



**Republic of Zambia** 

# **Central Statistical Office**

Volume 108

Website: www.zamstats.gov.zm

March, 2012

## Foreword

Welcome to the Monthly presentation organised by the Dissemination Branch of the Central Statistical Office (CSO). The CSO embarks on vigorous information delivery strategy to major stakeholders and the media institutions in order to increase utilisation of statistical products and services. The office produces a number of statistical products in the Economic, Social, Agricultural and Environmental areas. The information collected in these areas may be used for various purposes including policy formulation, planning, implementation, monitoring and evaluation of programmes and projects.

This Monthly publication is an attempt to provide highlights of CSO's work and how it can help media institutions and the general public to make use of data and information for sustainable national development and decision-making.

I would like to urge our readers and users of statistical information to send to us any comments that may enhance statistical production and contribute to the improvement of this bulletin.

John Kalumbi Director of Census and Statistics

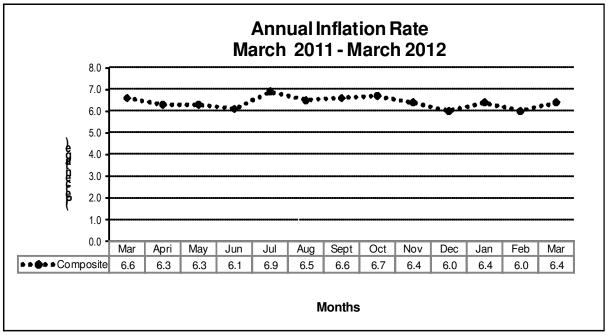
29th March, 2012

**Inside this** Issue • March Inflation rate increases to 6.4 percent. • Economy Grows by 6.6 Percent in 2011 • Explaining the Geometric Mean Methodology in the New CPI • Selected Socio -Economic Indicators

## INFLATION

## March Inflation rate increases to 6.4 percent.

The annual rate of inflation derived from the revised all items Consumer Price Index (CPI) was recorded at 6.4 percent in March 2012, from 6.0 percent in February 2012. This means that on average, prices increased by 6.4 percent between March 2011 and March 2012. The increase is attributed to increases in the prices of food and non-alcoholic beverages. On average, prices increased by 1.5 percent between February 2012 and March 2012.



Source: CSO; Prices Statistics

### Movements in inflation rates for CPI Main Groups

Between February 2012 and March 2012, the annual rate of inflation increased for Food and non-alcoholic beverages; Alcoholic beverages and tobacco; Housing, water and electricity; Recreation and culture; and Miscellaneous goods and services. The annual rate of inflation decreased for Clothing and footwear; Transport; Communication; Education; and Restaurant and hotels. The annual rates of inflation for Furniture and household equipment; and Health remained unchanged.

ltem	Weisele to	Index (2009=100)			Percentage change over one month			Percentage change over 12 months		
	Weights	Jan 12	Feb 12	Mar 12	Jan 12	Feb 12	Mar 12	Jan 12	Feb 12	Mar 12
CPI (All items)	1000.0	118.8	119.1	120.8	1.1	0.3	1.5	6.4	6.0	6.4
Food and non-alcoholic beverage	534.9	115.5	115.4	117.6	1.8	-0.1	1.9	6.1	5.5	6.3
Alcoholic beverages & tobacco	15.2	109.1	110.1	110.8	0.0	1.2	0.3	2.4	2.9	3.5
Clothing and footwear	80.8	122.2	122.7	124.4	0.5	0.4	1.4	9.3	8.1	7.9
Housing, water, electricity, gas and other fuels	114.1	134.2	134.7	136.3	-0.3	0.4	1.2	6.1	4.8	4.9
Furniture, household, equipment and maintenance	82.4	119.0	120.0	120.7	0.4	0.8	0.6	7.0	7.7	7.7
Health	8.1	121.8	122.8	123.5	1.4	0.9	0.6	8.1	7.4	7.4
Transport	58.1	121.3	122.5	123.8	0.4	1.0	1.1	8.5	8.9	7.8
Communication	12.9	103.8	104.1	104.1	1.0	0.3	0.0	1.1	1.3	1.2
Recreation and Culture	13.8	117.9	118.0	118.7	0.9	0.1	0.6	8.0	7.7	8.1
Education	26.6	121.2	122.9	123.3	2.4	1.4	0.3	8.6	9.6	7.9
Restaurant and hotel	3.8	118.0	118.0	118.9	0.8	0.0	0.8	5.2	5.2	3.0
Miscellaneous goods and services	49.7	115.0	115.9	117.5	-0.2	0.7	1.4	3.1	3.8	4.7

### Index Numbers and Percentage Changes

Source: CSO; Prices Statistics

## Contributions of different Items to overall inflation

Of the total 6.4 percent annual inflation rate in March 2012, food items accounted for 3.3 percentage points, while non-food products in the Consumer Price Index (CPI) accounted for a total of 3.1 percentage points.

#### Percentage Points Contributions of different items to overall inflation

Items	February 2012	March 2012
Food and Non-alcoholic beverages	2.9	3.3
Alcoholic beverages and Tobacco	0.1	0.1
Clothing and footwear	0.6	0.7
Housing, Water, Electricity, Gas and Other fuels	1.0	0.6
Furnishings and Household Equipment	0.3	0.6
Health	0.1	0.1
Transport	0.5	0.5
Communication	0.0	0.0
Recreation and Culture	0.1	0.1
Education	0.3	0.2
Restaurant and Hotel	0.0	0.0
Miscellaneous Goods and Services	0.1	0.2
All items	6.0	6.4

Source: CSO; Prices Statistics

## The Annual Food and Non-food Inflation Rate

The annual food inflation rate was recorded at 6.3 percent in March 2012. This is an increase from 5.5 percent recorded in February, 2012. The annual non-food inflation rate was recorded at 6.4 percent in March 2012. This is a slight decrease from 6.5 percent recorded in February 2012.

	All ite	ms CPI	Food	items	Non-fo	od items
	Index (2009=100)	Annual Inflation Rate	Index (2009=100)	Annual Inflation Rate	Index (2009=100)	Annual Inflation Rate
2011 Jan	114.8	6.3	111.6	4.2	108.9	8.6
Feb	115.8	6.5	112.4	4.3	109.4	9.1
Mar	117.1	6.6	113.6	4.1	110.5	9.4
Apr	117.8	6.3	114.2	3.7	111.1	9.2
May	118.7	6.3	114.6	3.5	111.0	9.5
Jun	119.4	6.1	114.5	3.8	110.3	8.7
Jul	120.5	6.9	115.9	5.0	111.9	8.9
Aug	121.8	6.5	116.6	5.8	112.1	7.3
Sep	122.2	6.6	117.0	6.1	112.5	7.3
Oct	122.1	6.7	116.8	6.3	112.2	7.2
Nov	121.8	6.4	116.9	6.0	112.7	6.8
Dec	122.2	6.0	117.5	5.3	113.4	6.6
2012 Jan	122.5	6.4	118.8	6.1	115.5	6.8
Feb	123.3	6.0	119.1	5.5	115.4	6.5
Mar	124.6	6.4	120.8	6.3	117.6	6.4

#### Index Numbers and Annual Inflation Rates: Food and Non food Items

Source: CSO; Prices Statistics

The Monthly

#### National Average Prices of Selected Products.

A comparison of retail prices between February 2012 and March 2012, shows that the national average price of 25 bag of white breakfast meal increased by 3.6 percent, from K42,828 to K44,388, while the average price of a 20 litre tin of maize grain increased by 0.9 percent, from K19.308 to K19,487. The national average price 1Kg of tomatoes increased 15.0 percent, from k4,586 to K5,260

However, the national average price of 25 kg bag of white roller meal reduced by 1.5 percent, from K33,361, to K32,858. The national average price of 1kg of dried kapenta (Mpulungu) reduced by 4.2 percent, from K65,329 to K62,567.

