER VISITS:

FIRST VISIT ...1	SECOND VISIT...2	THIRD VISIT...3
DATE: __/__/__	DATE: __/__/__	DATE: __/__/__
FINAL VISIT    __ __ / __ __ / __ __		

COMMENTS

NAME OF HEAD OF HOUSEHOLD: \_\_\_\_\_

SECTION B: HOUSEHOLD COMPOSITION										ICT HH			
1	2	3	4		5			6	7	8			
<b>PERSON ID No:</b>	Write down the names of all adults, children and babies, starting with the head of household.  <i>Include usual members who are temporarily absent.</i>  <i>Note that visitors are not usual members</i>	<b>What is the relation-ship of (name) to the head of household? Record the appropriate code from the prompts below)</b>	<b>Is (name) male or female?</b>  <i>Circle the appropriate code</i>		<b>What is (name's) date of birth?</b> Enter month and year			<b>How old is (name)?</b> <i>Record age in completed years ("00" for children less than 1 year).</i>	Circle person line number if member is aged 15 and above, then go to Q8.	<b>Is (name) a usual member of the household</b> 1 Yes 2 No 8 DK			
	<b>ID No:</b>	<b>Name</b>	<b>Relation*</b>	<b>Male</b>	<b>Female</b>	<b>Month</b>	<b>Year</b>		<b>Age</b>	<b>15 and above</b>	<b>Yes</b>	<b>No</b>	<b>Don't know</b>
	01		01	1	2					01	1	2	8
	02			1	2					02	1	2	8
	03			1	2					03	1	2	8
	04			1	2					04	1	2	8
	05			1	2					05	1	2	8
	06			1	2					06	1	2	8
	07			1	2					07	1	2	8
	08			1	2					08	1	2	8
	09			1	2					09	1	2	8
	10			1	2					10	1	2	8
	11			1	2					11	1	2	8
	12			1	2					12	1	2	8
	13			1	2					13	1	2	8
14			1	2					14	1	2	8	
15			1	2					15	1	2	8	

Tick here if additional questionnaire used

Probe for additional household members.  
Probe especially for others who may not be members of the family (such as servants, friends) but who usually live in the household.  
Insert names of additional members in the household list and complete form accordingly.

**\* RELATIONSHIP TO THE HEAD**

01 Head	04 Brother / Sister	07 Parent
02 Spouse	05 Nephew /Niece /Cousin	08 Other relative
03 Son / Daughter	06 Grandchild	09 Not related
		0 Don't know

SECTION C: FOR HOUSEHOLD MEMBERS AGE 15 YEARS AND ABOVE				ICT HH																
EDUCATION			ED	LABOUR FORCE STATUS LFS			OCCUPATION OC													
1	2 & 6		9	10			11													
PERSON ID No:	(Copy name and age from, Q2 and Q6 and complete this section)		<b>What is (name's) highest level of education completed?</b> (Record the appropriate level from the educational codes below)  88. None 00. Early Childhood Development (ECD) 01-07 Grade 1-7 11-16 Form 1-6 20. Diploma/Certificate after Primary 21. Diploma/Certificate after Secondary 22. Graduate/ Postgraduate	<b>In (name's) main job in the last 12 months what was he/she?</b>  1 Paid employee permanent 2 Paid employee casual/temporary/ contract/seasonal. 3 Employer 4 Own account worker (communal, resettlement & peri-urban farmer 5 Own account worker 6 Contributing family worker 7 Student			<b>Describe (name's) activity of main occupation during the last 12 months.</b> <i>e.g. Street vending, Primary school teaching</i>													
									ID No:	Name	Age	Level of Education		Labour force status		Occupation				
									01					1	2	3	4	5	6	7
									02					1	2	3	4	5	6	7
									03					1	2	3	4	5	6	7
									04					1	2	3	4	5	6	7
									05					1	2	3	4	5	6	7
									06					1	2	3	4	5	6	7
									07					1	2	3	4	5	6	7
									08					1	2	3	4	5	6	7
									09					1	2	3	4	5	6	7
									10					1	2	3	4	5	6	7
									11					1	2	3	4	5	6	7
									12					1	2	3	4	5	6	7
									13					1	2	3	4	5	6	7
14					1	2	3	4	5	6	7									
15					1	2	3	4	5	6	7									

