

The Nature of Rising Food Prices in the Eastern Caribbean

**An Analysis of Food Inflation During the Period 2005 – 2008
in a Context of Household Poverty**

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Abstract

Between 2005 and 2008, the Eastern Caribbean sub region has undergone an intense period of increased cost of living driving mainly by the rise in food and fuel prices.

This paper aims at reviewing the nature of these food price increases in selected countries of the Eastern Caribbean in order to appreciate to what extent children and their families may be affected.

As all countries of the Eastern Caribbean are signatories of the United Nations Convention of the Rights of the Child, they have committed themselves to ensure basic rights for children, including the right to education, health care, social protection and child protection. However, as the recent country poverty assessments in the various countries reveal, over half of the poor in all countries are less than 18 years old. Hence, an increase in cost of living may increase the various socio-economic risks affecting this age group and bring more children and their families into situations of income-poverty. This paper will review the nature of this increase, its assumed causes and its impact on families in the sub region.

1. Introduction

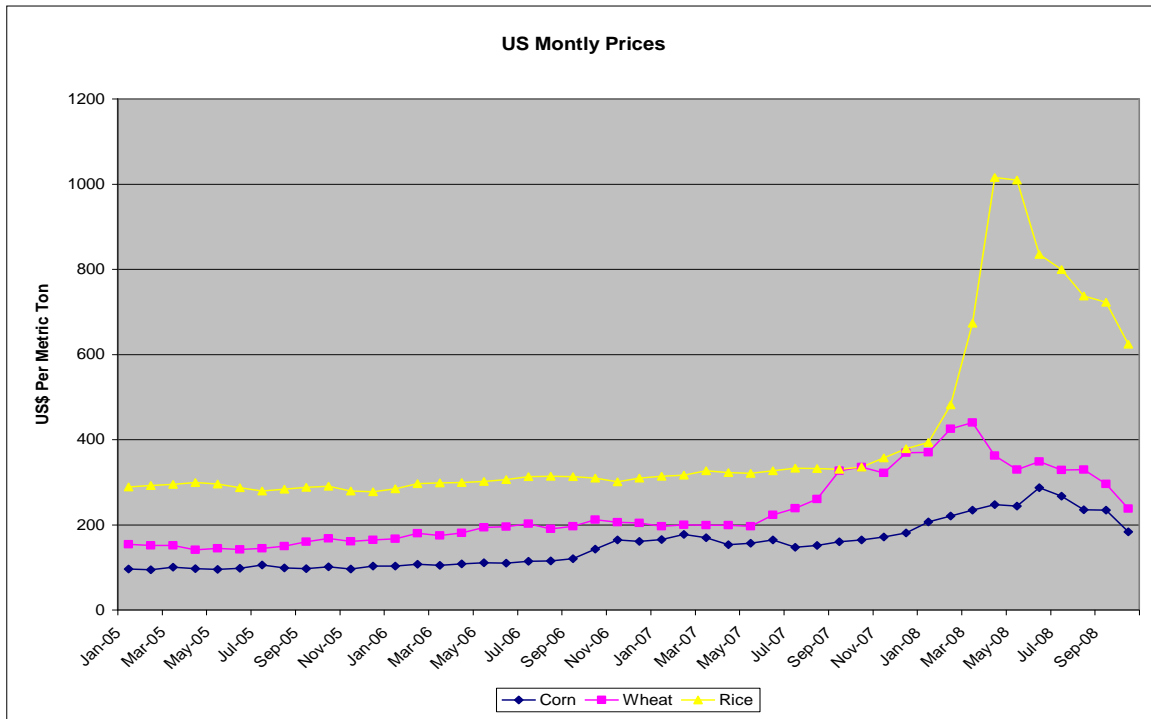
Food prices have increased rapidly during the period 2005-2008 in the Eastern Caribbean. Official statistics revealed that during the third quarter of 2007, the Consumer Price Index (CPI) for “food” increased 5.1 per cent, 4.2 percent and 4.0 per cent in Grenada, St. Lucia and St. Vincent and the Grenadines, respectively. During the first quarter of 2008 food prices jumped to 6.3 per cent and 8.7 per cent in Dominica and Barbados respectively. This rapid inflation follows extended acceleration of prices for “bread and cereal”, “fruits and vegetables” “meats” “dairy products”, and “sugars”.

