

REPUBLIC OF RWANDA



NATIONAL INSTITUTE OF STATISTICS OF RWANDA

**CONSUMER PRICE INDEX (C.P.I.)
Kigali – September 2007**
CAUTION

The National Institute of Statistics of Rwanda is very pleased to deliver to users the new Consumer Price Index (CPI) based in 2003 that replaces the previous one which was based in 1989. **The Index is published every month by the 15th.**

The **consumer price index (CPI)** in September has risen **0.74%** compared to last month. The annual inflation rate now stands at **8.04%**, (September 2007 compared to September 2006).

The **core inflation** – which excludes fresh produce and energy prices – went up slightly over the month by **0.41%**, and now stands at **9.70%** as compared to September 2006.¹

Figure one on page two shows these data over time.

The **annual average CPI** of the last twelve months (October 2006 to September 2007) increased by **10.0%** when compared to the average of the index in the previous twelve months (October 2005 to September 2006).

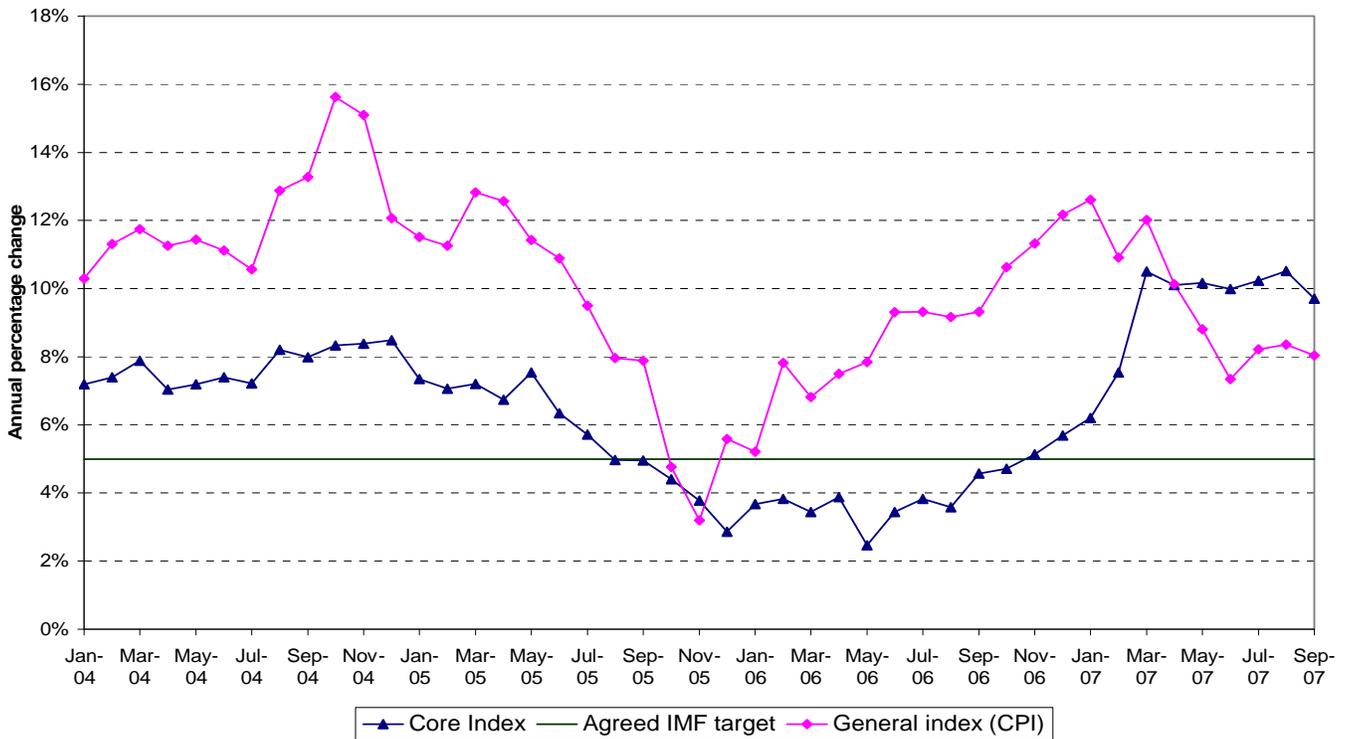
The **annual average core index** of the last twelve months (October 2006 to September 2007) increased **8.4%** when compared to the average of the index in the previous twelve months (October 2005 to September 2006).