NATIONAL AVERAGES PRICES FOR SELECTED PRODUCTS AND MONTHS
---

	20	)12	Percentage change		
Product Description	January 2012	February 2012	March 2012	February 2012/March 2012	
Breakfast Mealie Meal, 25 Kg	43,747	42,828	44,388	3.6	
Roller Mealie Meal,25Kg	33,587	33,361	32,858	-1.5	
Maize grain ,20 Litre tin	19,428	19,308	19,487	0.9	
Rice Local ,1Kg	8,169	8,297	8,493	2.4	
Rice Imported ,1Kg	19,901	16,950	18,637	10.0	
Fillet Steak,1 Kg	39,660	37,163	37,461	0.8	
Rump Steak,1Kg	34,872	34,074	34,136	0.2	
Brisket,1Kg	27,215	27,208	26,624	-2.1	
Mixed Cut,1Kg	24,362	24,415	25,233	3.4	
T-bone,1Kg	32,850	33,157	33,525	1.1	
Beef Sausages,1Kg	31,729	31,842	31,287	-1.7	
Mince Meat,1Kg	32,616	31,455	31,044	-1.3	
Ox-liver,1Kg	23,738	23,444	23,635	0.8	
Offals (Beef) ,1Kg	14,082	13,573	13,994	3.1	
Pork Sausages,1Kg	31,469	35,621	32,910	-7.6	
Pork Chops,1Kg	23,478	23,118	24,972	8.0	
Chicken Frozen,1Kg	16,474	16,989	17,206	1.3	
Chicken Live,1Kg	14,581	14,467	14,775	2.1	
Frozen Fish (Bream) ,1Kg	16,790	16,026	15,866	-1.0	
Buka Buka,1Kg	16,689	16,905	17,179	1.6	
Fresh Kapenta,1Kg	6,555	7,077	7,008	-1.0	
Dried Bream,1Kg	40,404	39,902	44,169	10.7	
Dried Kapenta Mpulungu,1Kg	62,814	65,329	62,567	-4.2	
Dried Kapenta Siavonga,1Kg	64,795	66,352	70,330	6.0	
Dried Kapenta Chisense,1Kg	48,306	50,501	43,208	-14.4	
Onion ,1Kg	5,687	5,912	6,124	3.6	

Product Description	2012	Percentage change	Product Description	2012
Product Description	Jan '12	Feb '12		Jan '12
Rape ,1Kg	5,280	7,177	7,626	6.0
Tomatoes,1Kg	4,417	4,586	5,260	15.0
Dried beans,1Kg	11,042	11,559	11,283	-2.4
Irish potatoes,1Kg	4,885	5,003	4,738	-5.3
Salt,1Kg	4,279	3,976	4,759	19.7
Air fare Lusaka/London	6,434,200	5,324,400	5,324,400	0.0
Hammer milling charge	2,951	2,996	3,089	3.1

Source: CSO; Prices Statistics

#### Consumer Price Index (2009=100)

		Food and non alcoholic beverages	Alcoholic beverages and tobacco	Clothing and footwear	Housing water electricity gas and other fuels	Furniture, household equipment and maintenance	Health	Transport	Communication	Recreation and culture	Education	Restaurants and hotels	Miscellaneous goods and services	All Items	Inflation Rate (%) <u>Monthly</u>	Inflation Rate (%) Annual
We	ights	534.9	15.2	80.8	114.1	82.4	8.2	58.1	12.9	13.8	26.6	3.4	49.7	1,000.0		
	Jan	104.4	105.1	107.1	107.9	103.9	105.9	103.5	102.8	105.5	105.3	103.6	104.9	105.0	5.0	9.4
	Feb	104.9	104.5	107.2	108.8	103.7	106.2	106.7	102.1	105.2	104.4	103.6	104.9	105.5	0.4	9.2
	Mar	106.1	104.9	107.2	109.9	104.8	107.9	108.5	102.6	106.9	104.5	105.3	105.4	106.6	1.0	10.0
	Apr	107.1	105.9	108.1	111.8	105.6	109.6	108.0	102.4	107.2	105.6	106.7	105.8	107.5	0.9	9.5
	May	107.2	103.1	109.0	110.7	106.7	109.9	110.8	102.4	107.5	105.5	108.4	106.3	107.7	0.2	8.9
2010	Jun	106.3	103.0	109.4	113.5	107.8	110.4	113.8	102.4	107.9	105.3	109.2	107.9	107.9	0.2	7.9
20	Jul	106.6	103.5	109.7	114.6	108.3	111.4	115.5	102.4	106.9	107.5	109.5	108.1	108.5	0.5	7.9
	Aug	106.0	104.5	110.7	125.6	108.6	113.9	113.4	102.6	107.7	108.0	108.2	108.6	109.5	0.9	7.7
	Sep	106.1	104.1	111.4	126.0	109.3	113.9	114.3	102.6	107.8	108.0	109.7	108.8	109.7	0.2	7.8
	Oct	105.6	104.9	111.7	126.4	109.4	114.7	111.8	102.3	107.9	108.0	110.5	109.1	109.4	-0.3	6.9
	Nov	106.4	105.1	111.3	125.8	110.2	113.4	111.6	102.2	109.0	108.0	111.5	111.1	109.9	0.4	6.6
	Dec	107.7	107.0	112.4	126.9	111.6	113.8	110.6	102.2	108.5	108.6	112.6	110.0	110.9	0.9	6.5
	Jan	108.9	106.6	111.9	126.5	111.2	112.6	111.8	102.6	109.2	111.6	112.1	111.5	111.6	0.7	6.3
	Feb	109.4	107.3	113.5	128.6	111.4	114.4	112.4	102.7	109.6	112.1	112.2	111.6	112.4	0.7	6.5
	Mar	110.5	107.1	115.3	130.0	112.0	115.0	114.9	102.8	109.9	114.2	115.4	112.2	113.6	1.1	6.6
	Apr	111.1	109.0	118.3	129.8	111.9	117.0	116.1	102.9	110.5	114.2	115.8	112.4	114.2	0.6	6.3
	May	111.0	108.3	119.2	131.0	113.4	117.8	117.0	102.9	113.1	113.2	116.4	112.5	114.6	0.3	6.3
2011	Jun	110.3	108.5	120.0	131.7	114.4	118.3	117.1	102.9	112.7	115.0	118.3	113.1	114.5	0.0	6.1
20	Jul	111.9	108.5	120.7	132.2	116.4	118.4	119.4	102.9	114.1	116.2	115.5	114.0	115.9	1.2	6.9
	Aug	112.1	108.3	122.4	134.7	117.0	119.0	121.5	102.9	115.7	115.8	117.3	114.1	116.6	0.6	6.5
	Sep	112.5	108.1	121.4	135.7	119.0	119.9	121.7	102.6	115.4	116.9	116.6	113.7	117.0	0.4	6.6
	Oct	112.2	109.7	121.2	134.2	120.0	118.3	121.2	102.7	116.3	117.1	116.6	114.3	116.8	-0.2	6.7
	Nov	112.7	109.3	121.1	133.9	119.6	120.3	119.2	102.8	117.5	118.2	118.6	114.4	116.9	0.1	6.4
	Dec	113.4	109.2	121.7	134.6	118.6	120.1	120.8	102.7	116.8	118.4	117.0	115.3	117.5	0.5	6.0
7	Jan	115.5	109.1	122.2	134.2	119.0	121.8	121.3	103.8	117.9	121.2	118.0	115.0	118.8	1.1	6.4
2012	Feb	115.4	110.4	122.7	134.7	120.0	122.8	122.5	104.1	118.0	122.9	118.0	115.9	119.1	0.3	6.0
	Mar	117.6	110.8	124.4	136.3	120.7	123.5	123.8	104.1	118.7	123.3	118.9	117.5	120.8	1.5	6.4

Source: CSO; Prices Statistics

## SPLICING AND CHAIN LINKING THE NEW CPI SERIES WITH THE OLD SERIES

The Central Statistical Office (CSO) has revised the Consumer Price Index (CPI). Key features of the revised CPI include a revised basket of products, revised weights, new index reference period, a new methodology and data processing software.

When the weights of the CPI become out of date, the best practice requires that new weights must be derived from a recently completed Household Budget Survey (HBS). The new index will therefore have a revised set of weights (associated with the updated basket) that will reflect the latest available spending patterns of the population. Consequently, two distinct index series will exist, i.e. one with 1994 as the index reference period and the other with 2009 as the index reference period.

A CPI will, however require that the new series be combined with the old one so

as to create one continuous series. To accomplish this objective, the splicing technique is applied. Thus to make the 2009 index series continuous with the old one (with 1994 as index reference period), the indices have been spliced at the year (2009) that is common to both series.

The new continuous series with year 2009 as the base period is shown below. The new index series has been combined with the old series with respect to the all items index only. The 12 division level indices do not exist before 2009.

Before December 2009, the spliced index series has reduced in magnitude but still yield the same rate of change (inflation rates). The new index series with 2009 as index reference period starts from January 2010.