SECTION D: ELECTRICITY ACCESS			
12	Does the dwelling unit in which this household resides have access to electricity?	Yes.....	1
		No.....	2
<p>a. <i>This question is asked of all in-scope households.</i></p> <p>b. <i>Electricity access may be by a grid/mains connection, or from power generated locally (including at the dwelling). Local power includes electricity generated by a fuel-powered generator, or from renewable resources such as wind, water or solar. It excludes sole use of energy storage devices, such as batteries (though these may be used to store electricity from other sources).</i></p> <p><b>Interviewer instructions</b></p> <p>c. <i>Where the interview occurs at the household dwelling, the presence of electricity may be directly observable by the interviewer, in which case the question does not need to be asked.</i></p>			

SECTION E. Household Access to Information and Communication Technology

13	What is the distance of the household to the nearest Post Office in kilometres? <i>Circle the appropriate code.</i>	(0 - <5) ...1	(5 - <10) ...2	(10 - <15) ...3
		(15 - <20) ...4	(20 and above) ...5	

14	<p>Did the household use postal services (ZIMPOST) to send mail/ documents during the last 12 months?</p> <p><i>Postal services are transmission of letters, packages, periodicals and related services. Postal services ensure that postal items are delivered. A postal item refers to anything dispatched by postal services such as letter post, parcel post, money orders, etc.</i></p> <p><i>Letter post items are defined as priority items and non priority items weighing up to 2kgs. letters, post cards, printed papers, small packets weighing up to 2kgs and literature for the blind weighing up to 7kgs.</i></p>	Yes.....	1
		No.....	2

15	How often did the household use postal services during the last 12 months?	Never.....	1
		Less than once a month..	2
		About once a month.....	3
		Weekly.....	4
		Daily .....	5

16	<p>Did the household use courier services to send mail /documents during the last 12 months?</p> <p><i>Courier services are express delivery services which include time definite delivery. Thus courier services are fast, door-to-door and have pick-up and delivery services of high-value goods or urgently needed documents.</i></p>	Yes.....	1
		No.....	2

<b>17</b>	How often did the household use courier services during the last 12 months?	Never.....1 Less than once a month..2 About once a month.....3 Weekly.....4 Daily .....5
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<b>18</b>	Does any member of this household have a radio at home?	Yes..... 1
	<p><i>a. This question is asked of all in-scope households.</i></p> <p><i>b. A radio is a device capable of receiving broadcast radio signals, using popular frequencies, such as FM, AM, LW and SW. It includes a radio set integrated in a car or an alarm clock but excludes radios integrated with a mobile phone or in a computer.</i></p> <p><i>c. The equipment should be in working order.</i></p> <p><i>Interviewer instructions</i></p> <p><i>d. The interviewer should probe a 'no' response to this question if the response to Q19 is 'yes'.</i></p>	No..... 2

<b>19</b>	Does any member of this household have a television at home?	Yes..... 1
	<p><i>a. This question is asked of all in-scope households.</i></p> <p><i>b. A television (TV) is a stand-alone device capable of receiving broadcast television signals, using popular access means such as over-the-air, cable and satellite. It excludes TV functionality integrated with another device, such as a computer or a mobile phone.</i></p> <p><i>c. The equipment should be in working order.</i></p> <p><i>Interviewer instructions</i></p> <p><i>d. The interviewer could check for the presence of a TV aerial or a TV set if the interview takes place at the household's residence.</i></p>	No..... 2

<b>20</b>	Does this household have a fixed line telephone at home?	Yes..... 1
	<p><i>a. This question is asked of all in-scope households.</i></p> <p><i>b. A fixed telephone line refers to a telephone line connecting a customer's terminal equipment (e.g. telephone set, facsimile machine) to the public switched telephone network (PSTN) and which has a dedicated port on a telephone exchange.</i></p> <p><i>c. The equipment should be in working order.</i></p> <p><i>Interviewer instructions</i></p> <p><i>d. The interviewer could possibly check for the presence of a fixed line telephone if the respondent is not sure (if the interview takes place at the household's residence).</i></p>	No..... 2