The second figure on page two shows the annual average time series.

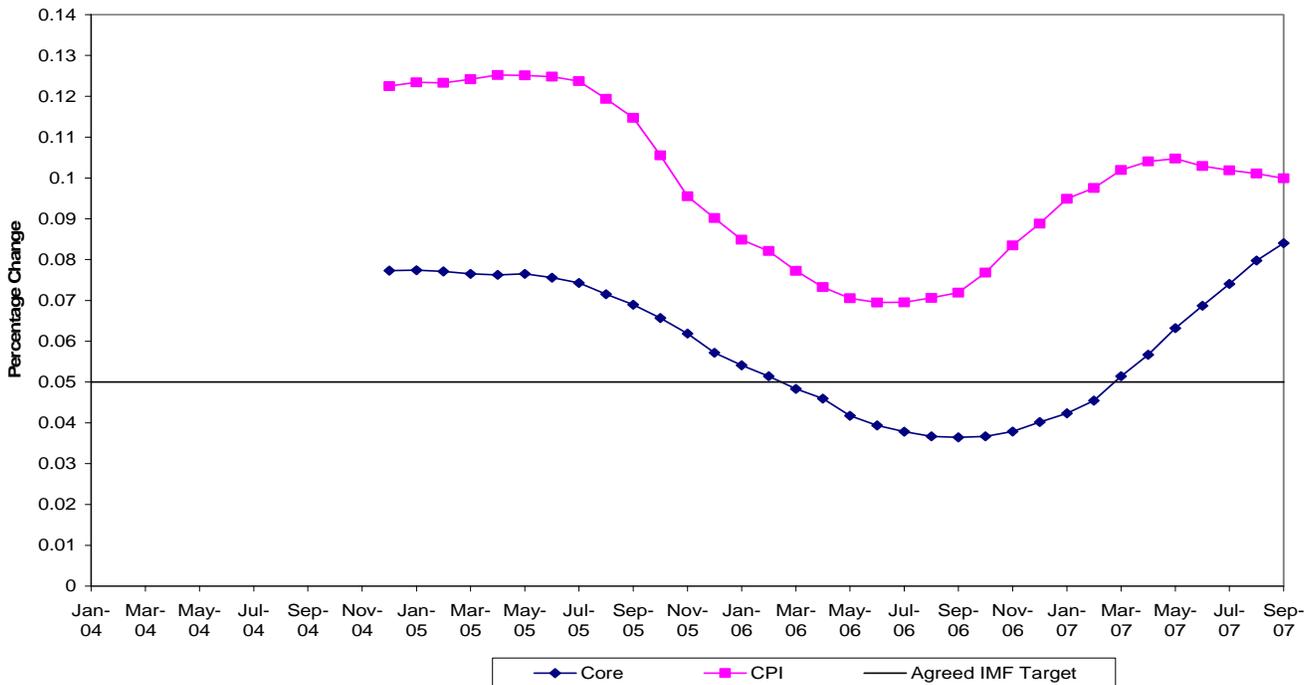
Please see section 'CPI and Core Inflation (Annual Average Percentage Change)' for more details on annual average inflation rates.

¹ Core inflation is a measure of inflation which excludes items that face volatile price movements. Therefore, it records the underlying movement of prices in the economy without taking into account the large swings in prices of seasonal food production and any prices shocks to energy.

Annual changes (Comparison with the same month of the previous year)



CPI and Core Inflation (Annual Average Percentage Change)



Note: Data not available before December 2004 for annual averages.

The main upward pressure on monthly changes was a result of rising *food and non-alcoholic beverages* prices, (+1.69%). In particular the price of *vegetables* went up by 1.97%. Changes over the year show upward pressure driven mostly by *housing, water, electricity, gas and other fuels*. This is largely due to rising prices of rents (+54.1%), water (+34.8%).

In terms of annual changes (September 2007 compared to September 2006), consultations at health centers and hospitals are responsible for the 15.12% rise in health related services (see 'health' category below). Prices in the 'communication' category rose by 22.28% during the same time period as a result of increases in prices paid for phone calls on one hand and stamps at the post office on the other. School fees are the main cause of the 11.90% price increase in the 'education' category. Finally, menus at hotels and restaurants have led to the 16.38% price rise for the 'hotels and restaurants' category.

