

**CENTRAL STATISTICAL OFFICE** 

Mission Statement:

June 2018 Volume Seven

# The STATISTICIAN

"To Coordinate and Provide Timely, Quality and Credible Official Statistics for use by Stakeholders and Clients for Sustainable Development"

**CSO -Serving Your Data Needs** 

# **Government Committed to** 2020 Census of Population and Housing Undertaking

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#### STATEMENT BY THE ACTING DIRECTOR



The Central Statistical Office (CSO) was established by an Act of Parliament, the Census and Statistics Act of 1964, CAP 127 of the Laws of Zambia. This Act stipulates the mandate for central formulation of statistical policy, collection and dissemination of official statistics.

CSO falls under the Ministry of National Development Planning and is functionally divided into four Divisions namely; Economic and Financial Statistics; Agriculture and Environment Statistics; Social Statistics; and Information, Research and Dissemination. Each Division is headed by an Assistant Director.

In fulfilment of its data and information sharing mandate, CSO through its Information, Research and Dissemination Division, has produced the Seventh Edition of "THE STATISTICIAN".

This edition falls in the final year of implementation of Zambia's first National Strategy for the Development of Statistics (NSDS), 2014-18. The main objective of this Strategy is to

develop our National Statistical System (NSS) through an effective coordination mechanism. This systematic planning of development of statistics in the country follows the global guidelines as set out in the United Nations Principles of Official Statistics (1994) and the African Charter of Statistics (2009).

The Office is encouraged by the steadfast support of statistical work by the Government and its Partners. It is indeed gratifying to note that there have been accelerated efforts and strong commitment from the Government which we believe will lead to the achievement of two key milestones of the 2014-18 NSDS namely: enactment of a new Statistics Act and Re-organisation of the CSO to afford it the appropriate institutional arrangements for the effective coordination of the NSS.

During this year, the Government through our parent ministry produced the Implementation Plan for the Seventh National Development Plan (7NDP). The 7NDP has created a platform for the integration of international, regional, multilateral and bilateral development strategies and agreements. From a statistical point of view, this integrated approach provides the much needed focus for the production of relevant data by CSO and other data producers dealing in administrative data. As such, CSO will continue to align the national statistical agenda to produce required statistics and indicators to monitor the implementation and progress of the 7NDP, our 2030 National Vision, African Agenda 2063 and the Sustainable Development Goals (SDGs).

I would also like to thank our esteemed users of statistical information for their unwavering support and constructive feedback on our statistical services. Some of this feedback has helped shape the future statistical trajectory to focus more on user engagements in order to achieve more statistical literacy.

It remains a privilege for CSO to continue serving your data needs and we look forward to more partnerships in this exhilarating and challenging journey of developing our nation's statistical system.



Goodson Sinyenga

Acting Director of Census and Statistics

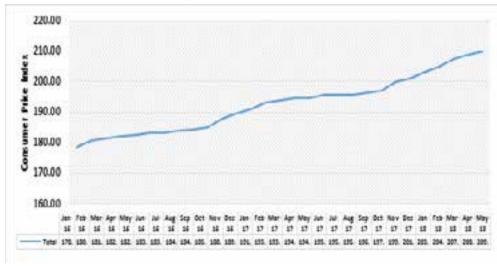
# THE CONSUMER PRICE INDEX (CPI) AND INFLATION

#### WHAT IS THE CONSUMER PRICE INDEX?

The Consumer Price Index (CPI) is a series of numbers/ figures showing how the average price

level of all those goods and services (Basket of Goods and Services) bought by a typical consumer or household changes overtime. The CPI is used to calculate inflation.

#### **CONSUMER PRICE INDEX, 2016-2018**



#### What is Inflation?

Inflation refers to the sustained increase in the general level of prices of goods and services in an economy.

# What is Annual Rate of Inflation?

The annual inflation rate is the change in the CPI for all items

of the relevant month of the current year compared with the CPI for all items of the same month in the previous year expressed as a percentage.

The magnitude of a change in the annual inflation rate at any particular point in

time depends on the direction and strength of the change in the month on month inflation in the current month of the current year compared to the month on month inflation rate for the corresponding month in the previous year.

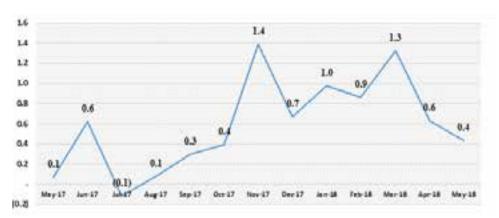
#### **ANNUAL INFLATION RATE 2017-2018**



#### **Monthly Rate of Inflation**

The monthly inflation rate is the percentage change in the CPI of the current month compared to the CPI of the previous month. The monthly inflation rate reflects short-term changes in the average prices.

#### **MONTHLY RATE OF INFLATION, 2017-2018**



#### **CPI Basket of Goods and Services**

The CPI Basket consists of specified goods and services consumed by individuals or households. The selection of these products was made based on the data derived from the Household Budget Survey(HBS) component of the 2002/2003 **Living Conditions Monitoring Survey** 

(LCMS). The current CPI basket consists of 440 items and over 23,000 price quotations are collected from selected outlets in all the districts in Zambia from 1st to 10th of every month.

#### Classification

Classification refers to a procedure in which individual items of goods and services are organised into categories based on characteristics inherent in the items. The CPI is categorised according to the international classification system called the COICOP (Classification of Individual Consumption according to Purpose).

COICOP MAIN GROUP	NUMBER OF PRODUCTS
Food and Non-alcoholic Beverages	130
Alcoholic Beverages and Tobacco	16
Clothing and Footwear	52
Housing, Water, Electricity, Gas, and Other Fuels	24
Furnishings, Household Equipment and Routine Household Maintenance	57
Health	28
Transport	34
Communication	12
Recreation and Culture	36
Education	5
Restaurant and Hotel	10
Miscellaneous Goods and Services	36
Total CPI basket	440

#### Weight

The weight of a product/ service in a CPI basket is the proportion of total household expenditure which is spent on that product/service during the weight

reference period.
The CPI uses a
fixed weight index,
which means
that the weight
of each product/
service remains the
same until a new
Living Conditions
Monitoring survey

with a household budget component is conducted. Nonetheless, the weight for the current CPI series were price updated to 2009 using the 2009 prices of goods and services.

WEIGHT
534.85
15.21
80.78
114.11
82.36
8.15
58.08
12.94
13.84
26.62
3.37
49.69
1 000.00

#### Outlet

This refers to the interface between a supplier of goods/ services and the consumer. It may be a shop, a market stall, a catalogue, a website, etc. Also referred to as a "retail outlet", although it can include wholesale outlets which also sell directly to the consumer.

#### Coverage/Scope

The scope and coverage of the CPI depends on the main use of the Index and on the resources available for data collection. Generally, the scope of the CPI pertains to the population coverage, geographical coverage, outlet coverage, item coverage and price

coverage. The CPI covers all the 10 provinces and districts of Zambia. Selection of districts and outlets was done using non-probability sampling methods. Available information and application of best judgement was used to ensure that representative samples were selected.

#### **Weights By Province**

PROVINCE	% WEIGHT
Central	10.7
Copperbelt	22.0
Eastern	8.9
Luapula	5.1
Lusaka	28.4
Northern	6.6
North- Western	3.2
Southern	10.9
Western	4.2
Total	100.0

#### **Base Effect**

The base effect refers to the impact of the rise in price level (i.e. last year's inflation) in the previous year over the corresponding rise in the price levels in the current year (i.e. current inflation).

 If the price index had risen at a high rate in the corresponding period of the previous year leading to a high inflation rate, a similar absolute increase in the price index in the current year will lead to a relatively lower inflation. If the inflation rate was too low in the corresponding period of the previous year, even a relatively smaller rise in the price index will arithmetically give a high rate of current inflation.

Thus, the base effect can also be defined as the influence of the consumer price changes of the corresponding month of the previous year on the changes in the annual inflation of this year's respective month. Annual inflation represents a precise reflection of the changes in the consumer price level over the year. The

base effect therefore helps to explain the changes in the annual inflation or the rate at which it diminishes or grows compared to the previous month.

# Explaining the Rate of Inflation

When the price of a grocery item like bread goes up overnight, it affects your household spending. The net effect of price changes, that cause your household spending to rise or fall over time, is called inflation. The Central Statistical Office tracks inflation with a statistical tool called the Consumer Price Index (CPI). The CPI is a series of

numbers published on the last Thursday of every month by the CSO. Its numbers represent the price, at a set time, of a representative 'basket' of goods and services a typical household consumes. For example, the price movements of Brand A of a cell phone which is in the basket of goods and services will represent price movements of other brands of cell phones. The CPI is often used as a general measure of inflation. It is not an exact record of individual households' spending, but it gives a good idea of how price increases affect household spending. and the change in money's 'buying power' because of inflation.

The CPI measures the price of a 'basket' of goods and services on a monthly basis and records that price as an index number. When two CPI index numbers are compared, the change in the total cost of the basket from one point in time to another is shown. This comparison shows the size of the change in household spending for that time period as a percentage – often called the inflation rate.

#### Use of the Consumer Price Index and Inflation Rate

The consumer price index (CPI) is treated as a key indicator of economic performance in most countries. The following are the main uses of the CPI:

 It is the most widely used measure of inflation and, by proxy, of the effectiveness of the government's economic policy. The CPI gives the government, businesses and citizens an idea about prices changes in the economy, and can act as a guide in order to make informed decisions about the economy.

