

PART 3

MONITORING FOOD PRICE TRENDS

Introduction to Part 3

One of the major tasks of the Food Pricing Monitoring Committee was to monitor food prices. This seemed to be a relatively simple task, but it soon became clear that recording and measurement errors could easily lead to erroneous conclusions. Consequently, great care was taken in the methodology and the approaches used. Given the potential for data inconsistency and in order to confirm specific trends it was decided to tackle the task of monitoring price trends from 5 different angles.

In the first place, the Committee utilised the various time series of aggregate data depicting food price inflation on a national scale. The trends in food price inflation as reflected by the data from Statistics South Africa (StatsSA) is presented in Chapter 1 and can be compared with the trends of the individual food products discussed in later Chapters.

In Chapter 2, the actual prices are compared for the month of September for individual products at different localities throughout the country. Prof Johann Potgieter has recorded these data for the last 30 years for the annual cost of living survey, done every September. Prof Potgieter travelled South Africa again in September 2003 and he was, therefore, able to compare food prices in September 2003 with prices in the month of September in previous years, especially those of 2000, 2001 and 2002.

The Committee in collaboration with the NAMC, also set-up 6 monitoring points: two in rural areas, two in peri-urban areas (township) and two in main cities/towns in each of the 9 provinces to monitor the prices of the basket of 26 food products identified by the Committee (See Table 1). The process of monitoring food prices had been put in place by the NAMC since May 2002 in the Gauteng province and the Committee was fortunate to link up to this ongoing activity. Chapter 3 deals with the results from this monitoring activity.

Table 1: List of 26 food products monitored

250g Margarine	1litre Milk
750ml Sunflower Oil	Chicken/kg
410g Peanut Butter	1 Doz Eggs
White Bread	425g Pilchards
Brown Bread	Potatoes/kg
250g Tea Leaves	Onions/kg
250g Instant Coffee	Tomatoes/kg
2.5kg and 12.5 kg Maize Meal	Cabbage per head
1kg Samp	Apples/kg
Stewing Beef/kg	Oranges/kg
Bananas/kg	Sugar beans (500g)
2Kg Rice	Butter Beans (500g)
2,5 kg White Sugar	Sorghum meal

As another avenue for monitoring retail prices, the Committee utilised the data extracted from the pay point scanners in retail stores. This database managed by AC

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Nielsen on behalf of the retailers and manufacturers provides valuable data for most of the major urban stores. This data set presented the Committee with average monthly prices for a large number of branded food products. The usefulness of these data is that they are the actual prices recorded with no fieldworker bias, etc. The results from the trend analysis of these monthly data are presented in Chapter 3.

Since the majority of poor households resides in remote rural areas, and because the data sources listed above do have a relative strong urban bias, it was decided to also monitor the difference between prices in urban stores and those of spazas/general dealers in remote rural areas. This was done for a period of four months during 2003 in 5 provinces (Free State, Northern Cape, Eastern Cape, Limpopo and Kwazulu-Natal). Despite the short period of this exercise, it nevertheless provided the Committee with a good sense of differences between prices in these stores and those in the urban supermarkets or at wholesalers. The results of this analysis are reported in Chapter 4.

CHAPTER 1

INFLATION AND FOOD PRICE INFLATION IN SOUTH AFRICA: JANUARY 1991 – SEPTEMBER 2003

1.1 Introduction¹

In this chapter, a broad overview is presented of general inflation trends in South Africa as measured by the Consumer Price Index (CPI). The CPI measures how the price level of consumer goods and services purchased by households have changed between two points in time.

Currently, Statistics South Africa (StatsSA) compiles and disseminates a number of different CPI aggregates, each serving a number of different analytical purposes. The various CPI's calculated for SA include:

Consumer Price Index: This index is used to calculate the official or headline rate of inflation and consists of price increases for all goods and services in the main metropolitan areas of the country.

Core Index: Certain items are excluded from the CPI basket on the basis that their prices are highly volatile, subject to temporary influences, or affected by government policies. These exclusions are fresh and frozen meat and fish, fresh and frozen vegetables, fresh fruit and nuts, interest rates on mortgage bonds and overdrafts/personal loans, and changes in VAT and assessment rates, and a few other items. The Core Index is used to calculate core inflation and is a reflection of the underlying inflationary pressures in the economy.

CPIX: The CPI excluding interest rates on mortgage bonds (CPIX), a measure designed to assist with inflation targeting.

CPIF, or the Food Price Index: Only the food items appearing in the CPI basket are included. The CPIF is regarded as useful to assess the impact of price increases on poor households since food is the single biggest item in the total basket for the CPI.

For the purpose of this Report, and in particular this Chapter, the CPIF is of relevance. Table 1.1 shows the share of food in the CPI in 13 countries of the world, selected to represent a spread of developed, developing, and middle-income food exporting countries (based on data availability). This shows that the weight of food in the CPI in South Africa is higher than that in developed economies such as Ireland, Australia, Canada and New Zealand, as could be expected. However, the share is lower than in countries such as Japan, Hong Kong and Chile, where the per capita income is higher than in South Africa.

¹ Parts of this Section draw heavily from the Vink and Kirsten report to the National Treasury, June 2002.

Part of the reason why the share of food in the CPI in South Africa is lower than expected can be found in the last two columns of Table 1.1, which shows that the South African CPIF excludes meals eaten away from the home. Food consumed away from home already represents more than 50% of food consumption in many developed countries. The example of Hong Kong in the Table is instructive in this regard, as food consumed at home represents only some 10 percentage points of the total contribution of food (26 percentage points) to the CPI. This is less than half in New Zealand (20% of the food sub-group) and Australia (a third of the food sub-group); in Ireland, it is allocated to an entirely different sub-group.