The table below gives more in depth information on the price movements throughout the past months and year:

Base 100: 2003

| | Divisions ❖ Groups | Weights | Indices for the following months: | | | | | Changes in % over | | |
|------------|--|---------------|-----------------------------------|--------|--------|--------|--------|-------------------|----------|-----------|
| | | | Sep 06 | Jun 07 | Jul 07 | Aug 07 | Sep 07 | 1 month | 3 months | 12 months |
| | GENERAL INDEX | 10 000 | 136.2 | 143.2 | 144.3 | 146.0 | 147.1 | 0.74 | 2.74 | 8.04 |
| 01 | Food and non-alcoholic beverages | 3 709 | 150.0 | 148.8 | 150.6 | 155.2 | 157.9 | 1.69 | 6.10 | 5.25 |
| 0111 | ❖ Bread and cereals | 625 | 142.5 | 147.9 | 146.0 | 148.0 | 149.7 | 1.15 | 1.22 | 5.05 |
| 0112 | ❖ Meat | 345 | 120.6 | 119.5 | 119.8 | 121.3 | 120.9 | -0.33 | 1.13 | 0.21 |
| 0113 | ❖ Fish | 114 | 137.4 | 153.7 | 154.7 | 151.2 | 150.3 | -0.56 | -2.16 | 9.43 |
| 0117 | ❖ Vegetables | 1 332 | 170.1 | 164.3 | 169.4 | 178.7 | 182.3 | 1.97 | 10.93 | 7.15 |
| 012 | ❖ Non-alcoholic beverages | 180 | 125.6 | 131.9 | 131.7 | 132.6 | 132.8 | 0.10 | 0.64 | 5.71 |
| 02 | Alcoholic beverages and tobacco | 221 | 115.6 | 127.9 | 129.0 | 128.4 | 127.8 | -0.45 | -0.10 | 10.57 |
| 03 | Clothing and footwear | 500 | 106.2 | 104.6 | 108.5 | 109.8 | 108.5 | -1.14 | 3.81 | 2.23 |
| 04 | Housing, water, electricity, gas and other fuels | 1 579 | 162.1 | 191.3 | 192.5 | 192.2 | 192.6 | 0.19 | 0.70 | 18.78 |
| 05 | Furnishing, household equipment and routine household maintenance | 764 | 117.1 | 118.9 | 119.7 | 119.9 | 119.7 | -0.15 | 0.65 | 2.28 |
| 06 | Health | 708 | 106.4 | 122.2 | 123.0 | 122.1 | 122.5 | 0.31 | 0.23 | 15.12 |
| 07 | Transport | 987 | 122.0 | 123.5 | 123.6 | 123.6 | 123.6 | 0.02 | 0.11 | 1.38 |
| 08 | Communication | 37 | 110.7 | 135.3 | 135.3 | 135.3 | 135.3 | -0.01 | 0.00 | 22.28 |
| 09 | Recreation and culture | 206 | 112.6 | 107.6 | 107.7 | 106.6 | 107.4 | 0.77 | -0.22 | -4.65 |
| 10 | Education | 432 | 139.5 | 155.9 | 156.1 | 156.1 | 156.1 | -0.01 | 0.10 | 11.90 |
| 11 | Restaurants and hotels | 273 | 124.0 | 148.6 | 142.1 | 142.1 | 144.3 | 1.61 | -2.89 | 16.38 |
| 12 | Miscellaneous goods and services | 584 | 109.9 | 107.9 | 109.9 | 110.2 | 110.9 | 0.60 | 2.80 | 0.91 |

| Month | Sep 06 | Oct 06 | Nov 06 | Dec 06 | Jan 07 | Feb 07 | Mar 07 | Apr 07 | May 07 | Jun 07 | Jul 07 | Aug 07 | Sep 07 |
|-------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Index (2003=100) | 136.2 | 136.4 | 135.7 | 137.0 | 140.0 | 142.9 | 146.4 | 145.9 | 143.9 | 143.2 | 144.4 | 146.0 | 147.1 |
| Annual changes | 9.3 | 10.6 | 11.3 | 12.1 | 12.61 | 10.9 | 12.0 | 10.1 | 8.8 | 7.3 | 8.3 | 8.4 | 8.0 |

The table below can explain the recent price movements in the economy by looking at different sources of inflation. It shows that *'local goods'* are inflationary, contrary to those which are *'imported'*; over the past year (September 2007 to September 2006) we see a **10.35%** increase in prices for locally produced goods compared to only **1.78%** rise for imported goods. This is important when considering that locally produced goods account for 70% of the basket of goods and services included in the CPI calculations, and imports are only 30%.