- The CPI and the components that make it up can also be used as a deflator for other economic factors, including retail sales, workers earnings and the value of a consumer's Kwacha to find its purchasing power. In this case, the kwacha's purchasing power declines when prices increase.
- The index can also be used to adjust people's eligibility levels for certain types of government assistance including Social Security and it automatically provides the costof-living wage adjustments to domestic workers.

# **NATIONAL ACCOUNTS STATISTICS**

**SUPPLY AND USE TABLES** 

#### What are Supply, Use and Input-Output Tables?

The Supply & Use and Input-Output Tables are a key framework used in National Economic Accounting. They describe, in a collection of matrices, how supplies of different kinds of goods and services originate from domestic industries and imports and how these supplies are allocated amongst various intermediate or final uses, including exports (Eurostat Manual, 2008). These tables involve the compilation of a set of integrated production and generation of income accounts for industries. The compilation of SUT is part of the implementation of the 2008 System of National Accounts (SNA).

#### Importance of Supply, Use and Input-Output Tables

Supply and use tables provide, in addition, a consistent framework for balancing national accounts. In the core of the accounting system they render noticeable effects on quality and stability of the statistical results. Supply

and use tables in combination with input-output tables constitute the appropriate basis for many different types of economic analysis.

Furthermore;

• They enhance the accuracy of GDP estimates, by making them not only consistent for the overall economy but also at each individual product level.

• They are the best way to ensure that all the estimates from the three GDP approaches (i.e. production, expenditure and income) are equal since there is no room for a statistical discrepancy.

• They constitute the centre piece of the internationally compatible framework for a systematic and detailed description of the economy, its various components on the supply and demand side and its relation to other economies. Thus, supply and

use tables give detailed information on the production processes, the interdependencies in production, the use of goods and services and generation of income generated in production.

#### Methodology

The 2010 SUT consists of 123 products and 24

industries. The main guide for classification of products is the Central Product Classification (CPC 2.1). The selection of products was based on availability of data and their importance to the economy. The International Standard Industrial Classification of All Economic Activities

(ISIC, Rev. 4) was used to classify the industries. The compilation of the SUT and IOT for Zambia was based mainly on the recommendations of the 2008 System of National Accounts (UN, 2008 SNA) and the 2008 Eurostat Manual on Supply, Use and Input-Output Tables.

To compile the 2010 SUT, data from the 2010 benchmarking exercise was used. The main source of data for benchmarking was the 2010 Economic Census which was at enterprise level. Other data sources were; the 2010 Living Conditions Monitoring Survey, the 2013 Non-

farm Informal
Sector Survey, the
2010/2011 Crop
Forecast Survey and
the 2010 Census
of Population and
Housing among
others. The
compilation of these
matrices involved
balancing the uses
and supplies at a
detailed product
level. Two processes
were used to

balance the tables, namely manual and automatic balancing.

#### Percentage Share Of The Supply Components By Industry

A brief analysis of the Supply table 1 shows the supply of the main product categories by industries within the Zambian Economy. The rows show
the main products
supplied while
the columns show
the industries that
supply the products.
Primary activities
of industries are
normally reported
in the diagonal
of the production
matrix while
secondary activities
are reported off
the diagonal. For

instance, of the manufactured food products, 2.4 percent were supplied by Agriculture, forestry and fishing industry, 79.8 percent by Manufacturing industry and 17.8 percent by Wholesale and Retail Trade representing 100 percent interindustry supply.

Percentage Share of the Supply Components by Industry

Product (rows) / Industry (columns)	Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Construction	Wholesale and retail trade	Other Industries	Inter-industry consumption
Agriculture, forestry and fishery products	100	0	0	0	0	0	100
Ores and minerals products	0	100	0	0	0	0	100
Manufactured Food products	2.4	0	79.8	0	17.8	0	100
Beverages and tobacco products	0	0	100	0	0	0	100
Textile articles and Leather products	0	0	100	0	0	0	100
Other transportable goods, except metal products, machinery and equipment	0	0	94.7	2	1.8	1.5	100
Metal products, machinery and equipment	0	64.6	35.1	0	0	0.3	100
Electricity generation and distribution	0	0	0	0	0	100	100
Water Supply Services	0	0	0	0	0	100	100
Constructions Services	0	0.1	0.2	99.7	0	0.1	100
Other Services	0	2.5	3.3	0.3	27.4	66.4	100
Total	9.1	15.5	17.6	10.4	14.3	33.1	100

#### Percentage Shares of the Use of Products within Industries

The use of main product categories(rows) by industries (columns)

within the Zambian Economy. A brief analysis of the Use table shows that 83 percent of Agriculture, forestry & fishery products are used by the Manufacturing Industry and 59.9 percent of Ores and mineral products are used by the Manufacturing Industry. As of 2010, the Manufacturing Industry was the largest consumer of products and services within the Zambian economy.

Percentage Shares Of The Use Of Products Within Industries

Product (rows) / Industry (columns)	Agriculture, for- estry and fishing	Mining and quar- rying	Manufacturing	Construction	Wholesale and retail trade	Other Industries	Inter-industry consumption
Agriculture, forestry and fishery products	12.7	0	83.8	0	0	3.5	100
Ores and minerals	0	30.4	59.9	9.5	0	0.2	100
Manufactured Food products	19.2	0	36.1	0	13.2	31.5	100
Beverages and tobacco products	0	0	98.6	0	0	1.4	100
Textile articles and Leather products	0	0	65.8	0	0	34.2	100
Other transportable goods, except metal products, machinery and equipment	9.3	19.2	17.8	10.8	15.4	27.4	100
Metal products, machinery and equipment	0	18	7.7	24.5	0.6	49.3	100
Electricity generation and distribution	4	62.1	20.7	0.4	1.8	11	100
Water Supply	4.8	43.9	25	0.4	13.7	12.2	100
Constructions	4.6	14.4	1.3	1.9	4.8	73	100
Services	11.5	17.5	12.2	10.5	14.7	33.6	100
Total	8.2	17.6	28.9	9.4	8.5	27.3	100

#### **Preliminary Annual Gross Domestic Product**

Economy Grows by 4.1 Percent in 2017

The Preliminary Annual Gross Domestic Product at constant 2010 prices for the year 2017 grew by 4.1 percent from K129, 699.9 million in 2016 to K134, 987.5 million in 2017. This growth is higher than the 3.4 percent recorded in 2016. The Industry with highest growth rate was Electricity & gas (18.5 percent) followed by Human health & social work activities (17.4 percent), Agriculture, forestry & fishing (16.5 percent) and Transportation & storage (7.8 percent). Information and communication on the other hand contracted by 13.2 percent. The preliminary annual GDP is derived as the

sum of four quarters. In terms of contributions to the total growth of 4.1 percent, Agriculture, forestry & fishing industry had the highest contribution

accounting for 1.21 percentage points. This was followed by Construction industry (0.7 percentage points) and Education industry (0.5 percentage points).

<b>Gross Value Added by Industry</b>	at Constant	2010 Price	es, Q1 2016	to Q4 2017	7							
INDUSTRY		2016(K'ı	million)		2016 Totals		2017(K'ı	million)		Preliminary 2017	Annual % Growth rate	Contribu- tions to growth
	Q1	Q2	Q3	Q4		Q1*	Q2*	Q3*	Q4**			
Agriculture, forestry and fishing	2,956.70	2,299.10	1,433.00	2,801.20	9,490.10	3,476.90	2,646.10	1,655.40	3,275.30	11,053.70	16.5	1.21
Mining and quarrying	3,288.20	3,352.50	3,553.00	3,449.10	13,642.80	3,120.20	3,493.70	3,675.80	3,762.40	14,052.10	3	0.32
Manufacturing	2,511.20	2,657.60	2,620.40	2,593.30	10,382.50	2,556.20	2,831.90	2,688.40	2,760.50	10,837.10	4.4	0.35
Electricity & gas	394.9	443.5	475.4	465.3	1,779.00	496	563.6	569.6	479.3	2,108.50	18.5	0.25
Water supply & sewerage	84.5	85.6	84.7	85.8	340.5	86	82.4	78.8	80.5	327.7	-3.7	-0.01
Construction	3,334.80	3,245.30	3,469.00	3,868.80	13,917.90	3,422.50	3,459.10	3,984.50	3,946.10	14,812.30	6.4	0.69
Wholesale and retail trade	6,331.80	6,707.90	7,652.10	7,918.60	28,610.40	6,449.40	6,625.60	7,642.70	8,088.70	28,806.40	0.7	0.15
Transportation and storage	1,145.20	940.7	1,110.00	1,090.80	4,286.80	1,235.50	1,022.80	1,175.00	1,187.30	4,620.60	7.8	0.26
Accommodation and food services	499.8	605.7	616.7	673.7	2,395.90	500.8	658.3	674.3	706.4	2,539.70	6	0.11
Information and communication	931.2	1,545.90	1,450.60	1,151.80	5,079.60	647.2	1,200.70	1,415.00	1,145.80	4,408.60	-13.2	-0.52
Financial and insurance activities	1,157.50	1,152.90	1,149.80	1,279.80	4,739.90	1,148.00	1,156.60	1,138.60	1,328.10	4,771.30	0.7	0.02
Real estate activities	1,094.70	1,103.50	1,112.40	1,121.30	4,431.80	1,130.40	1,139.60	1,139.60	1,148.90	4,558.60	2.9	0.1
Professional, scientific and technical	611.2	579.3	549	597.9	2,337.30	635	627.3	582.1	662.5	2,506.90	7.3	0.13
Administrative and support services	292.2	297.9	298.1	300.6	1,188.70	297.5	317.2	319	326.1	1,259.80	6	0.05
Public administration and defense	1,680.70	1,685.70	1,701.50	1,711.30	6,779.30	1,752.20	1,770.90	1,722.70	1,726.70	6,972.50	2.8	0.15
Education	2,422.20	2,428.00	2,436.60	2,432.30	9,719.20	2,617.80	2,615.30	2,633.50	2,505.30	10,371.90	6.7	0.5
Human health and social work	421.2	422.6	420.8	430.5	1,695.10	469.8	487.7	513.2	519	1,989.50	17.4	0.23
Arts, entertainment and recreation	66.7	127.2	192.4	133.2	519.5	71.3	125.3	178.4	123.8	498.9	-4	-0.02
Other service activities	247.2	249.1	251	253	1,000.30	255.1	257.1	257.1	259.2	1,028.60	2.8	0.02
Gross Value Added for the economy	29,471.70	29,929.90	30,576.60	32,358.30	122,336.50	30,367.80	31,081.20	32,043.90	34,031.90	127,524.80	4.2	4
Taxes less subsidies	1,612.70	1,722.80	1,976.60	2,051.40	7,363.50	1,670.80	1,716.40	1,979.90	2,095.50	7,462.70	1.3	0.08
GDP at market prices	31,084.40	31,652.70	32,553.20	34,409.70	129,699.90	32,038.60	32,797.60	34,023.90	36,127.40	134,987.50	4.1	4.1