21	Does any member of this household have a mobile telephone at home?	Yes.....	1
	<p>a. This question is asked of all in-scope households.</p> <p>b. at home means that the mobile telephone can be used by members of the household, though it is not restricted to home use.</p> <p>c. A mobile (cellular) telephone refers to a portable telephone subscribing to a public mobile telephone service using cellular technology, which provides access to the PSTN. This includes analogue and digital cellular systems, as well as IMT-2000 (3G). Users of both post-paid subscriptions and pre-paid accounts are included.</p> <p>e. The equipment should be in working order.</p>	No.....	2

22	Does any member of this household have a computer at home, regardless of whether it is used?	Yes.....	1
	<p>a. This question is asked of all in-scope households.</p> <p>b. A computer refers to a desktop or a laptop computer. It does not include equipment with some embedded computing abilities such as mobile cellular phones, personal digital assistants (PDAs) or TV sets.</p> <p>c. The equipment should be in working order.</p> <p><i>Interviewer instructions</i></p> <p>d. The interviewer could possibly check for the presence of a computer (e.g. a desktop PC) if the interview takes place at the household's residence.</p>	No.....	2

23	Does any member of this household have Internet access at home, regardless of whether it is used?	Yes.....	1
	<p>a. This question is asked of all in-scope households.</p> <p>b. The Internet is a world-wide public computer network. It provides access to a number of communication services including the World Wide Web and carries email, news, entertainment and data files.</p> <p>c. Access may be by any device enabling Internet access (not only a computer). It may also be by mobile phone, PDA, games machine, digital TV etc. Access can be via a fixed or mobile network.</p> <p><i>Interviewer instructions</i></p> <p>d. The interviewer may be able to check for the presence of some kinds of Internet connection (e.g. a modem connection) if the respondent is not sure (if the interview takes place at the household's residence).</p>	No.....	2

**If no, go to Q25**

<b>24</b>	What type/s of Internet access services are used for Internet access at home?		
<b>Narrowband</b>			
<b>Analogue modem</b> <i>Dial-up via standard telephone line; it requires that the modem dial a phone number when Internet access is needed.</i>		Yes.....	1
		No.....	2
<b>ISDN</b> <i>ISDN (Integrated Services Digital Network) turns a traditional telephone line into a higher speed digital link.</i>		Yes.....	1
		No.....	2
<b>Other Narrowband</b> <i>Includes mobile phone and other forms of access with an advertised download speed of less than 256 kbit/s (including CDMA 1x (Release 0), GPRS, WAP and i-mode).</i>		Yes.....	1
		No.....	2
<b>Broadband</b>			
<b>DSL</b> <i>DSL (Digital Subscriber Line) includes ADSL, SDSL, VDSL and uses ordinary telephone lines.</i>		Yes.....	1
		No.....	2
<b>Cable modem</b> <i>A cable modem uses cable TV lines for connecting to the Internet.</i>		Yes.....	1
		No.....	2
<b>Other fixed broadband</b> <i>Includes technologies at speeds greater than or equal to 256 kbit/s, in one or both directions, such as leased lines, fibre-to-the-home, satellite, fixed wireless, Wireless Local Area Network and WiMAX.</i>		Yes.....	1
		No.....	2
<b>Mobile broadband</b> <i>Mobile broadband refers to mobile cellular networks with access to the Internet at speeds greater than or equal to 256 kbit/s, in one or both directions, such as Wideband CDMA (W-CDMA), Universal Mobile Telecommunications System (UMTS); High-speed Downlink Packet Access (HSDPA), complemented by High-Speed Uplink Packet Access (HSUPA); CDMA2000 1xEV-DO and CDMA 2000 1xEV-DV. Access can be via any device (handheld computer, laptop or mobile cellular telephone etc.).</i>		Yes.....	1
		No.....	2
<p>a. This question is asked of all in-scope households with access to the Internet at home.</p> <p>b. Record all Internet access services used by the household (that is, allow multiple responses).</p> <p>c. It is not necessary to explicitly present categories grouped into narrowband and broadband, but the question should be worded in a way that makes it easy for the interviewer and the respondent to differentiate between narrowband and broadband Internet access.</p> <p>d. Where possible, use specific country examples for the two 'other' categories.</p> <p>e. The Mobile broadband category can be split into several categories reflecting available country services.</p> <p>f. Note that DSL services with an advertised download speed of less than 256kbit/s are defined as narrowband. Where such services exist, they should be placed in a separate category to enable aggregation to total narrowband.</p> <p><b>IF THE ANSWER FOR ALL TYPES OF INTERNET SERVICES IS "NO" GO TO Q25</b></p>			