The cost of fuel also increased considerably. The Consumer Price Index (CPI) for the fourth quarter of 2007 revealed that the group “fuel and light” increased by 7.4 per cent and 6.7 per cent in Dominica and Grenada respectively. During the first quarter of 2008 Barbados and St. Lucia registered increases of 11.6 percent and 11.5 percent respectively. This hike was attributed to higher fuel surcharge and cost of gasoline.

Globally, the costs of food and fuel have increased significantly. Between February 2005 and February 2008 food rose on average by 82 per cent and oil prices increased by 80 per cent (over US\$140 per barrel) between the years 2007 and 2008. Higher food prices have been especially steep for some basic food items such as corn and wheat which doubled during the period. (See figure 1)

As a consequence, price movements in the global market had a domino effect on inflation and depleted foreign exchange earning. Governments therefore face higher import bills and poor households are particularly vulnerable as much needed financial resources are diverted.

Figure 1: Prices of Key Agricultural Staple Commodities, 2005-2008 (US\$ per ton)



Source: FAO, FAOSTAT Database

The impact of higher food prices affects every fragment of the society: poor households, middle and upper class households, profit and non-profit organizations and governments. The most severe is the negative impact on the most vulnerable group – poor households, women and children- since staples are becoming scarce and very costly. Efforts towards eradicating poverty will be significantly affected by persistent high food prices as this situation will push more people into poverty.

In the Eastern Caribbean high food prices can potentially increase poverty rates, infant mortality, maternal mortality, worsen illiteracy rate, increase school drop-out and HIV and AIDS cases. Many households have been forced to reduce their nutritional intake and defer expenditure on other essential items – such as health and education – in order to cope. The situation is particularly critical for countries with high poverty incidence such as Dominica, St. Vincent and the Grenadines, St. Kitts and Nevis and St. Lucia. (See table 1)

Table 1: Selected Social Indicators

Countries	Indigence rate	Poverty rate including indigence	Literacy rate
Antigua and Barbuda (2005 – 2006)	3.9	18.3	86.0%
Barbados (1998)	1	13.9	99.7%
British Virgin Islands	1	22	na
Dominica (2002-2003)	15.0	39.0	88.0%
Grenada	12.9	32.1	96.0%
St. Kitts and Nevis (1999-2000)	11	32.0	98.0%
St. Lucia (2005-2006)	1.6	28.8	94.0%
St. Vincent and the Grenadines	25.7	37.5	88.1
Turks and Caicos	3.2	25.9	na

Source: Various Poverty Assessment Reports

The table suggests that special attention must be given to the appropriate immediate and longer term policy responses for alleviating the negative impacts on the most vulnerable – poor households, women and children.

2. Factors Causing Higher Food Prices

Energy cost and key agricultural commodities – notably rice, wheat, soybeans, maize and palm oil- increased significantly during 2007. These increases were at the heart of the global food and fuel crises.

The rising cost is explained by two main structural changes; supply and demand. On the supply side, climate change and disruptive weather patterns negatively affected harvests in several regions. This led to higher prices and significant reduction in agricultural output. Over recent years, there was an increase in the number of droughts, floods and weather pattern changes. In Australia a drought wiped out 10 per cent of the agricultural output during the period 2006 – 2007, hitting wheat production in an environment where there were already low world cereal stocks.

Some countries neglected agriculture production and have lost the capacity to be self-sufficient in food and are therefore importing a significant portion of their food. In a recent report on agriculture and development, the World Bank argued that neglect and lack of self-sufficiency resulted because some countries found it less profitable to invest in agriculture (World Bank, 2008). This situation contributed to reduced supply. High petroleum prices affected the cost of transporting food commodities to markets, machinery operations and the price of fertilizers. Oil prices increased by 80 per cent (over US\$140 per barrel) between 2007 and 2008 in a context where China alone accounted for about 40 per cent of the global increase in oil demand.

Other contributing factors are the competition from biofuels for land use, the decline in the currency in which many commodities are priced on the global markets and export restrictions. The implementation of export subsidies, production subsidies, tariffs and non-tariff barriers distorted world trade in agriculture and food. Subsidies in developed countries distorted prices on world and local markets, reducing the ability of farmers in non-subsidising countries to earn a sustainable income and generate the capital required to invest in increasing production and improving productivity. At the same time some countries, alarmed by high prices, imposed taxes, minimum prices, quotas and bans on exports of staples.