\*Revised

\*\*First release

Source: CSO, National Accounts

#### 2017 Preliminary GDP at Current Prices

The preliminary GDP at current prices in 2017 was estimated at K245, 685.6 million compared to K216,

098.1 million in 2016. The results show that out of preliminary GDP at current prices for 2017, the Wholesale & retail trade industry had the highest share accounting for 19.1 percent. This was followed by Mining & quarrying industry (14.8 percent), Construction (10.3 percent) and Manufac-

turing (7.6 percent). The Arts, entertainment & recreation and Water supply & sewerage industries had the lowest share each at 0.3 percent in 2017.

INDUSTRY		2016(k	('million)		2016 Totals		2017(K'm	illion)		Prelimi- nary 2017	Percentage shares
	Q1	Q2	Q3	Q4		Q1*	Q2*	Q3*	Q4**	-	
Agriculture, forestry and fishing	3,686.80	3,201.30	2,274.00	4,297.50	13,459.60	5,288.70	4,191.70	2,813.40	5,308.10	17,601.80	7.2
Mining and quarrying	6,230.10	6,771.60	7,828.40	7,664.00	28,494.10	8,274.40	7,806.20	8,952.00	11,242.00	36,274.50	14.8
Manufacturing	3,691.60	4,049.80	4,359.80	4,508.30	16,609.60	4,313.50	4,221.80	4,566.40	5,495.90	18,597.60	7.6
Electricity, gas, steam and air conditioning supply	1,808.20	1,886.30	1,863.30	1,869.50	7,427.30	1,826.00	1,770.00	1,610.80	1,769.40	6,976.20	2.8
Water supply & sewerage	128.4	155.1	158.1	164	605.6	167.7	167.5	164.7	169.4	669.2	0.3
Construction	3,063.70	3,941.30	7,443.90	7,783.30	22,232.20	3,406.80	4,675.40	6,537.50	10,590.50	25,210.20	10.3
Wholesale and retail trade; repair of motor vehicles and motorcycles	10,237.90	10,776.20	11,585.90	12,497.20	45,097.20	10,575.80	11,119.50	12,068.00	13,091.10	46,854.40	19.1
Transportation and storage	2,193.40	2,317.60	2,467.40	2,577.50	9,556.00	2,317.00	5,170.90	3,358.70	5,935.20	16,781.80	6.8
Accommodation and food service activities	682.7	964.8	996.8	940.8	3,585.20	824.9	959.5	925.1	881.2	3,590.80	1.5
Information and communication	1,174.60	1,322.20	1,223.70	1,235.10	4,955.60	1,139.00	1,264.10	1,345.60	1,377.90	5,126.60	2.1
Financial and insurance activities	2,344.80	2,375.40	2,459.80	2,479.50	9,659.40	2,423.40	2,429.80	2,279.70	2,670.10	9,802.90	4
Real estate activities	2,351.10	2,415.10	2,411.00	2,474.20	9,651.40	2,655.90	2,715.50	2,829.20	2,736.70	10,937.20	4.5
Professional, scientific and technical activities	613.6	814.7	739.5	826.3	2,994.10	753.3	739.2	700.8	766.6	2,959.90	1.2
Administrative and support service activities	489	554.1	564.7	550.6	2,158.40	589.2	549.5	553.5	681.9	2,374.00	1
Public administration and defense; compulsory social security	2,116.80	2,280.30	2,296.00	2,601.70	9,294.80	2,332.70	2,423.10	2,277.30	2,614.00	9,647.10	3.9
Education	3,851.80	3,977.70	3,882.90	4,087.60	15,800.00	4,062.90	4,199.00	4,172.90	4,217.20	16,652.00	6.8
Human health and social work activities	646.2	655.6	621.9	686.8	2,610.50	710.4	759.2	796.2	869.5	3,135.30	1.3
Arts, entertainment and recreation	85.3	160.7	244.5	173.3	663.7	93.8	165.1	233.8	163.2	655.9	0.3
Other service activities	217.9	281.4	299.7	261.8	1,060.90	248	277.5	293	250.7	1,069.30	0.4
Total Gross Value Added for the economy	45,613.80	48,901.40	53,721.40	57,679.10	205,915.80	52,003.50	55,604.50	56,478.50	70,830.30	234,916.80	95.6
Taxes less subsidies	2,248.90	2,419.60	2,641.60	2,872.30	10,182.30	2,430.70	2,555.70	2,773.70	3,008.80	10,768.80	4.4
Total for the economy, at market prices	47,862.70	51,321.00	56,363.00	60,551.40	216,098.10	54,434.20	58,160.20	59,252.10	73,839.10	245,685.60	100

\*Revised

\*\*First release

Source: CSO, National Accounts

#### INTERNATIONAL MERCHADIZE TRADE

The Export and Import Price Indices (XMPI) survey was carried out in 2016 based on the guidelines provided in the "IMF Export and Import Price Index Manual, Theory and Practice, 2009". This was the first XMPI survey to be undertaken in Zambia.

# Export and Import Price Index (Xmpi)

Export and import price indices (XMPIs) measure the overall change in the pure price (prices of perfectly matched commodities) component of transactions in goods and services in Zambian Kwacha between the residents of the Zambian economic territory and residents of the rest of the world.

# Uses of Export and Import Price Indices

The following are the uses of Export and Import Price Indices:

- Deflating Foreign
   Trade Statistics:
   A vital use of
   XMPIs is as a
   deflator of series
   of nominal values
   of exports and
   imports to derive
   volume estimates
   of the GDP by
   the expenditure
   approach;
- ii. Analysis of inflation:
  Movement in import prices can often be an indicator of future inflation since some inputs to domestic production, as well as consumption, are imported;
- iii. Formulating
  Fiscal and
  Monetary Policy:
  The central bank
  can use Import/
  Export Price
  Indices as a
  resource when
  formulating
  the nation's
  monetary policy.
  Import/Export

- Price Index data may also assist policymakers in determining the impact of trade legislation on fiscal policy;
- iv. Forecasting **Future Prices:** Anticipating future price trends is important to business leaders and those doing research on international prices. A major input into any model used to forecast price trends is past prices;
- v. Measuring
  Industrial
  Competitiveness:
  The Import/
  Export Price
  Indices can be
  used as inputs
  when measuring
  industrial
  competitiveness.
  These measures
  include terms
  of trade indices
  and export price
  comparisons;
- vi. Analysing
  the effects of
  Exchange Rates:
  The Import/
  Export Price
  Indices can be
  used to construct
  pass-through
  rates to measure
  how much of an
  exchange rate
  change is passed
  through to an
  import or export
  price;
- vii. Negotiating
  Trade Contracts:
  Import/Export
  Price Indices data
  are useful in both
  multilateral and
  bilateral trade
  negotiations
  which are

normally done by the government, as well as trade contracts between private entities resident in different economies.