This table also highlights that *'fresh produce'* prices rose **7.26%** as compared to September 2006. This is lower than recent price changes; for example, between June 2006 and April 2007 these annual rates were never below 15%. These high rates started going down in February this year. However, last month we started to observe an increase again in prices though still at a relatively low level. This should be a concern because of their important weight in household consumption; fresh produce have been known to drive inflation in the country.

In addition, this month's prices have shown an increase in both *fresh products* and *locally produced goods*, by **2.24%** and **0.56%**, respectively. Last month, these rates were higher (4.63% and 1.35%, respectively) and, for the past three months, they are the reversal of a trend of negative rates that had started last April. All this may be related to increased supplies of fresh produce from the season B then followed by the reduction of said supplies due to low output. The *energy* index went down slightly by 0.11% over the month; it had gone down by 0.60% last month. This is mostly due to price reductions in charcoal and gas over the month. However over the year prices are 0.79% higher.

Underlying, Imported and Other Indices

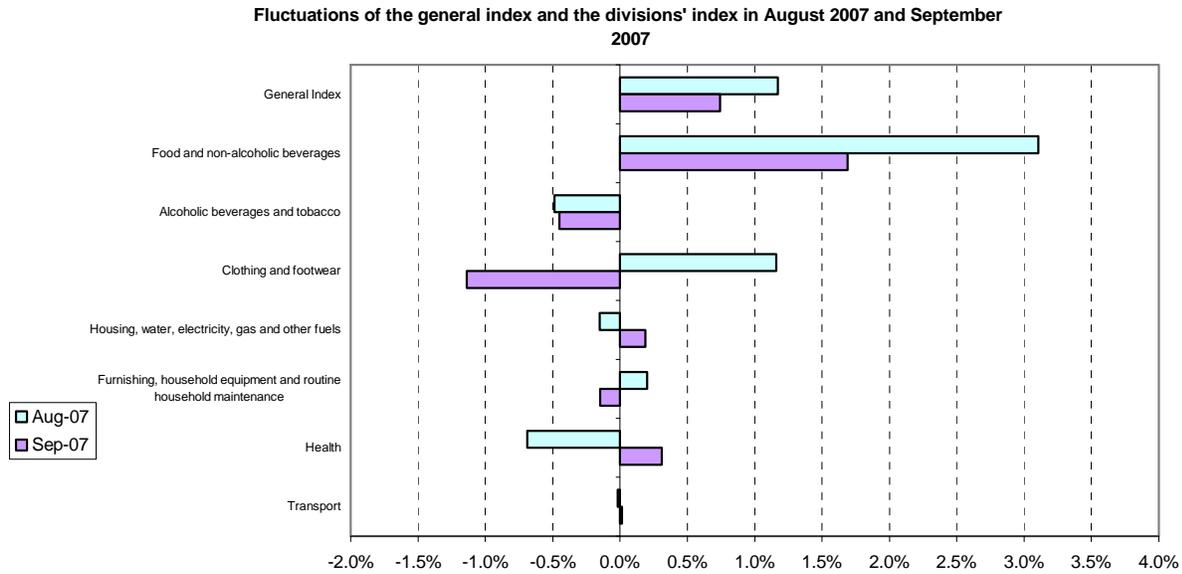
| | Weights | Indices for the following months: | | | | Changes in % over: | | | |
|--|---------------|-----------------------------------|--------|--------|--------|--------------------|---------|----------|-----------|
| | | Sep-06 | Jun-07 | Jul-07 | Aug-07 | Sep-07 | 1 month | 3 months | 12 months |
| General Index | 10 000 | 136.2 | 143.2 | 144.3 | 146.0 | 147.1 | 0.74 | 2.74 | 8.04 |
| Local Goods Index | 6 956 | 141.3 | 151.6 | 153.0 | 155.1 | 155.9 | 0.56 | 2.90 | 10.35 |
| Food and non-alcoholic beverages | 2 627 | 156.2 | 153.3 | 155.7 | 161.2 | 163.4 | 1.33 | 6.55 | 4.61 |
| Housing, water, electricity, gas and other fuels | 1 501 | 160.0 | 191.1 | 192.5 | 192.0 | 192.5 | 0.22 | 0.69 | 20.28 |
| Transport | 698 | 114.8 | 114.2 | 114.2 | 114.2 | 114.2 | 0.00 | 0.00 | -0.54 |
| Imported Goods Index | 3 044 | 123.9 | 122.7 | 123.4 | 124.3 | 126.1 | 1.48 | 2.78 | 1.78 |
| Food and non-alcoholic beverages | 1 082 | 135.3 | 136.8 | 136.9 | 139.6 | 144.2 | 3.28 | 5.43 | 6.58 |
| Furnishing, household equipment | 533 | 116.5 | 118.3 | 118.3 | 118.0 | 117.9 | -0.05 | -0.29 | 1.24 |
| Transport | 289 | 138.9 | 145.7 | 146.2 | 146.1 | 146.2 | 0.05 | 0.33 | 5.26 |
| Kigali Index | 7 679 | 134.6 | 141.6 | 142.5 | 144.2 | 145.4 | 0.82 | 2.66 | 8.04 |
| Provinces Index⁽¹⁾ | 2 321 | 141.4 | 148.4 | 150.3 | 152.1 | 152.9 | 0.50 | 3.01 | 8.09 |
| Fresh Products⁽²⁾ index | 1 829 | 164.5 | 161.9 | 164.9 | 172.5 | 176.4 | 2.24 | 8.97 | 7.26 |
| Energy index | 761 | 227.5 | 228.5 | 231.0 | 229.6 | 229.3 | -0.11 | 0.38 | 0.79 |
| General Index excluding fresh Products and energy⁽³⁾ | 7 410 | 119.8 | 129.8 | 130.3 | 130.9 | 131.4 | 0.41 | 1.25 | 9.70 |