Please circle the code relevant to your response (Allow multiple responses)

<b>25</b>	What are the main reasons for the household not having Internet access at home?		
	Lack of interest/no need	Yes..... No.....	1 2
	Lack of knowledge, skills/confidence	Yes..... No.....	1 2
	Have access to Internet elsewhere	Yes..... No.....	1 2
	Costly equipment	Yes..... No.....	1 2
	Subscription to the Internet is too costly	Yes..... No.....	1 2
	Concern about exposure to inappropriate or harmful content	Yes..... No.....	1 2
	Other specify .....	Yes..... No.....	1 2

<b>26</b>	Does this household face data/information security problems by using the Internet?	Yes..... No.....	1 2 <b>If no go to Section F</b>
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<b>27</b>	What are the data/information security problems the household faced by type during the last 12 months?		
	Viruses	Yes..... No.....	1 2
	Spam	Yes..... No.....	1 2
	Hackers	Yes..... No.....	1 2
	Worms	Yes..... No.....	1 2
	Other specify .....	Yes..... No.....	1 2

*Please circle the code relevant to your response (Allow multiple responses)*

28	What data/information security measures did the household have in place by type during the last 12 months?		
	Anti-virus	Yes..... No.....	1 2
	Firewall	Yes..... No.....	1 2
	Hacking detection	Yes..... No.....	1 2
	Data backup	Yes..... No.....	1 2
	Anti- hacking	Yes..... No.....	1 2

**SECTION F: INDIVIDUAL USES OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) ICT HH**

FOR INDIVIDUAL MEMBERS AGED 15 YEARS AND ABOVE

1	6	29	30	31	32	33	34
<b>PERSON ID NUMBER:</b>	<b>How old is (name)?</b>  Enter age in completed years from Q6	<b>Has (name) used a mobile cellular telephone in the last 12 months?</b>  1. Yes 2. No	<b>Have you used a computer from any location in the last 12 months?</b>  1. Yes 2. No	<b>Have you used the internet from any location in the last 12 months?</b>  1. Yes (Go to Q32)  2. No (Go to Q35)	<b>Where did you use the Internet in the last 12 months? (Allow multiple responses)</b>  <i>INDICATE WITH '1' THE APPLICABLE</i>  1. Home 2. Work 3. Place of education 4. Another person's home 5. Community Internet access facility 6. Commercial Internet access facility 7. Any place via a mobile cellular telephone 8. Any place via other mobile access devices	<b>How often did you typically use the Internet during the last 12 months (from any location)?</b>  1. Daily 2. Weekly 3. Monthly 4. Upon demand	<b>For which of the following activities did you use the Internet for private purposes in the last 12 months (from any location)? (Allow multiple responses).</b>  <i>INDICATE WITH '1' THE APPLICABLE</i>  1. Getting information about goods or services 2. Getting information related to health or health services 3. Getting information from general government organizations 4. Interacting with general government organizations 5. Sending or receiving e-mail 6. Telephoning over the Internet/VoIP 7. Posting information or instant messaging 8. Purchasing or ordering goods or services 9. Internet banking 10. Education or learning activities 11. Playing or downloading video games or computer games 12. Downloading movies, images, music, watching TV or video, or listening to radio or music 13. Downloading software 14. Reading or downloading online newspapers or magazines, electronic books
	<b>ID No:</b>	<b>Age</b>	<b>Yes No</b>	<b>Yes No</b>	<b>Yes No</b>	<b>1 2 3 4 5 6 7 8</b>	<b>Frequency</b>
01		1 2	1 2	1 2		1 2 3 4	
02		1 2	1 2	1 2		1 2 3 4	
03		1 2	1 2	1 2		1 2 3 4	
04		1 2	1 2	1 2		1 2 3 4	
05		1 2	1 2	1 2		1 2 3 4	
06		1 2	1 2	1 2		1 2 3 4	
07		1 2	1 2	1 2		1 2 3 4	