On the demand side, there is increasing demand for food and feed crops such as corn, sugar and palm oil in the production of ethanol and biofuel. The rising demand is due to continued increases in the world population, driving up the demand for basic staples (especially grains and edible oils) and changing consumer tastes and preferences. Strong economic and per capita income growth in emerging economies is leading to higher per capita food consumption and changing diets, including increases in demand for grain-intensive foods like meat and dairy products.

3. Situation Analysis of the Eastern Caribbean and Barbados

In 2008, the World Bank, the United Nations Economic Commission for Latin America and the Caribbean (UN ECLAC) and the Inter American Development Bank (IADB) published studies assessing the impact of rising food prices in the region. The IADB study focused on the impact on Central America and Caribbean countries. According to the IADB, poor households spend the majority of their income on food and do not have sufficient assets and savings to cope with the rising cost of basic staples. Hence, rising food prices may force households to cut down on food intake if other options are not available. The study found that countries that import large quantities of food face the greatest risk of deepening poverty and stated that more than 26 million people in Latin America and the Caribbean could fall into extreme poverty if food prices remain high.

The UN ECLAC study noted that at the macroeconomic level, the impact will be felt through widening trade deficits for most countries as a result of higher food import bills, as well as increasing inflationary pressures. At the social level, real income and consumption capacity of most households and individuals will suffer accordingly, contributing directly to the increase in poverty and inequality. According to ECLAC's estimation a 15 per cent increase in food prices in 2008 relative to 2007 would push more than 200 million people into poverty and some 84 million people into indigence in Latin America and the Caribbean. This would lead to an increase in both poverty and indigence rates of near three percentage points.

The World Bank evaluated the impact of rising food prices on trade balances by simulating the food trade balance for 2008 using the quantity of individual food exports and imports for 2006 and the prices for February in 2008 (World Bank, 2008). The model was designed to capture the impact of the different trends in prices, such as the stable price of sugar but rising price of wheat or cereals. The results suggest that the food trade balance will deteriorate in 2008 for most countries in the region—even net food exporters—due to differences in food trade. The simulations assume no change in the amount of food goods imported and exported even though consumers

and producers will likely respond to price changes by adjusting demand. However, the high price and limited quantities of substitute products may limit this response.

The consumption pattern of individuals from different countries generally varies. Therefore, as the prices of food products rise in different proportions will vary depending on the specific consumption patterns of the poor. The potential losses and gains in household are hence country specific. Therefore, individual country studies of the international food crisis are essential.

The Causes of Inflation

In Eastern Caribbean countries, three main factors have triggered higher food prices. A shortage of agricultural produce resulted from reduction in traditional backyard gardening and domestic supply, triggered higher prices through excess demand.

Changing consumption patterns –linked to higher per capita income- has enabled households to include more meats in their diets. The exchange rate shock has affected consumer prices through higher cost of trade and hence also the price of imported goods. Higher levels of imports dominated merchandise trade over the last decade and a great proportion of these imports are food items. The group “Food” which has the highest weight in the CPI is very sensitive to prices changes. (See *table2*)