Table 1.1: The share of food in the CPI, selected countries

Country	Base year	Per capita income (USD) ²	Share of food in CPI	Share of food away from home (%)	Basis of inclusion
Philippines	1994	1 040	51.00	Na	
Uganda	1997/98	300	45.20	Not included	
Malaysia	2000	3 380	33.80	Na	
Swaziland	1985	1 390	30.70	Not included	
Japan	2000	35 620	28.50	Na	The cost of a bowl of rice topped with seasoned beef is included in the food category of the CPI
South Korea	2000	8 910	27.12	Na	
Chile ¹	1997	4 590	27.00	Na	
Hong Kong	1999/00		26.67	16.67	Included, i.e. food at home makes up only 10.28% of the total for food.
South Africa	2000	3 020	25.44	Not included	
New Zealand	1999	12 990	18.50	19.71% of the food sub-group	Includes an item 'restaurant meals and ready-to-eat' in the food subgroup
Canada	1992		18.00		
Australia	1998/99	20 240	17.72	4.93% of the food sub-group	Includes an item 'Meals out and take away foods' in the food subgroup
Ireland	2001	22 660	12.75	17.76	Includes a separate item 'Restaurants and Hotels' (which includes take-away) in the CPI

¹ Includes beverages

² World Development Indicators database, World Bank, April 2002

Table 1.2: The weighting of food items in the CPI

Product	Weight
CPI	
CPI Excluding food	79,01
Food (total)	20,99
Grain products	3,81
Meat	5,66
Fish and other seafood	0,69
Milk, cheese and eggs	1,96
Fats and oils	0,76
Fruit and nuts	1,09
Vegetables	2,00
Sugar	0,50
Coffee, tea and cocoa	1,07
Other	3,45

Source: *Statistics South Africa*

In the remainder of the Chapter a long-term view is taken about trends in inflation and food price inflation in particular. This provides the background for the detailed discussions of retail price trends of the individual food products in the rest of the Chapters in this part of the Report.

1.2 Inflation trends

South Africa has been battling with double-digit inflation during most of the 1980s and early 1990s. Figure 1.1 shows that inflation remained below 10% after 1995 and even reached figures around 5% until it increased to high levels of 12% in 2002. The data in Figure 1.1 reflect the trend in the CPI-food with levels of 30% in 1991/92, then declining and stabilising gradually until the sudden surge to 20% in 2002. The September 2003 CPIF is only 3.8%, suggesting that food price inflation and total inflation (down to 3.7%) had recovered dramatically.

The data in Figure 1.1 show that when CPI-food was growing at a relatively constant rate (up to the end of 1999), the overall inflation rate was declining. However, it is clear that between the end of 1999 and the middle of 2000, and again from the middle of July 2001 onwards the increase in CPI-food has preceded an increase in the overall rate of inflation. This interpretation is emphasised by Figure 1.2, which shows the difference between the CPI and CPI ex-Food, and illustrates the important contribution of food price inflation to total inflation during the early part of 2002. Figure 1.2 also shows how the effect of food price inflation on total inflation decreased significantly over the last year. Whereas the difference was almost 2 percentage points in September 2002, there was virtually no difference in September 2003.

Another indication of the fast improving inflation picture in South Africa is reflected in Figure 1.3, which shows how the Producer Price Index (PPI) for food has dropped in recent months to negative figures.

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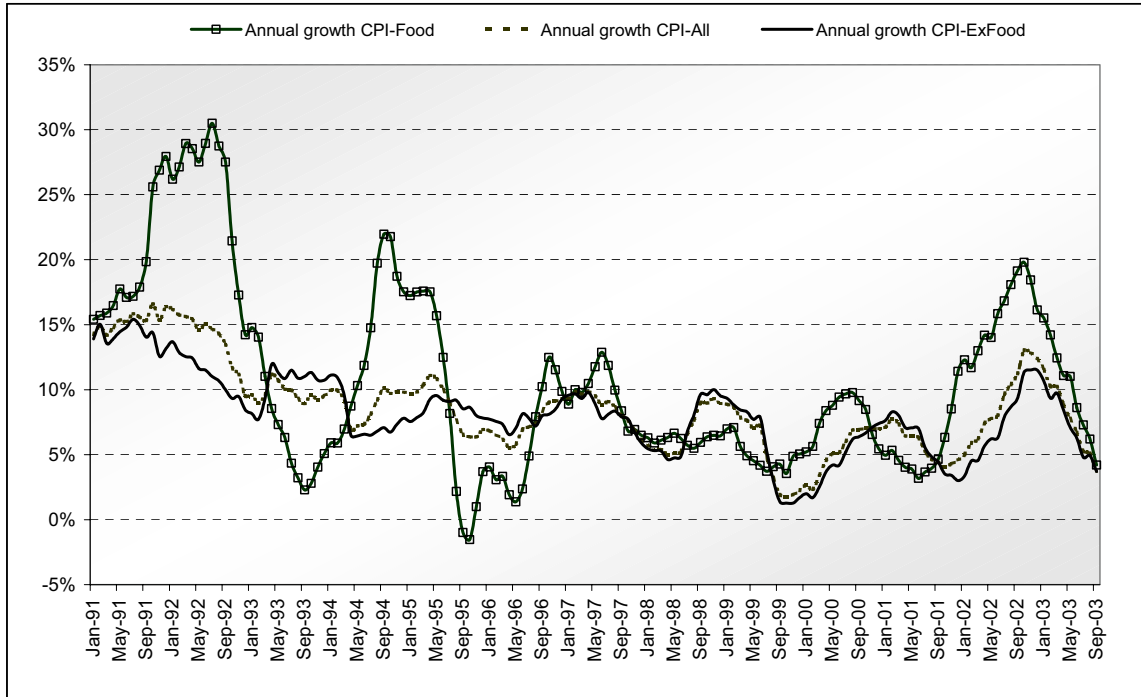