Year	Period	Index 2009=100	Annual Inflation rate
2008	January	82.70	9.3
	February	84.78	9.5
	March	85.66	9.8
	April	85.91	10.1
	Мау	86.28	10.9
	June	87.43	12.1
	July	88.15	12.6
	August	88.93	13.2
	September	90.07	14.2
	October	91.15	15.2
	November	92.46	15.3
	December	94.71	16.6
2009	January	95.96	16.0
	February	96.61	14.0
	March	96.88	13.1
	April	98.17	14.3
	Мау	98.94	14.7
	June	100.02	14.4
	July	100.48	14.0
	August	101.61	14.3
	September	101.75	13.0
	October	102.34	12.3
	November	103.11	11.5
	December	104.11	9.9
2010	January	105.01	9.4
	February	105.47	9.2
	March	106.55	10.0
	April	107.48	9.5
	Мау	107.74	8.9
	June	107.93	7.9
	July	108.45	7.9
	August	109.45	7.7
	September	109.72	7.8
	October	109.44	6.9
	November	109.92	6.6

#### ALL ITEMS CONSUMER PRICE INDEX (CPI) AND ANNUAL INFLATION RATES

Year	Period	Index 2009=100	Annual Inflation rate
	December	110.86	6.5
2011	January	111.61	6.3
	February	112.36	6.5
	March	113.56	6.6
	April	114.24	6.3
	May	114.56	6.3
	June	114.52	6.1
	July	115.89	6.9
	August	116.60	6.5
	September	117.01	6.6
	October	116.80	6.7
	November	116.94	6.4
	December	117.47	6.0
2012	January	118.77	6.4
	February	119.09	6.0
	March	120.84	6.4

Source: CSO; Prices Statistics

## **GROSS DOMESTIC PRODUCT (GDP)**

#### Economy Grows by 6.6 Percent in 2011

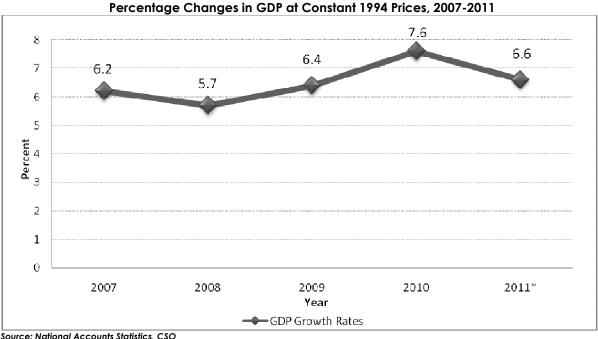
The revised estimates of Gross Domestic Product (GDP), i.e. the total value of goods and services produced in the country, show that the economy grew by 6.6 percent in 2011 compared to 7.6 percent recorded in 2010. The estimates are a tenth of percentage point higher than the preliminary estimates which showed an expected growth of 6.5 percent for 2011. The revised estimates are mainly based on data up to the third quarter of the year. The Transport and Communications; Agriculture, Forestrv and Fishina: Construction: and Trade sectors are the main drivers of this growth.

#### **Revision Policy of GDP Estimates**

The Central Statistical Office makes three releases for the estimates of GDP for a particular year. The first release is the *Preliminary Estimates* of GDP, based on data for the first half of the year. The preliminary estimates for 2011 were released in the fourth quarter of 2011.

The second release is the *Revised Estimates* of GDP based on more comprehensive data for the year, but may not be complete. It is mostly based on data up to the third quarter of 2011. The revised estimates for 2011 have been released during the first quarter of 2012.

The *Final Estimates* are based on complete data coverage for the year. The final estimates for 2011 will be released by the end of the second quarter, 2012.



Source: National Accounts Statistics, C \*Revised Estimates

The secondary sector has the highest growth compared to the other sectors i.e. primary and tertiary sectors. The sector grew by 8.2 percent in 2011 compared to the 6.5 percent growth in 2010. This growth mainly came from Construction, which showed a growth of 8.5 percent. This is mainly due to The Monthly increased building and construction activities at corporate and household levels.

The Electricity, Gas and Water Supply; and the Manufacturing industries grew by 8.2 percent and 7.7 percent, respectively.

KIND OF ECONOMIC ACTIVITY	2007	2008	2009	2010	2011*
PRIMARY SECTOR	1.7	2.5	12.4	10.2	2.0
Agriculture, Forestry and Fishing	0.4	2.6	7.2	6.6	7.7
Mining and Quarrying	3.6	2.5	20.3	15.2	(5.2)
SECONDARY SECTOR	10.0	4.7	6.2	6.5	8.2
Manufacturing	3.0	1.8	2.2	4.2	7.7
Electricity, Gas and Water	1.0	(1.2)	6.8	7.4	8.2
Construction	20.0	8.7	9.5	8.1	8.5
TERTIARY SECTOR	7.1	7.2	3.9	6.6	7.6
Wholesale and Retail Trade	2.4	2.7	2.3	4.3	7.2
Restaurants, Bars and Hotels	9.6	5.0	(13.4)	9.6	7.8
Transport, Storage and Communications	19.2	15.8	7.6	14.9	12.9
Financial Institutions and Insurance	4.1	8.7	5.2	6.0	4.9
Real Estate and Business services	3.1	3.0	2.8	3.0	2.9
Community, Social and Personal Services	12.5	11.7	8.6	5.3	8.4
Less: FISIM	2.5	2.5	3.3	2.3	2.3
TOTAL GROSS VALUE ADDED	6.7	5.7	6.4	7.6	6.6
Taxes less subsidies on Products	(0.3)	5.7	6.4	7.6	6.6
TOTAL G.D.P. AT MARKET PRICES	6.2	5.7	6.4	7.6	6.6

Percentage Changes in GDP b	v Kind of Economic Activity	v at Constant 1994 Prices
recentage changes in obrib		

Source: CSO, National Accounts Statistics \*Revised Estimates

The Primary Sector grew by 2.0 percent in 2011 compared to 10.2 percent in 2010. Growth in this sector was mainly spurred by the Agriculture, forestry and fishing whose output increased by 7.7 percent due to higher crop output. The Crop Forecast Survey recorded an expected output of 3.0 million metric tonnes of maize in the 2010/2011 agriculture season, a growth of 8.0 percent from 2.8 million metric tonnes in the 2009/2010 agriculture season. The other crops that were expected to record growth included soya-beans, seed cotton, both burley and Virginia tobacco and wheat. The output of sorghum, rice, millet, sunflower, groundnuts, and mixed beans were expected to decline.

•			•	•						
(Metric tonnes)										
	2007/2008	2008/2009	2009/2010	2010/2011	% change					
Maize	1,445,655	1,887,010	2,795,483	3,020,380	8.0					
Sorghum	11,446	21,829	27,732	18,458	(33.4)					
Rice	30,258	41,929	51,656	49,410	(4.3)					
Millet	39,163	48,967	47,997	37,644	(21.6)					
Sunflower	15,405	33,653	26,420	21,954	(16.9)					
Groundnuts	84,598	120,564	164,602	139,388	(15.3)					
Soyabeans	59,177	118,794	111,888	116,539	4.2					
Seed Cotton	89,106	87,018	72,482	121,908	68.2					
Virginia Tobacco	15,910	18,487	22,074	27,146	23.0					
Burley Tobacco	7,471	8,758	9,809	11,141	13.6					
Mixed Beans	50,488	46,729	65,265	47,070	(27.9)					

195,456

Expected Crop Production 2007/2008 Agriculture Season to 2010/2011 Agriculture Season

Source: CSO, Agricultural Statistics

Wheat

The slower growth in the primary sector is attributed to the decline in mining output. Copper output declined from 767,008 metric tonnes in 2010 to 727,475 metric tonnes in 2011, while cobalt output marginally increased from 2,127 metric tonnes in 2010 to 2,137 metric tonnes in 2011. In the Other Mining and

113,242

Quarrying sector, though stone quarrying continues to record increased growth, there was no recorded production in the coal mining industry by the third quarter of 2011. As a result, the mining and quarrying industry shrank by 5.2 percent in 2011 compared to a growth of 15.2 percent in 2010.

237,336

172,256

37.8

#### Copper and Cobalt output, 2010 and 2011 (Metric tonnes)

Year	Period	Copper	Cobalt
2010	Q1	173,296	780
	Q2	189,528	414
	Q3	200,089	595
	Q4	204,096	339
	Total	767,008	2,127
2011	Q1	189,632	792
	Q2	189,436	646
	Q3	173,056	471
	Q4	175,350	228
	Total	727,475	2,137

Source: CSO, Industrial Production Statistics

The Services or Tertiary Sector grew by 7.6 percent in 2011 compared to a growth of 6.6 percent in 2010. The Transport and Communications industry had the largest contribution to growth, showing a 12.9

percent growth. The strong growth was mainly due to the sustained growth in the Telecommunications sub-industry as well as the Road Transport sub-industry.

### Levels of GDP and GDP per Capita

Zambia's GDP at current prices shows that the level of GDP grew from K77, 666.6 billion in 2010 to K93, 354.2 billion in 2011. In US dollar terms, the economy grew from US\$ 16.2 billion in 2010 to US\$19.6 billion in 2011.

