

TELECOMMUNICATION DEVELOPMENT BUREAU

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 $7^{\rm TH}\, {\rm WORLD}\,\, {\rm TELECOMMUNICATION/ICT}\,\, {\rm INDICATORS}\,\, {\rm MEETING},\, {\rm CAIRO},\, {\rm EGYPT},\, 3\text{--}5\,\, {\rm MARCH}\, 2009$

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TITLE: Zambia's Status on the Data Collection and Dissemination of ICT Statistics

Zambia's Status on the Data Collection and Dissemination of ICT Statistics

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Zambia as a Country

Zambia is a land-locked country occupying an elevated plateau in South Central Africa. Eight other countries border Zambia: Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Democratic Republic of Congo and Zimbabwe. The country covers a land mass of 752,612 square kilometers. Its population is currently projected at 12.5 million for 2008 and the GDP per capita is estimated to be around USD 1,215 with the literacy rate estimated at 67.2% of the total population based on the 2000 Census of Population and Housing.

Zambia and ICT

Although Zambia has embraced Information, Communication Technology (ICT) quite late, the Zambian government has recognised the role that ICT can play in achieving its Fifth National Development goals as well as the Millennium Development Goals.

To enable the country fully embrace the significance of ICT, the Zambian Government liberalised the ICT sector in order to allow private participants in the running of the economy. Hence the Government through an Act of Parliament (Telecommunications Act No. 23 of 1994) created the Communications Authority to oversee the liberalization Telecommunications Industry in the Country. The Authority came into being in July 1994. The main aim was to increase the role of the private sector towards the development of the ICT sector. To this end, the Ministry of Communications and Transport came up with an ICT Policy known as National Information and Communication Technology Policy in April, 2006. The Ministry spearheaded the process of formulating the ICT Policy facilitated by a National Technical Committee comprising experts with varied experience in research and policy analysis, telecommunications, information technology, media as well as legal and regulatory issues. The team was assisted by an international Consultant hired on a short term basis.

To encourage competitive ICT market, the Zambia Communications Authority has so far registered thirteen (13) Internet Service Providers, three (3) Mobile Cellular Service Providers, two (2) Carrier of Carrier Providers (Public Carrier of Carrier are companies that are allowed to sell bandwidth to other entities as a commercial business) and one (1) Fixed Telephone Service Provider. Currently, the Communications Authority is

considering the entrance of a fourth mobile operator on the market. Despite the above mentioned developments in the ICT sector as well as Zambia being a pioneer of Internet in Sub-Sahara Africa, the potential for rapid growth is undermined by inadequate telecommunication infrastructure development across the country, poor telephony accessibility and high access costs.

Current Status of the ICT Statistics Data Collection

ICT being a new concept in Zambia, very little has been done in the area of developing a national ICT statistics database. To date, the Communications Authority of Zambia does the compilation of some data on telecommunications and other ICT sector.

At the National level, the National Statistical Office (NSO) namely the Central statistical Office (CSO) is responsible for the development and maintaining of various statistical databases. The CSO is the mandated government institution responsible for the collection, processing, validating, authenticating and disseminating official national statistics, in order to ensure uniformity in concepts, definitions and classifications that could enable the comparison of data at national as well as international level. Overall, the CSO is the databank for the country and therefore has the responsibility of publishing statistical reports.

The CSO works closely with different stakeholders in the planning and designing of methodologies that are applied in various surveys for the collection of primary data as well as conducting periodical workshops and training for the development and updating skills of statistical personnel in the country. This network of stakeholders includes; data suppliers, data producers and users of statistics and together they form the National Statistical Systems (NSS) in the country. The NSS encompasses the statistical outputs produced, and the organisations and people involved. The basic concept of NSS is to bring together the most important indicators and datasets within a well planned and well coordinated framework, which provides users with assurances about data quality and integrity.

However, the current NSS in Zambia is not coordinated and harmonised in the collection and provision of the required statistics for effective and efficient monitoring and evaluation of the development programmes. Therefore, the Government has embarked on the formulation of a National Strategy for the Development of Statistics (NSDS) which is being spearheaded by the CSO. The NSDS is the coordination mechanism which provides a vision on which the NSS should be based. The NSDS is being developed upon the foundation assessments of user needs and perceptions, data quality, legal, institutional and co-ordination arrangements, statistical capacity, and an analysis of strengths and weaknesses of the system, as well as opportunities and threats to the development of the system. The NSDS aims at providing a holistic, coherent and comprehensive framework for improving the NSS and developing official statistics in the country in a sustainable manner. The NSDS is expected to:

- Bring about the production of required statistics efficiently and effectively which will ensure that data is collected, analysed, compiled and disseminated in a consistent and coherent manner.
- Provide a framework for strengthening the statistical capacity across the NSS including mobilising, harnessing and leveraging resources.
- Form the basis for effective and out-put oriented management of the NSS.