Table 2: Consumer Price Index – Weights Per Country

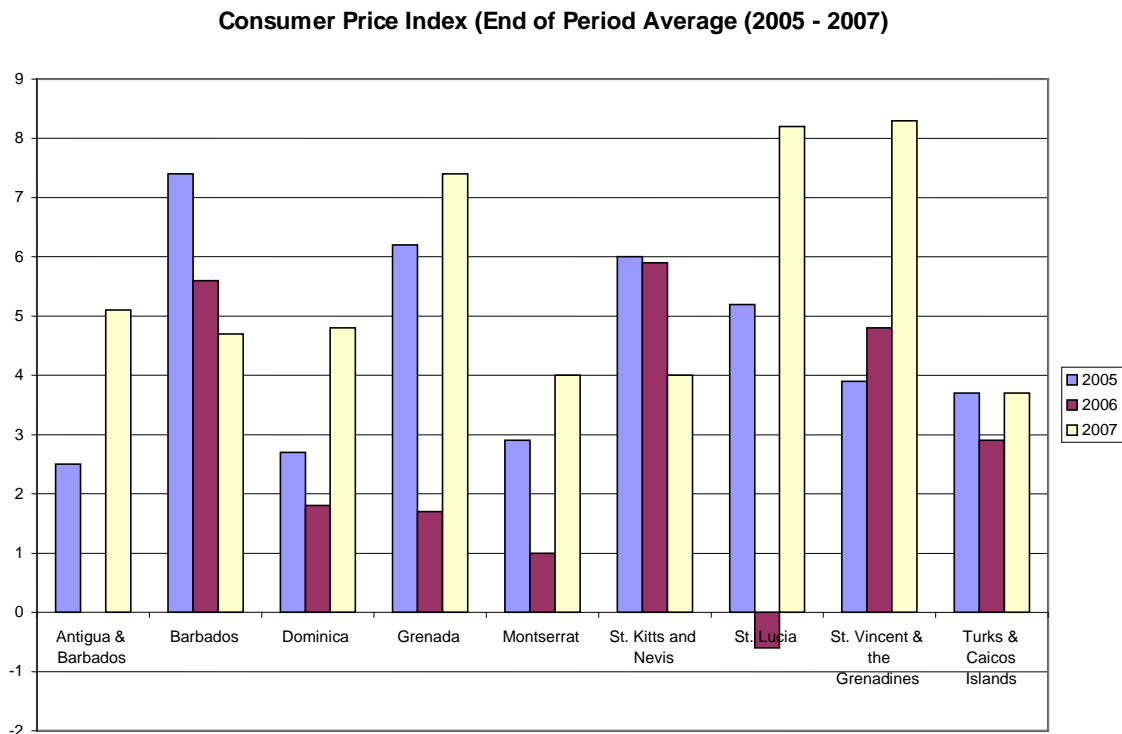
	B'dos	A&B	Dom.	Gren.	Mont.	SLC	SKN	SVG
All items	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0
Food	337.9	214.2	328.8	367.5	495.0	467.5	280.5	536.1
Transportation	170.3	153.5	194.3	156.5	---		21.4	
Household Furnishing	101.4	126.0	93.5	102.0	102.0	57.7	129.9	61.5
Education	74.1	23.4	29.0	37.3	---		192.7	34.3
Fuel & Light	63.4	63.9	58.6	55.0	18.0	45.0	43.7	29.8
Alcoholic Beverages	37.3	1.6	9.5	8.6	46.0	28.2	7.1	9.5
Medical Exp.	58.5	27.6	31.6	46.6	---	22.78	140.5	10.1
Clothing & Footwear	34.4	110.6	82.1	97.7	179.0	65.0	92.9	88.7
Personal Services	---	43.0	42.5	16.0	153.0	--	19.9	33.5
Miscellaneous	---	17.9	18.4	17.5	---	82.8	34.2	30.1

Source: Various Statistical Offices and the Eastern Caribbean Central Bank

Data Analysis

During the period January 2005 to March 2008 the main factors which led to increases in the Consumer Price Index in Antigua and Barbuda, the British Virgin Islands, Grenada, Dominica, Montserrat, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines and Turks and Caicos Islands were the higher prices in the groups “food” and “fuel and light”. (See figure 2)

Figure 2



Source: Statistical Offices and the Eastern Caribbean Central Bank

In 2005, the CPI was relatively high in Barbados (7.4 per cent), Grenada (6.2 per cent), St. Kitts and Nevis (6 per cent), St. Lucia (5.2 per cent), St. Vincent and the Grenadines (3.9 per cent) and Turks and Caicos (3.7 per cent). Generally, increases in the CPI of these countries were mainly due to movements in most of the groups in the basket of good and services.

More specifically, during 2005, Grenada's CPI increased to 5.8 per cent from 2.5 per cent in 2004. This increase was associated with higher cost of “fuel and light” (29.3 percent), “food, drink and tobacco” (6.9 per cent), and “transport and

communications” and “housing”. The movement in the food index is attributed to higher costs of selected vegetables and meat. Likewise, in 2005, the CPI of St. Kitts and Nevis rose to 6.0 per cent from 1.7 per cent in 2004. This price movement is also attributed to increase in the sub-indices “fuel and light” (33.6 per cent), “transport and communications” (15.6 per cent) and “food” (5.3 per cent). Those increases were influenced by higher prices for oil on the international market.