Figure 1.1: Change in CPI, CPI-food and CPI ex-food: Jan 1991 – Sept 2003

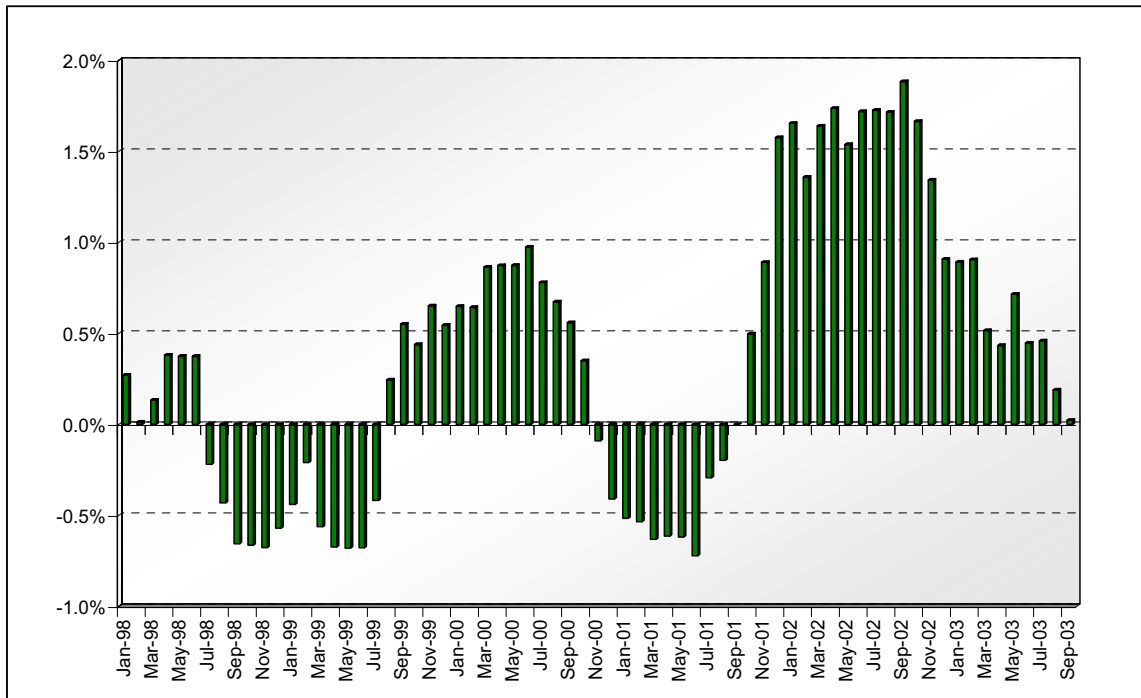


Figure 1.2: 'Food price inflation no longer the culprit': Difference between annual increase in CPI-all and CPI ex-food: Jan 1998-Sept 2003 (% points)

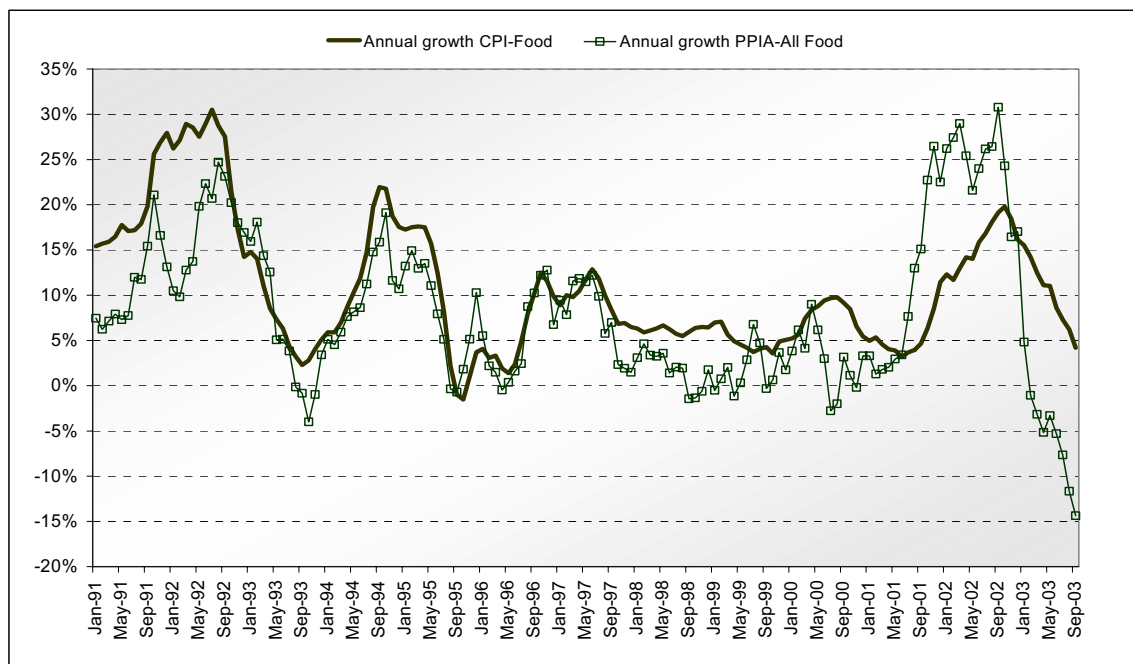


Figure 1.3: Annual change in CPI-food and PPI-food: January 1991 to September 2003

1.2.1 Unpacking food price inflation for different commodity groups

The next series of figures (Figures 1.4 to 1.7) are self-explanatory and provide more detailed analyses of the trends in the CPI and PPI for selected food groups, namely grain products, fruits and nuts, tea, coffee and sugar, and processed and unprocessed food products. Most of the commodities and food products show a similar trend with relatively stable and low inflation between July 1996 and November 2001. The high growth rates in the CPI and PPI series in 2002 are noticeable in all the commodities except for vegetables and fruits and nuts.