Despite being responsible for disseminating official national statistics, the CSO, has never conducted an independent ICT national survey. However, it has incorporated a few ICT elements in previous surveys such as the Living Conditions Monitoring Surveys and the Labour Force surveys. In view of the above, the CSO through its proposed NSDS has planned to undertake a National ICT survey within the period 2009 to 2013 to enable the office come up with a national ICT database.

Currently, the only ICT information available at the CSO is the household asset based information obtained on a two year basis through the Living Conditions Monitoring Surveys in which Zambian residents provide information on how many assets they own in terms of Televisions, DVD/VCR, Home Theatres, Radios, Cellular and Landline Phones, Internet Connection, Satellite Dishes/Decoder and Computers.

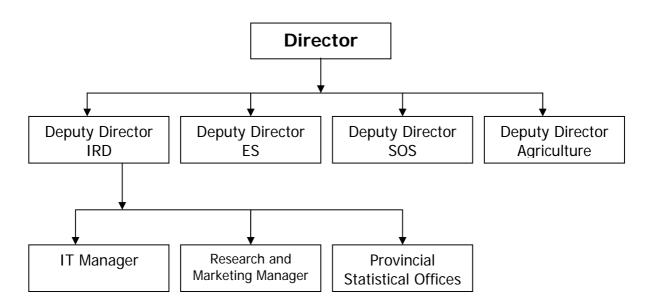
Besides the limited ICT information available at the CSO, the Communications Authority of Zambia being the government mandated organisation that oversees the Telecommunication Industry in the country, collects and disseminates Telecommunication indicators such as: Mobile Phone Growth Trends in Zambia, Internet and Internet Service Providers (ISPs) Connectivity Data in Zambia and Public Switched Telephone Network (PSTN) Subscription in Zambia. This information is made available through the organisation's website.

About the Central Statistical Office of Zambia

The CSO is a Department under the Ministry of Finance and National Planning and was established by an Act of Parliament, Cap 127, of the laws of Zambia. This Act provides for an elaborate system of data collection and Dissemination of official statistics in Zambia. The department is headed by a Director who is assisted by four Deputy Directors in charge of subject matter Divisions in the following areas: Economic statistics, Social statistics, Agriculture statistics; and Information, Research and Dissemination.

The mission statement for the CSO is to coordinate and provide timely, quality and credible official statistics for use by stakeholders and clients for sustainable development. This mission statement implies that the CSO will play a crucial role in coordinating and delivering the NSS, which will be central to provision of a broad range of statistical data, necessary for monitoring the implementation of national development initiatives.

Summarised Organisation Structure of the Central Statistical Office



IRD - Information, Research and Dissemination Division

ES – Economic Statistics Division

SOS – Social Statistics Division

IT - Information Technology Manager

Dissemination of Information

As a major supplier of official statistical information, the CSO's work revolves around the collection of statistical information through National Censuses and Surveys.

With the increased demand of statistical information, the CSO disseminates its statistical information to users such as: policy makers in key positions in government ministries including local authorities, the donor community, Civil Society, Non Governmental Organisations (NGO's), and Researchers, Academicians, the media and the general public through the Dissemination Office that falls under the Information, Research and Dissemination Division.

The office also ensures wide availability and usage of statistics through the distribution of reports and, the selling of publications through the Sales Office. Statistical information users are also able to obtain information through the Resource Centre that came into being after the CSO Library merged with that of Zambia Social Investment Funds (ZAMSIF) and Poverty Monitoring Analysis (PMA). The merging of the statistical information collections resulted in an improved and widened range of information. Information users can also get information by visiting the CSO's website on www.zamstats.gov.zm.

The CSO in conjunction with the Ministry of Finance and National Planning also developed a database called the **ZAMBIAINFO** containing various statistical information that can be accessed by users.

Users of the Central Statistical Reports

Like in many other countries, the CSO statistical reports are mainly used by the following users:

- Policy makers and government agencies for planning and decision making;
- Researchers and Academicians for their research reports;
- Business Houses for business projects;
- Non Governmental Organisations (NGO's);
- The media for publicity purposes; and
- International organizations and Donor agencies involved in developmental activities.

Future ICT Plans of the Central Statistical Office

The CSO has planned to develop a reliable National Data Warehouse that could be accessed online by statistical information users. Making data accessible by every user, either in hard or soft copies is the main priority of the CSO.

Since ICT is becoming one of the fastest growing sectors in Zambia, the CSO is looking into developing a national ICT indicator that could measure the information society from both economic and social aspect.

As ICT is a cross-sector activity, the CSO through the planned ICT national survey is looking into possibilities of developing partnership with different stakeholders, both government agencies and private sectors, with a view of obtaining better and accurate information/statistics on ICT sector in order to assist in projecting better facts and figures on Zambian Information Society.

Proposed Logistics for developing an ICT Database

As the CSO just proposed to undertake a national ICT survey within the period 2009 - 2013, no methodology has been developed yet for use in collection of ICT data. As ICT indicators are the best in terms of measuring the information society; CSO therefore needs to develop a national database on ICT indicators based on internationally agreed indicator specifications.