High price levels of 2005 were briefly interrupted by declines in 2006 such as in the case of Antigua and Barbuda (0 percent), Dominica (1.8 percent), Grenada (1.7 percent), Montserrat (1 per cent) and St. Lucia (-0.6 per cent). Lower prices in 2006 were attributable to declines in sub-index food and specifically meat, fish and vegetables. There were also declines in the surcharge on electricity consumption which resulted in decreases in the sub-index fuel and light.

In St. Lucia, the CPI fell by 0.6 per cent during 2006, on an end of period basis. The decline was the result of a 2.0 per cent fall in the food sub-index, the largest component of the goods and services basket. Reductions in prices of vegetables (13.0 per cent) and tubers (2.2 per cent) were largely responsible for the decrease in the food sub-index. Moreover, in Dominica the CPI rose by 1.6 per cent during 2006 (on an end of period basis), compared with 2.7 per cent during 2005. The increase was mainly attributable to a 3.9 per cent rise in the food sub index which has the largest weight. Increases in prices of vegetables, meat and restaurant meals contributed to the rise in the food sub-index.

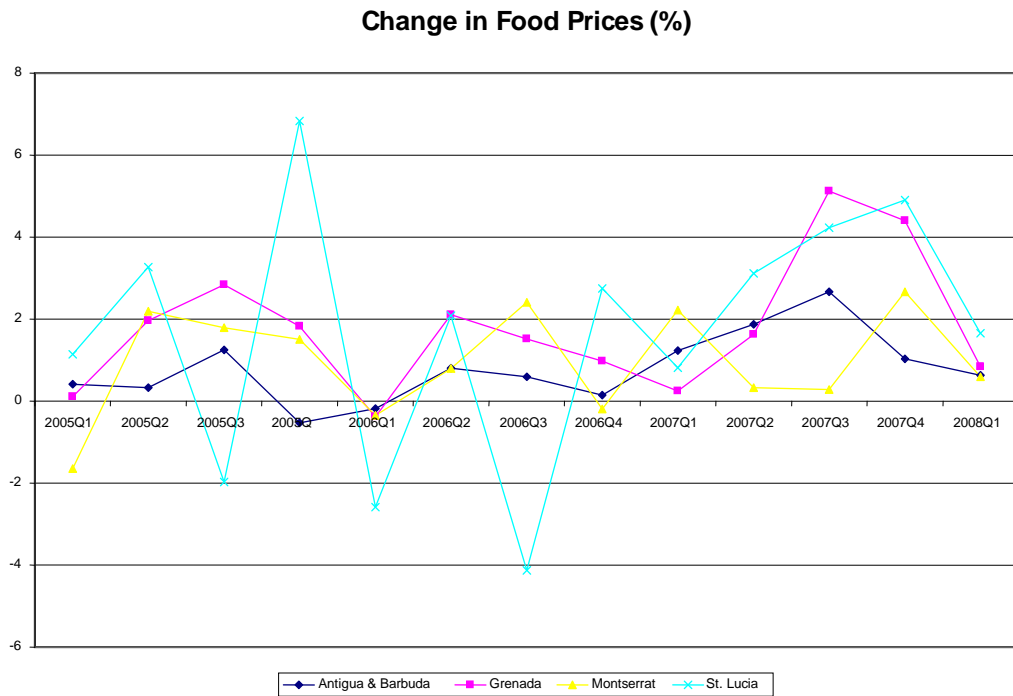
Inflationary pressures accelerated in 2007. Consumer prices sky-rocketed in St. Vincent and the Grenadines (8.3 per cent), St. Lucia (8.2 per cent), Grenada (7.4 per cent), Antigua and Barbuda (5.1 per cent) and Dominica (4.8 per cent). In St. Vincent and the Grenadines the CPI almost doubled from 4.8 percent in 2006 to 8.3 percent in 2007. Here, the food sub-index rose by 9.6 per cent. This increase was attributed to increases in prices of beef, chicken, dairy products and consumer staples. Additionally, the sub-indices fuel and light and transport and communication rose by 8.4 per cent and 4.7 per cent respectively, mainly associated with increases in petrol prices and the fuel surcharge. Also during 2007 consumer prices rose significantly for St. Lucia. The

CPI rose by 8.2 up from -0.6 percent in 2006. This increase largely reflects increases in the price of food (13.7 per cent) and fuel and light (6.9 per cent). Of the food sub-index, higher prices were recorded for fruits (22.8 per cent), vegetables (15.9 per cent), and milk and dairy products (17.3 per cent). The increase in the “fuel and light” sub-index was associated with higher energy costs.