SECTION F: INDIVIDUAL USES OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) ICT HH

FOR INDIVIDUAL MEMBERS AGED 15 YEARS AND ABOVE

1	6	29	30	31	32	33	34
<b>PERSON ID NUMBER:</b>	<b>How old is (name)?</b>  Enter age in completed years from Q6	<b>Has (name) used a mobile cellular telephone in the last 12 months?</b>  1. Yes 2. No	<b>Have you used a computer from any location in the last 12 months?</b>  1. Yes 2. No	<b>Have you used the internet from any location in the last 12 months?</b>  1. Yes (Go to Q32) 2. No (Go to Q35)	<b>Where did you use the Internet in the last 12 months? (Allow multiple responses)</b>  <i>INDICATE WITH '1' THE APPLICABLE</i>  1. Home 2. Work 3. Place of education 4. Another person's home 5. Community Internet access facility 6. Commercial Internet access facility 7. Any place via a mobile cellular telephone 8. Any place via other mobile access devices	<b>How often did you typically use the Internet during the last 12 months (from any location)?</b>  1. Daily 2. Weekly 3. Monthly 4. Upon demand	<b>For which of the following activities did you use the Internet for private purposes in the last 12 months (from any location)?</b>  <i>INDICATE WITH '1' THE APPLICABLE</i>  1. Getting information about goods or services 2. Getting information related to health or health services 3. Getting information from general government organizations 4. Interacting with general government organizations 5. Sending or receiving e-mail 6. Telephoning over the Internet/VoIP 7. Posting information or instant messaging 8. Purchasing or ordering goods or services 9. Internet banking 10. Education or learning activities 11. Playing or downloading video games or computer games 12. Downloading movies, images, music, watching TV or video, or listening to radio or music 13. Downloading software 14. Reading or downloading online newspapers or magazines, electronic books

ID No:	Age	Yes No	Yes No	Yes No	1	2	3	4	5	6	7	8	Frequency	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
08		1 2	1 2	1 2									1 2 3 4															
09		1 2	1 2	1 2									1 2 3 4															
10		1 2	1 2	1 2									1 2 3 4															
11		1 2	1 2	1 2									1 2 3 4															
12		1 2	1 2	1 2									1 2 3 4															
13		1 2	1 2	1 2									1 2 3 4															
14		1 2	1 2	1 2									1 2 3 4															
15		1 2	1 2	1 2									1 2 3 4															

SECTION F: CONT..... INDIVIDUAL USES OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

FOR INDIVIDUAL HOUSEHOLD MEMBERS AGED 15 YEARS AND ABOVE

ICT HH

1	6	35							
<b>PERSON ID NUMBER:</b>	<p><b>How old is (name)?</b></p> <p><i>Enter age in completed years from Q6</i></p>	<p><b>What are the reasons why (name) did not use the Internet in the last 12 months? (Allow multiple responses)</b></p> <p><b>INDICATE WITH '1' THE APPLICABLE</b></p> <ol style="list-style-type: none"> <li>1. Does not have a computer</li> <li>2. Does not know how to use a computer</li> <li>3. Internet cafes are far away</li> <li>4. Lack of electricity</li> <li>5. Connection is too slow</li> <li>6. Concern about exposure to inappropriate or harmful content</li> <li>7. Not connected</li> <li>8. Other specify .....</li> </ol>							
ID No.	Age	1	2	3	4	5	6	7	8
01									
02									
03									
04									
05									
06									
07									
08									
09									
10									
11									
12									
13									
14									
15									

**END OF QUESTIONNAIRE**

**CONFIDENTIAL**

FOR OFFICIAL USE ONLY	DATE
<i>END TIME</i> _____	
<b>NAME OF INTERVIEWER:</b> _____	___ ___ / ___ ___ / ___ ___
<b>RESULT OF HOUSEHOLD INTERVIEW:</b>  COMPLETED 1 NOT AT HOME        2 REFUSED                3 HOUSEHOLD NOT FOUND / DESTROYED 4 OTHER ( <i>SPECIFY</i> )..... 5	<b>COMMENTS:</b>
<b>NAME OF TEAM LEADER:</b> _____	___ ___ / ___ ___ / ___ ___
<b>NAME OF SUPERVISOR:</b> _____	___ ___ / ___ ___ / ___ ___
<b>EDITED BY:</b> _____	___ ___ / ___ ___ / ___ ___
<b>DATA ENTRY CLERK:</b> _____	___ ___ / ___ ___ / ___ ___
<b>VERIFIER:</b> _____	___ ___ / ___ ___ / ___ ___
<b>FILED BY:</b> _____	___ ___ / ___ ___ / ___ ___