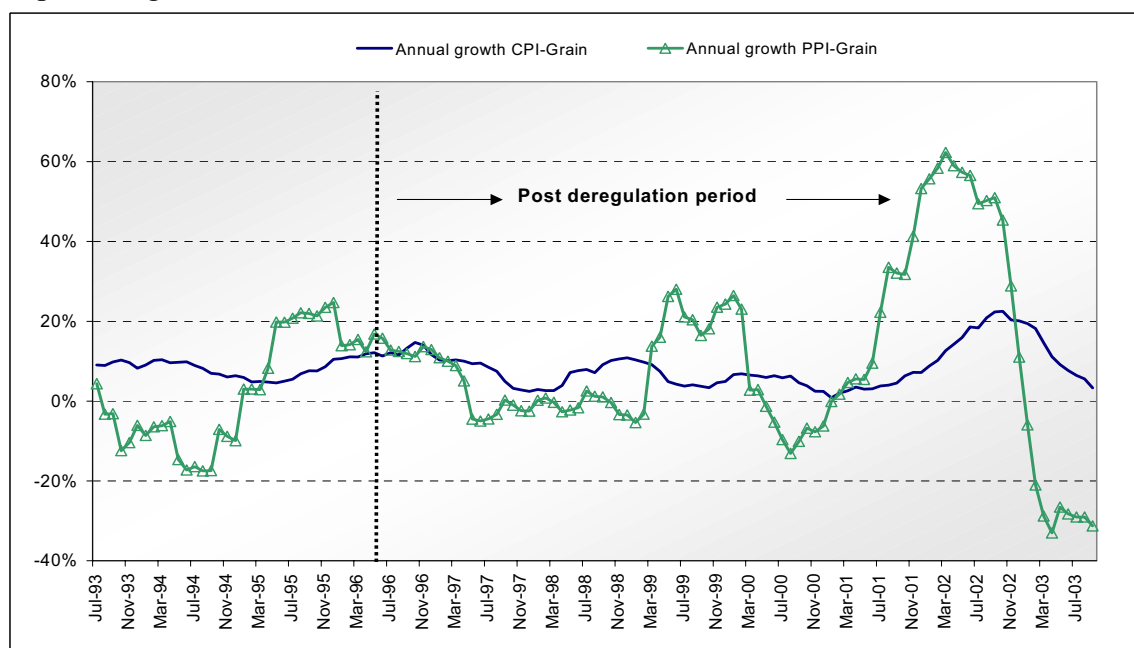


Figure 1.4: PPI and CPI for grain products: July 1993 to August 2003

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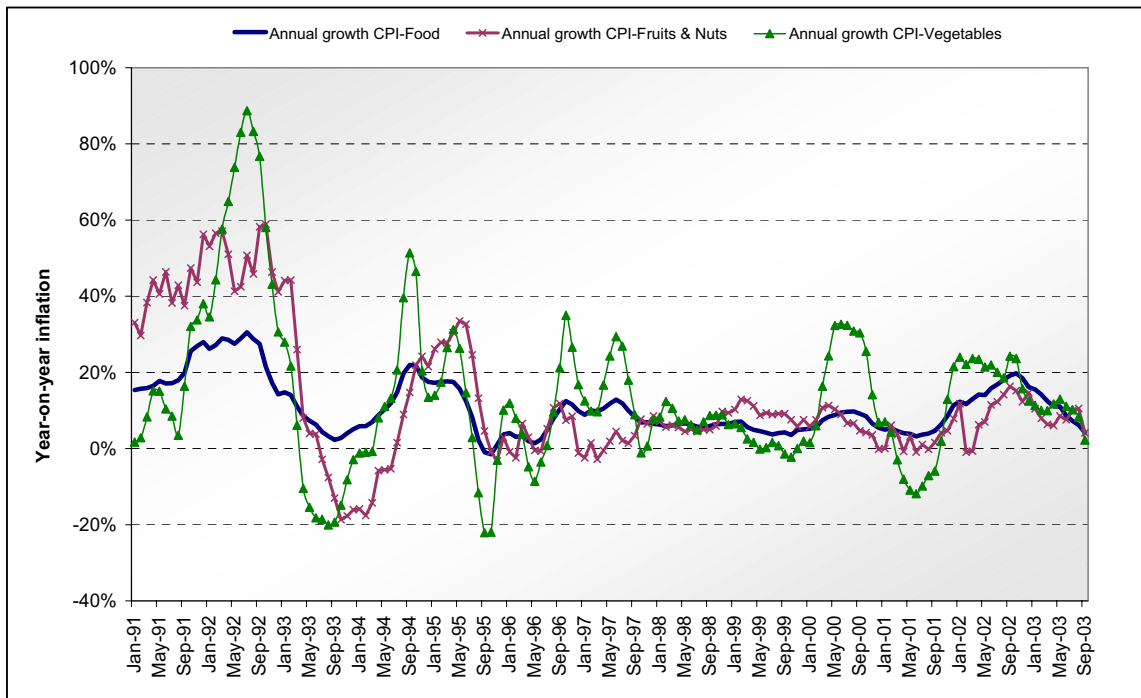


Figure 1.5: CPI for vegetables and fruits and nuts: January 1991 to September 2003

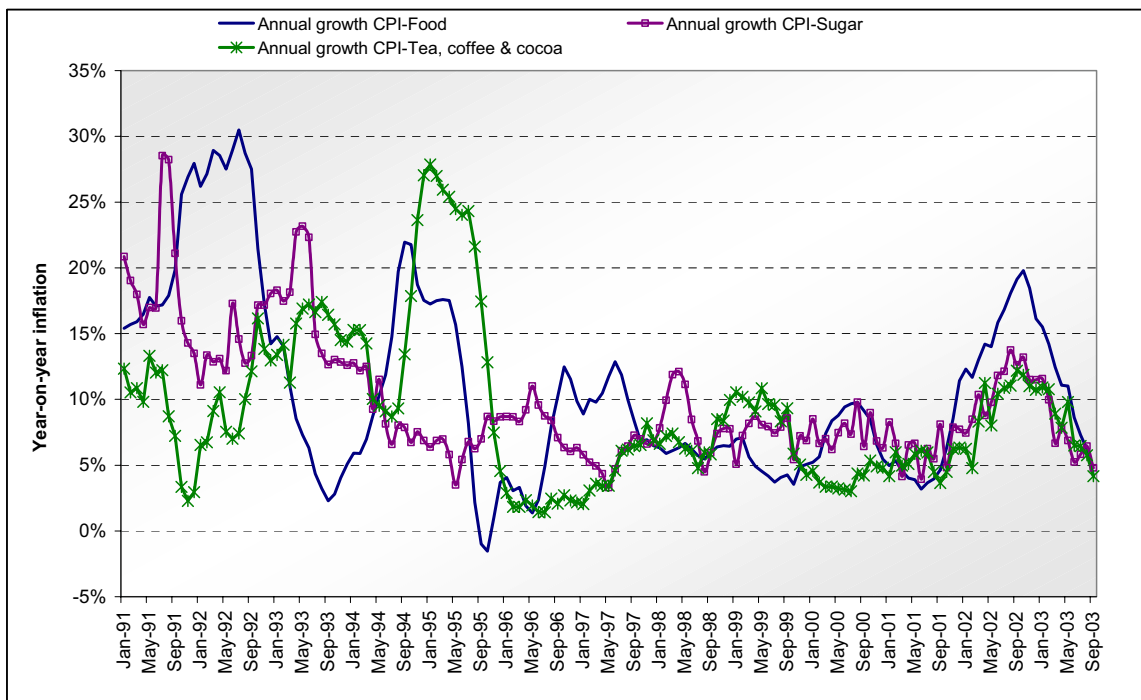


Figure 1.6: CPI for sugar and coffee, tea and cocoa: January 1991 – September 2003.