During the first quarter of 2008 prices increased in Antigua and Barbuda (0.6 per cent), St. Kitts and Nevis (3.6 per cent), St. Vincent and the Grenadines (2.48 per cent), with the highest increases being 5.2 per cent in June 2008 in Barbados. In Montserrat, the inflation rate for the first quarter of 2008 was 0.4 per cent. The increase was largely influenced by higher prices for food, gas, electricity and water, and services. The food sub-index, rose by 0.6 per cent, mainly associated with increases in the prices of poultry, dairy products and vegetables. Higher oil prices on the international market led to increases in the gas, electricity and water sub-index (2.3 per cent). In St. Kitts and Nevis, the consumer price index increased by 3.6 per cent during the first quarter of 2008. This was a relatively large increase when compared with the 0.9 per cent recorded in the first quarter of 2007. The largest increase was recorded for the transportation and communication sub-index which rose by 5.0 per cent, mainly reflecting rising international prices of petroleum products.

In each country in the sample, the group “food” carried the highest weighting of all the groups of the Consumer Price Index. Therefore, price movements in this category will significantly influence movements in the overall index. Within this group, the major subgroup categories with the highest weights are “bread and cereal”, “fruits and vegetables” “meats” “dairy products”, “fish” and “sugars”. (See figure 3)

Figure 3



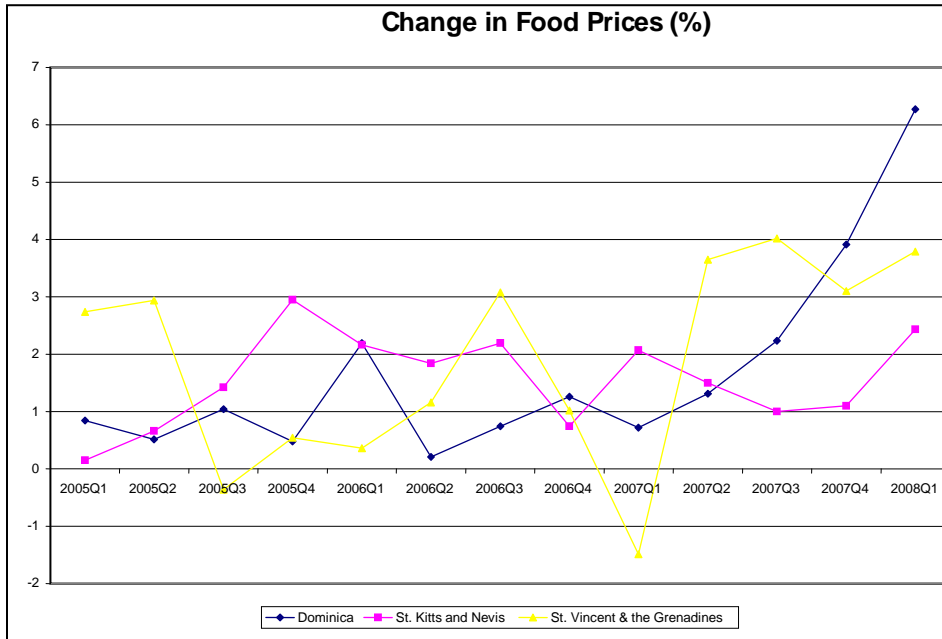
Source: Statistical Offices and the Eastern Caribbean Central Bank

The above graphs show price movements in the group “food” between 2005 first quarter (Q1) and -2008 Q1 in Antigua and Barbuda, Grenada, Montserrat and St. Lucia.

In 2007, prices in the group “food” in Grenada’s increased by 5.12 percent in quarter 3 (Q3) from 0.25 percent in quarter 1 (Q1). Likewise in 2007, St. Lucia’s food prices inflated by 4.9 percent this compares a movement of 0.81 percent in Q1 of 2008.

Figure 4 shows movements in the group “food” between 2005Q1-2008 Q1 in Dominica, St. Kitts and Nevis and St. Vincent and the Grenadines. In 2008 Q1, prices in the group “food” were 6.3 percent and 3.8 percent in Dominica and St. Vincent and the Grenadines’s respectively food prices inflated by 4.9 percent this compares a movement of 0.81 percent in Q1.