**CONFIDENTIAL**

## *Completion Notes for Questions 32, 33 and 34*

<b>HH8 Location of individual use of the Internet in the last 12 months</b>	
<p>HH8 refers to the location of Internet use by in-scope individuals in the previous 12 months.</p> <p>Locations are defined per the response categories below. They are:</p> <ul style="list-style-type: none"> <li>• Home</li> <li>• Work</li> <li>• Place of education</li> <li>• Another person's home</li> <li>• Community Internet access facility</li> <li>• Commercial Internet access facility</li> <li>• Any place via a mobile cellular telephone</li> <li>• Any place via other mobile access devices</li> </ul> <p>The Internet is a worldwide public computer network. It provides access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files.</p> <p>The proportion of individuals who used the Internet at each location can be calculated as either the proportion of in scope individuals or the proportion of Internet users, using the Internet at each location. In either case, the result is then multiplied by 100 to be expressed as a percentage.</p>	
<b>Where did you use the Internet in the last 12 months? (select all that apply)</b>	
Home	
Work	Where a person's workplace is located at his/her home, then he/she would answer yes to the home category only.
Place of education	For students. Teachers (and others who work at a place of education) would report 'work' as the place of Internet use. Where a place of education is also made available as a location for general community Internet use, such use should be reported in the Community Internet access facility category.
Another person's home	The home of a friend, relative or neighbour.
Community Internet access facility	For example, public libraries, publicly provided Internet kiosks, non-commercial telecentres, digital community centres, post offices, other government agencies; access is typically free and is available to the general public.
Commercial Internet access facility	For example, Internet or cybercafés, hotels and airports; access is typically paid (i.e. not free of charge).
Any place via a mobile cellular	Use of the Internet at any location via a mobile phone

telephone	(including handheld devices with mobile phone functionality).
Any place via other mobile cellular devices	Use of the Internet at any location via other mobile access devices, e.g. a laptop computer or handheld device that uses wireless access (at a WiFi 'hotspot') or a laptop computer connected to a mobile phone network.
<p><b>Explanatory notes</b></p> <p>Use of the Internet is not assumed to be only via a computer — it may also be by mobile phone, PDA, games machine, digital TV etc. Except for mobile Internet use, the locations are associated with the equipment used e.g. a PC installed at work or at an Internet café.</p> <p>Individuals should be asked about all locations of Internet use (that is, the survey question used by countries should specify multiple responses). In cases where countries ask about the main location or a small number of most commonly used locations, the results will not be comparable with those of countries that ask about all locations of use. The difference is that the last will reflect the actual use at each place, whereas the first two will not.</p> <p>The question is asked of all in-scope individuals who used the Internet in the last 12 months.</p> <p>Countries can replace the Community and/or Commercial Internet access facility categories with those that reflect the types of facilities available in their country.</p> <p>Countries may ask about response categories as a series of yes/no questions, rather than a single 'list' question. The method chosen will often reflect the method of data collection e.g. a telephone interview is more likely to use a series of questions. Other country variations are: remove categories where items are not feasible; and add or split categories corresponding to country data requirements. Care should be taken when adding or splitting categories that statistical bias is not introduced. This could occur if the provision of alternative categories affects response. Where categories have been split into sub-categories, care needs to be taken when aggregating responses to reflect the response categories of the model question (in particular, to avoid double counting individuals who respond to more than one of the sub-categories).</p> <p>The main statistical issue with this indicator is using a denominator that is not clear, or comparing indicators that have been compiled using different denominators. The 'locations' involving mobile devices (mobile phone or other mobile access device) may require explanation as they are fairly technical. It would be helpful if interviewers have a list of commonly available mobile services in the country as a reference.</p>	

## HH12 Frequency of individual use of the Internet in the last 12 months

HH12 refers to frequency of Internet use by in-scope individuals from any location in the previous 12 months, as follows:

- At least once a day
- At least once a week but not every day
- Less than once a week

The Internet is a worldwide public computer network. It provides access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files.