#### Scope of XMPI Survey

Calculating an XMPI cannot be reduced to a simple set of rules or a standard set of procedures that can be mechanically followed in all circumstances. Although there are certain general principles that may be universally applicable, the procedures followed in practice have to take account of country-specific circumstances. Statistical offices have to make choices. These include procedures for the collection or processing of the price data and the methods of aggregation. Other important factors governing methodology are the main use of the index, the nature of the markets and pricing practices within the country, and the resources available to the statistical office

#### **Exports**

The 2015 index was based on the Nomenclature of the Standard International Trade Classification of the United Nations (SITC, Rev 4). The Export Price Index (XPI) covered eight of the 10 sections of the SITC, namely "Food and live animals", "Beverages and tobacco", "Crude

materials, inedible, except fuels", "Mineral fuels. lubricants and related materials", "Chemicals and related products", "Manufactured goods classified chiefly by material", "Machinery and transport equipment" and "Commodities and transactions not classified elsewhere in the SITC". Exports of goods falling under these sections covered 87.6% of total exports in the base year (2015). Separate sub-indices are produced for each SITC section and division. The XPI covers domestic exports. The most important commodities in terms of weight in the 2015 XPI are "Manufactured goods classified chiefly by material", "Food and live animals" and "Crude materials, inedible, except fuels". However, some commodities were excluded in the computation of the weights because of their heterogeneity and the inherent difficulties in pricing them to a constant quality. Those were "miscellaneous manufactured articles" and "Animal and vegetable oils, fats and waxes," within the Sections 4 and 8 of the SITC; together they accounted for around 12.4% of total

#### exports in 2015.

Imports
The commodities
were classified
according to
the United

International Trade Classification (SITC, Rev 4). The Import Price Index (MPI) covered eight out of the 10 SITC sections. The sections not covered were "Beverages and tobacco" and "Commodities and transactions not classified elsewhere in the SITC", because of the heterogeneity of the products and the inherent difficulties in pricing items to a constant quality. Imports of goods falling under the covered sections make up for 49.5 percent of total imports in the base year (2015). Sub-indices are produced by SITC sections. Thus, the index covered about 89% of the value of merchandise imported in 2015 from the selected sections. For the computation of the 2015 weights, some commodities accounting for 50.5% of total imports in 2015 were excluded because of their heterogeneity and the inherent difficulties in pricing them to a constant quality. Those were: Fresh or chilled whole chickens frozen unboned meat of sheep, Cellular phones, Recorded media and free publications, and

Nations Standard

#### Base Year

parts.

certain machine

The year 2015 was chosen as base year based on stability of the economic factors which influence prices of commodities. The

dollar exchange rate and inflation rate were considered as the major factors.

#### Selection of Products to be Priced and Outlets

Commodities directly represented in the index, were selected for pricing using the harmonized system (HS) code from the 2015 trade declarations collected from the Zambia Revenue Authority (ZRA). The selection was on basis of share of value in the domestic exports and imports and the regularity of trade (exported/ imported at least six months in 2015). Thirty Five (35) exporters (outlets) were selected using the sampled HS codes. These exporters were the major traders in terms of value of exports and they traded in the products on a regular basis (at least six months in the year 2015). **Hundred and Twenty** (120) importers (outlets) were selected using the sampled HS codes. These importers were the major traders in terms of value of imports and they traded in the products on a regular basis (at least six months in the year 2015). Specifications of products to be priced (physical and qualitative) were established in collaboration with the selected exporters and Importers to ensure that same items were priced at each price

survey. Specifications included: pricing basis, contract basis, country of destination, unit of measurement, mode of transport, terms of payment, currency and any other conditions such as quality and quantity of the product, that

have a bearing on the

#### **Price Collection**

The selected exporters and importers were visited on a monthly basis to collect prices for the computation of quarterly indices.

#### **Updating of Weights**

The weight of a product in the XPI is the share of the selected HS code into the total value of exports of the selected HS codes during the period (2013-2015). The weight of a product in the MPI is the share

of the selected HS code into the total value of imports of the selected HS codes during the period (2013-2015).

The "weight" (or relative importance) of each Elementary Aggregate in the XMPI is determined

using data from the **ZRA** declarations between 2013 and 2015.

The Group weight is an aggregate of selected HS codes, Division weight is an aggregate of Group weights and Section weights is

an aggregate of the Division weights. The XMPI is a fixed weights index. which implies that the weight of each product stays the same until revision of the weights after 5 years (recommended).

#### **COMPUTATION OF THE EXPORT AND IMPORT PRICE INDEX (XMPI)**

The lowest level (SITC 5 digit) indices were calculated as a geometric average of the price relatives of the basic observations (products). A modified Laspeyres formula, based on the weighted average of price relatives, was used to calculate higher level indices. The mathematical form of the formula is shown below:

Geometric average of the price relatives of the basic observations (products)

The Price relative of each item, p1 = Current Price/Base Price \* 100

The Price relative of one outlet, C1 (of one particular HS) = Geometric mean (p1 \* p2 \* p3) $^{1/3}$ 

The Price relative of one product HS (e.g 3 outlets) for more than one companies.

Pi Geometric mean= (C1 \* C2 \* C3)1/3

$$I_{ot} = \frac{\sum W_i \times \frac{P_{it}}{P_{io}} \times 100}{\sum W_i}$$

lot is the index for period t compared to base period 0 Where

wi is the weight of the ith element

Pio is the base Price of the ith element

Pit is the Price of the ith element in period t

Pit

is the price relative of the i<sup>th</sup> element in period t relative to base Pot period o

 $\sum$ means summation over all selected elements

#### **Overall Quarterly Export Price Index, 2016**

During the first quarter of 2016, the Export Price Index was recorded at 113.4. The index declined to 108.5 in the second and third quarter before increasing to 108.7 in the fourth guarter. The decrease in the Export

Price Index between the first and second quarter resulted from a notable decline in the prices of Mineral fuels, lubricants and related materials and Crude materials, inedible, except fuels.

#### **QUARTERLY EXPORTS PRICE INDICES BY SITC/SECTIONS, 2016 (BASE YEAR** 2015=100) SECTION DESCRIPTION Quarter 1 Quarter 2 **Quarter 3** Quarter 4 Annual Food and live 127.4 121.2 120.8 120.4 122.4 animals Beverages and 1 105.9 121.8 162.6 138.6 132.2 tobacco Crude materials, 2 inedible, except 114.8 116.8 119.2 125.5 119.8 fuels Mineral fuels, 117.8 122.1 3 lubricants and 130.1 120.3 120.3 related materials Chemicals and 5 related products, 102.2 93.5 93.2 97 98.9 n.e.s. Manufactured goods classified 6 107.1 108.3 112.5 106.3 107.5 chiefly by material Machinery and transport equip-95.7 100.6 105.8 96.3 99.6 ment **Commodities** and transactions 124.7 not classified 131.5 122.4 130.5 114.3 elsewhere in the SITC **ALL ITEM INDEX** 113.4 108.5 108.5 108.7 109.8 Source: CSO, XMPI Survey 2016

#### Overall Quarterly Import Price Index, 2016

In 2016, the guarterly Import Price Index (IPI) increased by 8.6% from 108.0 in the first guarter to 116.6 in the fourth guarter. The increase was mainly due to the increases in the price of "mineral fuels, lubricants and related materials (11.1%), Crude materials inedible except fuels, (5.2%), manufactured goods classified chiefly by material (4.8%), and Miscellaneous manufactured articles (2.3%).

However, a decline was recorded in the second quarter of 2016 by crude materials inedible, except fuels (-4.5%).

SECTION	Description	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Annual
0	Food and live animals	118.4	114.3	113.9	114	115.2
2	Crude materials, inedible, except fuels	107	102.2	107.5	108	106.2
3	Mineral fuels, lubricants and related materials	104	108.5	120.5	131.1	116
4	Animal and vegetable oils, fats and waxes	125.1	126.8	123.7	124.1	124.9
5	Chemicals and related products, n.e.s.	111.8	114.3	116.8	116.8	114.9
6	Manufactured goods classified chiefly by material	110.2	112.1	117.5	119.8	114.9
7	Machinery and transport equipment	107.6	108.4	109.2	109.8	108.7
8	Miscellaneous manufactured articles	103.3	101.7	104	105.9	103.7
LL ITEM IN	DEX	108	108.5	113.6	116.6	111.7

#### **Terms Of Trade**

A country's terms of trade measures that country's export price index in relation to its import prices, and is expressed as follows:

Index of Export Prices

\_\_\_\_ x 100
Index of Import
Prices

For example, if, over a given period, the

export prices index rises by 10% and the of import price index rises by 5%, the terms of trade are:

110 x 100 / 105 = 104.8

This means that the terms of trade have improved by 4.8%. When the terms of trade rise above 100, they are said to be improving (favourable) and

when they fall below 100, they are said to be worsening (unfavourable).

If a country's terms of trade improve, it means that for every unit of exports sold it can buy more units of imported goods. So potentially, a rise in the terms of trade creates a benefit in terms of how many goods need to be exported to buy a

given amount of imports. A worsening terms of trade indicates that a country has to export more to purchase the same quantity of imports.

#### Analysis of Zambia's Terms of Trade 2015 and 2016

In 2015, the terms of trade worsened between the first and third quarter,

fluctuating between 96.9 and 96.8. This means that the country needed to export more in order to be able to import the same quantity of imports. The trend improved significantly in the fourth quarter by 9.2 percent, from 96.8 to 109.2. This is in line with the period where sharp

increases in the

export price index were recorded.

In 2016, the first quarter registered an improvement in the Terms of Trade of 5.0 percent but declined yet again to 93.3 in the fourth quarter, implying that the country had to export more to purchase the same quantity of imports during the period under review.

DEDIOD		20	15		Davied Average	2016				
PERIOD	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Period Average	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Period Average
All Items Export Price Index	89.8	93.3	97.8	118.4	99.8	113.4	108.5	108.5	108.7	109.8
All Items Import Price Index	92.7	96.9	101	108.4	99.8	108	108.5	113.6	116.6	111.7
TERMS OF TRADE	96.9	96.3	96.8	109.2	99.8	105	100	95.5	93.3	98.4

# 2017/18 Crop Forecasting Survey Results

Central Statistical Office in conjunction with the Ministry of Agriculture conducted the Crop Forecasting Survey (CFS) during the months of March and April 2018. The objective of the CFS is to provide Government with reliable, empirical annual estimates of crop production statistics for Agricultural Season.