(1) This is the national index without Kigali

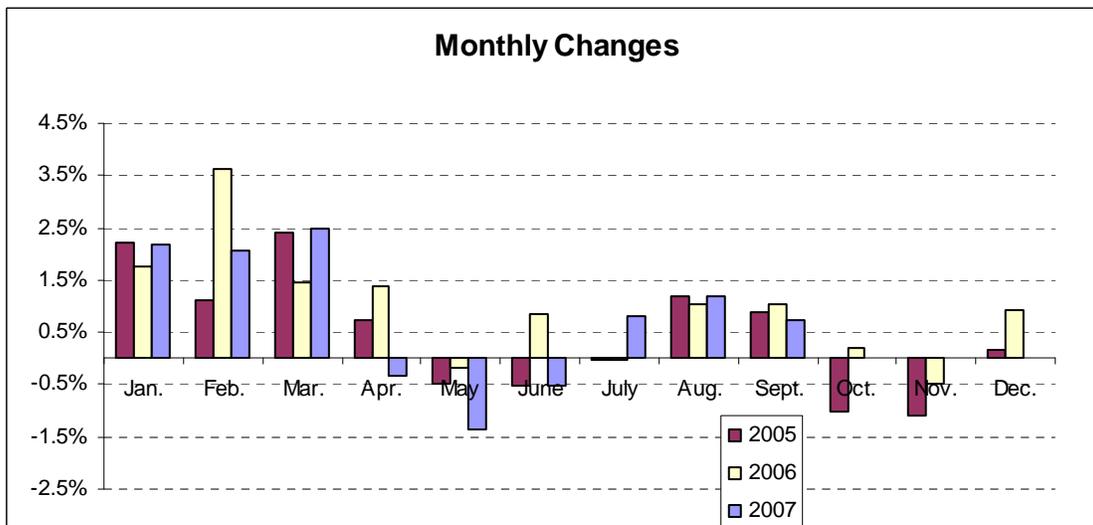
(2) Fresh products are food products which have seasonal fluctuations