The frequency of individual use of the Internet can be calculated as either the proportion of in-scope individuals or the proportion of Internet users, using the Internet with each frequency. In either case, the result is then multiplied by 100 to be expressed as a percentage.

### How often did you typically use the Internet during the last 12 months (from any location)?

At least once a day	Once a working day for respondents who only (or most frequently) used the Internet from work.
At least once a week but not every day	
Less than once a week	

### Explanatory notes

Use of the Internet is not assumed to be only via a computer — it may also be by mobile phone, PDA, games machine, digital TV etc. It can be via a fixed or mobile network.

Typically means on most days (or a typical day). It is recommended that countries collect this information in respect of a typical period; therefore, respondents should ignore weekends (if they only use the Internet at work) and breaks from their usual routine, such as holidays.

The question is asked of all in-scope individuals who used the Internet in the last 12 months.

Countries are able to add additional frequency categories if they wish to obtain finer level information, for example, 'less than once a week' could be split into 'at least once a month but not every week' and 'less than once a month'. In practice, for most countries, it is likely that the proportion of individuals using the Internet less than once a month will be small.

The main statistical issue with this indicator is using a denominator that is not clear, or comparing indicators that have been compiled using different denominators.

## HH9 Internet activities undertaken by individuals in the last 12 months

HH9 refers to Internet activities undertaken by in-scope individuals from any location in the previous 12 months. Internet activities are defined per the response categories in the model question below. They are:

- Getting information about goods or services
- Getting information related to health or health services
- Getting information from general government organizations
- Interacting with general government organizations
- Sending or receiving e-mail
- Telephoning over the Internet/VoIP
- Posting information or instant messaging
- Purchasing or ordering goods or services
- Internet banking
- Education or learning activities
- Playing or downloading video games or computer games
- Downloading movies, images, music, watching TV or video, or listening to radio or music
- Downloading software
- Reading or downloading online newspapers or magazines, electronic books

The Internet is a worldwide public computer network. It provides access to a number of communication services including the World Wide Web and carries e-mail, news, entertainment and data files.

The proportion of individuals who undertook each activity can be calculated as either the proportion of in-scope individuals or the proportion of Internet users who undertook each activity. In either case, the result is then multiplied by 100 to be expressed as a percentage.

### For which of the following activities did you use the Internet for private purposes in the last 12 months (from any location)? (select all that apply)

Getting information about goods or services	
Getting information related to health or health services	Includes information on injury, disease, nutrition and improving health generally.
Getting information from general government organizations	Government organizations should be explained to respondents in a way that is consistent with the SNA93 (2008 revision) concept of general government. See Explanatory notes below for details. Information may be obtained via websites or e-mail.
Interacting with general government organizations	Government organizations should be explained to respondents in a way that is consistent with the SNA93 (2008 revision)

	concept of general government. See Explanatory notes below for details. Interacting with general government includes downloading/requesting forms, completing/lodging forms online, making online payments and purchasing from government organizations via the Internet. It excludes getting information from government organizations.
Sending or receiving e-mail	
Telephoning over the Internet/VoIP	Using Skype, iTalk, etc. Includes video calls (via webcam).
Posting information or instant messaging	Posting messages or other information to chat sites, blogs, newsgroups, online discussion forums and similar; use of instant messaging.
Purchasing or ordering goods or services	Purchase orders placed via the Internet whether or not payment was made online. Orders that were cancelled or not completed are excluded. Includes purchasing of products such as music, travel and accommodation via the Internet.
Internet banking	Includes electronic transactions with a bank for payment or transfers, or for looking up account information. Excludes electronic transactions via the Internet for other types of financial services, such as share and insurance purchases.
Education or learning activities	Formal learning activities such as study associated with school or tertiary education courses as well as distance education involving online activities. (A more narrow interpretation is likely to be less meaningful as it could include a range of activities such as using the Internet to search for information.)
Playing or downloading video games or computer games	Includes file sharing games and playing games online, either paid or free of charge.
Downloading movies, images, music, watching TV or video, or listening to radio or music	Includes file sharing and using web radio or web television, either paid or free of charge.
Downloading software	Includes downloading of patches and upgrades, either paid or free of charge.
Reading or downloading online newspapers or magazines, electronic books	Includes accessing news websites and subscriptions to online news services, either paid or free of charge.
<p><b>Explanatory notes</b></p> <p>Internet use is not assumed to be only via a computer — it may also be by mobile phone, PDA, games machine, digital TV etc. It can be via a fixed or mobile network. Individuals should be asked about all Internet activities (that is, the question used by countries should specify multiple responses). Activities are not mutually exclusive.</p>	