The following are the results of the Survey.

<b>C</b> ****		Area planted (ha)		Ex	pected production (N	4T)		Yield rate (MT/ha)	
Сгор	2016/2017	2017/2018	% change	2016/2017	2017/2018	% change	2016/2017	2017/2018	% change
Maize	1,644,741	1,392,546	(15.3)	3,606,549	2,394,907	(33.6)	2.2	1.7	(21.6)
Sorghum	33,728	32,308	(4.2)	17,337	13,130	(24.3)	0.5	0.4	(20.9)
Rice	33,303	34,217	2.7	38,423	43,063	12.1	1.2	1.3	9.1
Millet	52,820	49,105	(7.0)	32,566	32,278	(0.9)	0.6	0.7	6.6
Sunflower	105,184	97,851	(7.0)	50,220	47,594	(5.2)	0.5	0.5	1.9
Groundnuts	269,611	284,708	5.6	168,699	181,772	7.7	0.6	0.6	2.0
Soya beans	231,630	205,508	(11.3)	351,416	302,720	(13.9)	1.5	1.5	(2.9)
Seed cotton	113,649	118,763	4.5	89,293	88,219	(1.2)	0.8	0.7	(5.5)
Irish potato	1,005	1,867	85.8	31,750	13,546	(57.3)	31.6	7.3	(77.0)
Virg. Tobacco	5,215	6,273	20.3	12,079	13,382	10.8	2.3	2.1	(7.9)
Burley Tobacco	5,428	7,787	43.5	8,416	11,512	36.8	1.6	1.5	(4.7)
Mixed beans	83,635	84,566	1.1	45,938	52,351	14.0	0.5	0.6	12.7
Bambara nuts	6,235	7,253	16.3	4,377	7,039	60.8	0.7	1.0	38.3
Cowpeas	26,438	14,022	(47.0)	12,428	6,824	(45.1)	0.5	0.5	3.5
Sweet Potatoes	55,312	60,325	9.1	206,676	183,280	(11.3)	3.7	3.0	(18.7)
Wheat	26,773	21,709	(18.9)	193,713	114,463	(40.9)	7.2	5.3	(27.1)
Barley	857	936	9.2	6,529	5,102	(21.9)	7.6	5.4	(28.4)
Popcorn	9,149	11,190	22.3	7,829	9,459	20.8	0.9	0.8	(1.2)

### **Production of Food Crops**

Overall, results of the 2017/18 CFS shows that production levels for most major food crops is expected to decline compared to the 2016/17 Agricultural season.

#### Maize

Maize production is expected to decrease by 33.6 percent from 3,606,549 metric tonnes last season to 2,394,907 metric tonnes in the 2017/18 season. Small and medium scale farmers are expected to contribute 2,290,076 metric tonnes representing 95.6 percent of total

production, while large-scale farmers are expected to produce 104,831 metric tonnes representing 6.4 percent.

Area planted to maize recorded a decrease of 15.3 percent from 1,644,741 hectares planted in the 2016/17 season to 1,392,546 hectares in the 2017/18 season.

National average yield rate for maize is expected to decline by 21.6 percentage points from 2.2 to 1.7 metric tonnes per hectare this season. Small and medium scale farmers are expected to record a national average maize yield rate of

1.7 metric tonnes per hectare, whilst large scale farmers are expected to record an average maize yield rate of 3.2 metric tonnes per hectare.

#### **Sorghum**

2017/18 CFS results show that sorghum production is expected to decline by 24 percentage points from 17,337 to 13,130 metric tonnes in the 2016/17 season.

The area planted to sorghum has reduced by 4.2 percent from 33,728 in 2016/17 season to 32,308 in the 2017/18 season.

Sorghum yield is expected to decrease by 20.9 percent from

0.5 metric tonnes per hectare in the 2016/17 season to 0.4 metric tonnes in the 2017/18 season

#### Millet

The survey results show that production of millet is expected to reduce to 32,278 metric tonnes in the 2017/18 season from 32,566 metric tonnes last season, a reduction of 0.9 percent.

Area planted to millet reduced by 7.0 percent from 52,820 hectares in the 2016/17 season to 49,105 hectares in the 2017/18 season.

However, despite the reduction in production and area planted to millet, average yield rate is expected to increase by 6.6 percent from 0.6 to 0.7 metric tonnes per hectare this season.

#### Soya beans

Production of soya beans is expected to decrease by 13.9 percent to 302,720 metric tonnes in the 2017/18 season from 351,416 metric tonnes last season.

The area under soya beans cultivation has reduced by 11.3 percent from 231,630 hectares in the 2017/16 season to 205,508 hectares planted last season.

The average national yield rate of sorghum is expected to decrease by 20.9 percent from 0.5 metric tonnes per hectare reported during the 2016/17 season to 0.4 tonnes this season.

#### **Groundnuts**

Groundnuts production is expected to increase from 168,699 to 181,772 metric tonnes in the 2016/17, 2017/18 season, respectively representing an increase of 7.8 percent.

A total of 284,708 hectares of land was sown to groundnuts during the 2017/18 season compared to 269,611 last season, representing an increase of 5.6 percent.

The average national yield rate for groundnuts is expected to increase by 2 percentage points from 0.6 metric tonnes per hectare during the 2016/17 season to 0.64 metric tonnes per hectare last season.

#### Rice

Rice production is expected to increase by 12.1 percent from 38,423 to 43,063 metric tonnes this season.

The area planted to rice has increased by 2.7 percent from 33,303 hectares last season to 34,217 this season.

The national average yield rate for rice is expected to increase by 9.1 percent to 1.2 metric tonnes per hectare last season compared to 1.3 metric tonnes this season.

#### **Mixed Beans**

Production of mixed beans is expected to increase by 14.0 percent from 45,938 to 52,351 metric tonnes this season.

In comparison to the 2016/17 season, area sown to mixed beans has increased from 83,635 metric tonnes to 84,566 metric tonnes this season.

Average national yield rate for mixed beans is expected to increase by 12.7 percentage points from 0.55 metric tonnes per hectare to 0.6 metric tonnes per hectare last season.

#### Sweet potatoes

Production of sweet potatoes is expected to decrease to 183,280 metric tonnes this season from 231,882 metric tonnes last season, representing a reduction of 11.3 percent.

Area planted to sweet potatoes has increased by 9.1 percent from 55,312 hectares in the 2016/17 season to 60,325 hectares this season.

The national average yield rate for sweet potatoes is expected to decrease by 18.7 percent from 3.74 to 3.0 metric tonnes per hectare.

#### Irish Potatoes

Production of Irish potatoes is expected to decline by 57.3 percent from 31,750 to 13,546 metric tonnes this season compared to last season.

The area sown to Irish potatoes has increased by 85.77 hectares from 1,005 hectares in the 2016/17 season to 1,867 hectares this season.

Average national yield rate for sweet potatoes is expected to decrease by 77.0 percent to 7.3 metric tonnes per hectare this season compared to 31.6 metric tonnes last season.

#### Sunflower

Sunflower production is expected to decline

from 50,220 to 47,594 metric tonnes this season representing a reduction of 5.23 percent.

Area planted to sunflower has decreased by 7.0 percent from 105,184 to 97,851 hectares this season.

The average national yield rate for sunflower is expected to increase by 1.9 percentage points from 0.48 to 0.49 metric tonnes per hectare in this season.

#### **Cashew Nut**

Area planted to cashew nuts has increased by 2,120 percent from 134 to 2,974 hectares this season.

#### Cassava

Cassava flour equivalent production is expected to increase by 11.0 percent from 923,795 metric tonnes last season to 1,025,575 metric tonnes this season.

#### Wheat

Preliminary estimates indicate that the country will produce 114,462 metric tonnes of wheat from an area estimated to be planted of 21,709 hectares. These estimates indicate an expected 40.9 percent reduction in production which translates into 193,713 metric tonnes.

#### Production of Nonfood Crops

**Burley Tobacco** 

The 2017/18 CFS results show that production of burley tobacco is expected to increase from 8,416 to 11,512 metric tonnes this season representing an increase of 36.8 percent.

Compared to the last agricultural season, area planted to burley tobacco has increased by 43.5 percent from 5,428 to 7,787 hectares this season.

The expected yield rate for burley tobacco is expected to reduce by 4.7 percentage points from 1.55 to 1.48 metric tonnes per hectare this season.

#### Virginia Tobacco

Production of virginia tobacco is expected to increase by 10.8 percent from 12,079 to 13,382 metric tonnes this season.

Area planted to virginia tobacco has increased by 20.3 percent from 5,215 hectares last season to 6,273 this season. Despite the increase in expected production the expected national yield rate will decline by 7.9 percent from 2.32 to 2.13 metric tonnes per hectare this season.

#### **Seed Cotton**

Compared to last season, seed cotton production is expected to reduce marginally by 1.2 percent from 89,293 to 88,219 metric tonnes this season.

Area planted to seed cotton is expected to increase by 4.5 percent from 113,649 to 118,763 hectares this season.