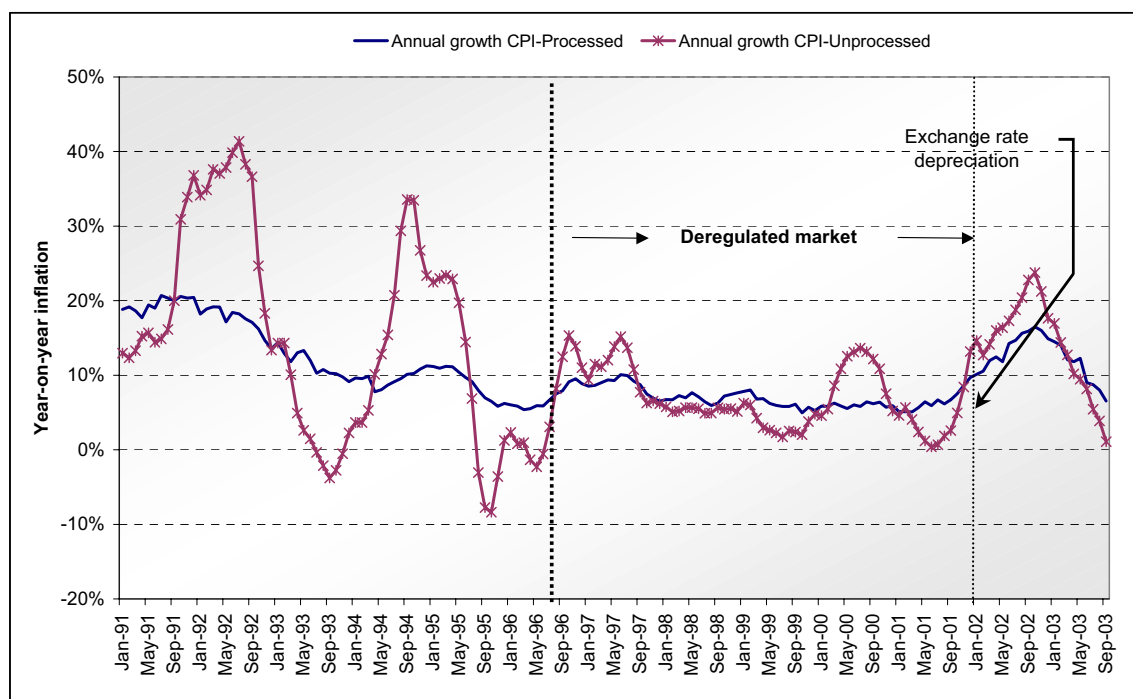


Figure 1.7: CPI for processed and unprocessed food products

1.2.2 Food price inflation and rural communities

When one unpacks the various CPI series in the StatsSA database, an interesting dichotomy between food price inflation in rural and urban areas emerges. The Consumer Price Index for food (for most commodities) in rural areas is generally higher, with inflation (year on year) being generally higher than in urban areas (except for September 2003). This is illustrated in Table 1.3 and Figures 1.8 to 1.11.

Table 1.3: The relationship between food price inflation in rural and urban areas

	January 2003		September 2003	
	Urban	Rural	Urban	Rural
CPI-food	129.7	137.5	131.7	138.3
Inflation: Total Food	15.1%	22.5%	4.2%	2.2%
Inflation: Grain Prod	19.0%	30.4%	3.3%	-3.2%

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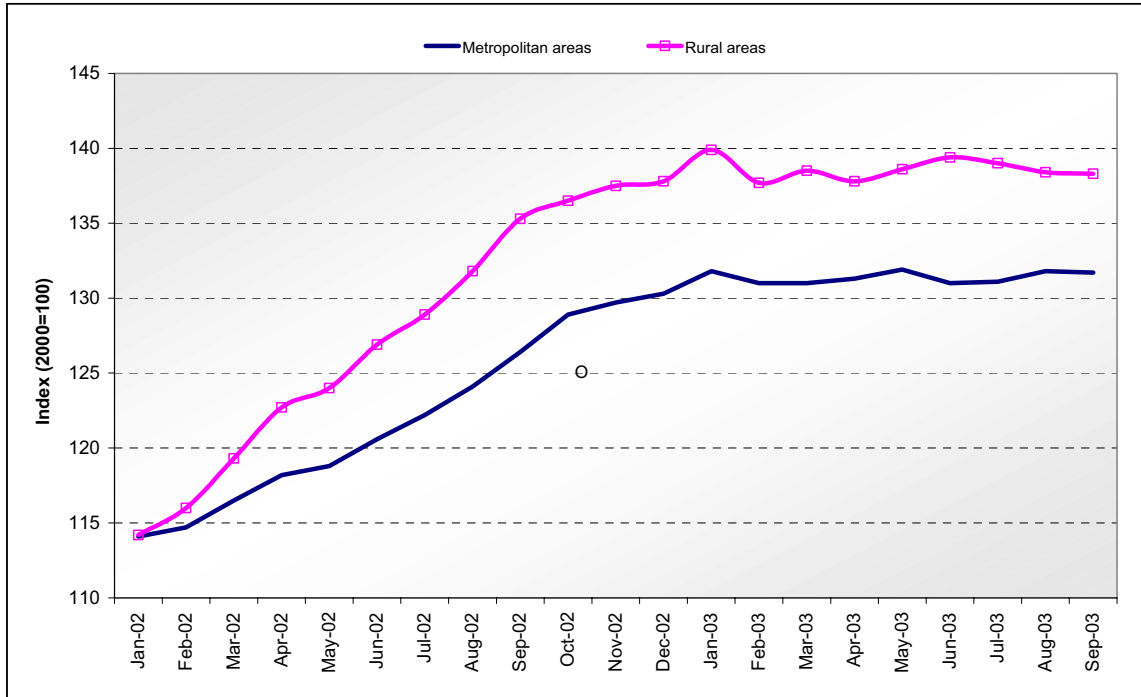


Figure 1.8: CPI food for rural and metropolitan areas: January 2002 to September 2003

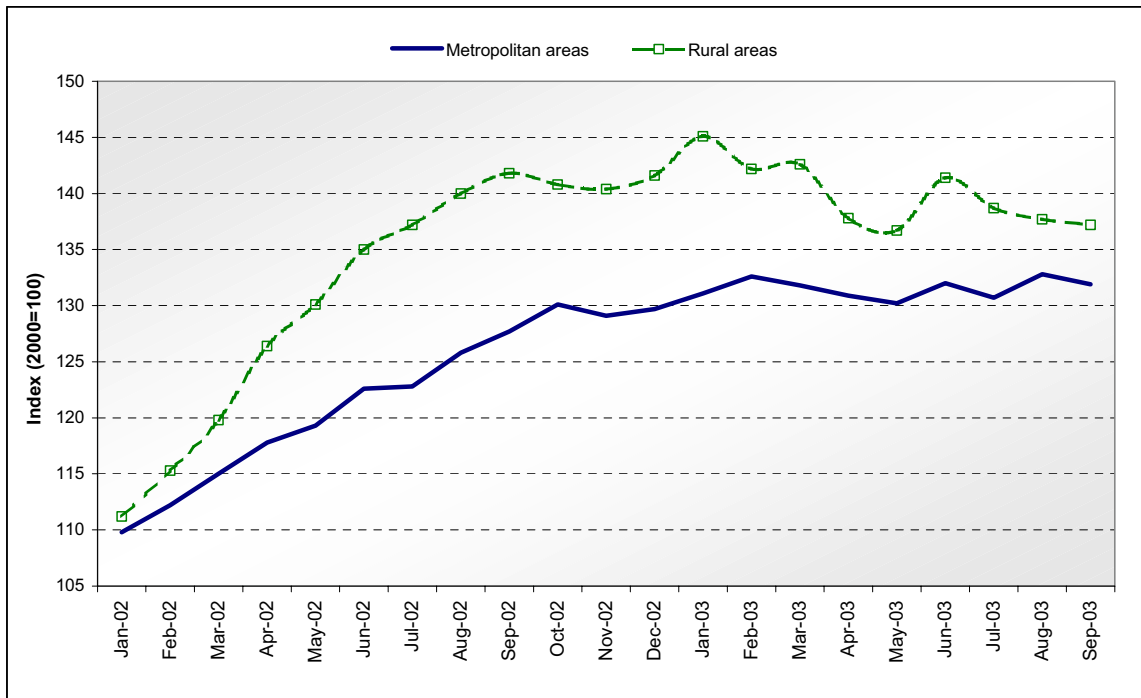


Figure 1.9: CPI for grain products for rural and metropolitan areas: January 2002 to September 2003