GDP per capita increased from US\$1,241.0 in 2010 to US\$1,432.1 in 2011.

001	per capita	, 200, 2011			
	2007	2008	2009	2010	2011*
GDP by kind of economic activity (K'billions)	46,194.8	54,839.4	64,615.6	77,666.6	93,354.2
GDP in US\$ Million	11,541.43	14,638.85	12,805.79	16,190.66	19,206.6
GDP per capita (Kwacha)	3,798,753	4,378,122	5,010,191	5,953,056	6,960,594
GDP per capita (US Dollars)	949.1	1,168.7	992.9	1,241.0	1,432.1

#### GDP per Capita, 2007-2011

Source: CSO, National Accounts Statistics

\*Revised Estimates

## Structure of the Economy

The percentage share of each industry to GDP depicts the structure of the economy. The economy is dominated by the Services, or Tertiary Sector. In current prices, the Services Sector accounted for 44.3 percent of the total GDP in 2011. This was followed by the Secondary Sector which accounted for 33.7 percent of the total GDP. The Primary Sector accounted for 22.9 percent of the total GDP.

Within the Tertiary Sector, the Wholesale and Retail Trade industry accounted for the largest share of 14.0 percent, followed by the Community, Social and Personal Services (10.4 percent), and the Financial Institutions and Insurance industry (8.1 percent).

Within the Secondary Sector, Construction had the largest share of 22.2 percent, followed by Manufacturing (8.3 percent), Electricity, Gas and Water Supply (3.1 percent).

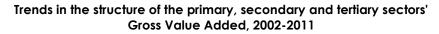
Within the Primary Sector, Agriculture, Forestry and Fishing accounted for the larger share (19.4 percent) compared to Mining and Quarrying (3.6 percent). The structure of the primary sector has not changed much in the last five years.

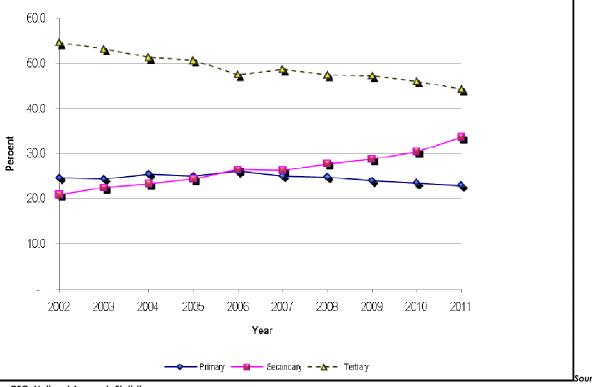
	2007	2008	2009	2010	2011*	Average
PRIMARY SECTOR	24.2	23.5	23.4	23.8	22.9	23.6
Agriculture, Forestry and Fishing	19.8	19.8	20.8	20.1	19.4	20.0
Mining and Quarrying	4.4	3.6	2.6	3.7	3.6	3.6
SECONDARY SECTOR	27.1	28.2	30.4	31.8	33.7	30.2
Manufacturing	9.7	9.4	9.3	8.7	8.3	9.1
Electricity, Gas and Water	2.9	2.8	2.8	2.8	3.1	2.9
Construction	14.5	16.1	18.3	20.2	22.2	18.3
TERTIARY SECTOR	46.3	46.3	45.9	45.5	44.3	45.6
Wholesale and Retail trade	16.0	15.6	15.3	14.4	14.0	15.1
Restaurants, Bars and Hotels	2.9	2.9	2.4	2.4	2.3	2.6
Transport, Storage and Communications	4.3	4.1	3.6	4.0	3.8	4.0
Financial Institutions and Insurance	7.9	8.0	8.6	8.7	8.1	8.2
Real Estate and Business services	5.8	5.7	5.7	5.5	5.7	5.7
Community, Social and Personal Services	9.4	10.0	10.3	10.5	10.4	10.1
Less: FISIM	(4.5)	(4.6)	(4.5)	(5.0)	(4.7)	(4.7)
TOTAL GROSS VALUE ADDED	93.1	93.4	95.2	96.1	96.2	94.8
Taxes less subsidies on Products	6.9	6.6	4.8	3.9	3.8	5.2
TOTAL G.D.P. AT MARKET PRICES	100.0	100.0	100.0	100.0	100.0	100.0

Percentage Share of GDP by Kind of Economic Activity, 2006-2011

Source: CSO, National Accounts Statistics \*Revised Estimates

Over the last ten years, there has been a shift in the structure of the economy. Notably, the secondary sector has increased its share of the economy from 20.9 percent in 2002 to 33.7 percent in 2011. This has been largely due to the increased importance of the construction industry in the economy. The primary sector has remained more or less the same, while there has been a decline in the share of the tertiary sector, from 54.5 percent in 2002 to 44.3 percent in 2011.





ce: CSO, National Accounts Statistics \*Revised Estimates

## LAYMAN AND STATISTICS: FEATURE ARTCLES

### Explaining the Geometric Mean Methodology in the New CPI

The Central Statistical Office launched a new methodology for calculating the Consumer Price Index (CPI) in January 2012. Among other differences, one of the fundamental differences with the old CPI methodology is that the new CPI uses the Geometric Mean to calculate price relatives of products.

In normal every day language, the mean is called *average*. This is a number that summarises a set of numbers. There are several kinds of averages, prominent among them are *arithmetic, geometric* and *harmonic* means.

Suppose I walk into Spar Arcades and purchase a packet of 1 kg of oranges for K3,000. Later I buy the same quantity of similar oranges for K4,000 in Shoprite Manda Hill. On my way home, my wife calls and asks me to buy more oranges in order for her to make fruit juice. So I make a stopover at Olympia market and purchase a 1 kg packet of oranges for K5,000. In total, I would have spent K12, 000 on the oranges.

If we ask for the average price of oranges whose accumulated cost is K12, 000, it is implied that we refer to the price such that, if the cost of all packs of oranges were equal to that number, then the total would also be K12, 000.

In our orange example, the average price would be K4,000, because if each pack cost K4,000, then the total cost would also be K12,000. This is the most common type of average or mean, called *arithmetic* mean. In every day language, we usually refer to this type of average.

The formula for calculating arithmetic means is well known and pretty straightforward. Let's get a little mathematical here, I apologise for subjecting you to the mathematics that you dreaded in secondary school.

To obtain the arithmetic average of *n* numbers *a*, we sum these numbers and then divide by *n*:

Arithmetic mean = 
$$\frac{a_1 + a_2 + \dots + a_n}{n}$$

Using the oranges example, I bought the oranges from 3 different outlets, thus *n* is 3;  $a_1 = 3000$ ;

 $a_2 = 4000$ ;  $a_3 = 5000$ . The arithmetic mean would therefore be:

$$Arithmetic mean = \frac{3000 + 4000 + 5000}{3} = 4000.$$

The key to understanding the difference with the other kinds of means, and their applications, is realising that in the oranges example, as in every case that uses the arithmetic mean, the "accumulated total" is built through *addition*. But there are other situations in which there is a total that is the result of a different operation.

Let us first consider the geometric mean.

*How is the geometric mean calculated?* It is similar to the arithmetic one, but products are used instead of sums, because that's how we construct the total in their case, and the <u>n</u>th root is used

instead of dividing by n, because the total is equal to the average multiplied n times, instead of adding up n times like with the arithmetic mean. Adding up n times is the same as multiplying by n, its inverse being divided by n, therefore we use division for the arithmetic average. In the case of the geometric mean, multiplying n times is the same as elevating to the nth power, which is the inverse of taking the *n*th root, thus we take the *n*th root for the geometric average.

To summarise, the formula for the geometric mean, or average, is:

geometric mean =  $\sqrt[n]{a_1 \times a_2 \times ... \times a_n}$ 

Back to the oranges example. The geometric mean of 3,000, 4,000 and 5,000 is:

*aeometric*  $mean = \sqrt[3]{3000 \times 4000 \times 5000} = 3.915$ 

Let us now consider the harmonic mean, which is the reciprocal of the arithmetic mean of reciprocals. Quite a mouthful of words, just read it again and you will understand that the first thing that we need to do is get the inverse of the numbers given, then we have to obtain the arithmetic average of the obtained reciprocals. Once we obtain this, we flip it again to obtain its inverse.