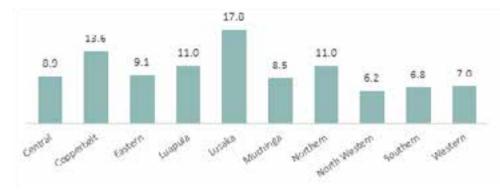
The national yield rate of seed cotton is expected to reduce by 5.46 percentage points from 0.79 to 0.74 metric tonnes per hectare this season.

# 2015/16 Sample Vital Registration with Verbal Autopsy (SAVVY)

The Zambian Government, through the Department of National Registration, Passport and Citizenship in collaboration with the Central Statistical Office and the Ministry of Health conducted the Sample Vital Registration with Verbal Autopsy (SAVVY) in all the 10 provinces in 2015/16. The main objective was to provide nationally representative estimates of age and sex cause-specific mortality rates and ratios in Zambia. The SAVVY undertaking provided an opportunity to supplement Zambia's vital registration system, as well as provide key vital information on births, deaths and causes of death.

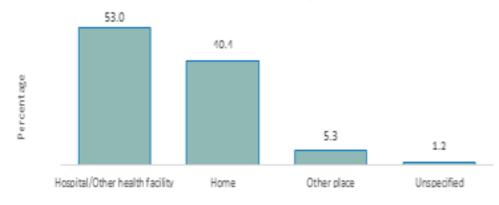
The largest proportion of deaths occurred in Lusaka Province (17.8 percent) followed by Copperbelt Province (13.6 percent). Luapula and Northern provinces tie at 11.0 percent each. The least proportion of death occurred in North Western Province at 6.2 percent.

#### Percentage Distribution of Deaths by Province, 2015/2016



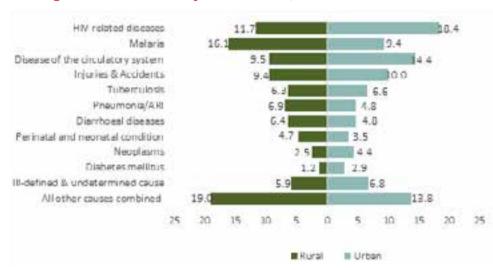
More than half (53.1 percent) of deaths occurred at a hospital or health facility, while a large proportion of deaths occurred at home (40.4 percent).

#### Percent distribution of deceased persons by Place of Death, 2015/16



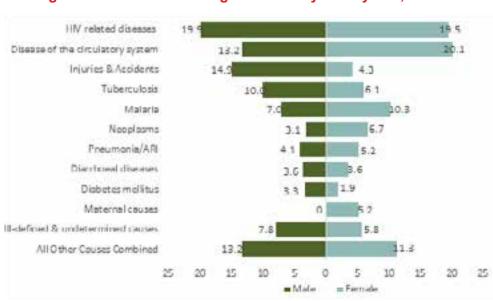
Among the leading causes of death, HIV related diseases were highest in the urban areas at 18.4 percent while Malaria was the highest in rural areas at 16.1 percent.

#### Leading Causes of Death by Rural/Urban, 2015/2016



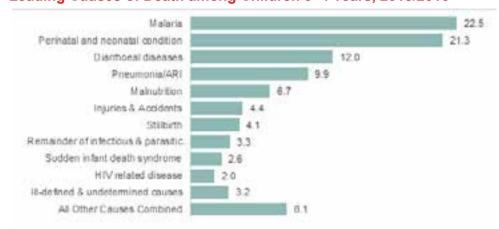
Among males aged 15 years and older, HIV related diseases was the leading cause of death (19.9 percent), followed by injuries and accidents (14.9 percent). Among women aged 15 years and older, disease of the circulatory system (20.1 percent) was the leading cause of death, followed by HIV related diseases (19.5 percent).

#### Leading Causes of Death among Adults 15+ years by Sex, 2015/2016



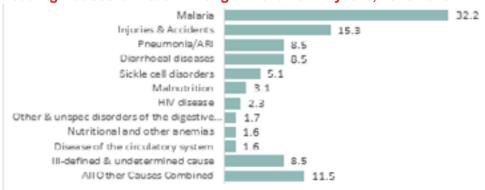
For children aged 0-4, Malaria was the leading cause of death at 22.5 percent, followed by perinatal and neonatal conditions (21.3 percent). HIV related diseases are the least among the leading cause of death at 2.0 percent.

Leading Causes of Death among Children 0-4 Years, 2015/2016



Among children aged 5-14, malaria was the leading cause of death at 32.2 percent. External causes of deaths (injuries and accidents) were second at 15.3 percent. Non-communicable diseases in this age group were among the leading causes of death: sickle cell disorders (5.1 percent) and malnutrition (3.1 percent). HIV and AIDS deaths were at 2.3 percent.

#### Leading Causes of Death among Children 5-14 years, 2015/2016



# 2018 Zambia Demographic and Health Survey (ZDHS)

The Government of Republic of Zambia with support from United States Agency for International Development (USAID), Department for International Development (DFID), United Nations Population Fund (UNFPA), Global Fund and ICF will undertake the Zambia Demographic and Health Survey (ZDHS) in 2018. The 2018 ZDHS will provide data for planning, monitoring and evaluation of national health programmes and implementation of national development frameworks. The ZDHS also provides indicators for assessing the country's progress towards regional and global development frameworks such as the Agenda 2063 and the Sustainable Development Goals (SDGs). The 2018 ZDHS will be the sixth to be undertaken by the Government. The previous surveys were undertaken in 1992, 1996, 2001/02, 2007 and 2013/14.

#### What is the ZDHS?

The Zambia Demographic and Health Survey is a national sample survey designed to provide information on population, family planning, maternal and child health, child survival, HIV/ AIDS and sexually transmitted infections (STIs) in Zambia. It also provides information on reproductive

health and nutrition. The ZDHS will involve interviewing a randomly selected group of women of reproductive age who are 15-49 years and men who are between 15 and 59 years of age. These respondents will be asked questions about their background, the children they have given birth to, their knowledge and use of family planning

methods, the health of their children, their awareness of HIV/AIDS and sexually transmissible infections, and other information that will be helpful to policy makers and administrators in health and family planning fields.

## Objectives of the 2018 ZDHS

The main objective of the 2018 ZDHS is to

provide information on the levels and trends in fertility, childhood mortality, use of family planning methods, maternal and child health indicators including HIV/AIDS at a national and provincial level.

# The specific objectives are:

- To collect up-todate information on fertility, infant and child mortality, and family planning;
- To collect information on health-related matters such as breastfeeding, antenatal care, children's immunizations, and childhood diseases;
- To measure
   maternal
   and neonatal
   morbidity and
   mortality and its
   associated factors
   (i.e. antenatal
   and delivery care,
   pregnancy care,
   etc.);
- Provide information on availability, access and use of mosquito nets as part of the national malaria eradication programs;
- To measure the levels of knowledge of contraceptive practice and use among women;
- To assess the nutritional status of mothers and children, including the measurement of the anemia prevalence among women 15-49 and children 6-71 months, as well as measuring

- weight and height among children under 6 years old;
- To measure the HIV prevalence levels in men 15-59 and women 15-49 and collect data on behavioral risk factors related to HIV;
- To assess the situation regarding violence against women and girls.

# When will data collection be conducted?

The data collection will commence in July and is expected to be completed in December, 2018.

## Where will it be conducted?

The survey will be conducted countrywide in the 545 selected Enumeration Areas. About 25 households in each selected area will be interviewed.

# Who is eligible to take part in the survey?

Women aged 15-49 years, Men aged 15-59 years and children aged 0-5 years who reside in the selected households will be eligible to take part in the survey.

#### **Current Status**

The training of the data collectors is currently being conducted. The prefrom 2nd to 28th April, 2018. The household listing in the selected EAs where the ZDHS will be conducted commenced in May, 2018. The Central Statistical Office therefore urges all the persons visited by our data collection team to cooperate.

# 2020 Census of Population and Housing

In keeping with the international standard of decennial census undertaking, Zambia will be conducting a Census of Population and Housing in 2020. The Zambian government committed to the undertaking of the Census by approving the Cabinet memorandum on conducting the Census in October 2017. Zambia has successfully conducted population and housing censuses since independence in 1969, 1980, 1990, 2000 and 2010 in line with UN Recommendations

## Why Conduct a Census:

Evidence-based decision-making is a universally recognised paradigm of efficient management of economic and social affairs and of overall effective governing of societies today. The most important aspect in any society is human capital. In order to provide a numerical profile of the nation which is the outcome of evidence-based decision-making at all levels, the following questions need to be answered:

- "How many are we?"
- "Who are we?"
   in terms of age,
   sex, education,
   occupation,
   economic
   activity and
   other important
   characteristics;
   and

"Where do we live?" in terms of housing, access to water, availability of essential facilities etc. The availability of this information at small area, regional and national level is essential for any democracy and measuring social change. The population census represents one of the pillars for data collection on the number and characteristics of the population of a country. It is part of an integrated national statistical system and forms the benchmark for the population count at national and local levels.

Census information becomes the demographic, population and economic baseline information that is collected periodically to inform planning, monitoring and evaluation at all three spheres of government. Census information is also indispensable for Monitor national development programmes such as the **Seventh National** Development Plan (7NDP), the Vision 2030 and international obligations such as the **Sustainable Development Goals** (SDGs) and the 2063 Africa Agenda;

# What is a population census?

The UN's
Principles and
Recommendations
for Population and

**Housing Censuses** define a population census as "the total process of collecting, compiling, evaluating, analyzing and publishing or otherwise disseminating demographic, economic and social data pertaining, at a specified time, to all persons in a country or a well-defined part of the country". The four essential features of the census are:

- individual enumeration,
- universality within the country's administrative boundaries,
- simultaneity: conducted at the same time for all persons, and
- defined periodicity.