(3) Proxy for underlying inflation

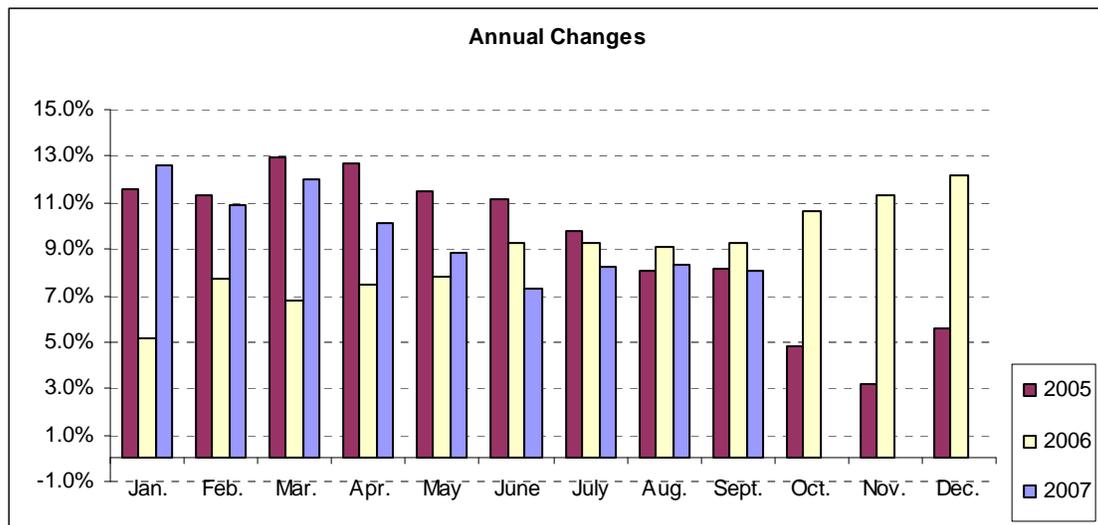
The figure below shows the monthly price fluctuations in the CPI. It highlights that the prices of 'food and non-alcoholic beverages' have registered the largest increases in the past two months.



As can be seen in the monthly changes chart below, the September monthly inflation rate is the lowest of the past three years.



The chart below records the annual change in the CPI and thus shows that price levels in September 2007 compared to September 2006 are **8.04%** higher. This rate is a fall from the **8.35%** in August 2007 and it is, like the monthly change, the lowest September annual inflation rate of the last three years.



CPI and Core Inflation (Annual Average Percentage Change)

In September 2007 the **annual average CPI** was 10.0% as compared to an annual average of 10.1% last month. Although the rate of increase has been falling for the past five months, from 10.5% in May 2007, it still remains in double digits. This is shown graphically on page two.

Driving this rise has been the increase in the price index for '*food and non-alcoholic beverages*', which contributed 4.36% to the overall annual average CPI. Disaggregating further the increase can be attributed to the price of vegetables, which contributed 2.87%, a decrease from last month's 3.02%. This rate has steadily been going down since May.