The formula for the Harmonic Mean will therefore be expressed as

$$H = \frac{1}{\frac{1}{n} \left(\frac{1}{a_1} + \frac{1}{a_2} + \dots + \frac{1}{a_n}\right)}$$

Back to the oranges example, this translates to

$$H = \frac{1}{\frac{1}{3}\left(\frac{1}{3000} + \frac{1}{4000} + \frac{1}{5000}\right)} = 3,830$$

Thus, for the same packets of oranges, the arithmetic, geometric and harmonic averages are different. The arithmetic average is K4,000, the geometric average is K3,915 while the harmonic average is K3.830.

What is described above is a simplistic look at the use of the arithmetic, geometric and harmonic means. For those of you who deal with financial data such as stocks, interest rates, and inflation, it is often more convenient to analyse the *changes in prices* rather than the prices themselves. This is because consecutive prices may be highly correlated and the variances of prices often increase with time.

Let's go back to the oranges example: Suppose the orange prices that I guoted earlier were for the month of January. When I go back to Spar in February, I find that the orange prices have gone up to K3,500; while in Shoprite the price is now K4,500 and the lady at Olympia market maintained the price at K5,000.

Let us summarise that information of the changes in prices to ensure we are on the same page.

Retail Outlet	Jan price (K)	Feb price (K)	Price change
Spar	3,000	3,500	1.167
Shoprite	4,000	4,500	1.125
Olympia market	5,000	5,000	1.000
The Monthly			13

The arithmetic average change in prices of oranges between January and February is calculated as:

Arithmetic mean = 
$$\frac{1.167 + 1.125 + 1.000}{3} = 1.097$$

That is, 9.7 percent.

Let us now use the geometric mean.

The geometric average price of the oranges between January and February will be:

geometric mean = 
$$\sqrt[5]{1.167 \times 1.125 \times 1.000} = 1.095$$

That is, 9.5 percent.

So while the change in average prices using the arithmetic means gives 9.7 percent, the change in prices using the geometric mean yields 9.5 percent.

Let me now explain the harmonic mean before I lose you completely. The *harmonic mean*, as earlier explained, is the reciprocal of the arithmetic mean of reciprocals. Using the oranges example, the arithmetic mean of the reciprocals h is

$$h = \frac{\left(\frac{1}{1.167} + \frac{1}{1.125} + \frac{1}{1.000}\right)}{3}$$

The Harmonic mean H would therefore be the reciprocal of the above figure h.

$$H = \frac{1}{h} = \frac{1}{0.915262} = 1.093$$

That is, 9.3 percent.

So, the arithmetic mean is 9.7 percent, the geometric mean is 9.5 percent, while the harmonic mean is 9.3 percent. In general, the arithmetic mean gives higher estimates, while the harmonic mean gives lower estimates. The geometric mean is the middle-ground average. This means that the arithmetic mean is likely to over-state inflation, while the harmonic mean is likely to under-state inflation. It therefore makes sense to use the geometric mean, which is relatively less sensitive to outliers or extreme values in the data.

In order to aggregate price relatives at the elementary level of price quotations, the CSO has adopted the use of the geometric mean as opposed to the arithmetic mean that was previously employed. This is in line with international best practices and standards. The likely outcome is that, compared to the old CPI series, the new series gives relatively lower rates of inflation. It is worth noting, however, that the differences are not entirely due to the change from arithmetic to geometric mean.

The differences between the Old and the Revised CPI methodologies are summarized below.

Item/ Area	Old CPI	Revised CPI
Basket of products	357	438
Classification system	8 Divisions	12 Divisions (COICOP)
Weights	Derived from 1993/1994 Household Budget Survey (HBS)	Derived from 2002/2003 LCMS III HBS TYPE
Compilation level	Metropolitan Low Income Group, Metropolitan High Income Group, and Non-Metropolitan Group.	Provincial CPIs
Index reference period (Base Period)	1994	2009
Methodology for calculating item indices	Arithmetic mean	Geometric mean
Price reference period	Base price reference period	Previous month price
Districts	45	All districts in Zambia
Outlets	2115	About 3,000
Software for Data Entry, Processing and Reporting	Dbase IV, DOS based	Microsoft Access, with Visual Basic for Applications (Windows based)

**Comparison of the Old and New Consumer Price Index** 

### Demystifying the Rate of Inflation

When the price of a grocery item like bread goes up overnight, it affects your household spending. The result 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).

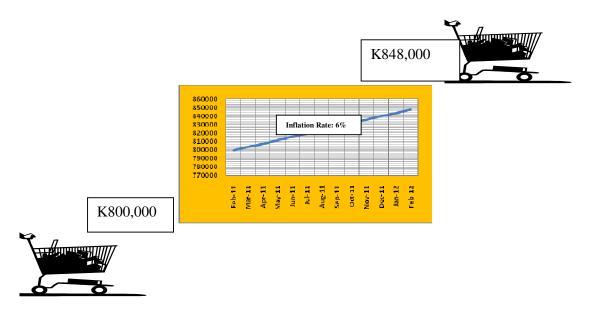
The CPI is a series of numbers published on the last Thursday of every month by the CSO. Its numbers represent the price, at a set time, of a representative 'basket' of goods and services a typical household buys.

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**.

The change shown by comparing index numbers is usually expressed as a percentage – for example, when the media reports that 'the inflation rate has increased by 6.0 percent in February 2012', this means that, compared to February 2011, consumer prices in the basket of goods have gone up by an average of 6.0 percent in February 2012.

To illustrate this, compare the effect of the inflation rate on the price of a trolley of goods. In February 2011, the goods cost K800,000. In February 2012, affected by the year's inflation rate of 6.0 percent, the same selection of goods cost K848,000.



Within this basket of goods, it is possible that the prices of some of the products would have reduced, while the prices of some other products would have gone up. When the CSO reports that the inflation rate has increased by 6.0 percent, it means on average, there has been a general rise in the prices of the basket of goods.

If, hypothetically, the same basket of goods now costs K848,500 in March 2012, this will be compared to its cost in March 2011, which in our illustration is K804,000. The annual rate of inflation for March 2012 is obtained by comparing the percentage increase between the cost in March 2011 and March 2012. This is 5.5 percent.

In comparing the two months in the media, there will be a big headline that says "March Inflation Drops" and it will be reported that the inflation rate has reduced from 6.0 percent in February 2012 to 5.5 percent in March 2012. Some people interpret this to mean the prices of goods have reduced. Consumer groups would cry foul and call CSO all sorts of names. Other consumers would question CSO's motive and credibility because they would not have seen any reduction in the prices at their local supermarket! This is a classic failure to interpret percentage changes.

The question is 'Has CSO reported a reduction in the price of the typical basket of goods that it monitors?' The simple answer to that question is definitely 'No'. The very fact that CSO reports the rate of *inflation* means the general level of prices has indeed gone up. What CSO has reported is a *reduction in the rate* of inflation. The rate at which the prices of goods has increased in March (5.5 percent) is lower than the rate at which the prices increased in February (6.0 percent). But the bottom line is the price for the basket of goods did indeed increase.

The main thing to remember is that these percentages are calculated from actual values. If in January, I bought a cob of maize at K7,500, then in February the price goes up to K8,000, the percentage increase in the price is 6.7 percent. If in March, the cob price increases to K8,250, the percentage price increase is 3.1 percent. We would then say the *rate* of price increase reduced from 6.7 percent in February to 3.1 percent in March. This does not mean that the price of the maize cob reduced! The simple interpretation is that the price of the maize cob increased in March, but not as high as it did in February.

## **SELECTED SOCIO-ECONOMIC INDICATORS**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010*
Total Population	9,885,591	10,089,492	10,409,441	10,744,380	11,089,691	11,441,461	11,798,678	12,160,516	12,525,791	12,896,830	13,046,508
Population Growth Rate	2.5	3.1	3.1	3.1	3.1	3.1	3	3	2.9	2.9	2.8
Life Expectancy at Birth	50	51.8	51.9	52.4	52.4	52.6	51.9	51.4	51.3	51.2	51.3
POPULATION BY PRO	VINCE										
Central	1,012,257	1,032,574	1,066,992	1,103,387	1,141,256	1,180,124	1,219,980	1,260,491	1,301,776	1,343,835	1,267,803
Copperbelt	1,581,221	1,611,569	1,662,155	1,714,225	1,767,165	1,820,443	1,874,081	1,927,576	1,980,824	2034012	1,958,623
Eastern	1,306,173	1,348,070	1,391,690	1,436,120	1,482,290	1,530,118	1,579,960	1,631,890	1,684,910	1,740,180	1,707,731
Luapula	775,353	791,067	817,326	845,076	873,969	903,746	934,317	965,605	997,579	1,030,572	958,976
Lusaka	1,391,329	1,413,010	1,453,690	1,495,730	1,538,000	1,579,769	1,620,730	1,660,070	1,697,730	1,733,830	2,198,996
Northern	1,258,696	1,277,250	1,315,650	1,357,540	1,401,340	1,445,730	1,490,330	1,534,170	1,577,310	1,619,980	1,759,600
North-western	583,350	596,010	616,496	638,004	660,322	683,367	707,074	731,351	756,261	781,800	706,462
Southern	1,212,124	1,235,134	1,275,470	1,318,161	1,362,382	1,407,433	1,453,324	1,499,462	1,545,880	1,592,864	1,606,793
Western	765,088	774,929	795,247	816,983	839,757	863294	887,540	912,226	937,419	963,107	881,524

#### **PROJECTED MID-YEAR POPULATION 2000-2010**

Source: CSO, Population Projections Report

Note: 2000 figures are from the 2000 Census of Population and Housing while the 2001 to 2009 figures are Population Projections from the Projections Report. The 2010 figures are from 2010 Census of Population and Housing Preliminary Report.