Population census is the most complex and massive exercise a national statistical office undertakes. It requires mapping the entire country, mobilizing and training a huge number of enumerators, conducting a comprehensive publicity campaign, canvassing all households to participate, collecting individual information, and analyzing and disseminating the data. A census is an opportunity for making statistical activity visible as it touches every household in the country.

# What is the importance of a population census?

a)The population census plays an essential role in public administration. The results are used to ensure:

- equity in distribution of government services;
- distributing and allocating government funds among various provinces and districts for education and health services;
- delineating electoral polling districts at constituency and ward levels; and
- measuring the impact of industrial development etc.

b) The census results are a cornerstone of the national statistical system, including the economic and social components. Census statistics are used as benchmarks for statistical compilation or as a sampling frame for sample surveys. The national statistical system of almost every country relies on sample surveys for efficient and reliable data collection. Without the sampling frame derived from the cartographic mapping and population census count, the national statistical system would face difficulties in providing reliable official statistics for use by the Government and the general public.

(c) The census enables generation of statistics on small areas and small population groups with minimum sampling errors. With Census data the production of statistics on any geographical unit is made possible.

d) Delimitation of constituency and ward boundaries for appropriate apportioning of seats in parliament. The 2021 General Elections will rely on the 2020 census results for updating the voter register.

(e) Since census data can be tabulated for any geographical unit, it is possible to provide the required statistics for use in the private sector for applications such as business planning and market analyses;

(f) The census results are used as a benchmark for research and analysis.

# Census 2020 Data Collection Innovation

The 2020 census will be IT driven with a major shift from using Pen And Paper Interview (PAPI) questionnaires to Computer Aided Personal Interviewing (CAPI). With improvements in technology (both hardware and software) a wide range of data collection methods and sources have become available. Such technologies have been deployed for data collection as a substitute for surveys done by Pen and-Paper Interviews (PAPI). CAPI is a surveying technique that uses a computer based questionnaire, where census or survey enumerators

record people's responses straight into a mobile device such as a PDA, tablet or notebook. With increasing availability and coverage of mobile data networks and internet, instant transmission of collected data to servers is becoming increasingly viable and both circumvents the tedious data entry stage, and makes data available for processing and analysis in near real time.

Since 2014 the CSO has made steady progress in the use of CAPI and large sample surveys like Livestock surveys, Living Conditions Monitoring Survey, ZAMPHIA survey, Disability Survey and Crop Forecasting Surveys have been conducted using this technology.

# What is involved in Planning for the Census?

Conducting a successful census involves a series of carefully planning and coordinated activities. There are three key phases of the 2020 census operations namely Pre-Census Stage, Census Enumeration Stage and Post Census stage covering a five year period 2017 to 2022.

# Pre Census Phase Activities

#### Census Mapping Project 2017-2019

Mapping program is the foundation of a good census enumeration. Census mapping involves the accurate updating of the current administrative and geographic frame of the country and the systematic demarcation of the entire country into small units called

Enumeration Areas (EAs) for ease of enumeration and are eventually used for spatial analysis and dissemination purposes.

The mapping methodology will be Geographic Information System (GIS) driven with the use of satellite base maps for demarcating enumeration areas.

Mapping before enumeration is specifically done to:

- Delineate enumeration areas (EAs) in the country to facilitate the smooth counting of people during enumeration period and essentially to establish that all areas are covered and that everyone in the country is counted with minimal possibility of under or over counting.
- Provide the basis to estimate resources required at each administrative level e.g. personnel, materials and transport.
- Ensure that EA maps easily guide the enumerators on the households that they should cover during the census period
- Ensures that enumerators have a uniform work load in terms of households

to cover during enumeration.

Urban enumeration areas will range from 150-200 while rural areas will have 80-120 households. It is estimated that a total of 30,000 Enumeration areas will be created for the 2020 census.

#### Census 2020 Pretest (2018)

A pre-test will be conducted in August 2018 to test the formulation of concepts and definitions, census questionnaires, instruction manuals, etc., and the evaluation of alternative methodologies and data collection techniques. The report from pretest will assist in guiding on what changes need to be made to the questionnaire as well as guiding on what logistics need to be put in place. The pre-test report will be produced in the fourth quarter of 2018.

#### Pilot Census (August 2019)

The pilot census is the 'dry run' for the actual census on a smaller scale, to evaluate all aspects of the census operation including the concepts and definitions, the adequacy of the questionnaires, the training of field enumerators and supervisory staff, field organization,

census methodology, sampling design and estimation procedure, data processing and data tabulation. The results will be used when drawing up the final plans for the census.

#### Census Enumeration Phase (15th August 2020)

The main census activities during this phase involve the identification, recruitment and training of all staff including census enumerators, supervisors, master trainers, assistant master trainers, zone managers, district census coordinators, provincial census coordinators and national census coordinators on the census procedures and guidelines. The phase includes the actual census enumeration and supervision of the count. Deployment of field staff will be done a week before the start of data collection for 5 days from 10th to 15th August, 2020

#### Post 2020 Census Phase

#### Post Enumeration Survey (September 2020)

The Post
Enumeration Survey
(PES) is a sample
survey conducted to
evaluating the main
census count. It
estimates the extent
of under-coverage
and over-coverage of
population count at
national, provincial

and rural urban domains. A PES helps to assess the level of agreement for responses related to sex, age, marital status as well as types of housing units.

#### Census Analysis and Report Writing (2021-2022)

Analysis of census data is always an ongoing activity, involving the making of comparisons between new and old findings in order to understand trends in population attributes. The tabulations and analyses will take into account priority national and international needs. review of the 7DNP as well as assessing the country's progress towards the attainment of the SDGs by year 2030.

#### Census Dissemination (2021-2022)

A census is only complete once the information collected is disseminated to users, and is used in the making informed decisions and choices. Disseminated information should be relevant, timely and in a format that can be easily understood and used by the different users, both local and international. To carter for wide range of data users different products will be developed to carter for the varied array of users information needs.

#### 2020 CENSUS OF POPULATION AND HOUSING TIMELINE



2018 - 2020 PRE CENSUS ACTIVITIES

2020 MAIN CENSUS ACTIVITIES

2020-2021 DATA ANALYSIS AND DISSEMINATION

# **Labour Market Statistics**

#### **2017 LABOUR FORCE SURVEY**

Zambia is one the countries in Africa implementing the resolution of the 19th International Conference of Labour Statisticians (ICLS) of 2013 in the 2017 Labour Force Survey. The primary features of the resolution are the definitions of work, employment and labour under utilization.

The key changes in reporting based on ICLS 2013 include;

- The employed persons strictly include person engaged in market activities only or work for pay or profit only.
- The unemployed persons strictly satisfy the conditions of not being in employment, seeking a paid job and available to take up the job.
- Persons who are not in employment but are seeking employment and those that are not seeking but are available to take up the job are classified as the Potential Labour Force.

 Therefore, adding the unemployed population and the potential labour force is what represents the national unemployment situation.

#### HighlightsoOf the Selected Key Indicators of the Labour Market Working Age

**Population** 

The working-age population refers to all persons above a specified minimum age which varies from country to country. In Zambia, the minimum age of persons in the working-age population is 15 years. In 2017, the workingage population was estimated at 9,056,840 of which 53.8 percent was in the rural areas and 46.2 percent was in the urban areas.

# Number and Percentage Distribution of the working Age Population (15 years or older by Rural/Urban and Sex, 2017

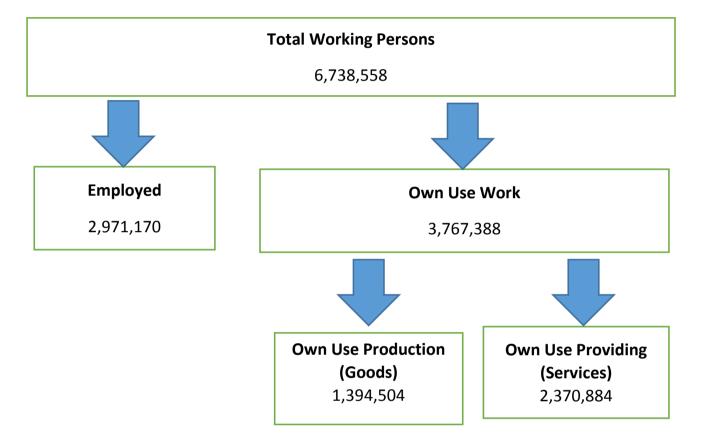
Rural/Ur-	Working Age Population (15 years or older)							
ban	Total	Percent	Male	Female				
Total	9,056,840	100	4,315,697	4,741,143				
Rural	4,870,262	53.8	2,324,039	2,546,222				
Urban	4,186,579	46.2	1,991,658	2,194,921				

#### Main Categories of Work

Work is defined as any activity performed by persons of any sex and age to produce goods or to provide services for use by others or for own final use. This is irrespective of legality, formal/informal nature of activity, context or person's status.

In 2017, a total of 6,738,558 persons were involved in work of which 2,971,170 persons were employed and 3,767,388 persons were in own use work. Of

the total number of persons in own use work, 1,394,504 were in production of goods while 2,370,884 were providing services.