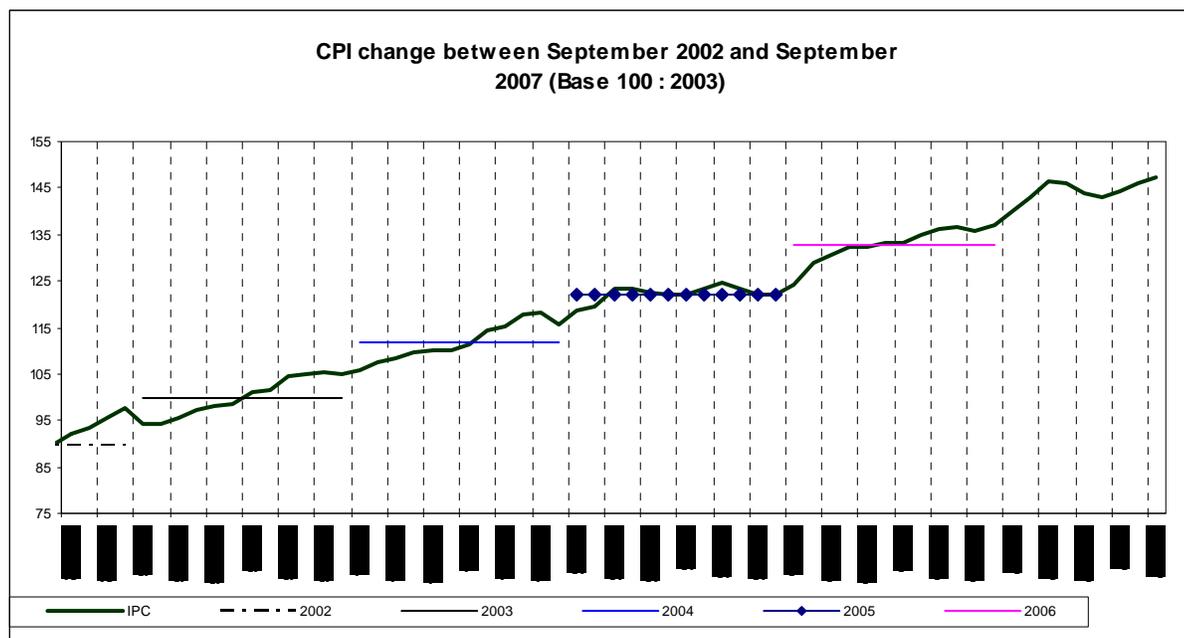
The **annual average core inflation** stands at 8.4% in September up from 8.0% in August 2007. '*Housing, water, gas, electricity and other fuels*' has been another significant factor increasing annual average **CPI** and **core inflation**. The rise associated with '*housing, water, gas, electricity and other fuels*' contributed 3.05% to the overall CPI and has been sourced to: rising rents in Kigali; a water tariff increase in January 2007; the continuing effect of the rise of the electricity tariff in December 2005 (not included in core); and the rise in price of charcoal due to governmental environmental policy attempting to prevent deforestation (not included in core).

The table below shows the evolution of these indicators over time. On a monthly basis the annual average inflation rate fell by 0.1 percentage point for the third time in a row while the core increased by 0.4 percentage points.

Evolution (over 12 months) of the rate of inflation (%)⁽¹⁾

| MONTH | Sept. 06 | Oct. 06 | Nov. 06 | Dec. 06 | Jan. 07 | Feb. 07 | Mar. 07 | Apr. 07 | May 07 | Jun. 07 | Jul. 07 | Aug. 07 | Sep. 07 |
|-------------------|----------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|---------|---------|
| CPI | 7.2 | 7.7 | 8.3 | 8.9 | 9.5 | 9.8 | 10.2 | 10.4 | 10.5 | 10.3 | 10.2 | 10.1 | 10.0 |
| Core / Underlying | 3.6 | 3.7 | 3.8 | 4.0 | 4.2 | 4.5 | 5.1 | 5.7 | 6.3 | 6.9 | 7.4 | 8.0 | 8.4 |

(1) In September 2007 the average index of the last twelve months (October 2006 to September 2007) increased by 10.0% compared to the average index of the previous twelve months (October 2005 to September 2006).



The figure above shows the time series of the general price index with horizontal lines identifying annual averages.

The next table shows a summary of the average annual indices and inflation rates over the past three years:

Annual Average Indices and Annual Average Inflation Rates Over the Past 3 Years

| Year | 2004 | 2005 | 2006 |
|---|-------|-------|-------|
| General Index Excluding Fresh Products and Energy | 107.6 | 113.7 | 118.3 |
| Imported Products Index | 110.9 | 119.2 | 122.5 |
| CPI | 112.0 | 122.1 | 132.9 |
| Core inflation | 7.7% | 5.7% | 4.0% |
| Imported inflation | 10.9% | 7.4% | 2.8% |
| General inflation | 12.3% | 9.0% | 8.9% |

The final two tables contain time series data:

Underlying Inflation

| | Oct-05 | Nov-05 | Dec-05 | Jan-06 | Feb-06 | Mar-06 | Apr-06 | May-06 | Jun-06 | Jul-06 | Aug-06 | Sep-06 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| General index excluding fresh products and energy | 114.2 | 114.0 | 114.1 | 116.0 | 116.6 | 117.1 | 117.6 | 117.5 | 118.0 | 118.2 | 118.4 | 119.8 |
| Monthly change (in %) | -0.28 | -0.20 | 0.04 | 1.74 | 0.46 | 0.43 | 0.47 | -0.10 | 0.41 | 0.20 | 0.16 | 1.15 |
| Annual underlying inflation rate (in %) ⁽⁴⁾ | 6.6 | 6.2 | 5.7 | 5.4 | 5.1 | 4.8 | 4.6 | 4.2 | 3.9 | 3.8 | 3.7 | 3.6 |

| | Oct-06 | Nov-06 | Dec-06 | Jan-07 | Feb-07 | Mar-07 | Apr-07 | May-07 | Jun-07 | Jul-07 | Aug-07 | Sep-07 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| General index excluding fresh products and energy | 119.6 | 119.9 | 120.5 | 123.2 | 125.4 | 129.4 | 129.5 | 129.5 | 129.8 | 130.4 | 130.9 | 131.4 |
| Monthly change (in %) | -0.14 | 0.21 | 0.56 | 2.25 | 1.72 | 3.22 | 0.10 | -0.04 | 0.25 | 0.46 | 0.40 | 0.41 |
| Annual underlying inflation rate (in %) ⁽⁴⁾ | 3.7 | 3.8 | 4.0 | 4.2 | 4.5 | 5.1 | 5.7 | 6.3 | 6.9 | 7.4 | 8.0 | 8.4 |

⁽⁴⁾In September 2007 the average index of the last twelve months (October 2006 to September 2007) increased by **8.4%** compared to the average index of the previous twelve months (October 2005 to September 2006)

Imported Inflation

| | Oct-05 | Nov-05 | Dec-05 | Jan-06 | Feb-06 | Mar-06 | Apr-06 | May-06 | Jun-06 | Jul-06 | Aug-06 | Sep-06 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Imported products index | 119.2 | 118.6 | 118.7 | 118.8 | 119.3 | 120.8 | 122.0 | 123.1 | 123.4 | 123.7 | 124.1 | 123.9 |
| Monthly change (in %) | -1.02 | -0.56 | 0.08 | 0.09 | 0.39 | 1.27 | 0.98 | 0.95 | 0.25 | 0.27 | 0.29 | -0.18 |
| Annual imported inflation rate (in %) ⁽⁵⁾ | - | - | 7.4 | 6.6 | 5.8 | 5.2 | 4.6 | 3.9 | 3.3 | 3.0 | 2.8 | 2.5 |

| | Oct-06 | Nov-06 | Dec-06 | Jan-07 | Feb-07 | Mar-07 | Apr-07 | May-07 | Jun-07 | Jul-07 | Aug-07 | Sep-07 |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Imported products index | 123.2 | 123.9 | 124.1 | 124.9 | 125.7 | 124.9 | 123.3 | 123.3 | 122.7 | 123.4 | 124.3 | 126.1 |
| Monthly change (in %) | -0.54 | 0.57 | 0.13 | 0.65 | 0.65 | -0.62 | -1.29 | 0.00 | -0.50 | 0.61 | 0.67 | 1.48 |
| Annual imported inflation rate (in %) ⁽⁵⁾ | 2.4 | 2.6 | 2.8 | 3.2 | 3.5 | 3.6 | 3.5 | 3.4 | 3.1 | 2.7 | 2.4 | 2.4 |

⁽⁵⁾In September 2007 the average index of the last twelve months (October 2006 to September 2007) increased by **2.4%** compared to the average index of the previous twelve months (October 2005 to September 2006)

METHODOLOGICAL NOTICE

The Consumer Price Index is a Laspeyres index that covers household consumption as it is used by national accounts. The reference population for the CPI consists of all households living in urban areas in Rwanda.

The housewife basket includes 438 products observed in many places spread all over the administrative centers of all provinces in Rwanda. All kinds of places of observation are selected: shops, markets, services, etc. More than 25,000 prices are collected every month by enumerators of the National Institute of Statistics of Rwanda and of the National Bank of Rwanda.

The base year for the CPI is the year 2003.

The weights used for this new index are the result of the Household Living Conditions Survey (EICV) conducted in 2000-2001 with a sample of 6,450 households.

The splicing with the old index is feasible using the splicing coefficient of 3.889. If you divide the old index by this coefficient, you will be able to make comparisons with the new index based in 2003.

Additional methodological documentation can be obtained at the National Institute of Statistics of Rwanda, Economic Statistics Department.

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