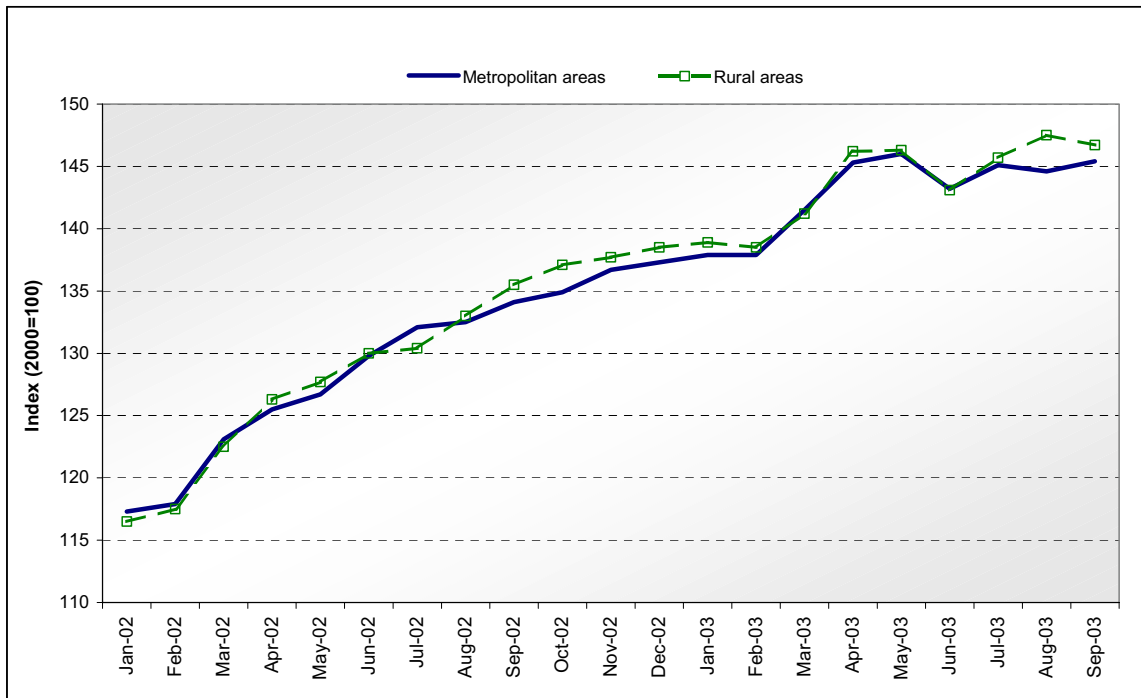


Figure 1.10: CPI for dairy products and eggs for rural and metropolitan areas: Jan 2002-Sept 2003

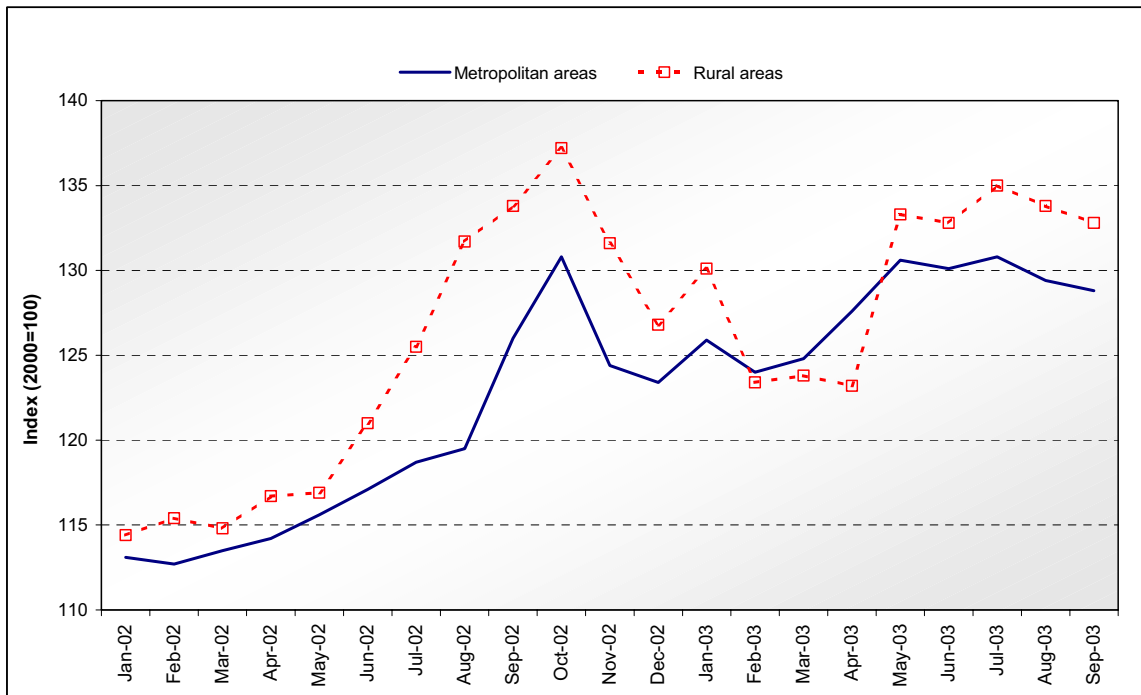


Figure 1.11: CPI for vegetables for rural and metropolitan areas: Jan 2002 to Sept 2003

Food purchasing patterns of rural households: A case study of households in Guquka and Koloni, Eastern Cape²

Although the inflation trends look differently for rural households, it is imperative to make an important clarification. Do these households buy their food in urban markets or do they rely on the local store in the rural village for their food supplies? A recent study by a PhD student at the University of Fort Hare of 2 rural villages in the Eastern Cape attempts to answer this question.