PERCENTAGE CHANGES IN G.										0000	0010	0011*
KIND OF ECONOMIC ACTIVITY	2000	2001	2002	2003 5.0	2004	2005	2006	2007	2008	2009	2010	2011*
Agriculture, Forestry and Fishing	<b>1.6</b>	(2.6)	(1.7) (6.3)	<b>5.0</b> 8.0	<b>4.3</b> 6.1	(0.6)	<b>2.2</b> 3.0	<b>0.4</b> (2.7)	<b>2.6</b> 1.9	<b>7.2</b> 12.4	<b>6.6</b> 13.6	<b>7.7</b> 13.3
Agriculture		(6.0)		4.3		(4.0)			3.7		3.7	3.7
Forestry	4.0	4.3	4.3		4.3 (0.7)	3.6 0.5	1.4 1.8	3.7		3.7		
Fishing	(1.0)	(5.0)	(0.7)	(0.7)			7.3	1.8	1.8	1.8	(7.0)	(2.0)
Mining and Quarrying	0.1	<b>14.0</b> 15.0	<b>16.4</b> 17.1	<b>3.4</b> 3.3	<b>13.9</b> 13.5	<b>7.9</b> 7.1	<b>7.3</b> 9.0	<b>3.6</b> 4.4	<b>2.5</b> 2.5	<b>20.3</b> 19.7	<b>15.2</b> 16.0	(5.2)
Metal Mining	(0.3)		(13.0)			42.9	9.0 (45.8)			99.6	(48.8)	(5.3)
Other mining and quarrying	13.3	(15.0) <b>1.9</b>	· /	10.7	35.8 <b>7.5</b>		· /	(45.5) <b>1.7</b>	(3.5)			7.4
PRIMARY SECTOR	1.1	4.2	3.8 5.7	4.5 7.6	7.5 4.7	2.5 2.9	4.1 5.7		2.5	12.4	10.2	2.0
Manufacturing	3.6	<b>4.2</b> 5.3	<b>5.7</b> 5.4	<b>7.6</b> 8.6	<b>4.7</b> 5.8	3.6	<b>5.7</b> 8.9	<b>3.0</b> 7.6	<b>1.8</b> 3.0	<b>2.2</b> 4.9	<b>4.2</b> 7.4	<b>7.7</b> 9.0
Food, Beverages and Tobacco	0.6 2.2	5.3 2.3	5.4 6.2	8.6 3.2	5.8 (1.9)	3.6 (2.9)	(1.3)	(19.5)	(23.6)	4.9 (20.0)	(56.8)	9.0
Textile, and leather industries	(0.3)	2.3	6.2 7.5			(2.9) 3.6	0.7	3.7	12.1	2.6		
Wood and wood products		3.8	2.2	11.4	4.2		0.7	0.7		6.2	13.4	6.5
Paper and Paper products	(1.3)			8.2	2.5	10.6		4.2	29.3		22.7	17.5
Chemicals, rubber and plastic products	41.2	4.3 3.5	10.0 1.7	4.9 14.9	8.5	3.2 7.4	4.6		5.2 5.0	(0.3)	2.7	6.8
Non-metallic mineral products	4.5		4.3	14.9	14.4 3.1	(2.0)	(5.2)	2.3 (4.8)	23.0	11.7	13.0	23.1
Basic metal products	4.3	(18.0)					1.9 5.0			(4.8)	(2.0)	(1.4)
Fabricated metal products	11.3	(8.0)	(4.0)	5.3	4.8	7.4 <b>5.4</b>	5.0 10.5	7.8 <b>1.0</b>	(2.5)	(3.4)	12.8	18.9
Electricity, Gas and Water	1.2	12.6	(5.2)	0.4	(1.7)	5.4 21.2	10.5	20.0	(1.2)	6.8	7.4	8.2
Construction SECONDARY SECTOR	6.5 4.0	11.5 7.5	17.4 7.2	21.6 10.8	20.5 9.1	10.0	9.8	10.0	8.7 4.7	9.5 6.2	8.1 6.5	8.5 8.2
Wholesale and Retail Trade	2.3	7.5 5.4	5.0	6.1	5.0	2.4	2.0	2.4	2.7	2.3	4.2	7.2
Restaurants. Bars and Hotels	12.3	24.4	4.9	6.9	6.4	2.4 11.7	16.1	<u> </u>	5.0	(13.4)	<u>4.2</u> 10.2	7.2
Transport, Storage and Communications	2.4	24.4	<u>4.9</u> 1.8	<u>6.9</u> 4.8	6.4 6.4	11.7	22.1	<u>9.6</u> 19.2	15.8	7.6	10.2	12.9
Rail Transport	<b>2.4</b> 3.6	<b>2.0</b> 7.6	6.0	(8.1)	<b>0.4</b> (1.8)	(11.6)	(2.6)	(18.7)	(20.2)	(23.8)	13.1	(17.8)
Road Transport	1.9	0.5	1.9	3.9	4.2	6.3	6.4	6.4	13.2	13.3	6.3	9.3
Air Transport	6.3	10.6	(8.4)	3.9	18.1	10.8	33.5	24.1	13.7	(23.4)	19.1	12.8
	0.6	0.6	7.9	10.0	5.0	23.2	40.5	33.6	21.1	19.4	20.0	16.0
Financial Institutions and Insurance	(0.6)	0.8	3.5	3.5	3.5	3.3	<b>4</b> 0.3 <b>4</b> .0	<u> </u>	8.7	5.2	<u> </u>	4.9
Real Estate and Business services	17.0	3.5	4.4	4.0	4.0	3.2	3.2	3.1	3.0	2.8	3.0	2.9
Community, Social and Personal Services	(0.5)	5.8	1.6	1.6	0.6	11.4	9.0	12.5	11.7	8.6	5.3	8.4
Public Administration & Defence/Public sanitary services	(0.7)	1.0	(1.0)	0.2	0.2	6.2	(8.7)	14.8	2.2	0.4	(3.1)	10.6
Education	(0.7)	13.5	7.0	3.0	0.2	22.2	35.3	13.6	19.6	15.2	11.8	7.5
Health	(0.7)	16.5	1.0	2.5	(0.8)	(2.2)	5.2	1.0	18.3	7.7	7.2	13.3
Recreation, Religious, Culture	(0.7)	10.0	(2.0)	4.5	4.3	34.1	22.8	9.3	26.7	17.7	5.0	2.8
Personal Services	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
TERTIARY SECTOR	<b>4.1</b>	<b>4.7</b>	3.8	<b>4.5</b>	<b>4.2</b>	5.4	6.7	<b>7.1</b>	7.2	3.9	6.6	7.6
Less: FISIM	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.3	2.3	2.3
TOTAL GROSS VALUE ADDED	3.4	4.6	4.6	6.0	6.2	5.8	7.0	6.7	5.7	6.4	7.6	6.6
Taxes less subsidies on Products	4.6	7.0	(6.7)	(2.7)	(2.7)	(0.1)	(3.1)	(0.3)	5.7	6.4	7.6	6.6
TOTAL G.D.P. AT MARKET PRICES	3.5	4.9	3.3	5.1	5.4	5.3	6.2	6.2	5.7	6.4	7.6	6.6
	0.5	/	0.0	0.1	J.+	5.5	0.2	0.2	5.7	0.4	7.0	0.0

### PERCENTAGE CHANGES IN G.D.P. BY KIND OF ECONOMIC ACTIVITY - CONSTANT 1994 PRICES

The Monthly

#### Source: CSO; National Accounts \*Revised Estimates

GDP BY KIND OF ECONOMIC ACTIVITY AT CURRENT PRICES (K' BILLION)