#### **Labour Force**

The labour force has two categories namely; standard labour force which consist of the employed and unemployed persons and extended labour force which has the standard labour force plus persons in potential labour force. The Potential labour force refers to persons not in employment but are seeking employment and not available for employment or available but not seeking employment. It shows the extent at which the population can participant in labour related activities in a reference period.

The 2017 LFS shows that there were 3,398,294 persons in the standard labour force of which 427,125 were persons in unemployment while 2,971,169 persons were in employment. However, the extended labour force, inclusive of persons in the potential labour force was estimated at 5,049,059, in which

case the potential labour force is considered as part of the persons in unemployment.

#### Labour Force and Potential Labour Force by Sex, 2017

	Labour Force	Persons in Employment	Persons in Unemployment	Potential Labour Force				
International perspec	tive (standard)							
Total	3,398,294	2,971,169	427,125					
Male	2,041,306	1,797,957	243,349					
Female	1,356,988	1,173,212	183,776					
Local perspective (extended)								
	Labour Force	Persons in Employment	Persons in Uner	nployment				
Total	5,049,059	2,971,170	427,125	1,650,764				
Male	2,759,098	1,797,957	243,349	717,792				
Female	2,289,961	1,173,213	183,776	932,972				

#### **Employment**

The employed population comprises all persons of working age who in the reference period were either in paid employment, self-employment or

contributing family workers. In 2017, the employed population was estimated at 2,971,170, of which 59.9 percent were in the urban areas and 40.1 percent were in rural areas.

Number and Percentage Distribution of Employed Persons by Rural/Urban and Sex, Zambia 2017							
Rural/Urban	Both Sexes		Male	Female			
Kui di/ Ui Udii	Number	Percent	Number	Number			
Total	2,971,170	100	1,797,957	1,173,213			
Rural	1,192,712	40.1	725,739	466,974			
Urban	1,778,458	59.9	1,072,218	706,239			

**Total Employed Persons** 

**Percent** 

100

25.9

2

7.9

0.4

0.3

4.9

26.9

3.8

1.9

0.4

8.0

1.1

0.9

2.3

2.6

6.4

2.3

0.1

2.7

6.5

0.1

Number

768,605

58,007

233,721

13,077

9,300

145,211

798,012

112,100

57,247

12,493

23,003

32,039

25,693

68,241

76,465

189,677

68,270

3,252

81,535

192,921

2,300

2.971.170

#### Sector of Employment

The labour market has three sectors of employment namely the formal, informal and household sectors. Formal sector employment relates to a totality of jobs in establishments or enterprises that are

registered with a tax and/or a licensing authority. Informal sector employment relates to all jobs in unregistered enterprises. Employment in household Sector refers to all jobs carried out for households.

Agriculture, forestry and fishing

Electricity, gas, steam, and air conditioning supply

Accommodation and food service activities

Professional, scientific and technical activities

Administrative and support service activities

Human health and social work activities

Arts, entertainment and recreation

Activities of households as employers

Activities of extraterritorial organizations and bodies

Public administration and defense; compulsory social security

Information and communication

Financial and insurance activities

Mining and quarrying

Transport and storage

Real estate activities

Other service activities

Education

Manufacturing

Construction

Total

In 2017, the proportion of the formal Sector was higher than that of the informal and Household Sector at 45.7 percent, 31.0 percent and 23.3 percent, respectively.

**INDUSTRY** 

Water supply; sewerage, waste management and remediation activities

Wholesale and retail trade; repair of motor vehicles and motorcycles

Percentage Distribution of Employed Persons (15 Years or Older) by Industry and Sex, 2017

Number and Percentage Distribution of the Employed Persons by Sector of
Employment and Sex, 2017

- Improyment and						
	Total		Mala	Famala		
	Number	Percent	Male	Female		
Total	2,971,170	100	1,797,957	1,173,213		
Formal Sector	1,357,186	45.7	893,843	463,343		
Informal Sector	922,476	31	565,579	356,897		
Household Sector	691,508	23.3	338,535	352,973		

Male

Number

1,797,957

470,303

54,171

178,306

10,408

7,417

138,834

370,837

109,969

26,649

9,644

16,602

20,208

15,933

58,427

56,890

91,178

37,487

2,478

40,303

80,204

1,709

**Female** 

Number

298,303

3,836

55,414

2,670

1,883

6,377

2,131

30,598

2,849

6,400

11,831

9,759

9,815

19,576

98,499

30,783

41,233

112,717

774

591

427,175

1,173,213

# Employed Persons by Industry and Sex

The wholesale and retail trade The Wholesale and Retail industry had the highest proportion of employed persons at 26.9 percent while the Agriculture, Forestry and Fishing had the second highest proportion of employed persons at 25.9 percent. The industries with the lowest proportions were the Arts, Entertainment and Recreation at 0.1 percent and the Activities of Extraterritorial Organizations and Bodies at 0.1 percent.

Unemployment Ra	٠.
Onemblovineni Ka	ιe

The standard unemployed population consists of all persons (15 years or older) who are not in employment but are actively seeking for a paid job and are available to take up a job during the reference period (the week preceding the interview).

The national unemployment consists of unemployed persons plus persons in the potential labour force.

In 2017, the standard unemployment rate was estimated at 12.6 percent, whereas the combined rate of unemployment and potential labour force

was estimated at 41.2 percent.

Both unemployment rates and combined rate of unemployment and potential labour force for females were higher at 13.5 percent and 48.8 percent than that of males at 11.9 percent and 34.8 percent, respectively.

# Understanding Our Society through Data

The official statistics find their purpose in satisfying the information requirements of all categories of users which are continuously growing and diversifying. Therefore, it is necessary to develop and improve the system of dissemination to highlight the completeness and diversity of statistical information. Official statistics are common goods of the society and

should be available

promote increased utilization of statistical information for effective decision making, CSO through the Dissemination Branch provides interface with various statistical users. These users include policy makers, Cooperating Partners, Non Governmental Organizations (NGOs), researchers, academicians, the Media and the general public. The Branch produces periodic publications

Through the Dissemination Branch, members of the public gain access to a variety of statistical publications such as census reports, Living Conditions Monitoring Survey Reports, CPI reports and other key socio-economic indicators such as GDP, Inflation rates, Index of Industrial Production, External Trade. etc.

Dissemination represents the final process of the statistics production activity cycle. Sharing of statistical information supports the right to information of all users' categories: policy makers, mass media, economic operators, investors, international bodies and the citizens.

With the ultimate goal of every statistical office being to provide data that satisfies the purposes of users, statistical literacy through wide range use, is paramount. This is because data disseminated and not understood by the citizens is as good as not having been disseminated.

The only way to make citizens understand statistics is by enhancing statistical literacy among citizens and this has been recognised as essential knowledge that all citizens need to possess in today's information driven society. As such, in

as much as data is being disseminated through different medias, it is imperative for CSO to ensure that people have the ability to understand and reason with it. Our users should be able to to interpret material presented be it in reports, newspapers, internet or Television and make informed

# What is statistical literacy?

decisions.

CSO collects statistics on most aspects of Zambian life. We capture understand, interpret and evaluate the data that inform these issues above. their statistical understanding.

It is our hope that



As a way of ensuring that data is understood, the office has instigated statistical literacy programmes for different groups of people. This is knowledge acquired will compel these students and other citizens to have the ability to think critically and reflect on claims made on issues that concern their wellbeing. Being statistically literate gives an edge to citizens by broadening their statistical knowledge to enable them to engage in discussions and decision-making processes with authority, accuracy and integrity.



## Access to CSO Data

Data can be accessed from through the CSO Website, Data Portal; CSO Library and the Resource Centre which open to researchers interested in various CSO datasets.

The Library and Resource Centre are open to the public from Monday to Friday (08:30-13:00 hrs and 14:0017:00 hrs).

#### to everyone.

The Central Statistical Office (CSO) through the Information, Research and Dissemination (IRD) Division is responsible for ensuring that statistical information and data is disseminated, and easily accessible by various users. The Division consists of two branches namely: Research; and the Dissemination branches. The Division also consists of four units, that is: Gender Statistics; Library; Printing; and Field Coordination

In an effort to

such as the Selected Socio-economic Indicators, Zambia in Figures, Gender Status Report, and The Monthly Statistical Bulletin. On the other hand, the Research Branch provides consultancy services individuals. Further, the Branch conducts adhoc quantitative and qualitative surveys for various institutions, upon request. Recent surveys conducted include: Skills Development and Entrepreneurship Baseline Survey-2018 for Citizens Economic Empowernment Commission (CEEC)

vital information about our economic performance, the well-being of our population and the condition of our environment. The statistics provide us with essential knowledge to assess the health and progress of our society.

Statistical literacy, then, is the ability to accurately

reason with numbers and figures, make sense of what is presented and make informed decisions. One the programmes undertaken this year was information sharing with students from a Secondary school in Mkushi (Central Province) and students from a College in Luanshya (Copperbelt Province) to strengthen

# **CSO Top Management**



**Goodson Sinyenga**Acting Director of Census and Statistics



Iven Sikanyiti
Assistant Director
Social Statistics Division



Daniel Daka
Assistant Director
Agriculture and Environment Division



Sheila S. Mudenda
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Information, Research
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**Priscilla Mutandwa** Head of Administration