Households in these two villages were asked to list all the strategies they employed to secure their food needs. These were found to consist of a combination of food acquisition strategies (i.e. ways of obtaining food) and entitlements. Food was acquired in five different ways, namely by purchasing food from urban markets, purchasing food from village markets, the household's own production of crops and livestock, bartering of food (food for food exchange) and claiming against relations (network of social relations). Table 1.4 shows these strategies as well as the proportion of households that employed these strategies.

Table 1.4: Food acquisition strategies employed by households at Guquka and Koloni in 1999 (n= 128)

Food acquisition strategy	Guquka		Koloni	
	No	%	No	%
Purchases on urban markets	63	93	60	100
Purchases on the village market	68	100	60	100
Own production of crops and livestock	61	90	52	87
Bartering of food (food for food exchange)	61	90	0	0
Claims against relations (network of social obligations)	68	100	60	100

Purchasing food from urban centres was the most important strategy employed by households in both villages. All households in Koloni and 93% of the households in Guquka acquired food in this way. Out of the five food acquisition strategies employed by households, purchasing food from urban centres can be regarded as the main strategy. Households in Koloni made use of supermarkets in King William's Town, about 60km from the village. They travelled by bus at R20.00 per return trip, and were not charged for loading their food parcels. Households in Guquka made use of supermarkets in Alice, which is about 30km away from the village. In Guquka, households travelled by combi-taxis to town as there was no bus passing the village. Apart from paying for the purchase of the goods, they also had to pay for transport and loading costs. The cost of transport was fixed at R12.00 per return trip, while loading costs varied from 50c to R5.00, depending on the weight and bulk of the food items. Groceries were purchased on a monthly basis and in bulk (10 – 50 kgs), which was particularly the case with staples. Most households purchased their groceries from supermarkets at month end.

² The information for this section was kindly provided by Prof Gavin Fraser and his PhD student Nomakhaya Monde at the University of Fort Hare

Buying food from local markets did not seem to be an important food acquisition strategy. The main reason for buying food in village shops was the occurrence of food shortages between the monthly grocery shopping trips in the urban centres. Buying bread when a household was running out of wheat flour is but one example. In other words, buying food from local markets appeared to be primarily a strategy for coping with temporary food shortages. Food products that were commonly bought locally included *amasi* and vegetables. All households in both villages bought some food items from local shops. Households who bought all their food from local suppliers appeared to lack the resources to buy in urban stores. They did not have a reliable source of income, and for their income they relied on doing piece jobs in the villages. The amounts they would earn at any one point in time were very small. The effect of this was that they did not even consider buying food from urban markets because the cost of transport was too high to warrant the trip.

Acquiring food through own production was mainly achieved through field cropping (very few households) and gardening (a majority of households). Very few people owned livestock, and the majority of these did not get much in terms of food from their animals. Exchanging food products for money or for other food products was an important food acquisition strategy in Guquka, but none of the respondents in Koloni acquired food this way. In Guquka, the products exchanged for other products were those obtained from home gardens, as there were no households amongst the respondents who cropped their fields.

Exchanges amongst and claiming against relations was another important food acquisition strategy. All households seemed to have social networks in their village. In most cases, the relationships were based on kinship. Gardens supplied a lot of the food that featured in this particular food acquisition strategy. When a household obtained produce from the garden, a portion of this was donated to relatives, friends or neighbours. The food that was donated this way strengthened the donor's right to claim food from the recipients. People said it was easy that way, regardless whether the donation happened in the form of borrowing or just by simply asking with no intention of returning what one asked for. A variation of this strategy was to give gifts in the form of money or live animals to friends, relatives or neighbours when they were organising social functions. These gifts were also a form of social capital building aimed at getting favours returned when needed. Such gifts, as mentioned by few respondents in Koloni, were given only to people who were likely to return them. For example, a sheep would be donated to a person who owned sheep. This means that those households who could not afford to return gifts were also not likely to receive them.

Households in Guquka and Koloni acquired food by combining different strategies. None relied on a single strategy. In Guquka, purchasing food from village markets and claiming food from relations were the strategies employed by all households. The same applied to Koloni, but to these two strategies was added the purchasing of food in urban markets as a food acquisition strategy employed by all households. Of the 68 households interviewed in Guquka, 7 did not have gardens on their sites. Since these households were not involved in field cropping either, they could not acquire food through own production.

1.2.3 Food price inflation for different income groups

The concern about rising food prices relates in many ways also to the impact the rising costs have on poorer households who spend a much greater share of their monthly budget on food. The effect of food price inflation on the poor is well illustrated by Figure 1.12 and Table 1.5 confirming that the poorer households were affected much more by the high food price inflation during 2002.

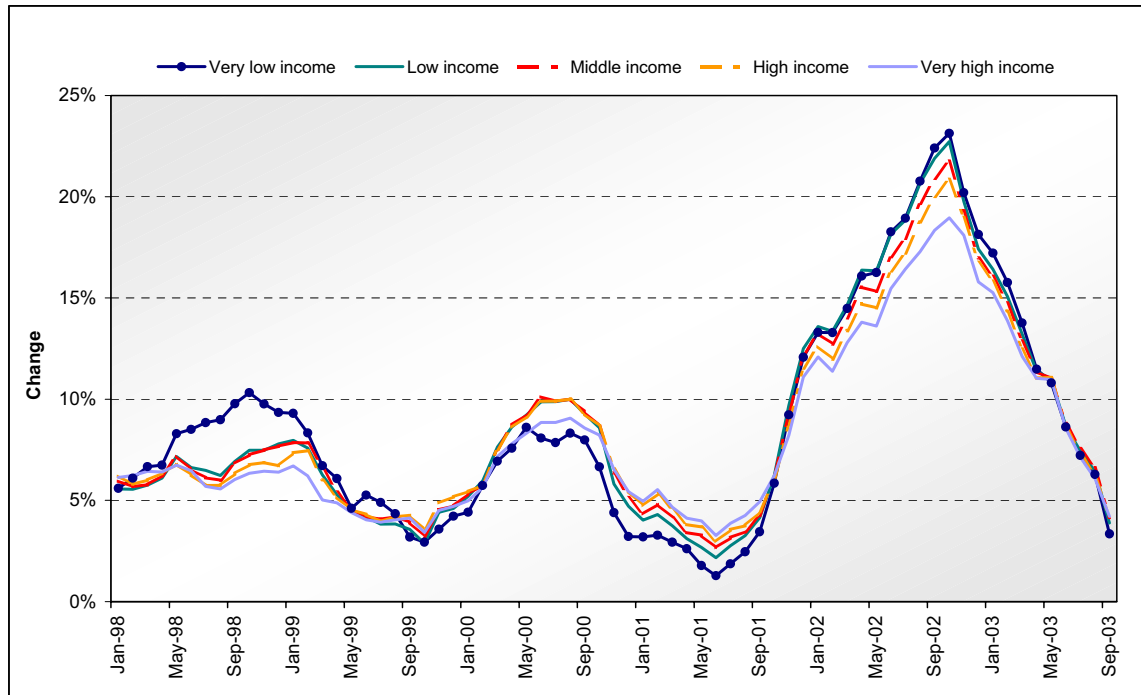


Figure 1.12: Food price inflation for different income groups: Jan 1998 to Sept 2003