	GDIDIR		CONOM		TALCO	KKENI PRIC						
KIND OF ECONOMIC ACTIVITY	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Agriculture, Forestry and Fishing	2,002.2	2,582.0	3,247.4	4,244.6	5,568.2	6,723.6	7,800.2	9,139.5	10,863.8	13,461.4	15,642.3	18,072.4
Agriculture	561.1	627.3	749.8	1,008.2	1,249.5	1,421.7	1,537.0	1,575.1	1,826.4	2,344.3	2,801.4	3,329.4
Forestry	1,285.0	1,778.5	2,274.3	2,960.3	3,998.5	4,920.3	5,855.7	7,127.7	8,531.6	10,528.8	12,265.5	14,151.6
Fishing	156.1	176.3	223.3	276.1	320.2	381.6	407.5	436.7	505.8	588.2	575.3	591.5
Mining and Quarrying	416.1	518.9	575.1	564.8	809.6	1,030.9	1,612.5	2,037.2	1,998.9	1,682.1	2,837.8	3,346.3
Metal Mining	407.9	511.3	568.8	558.2	798.3	1,011.7	1,597.5	2,027.2	1,989.8	1,669.3	2,828.1	3,333.4
Other Mining and Quarrying	8.2	7.6	6.3	6.6	11.3	19.1	15.0	9.9	9.2	12.9	9.6	12.8
PRIMARY SECTOR	2,418.4	3,101.0	3,822.5	4,809.4	6,377.7	7,754.5	9,412.8	11,176.7	12,862.7	15,143.5	18,480.0	21,418.7
Manufacturing	1,024.6	1,293.1	1,693.6	2,241.0	2,827.7	3,430.2	4,015.7	4,487.4	5,149.6	6,016.9	6,770.8	7,769.1
Food, Beverages and Tobacco	613.9	768.4	1,033.4	1,397.2	1,726.6	2,121.0	2,423.5	2,745.1	3,218.4	3,859.0	4,358.0	4,982.6
Textile, and Leather Industries	180.4	224.2	284.5	352.9	450.7	500.4	630.8	611.4	506.7	445.2	214.5	98.7
Wood and Wood Products	64.1	89.9	118.4	164.7	222.2	273.4	323.2	393.5	509.2	621.6	791.9	937.7
Paper and Paper products	40.0	55.1	69.0	93.1	123.6	162.4	191.3	226.1	337.3	426.4	587.7	768.2
Chemicals, rubber and plastic products	85.8	111.3	142.6	178.9	231.7	281.2	331.2	372.4	432.6	519.1	613.2	700.5
Non-metallic mineral products	14.3	18.5	21.9	30.0	41.0	51.8	55.3	61.1	70.8	95.1	123.7	162.8
Basic metal products	3.2	2.9	2.8	3.1	4.0	4.7	6.9	8.0	9.4	6.2	8.9	11.0
Fabricated metal products	22.9	23.0	21.0	21.0	27.7	35.2	53.6	69.9	65.2	44.2	72.8	107.7
Electricity, Gas and Water	328.0	445.3	488.3	595.1	694.7	922.7	1,165.9	1,345.0	1,512.4	1,779.8	2,201.8	2,910.4
Construction	500.5	728.6	1,067.7	1,590.0	2,321.5	3,216.4	4,703.7	6,692.7	8,811.4	11,819.5	15,703.6	20,737.3
SECONDARY SECTOR	1,853.1	2,466.9	3,249.6	4,426.1	5,843.9	7,569.2	9,885.3	12,525.1	15,473.4	19,616.2	24,676.1	31,416.8
Wholesale and Retail trade	1,879.8	2,340.5	3,004.1	3,873.8	4,843.7	5,868.9	6,524.7	7,395.5	8,539.1	9,908.2	11,204.2	13,056.3
Restaurants, Bars and Hotels	207.0	315.9	406.8	527.7	670.9	894.0	1,120.1	1,354.2	1,610.8	1,545.2	1,838.6	2,141.2
Transport, Storage and Communications	635.7	852.6	1,055.9	1,058.2	1,252.3	1,395.6	1,629.2	1,984.4	2,248.9	2,355.2	3,076.5	3,553.0
Rail Transport	54.9	72.7	82.7	89.5	100.8	93.8	94.7	91.9	79.0	66.2	105.9	96.6
Road Transport	255.2	311.3	334.3	393.9	464.0	543.0	640.4	755.7	891.8	1,052.6	1,242.6	1,467.9
Air Transport	99.0	133.7	129.7	152.7	203.0	243.8	356.0	488.6	573.4	453.6	611.0	737.8
Communications	226.6	334.9	509.1	422.1	484.6	515.0	538.2	648.3	704.8	782.7	1,117.0	1,250.6
Financial Intermediaries and Insurance	982.2	1,238.8	1,493.1	1,847.7	2,282.7	2,771.5	3,246.9	3,647.2	4,373.6	5,534.6	6,745.1	7,568.8
Real Estate and Business services	660.6	832.8	1,041.2	1,341.2	1,691.8	1,979.4	2,296.4	2,678.2	3,138.4	3,671.6	4,306.1	5,326.3
Community, Social and Personal Services	951.3	1,297.1	1,478.4	1,828.9	2,122.8	2,806.9	3,462.2	4,324.1	5,465.5	6,649.0	8,148.6	9,695.3
Public Administration and Defence/Public Sanitary Services	500.1	610.2	646.8	752.2	797.3	1,002.2	983.0	1,258.3	1,446.1	1,647.3	1,732.7	2,082.4
Education	256.1	394.3	496.9	688.6	867.7	1,254.2	1,842.6	2,335.3	3,092.8	3,890.8	4,694.2	5,542.0
Health	107.0	175.5	203.6	252.4	292.8	338.8	389.9	445.2	576.9	690.9	1,246.2	1,522.9
Recreation, Religious, Culture	36.4	52.7	48.5	29.1	31.7	50.3	67.1	81.8	114.7	147.4	167.1	188.6
Personal services	51.7	64.4	82.7	106.6	133.3	161.5	179.6	203.5	235.0	272.7	308.3	359.3
TERTIARY SECTOR	5,316.6	6,877.8	8,479.5	10,477.5	12,864.2	15,716.4	18,279.4	21,383.6	25,376.4	29,663.9	35,319.1	41,340.9
Less: FISIM	(564.4)	(711.9)	(858.1)	(1,061.8)	(1,311.8)	(1,592.8)	(1,865.9)	(2,096.0)	(2,513.4)	(2,922.4)	(3,876.3)	(4,349.6)
TOTAL GROSS VALUE ADDED	9,023.6	11,733.7	14,693.6	18,651.2	23,774.0	29,447.4	35,711.6	42,989.4	51,199.1	61,501.2	74,599.0	89,826.7
Taxes less subsidies on Products	1,097.7	1,460.0	1,630.8	1,899.9	2,219.1	2,594.2	2,849.2	3,205.4	3,640.4	3,114.3	3,067.6	3,527.5
TOTAL G.D.P. AT MARKET PRICES	10,121.3	13,193.7	16,324.4	20,551.1	25,993.1	32,041.510	38,560.8	46,194.8	54,839.4	64,615.6	77,666.6	93,354.2
									.,			

			м	INING					MAN	UFACTURING					
PERIOD	TOTAL INDEX	TOTAL MINING	Coal	Non- ferrous Ore	Stone Quarrying	TOTAL MANUFACTURING	Food, Beverages & Tobacco	Textile, Clothing & Leather	Wood & Wood Products	Paper & Paper Products	Chemicals, Rubbers & Plastics	Non- metallic Mineral Products	Basic Metal Industries	Fabricated Metal Products	TOTAL ELECTRICITY
WEIGHT	1.000	0.350	0.005	0.242	0.103	0.511	0.235	0.060	0.006	0.017	0.059	0.025	0.009	0.100	0.139
2010 Q1	180.1	287.0	0.0	272.7	333.4	117.2	146.0	26.3	248.2	136.4	136.9	150.8	80.3	75.8	142.4
2010 Q2	186.9	273.4	0.0	261.7	312.9	138.5	193.6	22.8	261.2	171.5	98.6	189.8	84.8	80.6	147.2
2010 Q3	190.1	272.4	0.0	261.9	308.9	146.7	204.6	3.5	177.9	120.2	87.5	199.6	78.4	126.7	142.5
2010 Q4	193.1	260.6	0.0	248.3	301.0	160.2	230.3	3.6	183.4	159.9	90.8	211.1	55.4	125.4	144.2
2010	187.5	273.3	0.0	261.1	314.1	140.6	193.6	14.0	217.7	147.0	103.5	187.8	74.7	102.1	144.1
2011 Q1	193.9	307.0	0.0	297.0	343.9	125.1	153.0	14.1	261.7	169.3	154.5	178.8	79.0	83.5	162.4
2011 Q2	197.8	279.8	0.0	264.5	328.1	152.0	212.4	4.5	275.3	184.1	99.0	233.1	83.6	101.9	159.9
2011 Q3*	198.3	260.7	0.0	226.1	353.6	166.3	227.5	3.4	194.8	149.5	91.5	253.0	77.3	151.2	159.0