The CSO also needs to look into collecting data in the following areas: ICT infrastructure and usage (individuals and households), barriers to use ICTs, ICT skills, and purposes of ICT use based on gender and other social-economic factor such as age, education and income levels, urban/rural geography and ethnic background. Such information would give a better picture on Zambian information society.

Furthermore, the CSO needs to make a provision that could aid in the monitoring of the national information society statistics which in turn would address a number of issues, ranging from the role of ICT in economic and social transformation, use of ICT by households and businesses, and the measurement of their social impacts. Therefore, there is also need to bring information society measurement into realm of official statistics in order to identify national gap in terms of availability of ICT services.

The CSO also plans for a stronger co-ordination and partnership among stakeholders for the harmonization and expansion of ICT statistics at the national level that could strengthen future policy and analytical work on the development of information society.

Lastly, the CSO intends to embark on capacity building in terms of training statistical personnel and develop statistical compilation programmes on the information society, based on internationally agreed standards.

Expected Knowledge to be Gained from the ICT Meeting

As mentioned earlier on, ICT sector is relatively a new concept in Zambia, therefore, developing a comprehensive ICT indicator will as well be a new concept for the CSO. With this in mind, the CSO through this ICT meeting expects to learn concepts, definitions, standards and methods that were applied in coming up with such indicators by countries that already collect, process and disseminate national ICT indicators. The CSO also expects to learn a lot from individual experts that have participated in such assignments through sharing their previous experiences.

The CSO also looks forward to developing partnership with stakeholder from developed countries in the field of developing a methodology that can be applied in the proposed national ICT survey as well as data processing methods. Such partnership would assist developing countries like Zambia in closing the data gap that exists between developed and developing countries.

Annex 1

ICT Indicators Update in Zambia as at 30th September, 2008

Mobile Phone Growth Trend in Zambia

	Country		Per 100	Mobile	Growth
Year	Population	Subscribers	Habitants	Internet	Rate (%)
2000	9, 885,591	49,957	0.505	-	32.47
2001	10,089,492	97,900	0.97	-	95.97
2002	10,409,440	139,258	1.338	-	42.25
2003	10,774,382	204,150	1.895	-	46.60
2004	11,089,691	413,120	3.725	1	102.36
2005	11,441,469	949,558	8.299	-	129.85
2006	11,574,190	1,663,051	14.369	-	75.14
2007	11,708,450	2,639,026	22.539	215,472	58.68
2008	11,900,000	3,207,679	26.955	791,464	21.54

^{*} Source: The Zambia Communications Authority Website

NB: Mobile Internet access in Zambia was introduced in 2007.

Internet and Internet Service Providers connectivity Data - Zambia

	Country	Total	Per 100	Type of Internet		Growth
Year	Population	subscribers	Inhabitants	Dial-up	Broadband	Rate (%)
2001	10,089,492	8,248	0.082	7,627	621	1
2002	10,409,440	11,647	0.112	10,826	821	41
2003	10,774,382	12,000	0.111	10,857	1,143	3
2004	11,089,691	16,288	0.147	15,334	954	36
2005	11,441,469	10,882	0.095	10,179	703	-33
2006	11,574,190	11,996	0.104	10,067	1,929	10
2007	11,708,450	17,946	0.153	12,578	5,368	49.6
2008	11,900,000	18,078	0.152	12,484	5,671	0.73

^{*} Source: The Zambia Communications Authority Website

PSTN Subscription

Year	Country Population	Subscribers	Per 100 Inhabitants	Per 1000 Inhabitants	Growth Rate (%)
2001	10,089,492	85,680	0.849	8.49	2.83
2002	10,409,440	87,674	0.842	8.42	2.33
2003	10,774,382	88,561	1	10	1.01
2004	11,089,691	90,663	0.818	8.18	2.37
2005	11,441,469	94,665	0.827	8.27	4.41
2006	11,574,190	93,427	0.807	8.07	-1.31
2007	11,708,450	91,789	0.784	7.84	-1.75
2008	11,900,000	90,600	0.761	7.61	-1.29

^{*} Source: The Zambia Communications Authority Website

Annex 2

Questionnaire for Living Conditions Monitoring Survey Household Income and Assets

Percentage distribution of assets owned by residence, Zambia, 2006

Assets	Total Zambia	Rural Areas	Urban Areas
Television	24.1	7.8	54.6
DVD/VCR	10.5	2.0	26.5
Home theatre	2.3	0.5	5.5
Radio	55.6	50.1	65.8
Land Telephone line	1.2	0.2	3.2
Cellular phone	24.2	8.8	53.1
Internet Connection	0.1	0.0	0.1
Satellite Dish/Decoder	3.6	0.7	9.0
Computer	1.8	1.1	3.2

^{*} Source: 2006 Living Conditions Monitoring Survey draft report.

Acronyms

NSO - National Statistical Office
CSO - Central Statistical Office

NSS - National Statistical Systems

NSDS - National Strategy for the Development of statistics

ISPs - Internet Service Providers

PSTN - Public Switched Telephone Network

ZAMSIF - Zambia Social Investment Funds

PAM - Poverty Monitoring Analysis