Table 1.5: Year-on-year food price inflation for different income groups

Income group*	October 2002	January 2003	September 2003
Very low income (R8070)	23.13%	17.21%	3.35%
Low income (R8071 – R12263)	22.72%	16.42%	3.89%
Middle income (R12263 – R24365)	21.77%	16.07%	4.15%
High income (R24366 – R55159)	20.88%	15.84%	4.17%
Very high income (> R55160)	18.99%	15.26%	4.21%

* Classified on annual expenditure in 2000 values

Source: Calculated from Statistics South Africa, CPI time series data

A study commissioned by the South African Reserve Bank to the Development Policy Research Unit at UCT provides another perspective on the impact of the rising prices on poor households. The study is based on the assumption that it is access to incomes, or lack thereof, which fundamentally characterises the inequality and poverty in society. It points out that although there may be a number of income related variables that can be combined to determine whether households are poor or not, output prices may have a significant impact on the welfare of indigent households and generally remains a critical factor in the understanding of poverty household traps. The study points out that inflation is one of the macro-economic channels through which poverty is impacted. Other channels are growth and employment.

The study constructed a price consumer index for poor households and compared it to that of richer households. Two data inputs were utilised for the study: household expenditure data and commodity data. To ensure possible maximum accuracy and allow for detailed impression of inflation in South Africa, the study worked at the highest disaggregation possible. It used monthly price data collected by StatsSA in their monthly survey of retail prices and expenditure data obtained from the Income and Expenditure (IES99) data set.

The sample used in the study is only from the urban and metropolitan households. Rural households were excluded because there were no rural price series available and, therefore, no firm evidence that price movement in rural areas would reflect that of urban areas. In matching expenditure and price data, the total expenditure was divided into seventeen main categories including food (grain products, meat, fish and other seafoods, milk, cheese and eggs, oil and fats, fruit and nuts, vegetables, sugar, coffee, tea and cocoa). Other variables used in the study were race and gender. Intra-racial expenditure inequality (described by Gini-coefficients), showed deepest poverty amongst urban and metropolitan African households while Asian and White households showed relatively less severe poverty.

The Plutocratic Gap for South Africa between December 1997 and May 2002 is negative during the first fourteen months, showing that the price of necessities, other goods and services consumed by the poor was higher than those of the luxuries, goods and services consumed by the relatively rich. Between February 1999 and July 2001 (with an interruption in April and May 2001), the Plutocratic Gap is positive, showing that higher income groups experienced higher rates of inflation than lower income groups. After July 2001, the situation reversed into negative ending the period below minus 1 (May 2002).

The Plutocratic Gap, therefore, fluctuates over a specific period, indicating that at different times, different groups may be worst hit by inflation. Data on the expenditure deciles, as in the Plutocratic Gap, suggest that inflation has a differentiated impact across income distribution over time, and that the poor are not always the worst off. However, where the relative inflation rate of the poor households rises dramatically this necessitates welfare interventions.

The inflation rates of male and white-headed households displayed the same patterns by the richer deciles. Female- Coloured- and African-headed households' inflation rates tend to be in the lower income groups. The inflation experiences of households grouped according to race and gender tend to reflect the demographic patterns as determined by apartheid. Like the decile and Plutocratic Gap estimates, race and gender suggest that the experiences of inflation are differential across income and social categories.

Overall food price inflation including grain products, showed a peak during the period 1998 and 2000, with a rapid increase in 2002. Among the poor the pattern is driven largely by the price of movements of maize meal, while for the richer households this is rice and white bread inflation. The study found that the period of rice deflation coincided with the 2000 peak in grain inflation. Poultry, beef and veal, lamb and goat were found to be responsible for the largest share of the total inflation, especially

during the latter parts of 2000, 2001 and 2002. Beef and veal prices have contributed a relatively small amount to total inflation in 2001 across all expenditure groups.

In the first instance the study has attempted to insert one key element of the macro-economic environment, namely relative prices, into the analysis around household poverty and income distribution in South Africa. There are several lessons and important points emerging from this study. Firstly, that the official measure of inflation, while being an internationally accepted norm, is in fact not the best predictor of the average household's experience of inflation. The proxy for average product inflation rather than household inflation means that the official measures of the consumer price index for South Africa more closely proxy households that are White- and male-headed, and, therefore, by extension invariably are in the 8th, 9th and 10th deciles of the national income distribution.

Having illustrated this, though, the study makes a second important claim, namely that it is not always true *a priori* that the poor will be worse off relative to non-poor households, as a result of relative shifts in product prices. The data showed that for a substantial part of the period December 1997 to March 2002, households in the 1st and 2nd deciles were in fact less affected by the relative price shifts, than those in upper 2 deciles of the distribution. It is true, however, that when the poor are more affected by relative price shifts – and by a significant margin as was the case from September 2001 onwards - then welfare related interventions such as price control, food vouchers and the like need to be seriously considered for a group that obviously has very few resources at its disposal to counter the expenditure eroding effect of rising prices.

The analysis of the impact of inflation on the poor points to two critical methodological considerations, namely that the importance of the price-poverty chain relies on the particular product's price increasing sufficiently, but secondly, also, that this product be a significant component of the poor household's consumption basket. What is powerfully evident through the decomposition of the aggregate decile inflation rates according to product bands is that the key drivers of inflation over the period under analysis for the urban and metropolitan poor are in fact household services, namely water and electricity. The deleterious consequences of food price inflation (specifically maize meal) on the urban and metropolitan poor are evident, but over the sample period, it remains less damaging than the aforementioned services in addition to housing rentals and paraffin. Food therefore remains a key component of the impact of prices on the urbanised poor, but clearly, it is a factor less important in this particular period than other product categories. This does not discount the fact that for the rural poor, food price inflation remains the key driver.

1.3 Summary

The purpose of this Chapter was to provide a broad overview of food price inflation trends in South Africa over the last five years. This was necessary to set the background against which the individual food price trends are compared in later chapters. The Chapter also unpacked the food price inflation trends to indicate the differential impact of food price inflation on rural communities and poorer households. This again provides an important justification for Government to consider targeted assistance to these households.