#### **QUARTERLY INDEX OF INDUSTRIAL PRODUCTION – ZAMBIA**

\* Preliminary

### PERCENTAGE CHANGE IN THE 2011 QUARTERLY INDEX OF INDUSTRIAL PRODUCTION - ZAMBIA

			MI	NING					MAN	UFACTURING					
PERIOD	TOTAL INDEX	TOTAL MINING	Coal	Non- ferrous Ore	Stone Quarrying	TOTAL MANUFACTURING	Food, Beverages & Tobacco	Textile, Clothing & Leather	Wood & Wood Products	Paper & Paper Products	Chemicals, Rubbers & Plastics	Non- metallic Mineral Products	Basic Metal Industries	Fabricated Metal Products	TOTAL ELECTRICITY
WEIGHT	1.000	0.350	0.005	0.242	0.103	0.511	0.235	0.060	0.006	0.017	0.059	0.025	0.009	0.100	0.139
2010 Q1	6.6	7.8	(100.0)	8.5	6.6	5.0	6.6	(42.2)	13.1	21.2	(0.1)	10.3	(2.1)	14.1	5.6
2010 Q2	10.0	10.6	(100.0)	14.2	5.3	9.1	9.2	(21.9)	13.4	29.8	(0.3)	14.0	(0.2)	14.2	10.8
2010 Q3	11.4	6.1	(100.0)	25.7	4.2	5.7	4.0	(77.2)	9.7	24.4	1.8	11.6	1.8	16.2	7.2
2010 Q4	10.7	14.2	(100.0)	19.4	5.2	6.8	9.4	(91.0)	17.4	15.8	12.4	15.4	(9.3)	8.1	12.1
2010	9.7	12.3	(100.0)	16.5	5.3	6.7	7.4	(56.8)	13.4	22.7	2.8	13.0	(2.0)	12.8	8.9
2011 Q1	7.7	6.9	(100.0)	8.9	3.2	6.7	4.8	(46.6)	5.4	24.1	12.8	18.6	(1.6)	10.2	14.0
2011 Q2	5.8	2.4	(100.0)	1.1	4.9	9.7	9.7	(80.1)	5.4	7.4	0.5	22.8	(1.4)	26.4	8.7
2011 Q3*	4.3	(4.3)	(100.0)	(13.7)	14.5	13.4	11.2	(0.7)	9.5	24.3	4.5	26.7	(1.3)	19.3	11.6

\* Preliminary

#### **INFLATION TRENDS 2000 - 2009**

Year	End of Year Inflation
1990	110.6
1991	99.7
1992	180.7
1993	128.1
1994	38.3
1995	46.0
1996	35.2
1997	18.6
1998	30.6
1999	20.6
2000	30.1
2001	18.7
2002	26.7
2003	17.2
2004	17.5
2005	15.9
2006	8.2
2007	8.9
2008	16.6
2009	9.9
2010	6.5
2011	6.0

Source: CSO, Prices Statistics

## ZAMBIA'S TRADE FLOWS IN ABSOLUTE ZAMBIAN KWACHA (2000 TO 2011)

Flow Year	Imports(cif)	Domestic Exports(fob)	Re-Exports(fob)	Total Exports(fob)	Trade Balance
2000	2,751,563,199,592	2,680,166,733,376	36,390,914,760	2,716,557,648,136	-35,005,551,456
2001	3,900,496,869,495	3,523,388,830,726	13,818,082,693	3,537,206,913,419	-363,289,956,076
2002	4,734,304,934,590	4,046,573,003,139	24,035,820,066	4,070,608,823,205	-663,696,111,385
2003	7,444,669,756,553	4,614,154,833,843	27,918,721,735	4,642,073,555,578	-2,802,596,200,975
2004	10,325,503,347,652	7,486,745,995,064	59,170,839,070	7,545,916,834,134	-2,779,586,513,518
2005	11,444,687,982,620	9,556,350,699,041	55,238,218,023	9,611,588,917,064	-1,833,099,065,556
2006	11,063,138,110,907	13,388,355,650,002	22,808,958,125	13,411,164,608,127	2,348,026,497,220
2007	15,945,376,837,943	18,301,362,191,730	97,855,426,894	18,399,217,618,625	2,453,840,780,682
2008	18,479,642,802,328	17,951,791,468,707	701,848,350,726	18,653,639,819,433	173,997,017,105
2009	19,123,920,627,951	20,324,345,158,885	1,052,545,471,859	21,376,890,630,744	2,252,970,002,793
2010	25,507,487,313,137	32,876,095,550,370	1,623,955,907,893	34,500,051,458,263	8,992,564,145,126
2011	34,952,221,308,124	42,035,955,496,346	1,796,262,816,977	43,832,218,313,322	8,879,997,005,198
Total:	165,673,013,090,892	176,785,285,611,229	5,511,849,528,821	182,297,135,140,050	16,624,122,049,158

## ZAMBIA'S TRADE FLOWS IN ABSOLUTE US DOLLAR (2000 TO 2011)

Flow Year	Imports(cif)	Domestic Exports(fob)	Re-Exports(fob)	Total Exports(fob)	Trade Balance
2000	871,386,492	857,162,791	12,322,625	869,485,416.00	-1,901,076
2001	1,079,955,769	974,976,195	3,812,082	978,788,277.00	-101,167,492
2002	1,103,420,711	938,812,212	5,704,981	944,517,193.00	-158,903,518
2003	1,574,300,779	973,386,279	5,919,576	979,305,855.00	-594,994,924
2004	2,161,774,011	1,569,772,851	12,463,536	1,582,236,387.00	-579,537,624
2005	2,574,917,607	2,164,120,186	12,212,327	2,176,332,513.00	-398,585,094
2006	3,027,310,787	3,674,763,391	6,824,871	3,681,588,262.00	654,277,475
2007	4,006,998,096	4,591,793,327	25,682,698	4,617,476,025.00	610,477,929
2008	5,061,390,791	4,909,524,577	189,326,707	5,098,851,284	37,460,493
2009	3,831,581,658	4,102,130,891	212,500,100	4,314,630,991	483,049,333
2010	5,321,002,628	6,863,323,917	337,627,232	7,200,951,149	1,879,948,521
2011	7,177,669,615	8,643,678,779	371,709,764	9,015,388,543	1,837,718,928
Total:	37,791,708,944	40,263,445,396	1,196,106,499	41,459,551,895	3,667,842,951

## Surveys/Activities being undertaken

- 2010 Census of Population and Housing Data Analysis and Report writing
- Economic Census Phase II Training of Field Staff
- Sample Vital Registration with Verbal Autopsy (SAVVY) Report writing
- Maternal Mortality Survey Data Collection

## Available

- 2010/2011 Crop Forecasting Survey
- 2009 Zambia Sexual Behaviour Survey (ZSBS)
- Employment and Earnings Inquiry Report, 2009
- A National Accounts Statistics Bulletin No.9 2005
- Labour-Force Survey Report, 2008
- 2007 Zambia Demographic and Health Survey (ZDHS)
- 2010 Census of population and Housing Preliminary Report (both Hard and soft copy)
- 2010 Selected Socio-Economic Indicators Report
- 2010 Zambia In Figures

Subscribe for your free electronic copy of "The Monthly" online at **www.zamstats.gov.zm** *The Editorial Team would like to thank all Media Institutions and Users of.....* 

## **\*\*The #Ionthly Bulletin\*\***

Thank you for supporting us

## Secretariat

John Kalumbi
Peter Mukuka
Richard Banda
Linda N. Chonya
Anthony Nkole
Perry Musenge
Petronella Kaputu
Chisuwa S. Nalishuwa
Daniel Chipaila
George Mhango

- Director
- Deputy Director
- Research and Marketing Manager
- Senior Research Officer
- Desktop Publishing Officer
- Assistant Desktop Publishing Officer
- Press Liaison Officer
- a Assistant Field Co-ordinator
  - Statistician
  - Sales Officer

## **Editorial Team**

John Kalumbi Peter Mukuka Modesto Banda William Mayaka Goodson Sinyenga Shebo Nalishebo Josephine Chewe Gerson Banda Palver Sikanyiti Linda Nyasulu

- Director
- Deputy Director (IRD)
- Deputy Director (AG)
- Deputy Director (SOC)
- Deputy Director (ECON)
- Statistician
- Statistician
- Statistician
- Statistician
- Gender Analyst