Internet activities are restricted to private purposes and therefore exclude activities such as purchasing over the Internet undertaken as part of a person's job.

General government organizations should be explained to respondents in a way that is consistent with the SNA93 (2008 revision) (UNSD, 2008a) concept of general government. According to the SNA "... the principal functions of government are to assume responsibility for the provision of goods and services to the community or to individual households and to finance their provision out of taxation or other incomes; to redistribute income and wealth by means of transfers; and to engage in non-market production." (General) government organizations include central, state and local government units. Importantly, they do not include public corporations (legal entities, predominantly owned and controlled by the government that are created for the purpose of producing goods and services for the market and may be a source of profit or other financial gain to their owner/s).

The question is asked of all in-scope individuals who used the Internet in the last 12 months.

Countries may ask about response categories as a series of yes/no questions, rather than a single 'list' question. Other country variations are: remove categories where items are not feasible; and add or split categories corresponding to country data requirements. Care should be taken when adding or splitting categories that statistical bias is not introduced. Where categories have been split into sub-categories, care needs to be taken when aggregating responses to reflect the response categories of the model question.

There are several statistical issues with this indicator. They include not including all activities, from all locations, using a denominator that is not clear, or comparing indicators that have been compiled using different denominators.

In respect of the activity categories, the concept of a general government organization may prove difficult for respondents to understand, especially in a consistent way. Some countries clarify the definition by listing particular general government organizations or functions of those organizations.

## Appendix C: Status of ICT Infrastructure in Zimbabwe as at 31 March 2010

<b>Telecommunications Infrastructure</b>	
Mobile Switching Centres	9
Fixed Network Trunk Switches	2
Base Stations	880
International Gateways	5
Radio Terrestrial 2 Fibre Optic Links To Regional Countries	5

<b>Access Technologies Used</b>
GSM
WiMax
CDMA
Fibre
Copper Based Technologies such as ADSL

<b>Industry Structure</b>	
Type of Operator	Number of Licensees
PSTN	1
Mobile	3
Internet Access	11
Public Data Operators The operators in this category are authorised to offer point to point or point to multipoint data connectivity for organisations.	2
Internet Service Providers (ISP)	17

<b>Market Structure (Fixed Network)</b>	
Fixed Network Public Operator Zimbabwe has one fixed telephone service provider. As at 31 March 2011, the operator had 378 000 lines. Of these, 70% were in the Harare, 53% were residential lines. Seventy percent (70%) were connected to the digital exchange	1
Subscribers	386 000
Digitalized Lines	92%
Fixed Lines in Harare	50%
Fixed Lines in Rural Areas	17%
Offers Local, Regional and International Voice Telephone Services	

<b>Market Structure (Mobile Network)</b>			
Mobile Telephone Operators			3
Mobile Operator	ECONET	TELECEL	NET-ONE
Subscriber Base	3 542 715	938 383	900 243
Post Paid Subscriptions			3%
Digitalized Lines			100%
ECONET offers GPRS, EDGE, and 3G Services There were 25 600 subscribers on GPRS/EDGE services			

<b>Internet Service Indicators</b>	
No. of Leased Line Subscribers	53 000
No. of Internet Dial-Up Subscribers	26 000
Mobile Broadband Subscribers	20 000
Incoming International Bandwidth	290Mbps
Outgoing International Bandwidth	215Mbps
Number of Personal Computers (estimate)	895 000
Internet Users	1 400 000

*Source: POTRAZ*