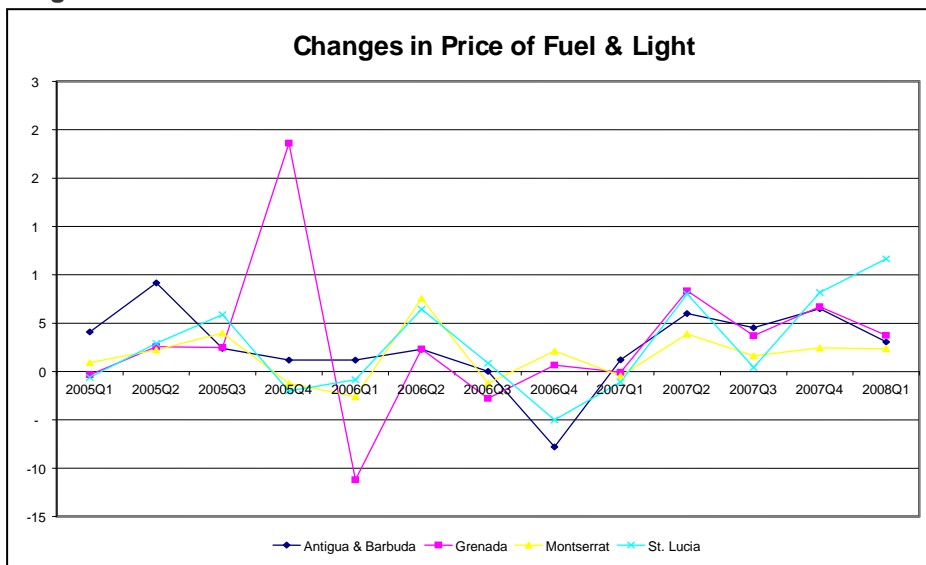
Figure 4



Source: Statistical Offices and the Eastern Caribbean Central Bank

With respect to price movements in the group “Fuel and Light”, figures 5 and 6 indicate that during 2007 Q4 prices in this group increased by 6.5 percent, 6.7 percent, 7.4 percent and 8.2 percent in Antigua and Barbuda, Grenada, St. Lucia and Dominica respectively.

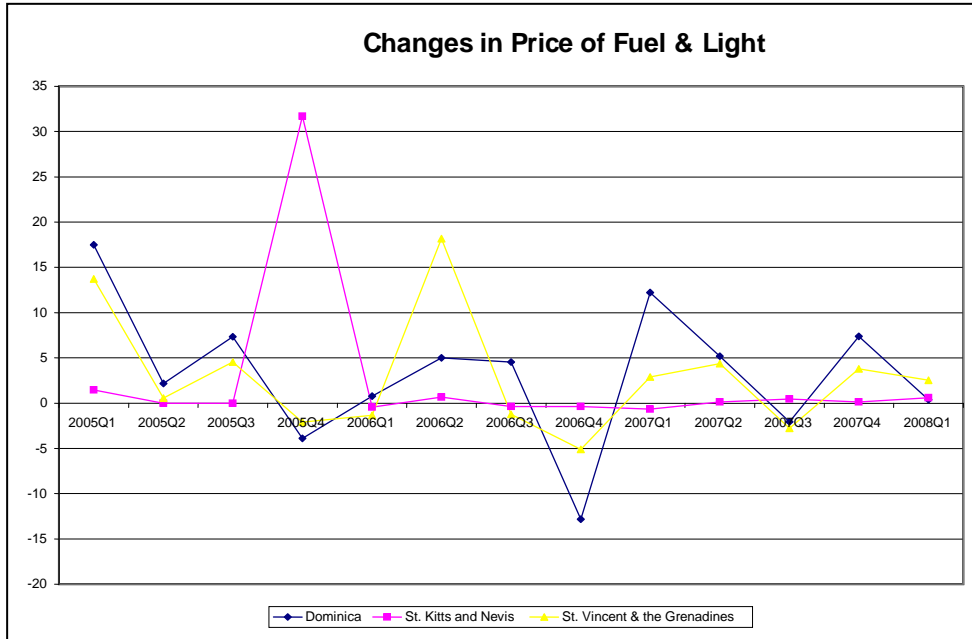
Figure 5



Source: Statistical Offices and the Eastern Caribbean Central Bank

In Q1 of 2007 the movement in this group was negative for these countries with the exception of Antigua and Barbuda and Dominica which registered a 12.2 percent increase during the same quarter.

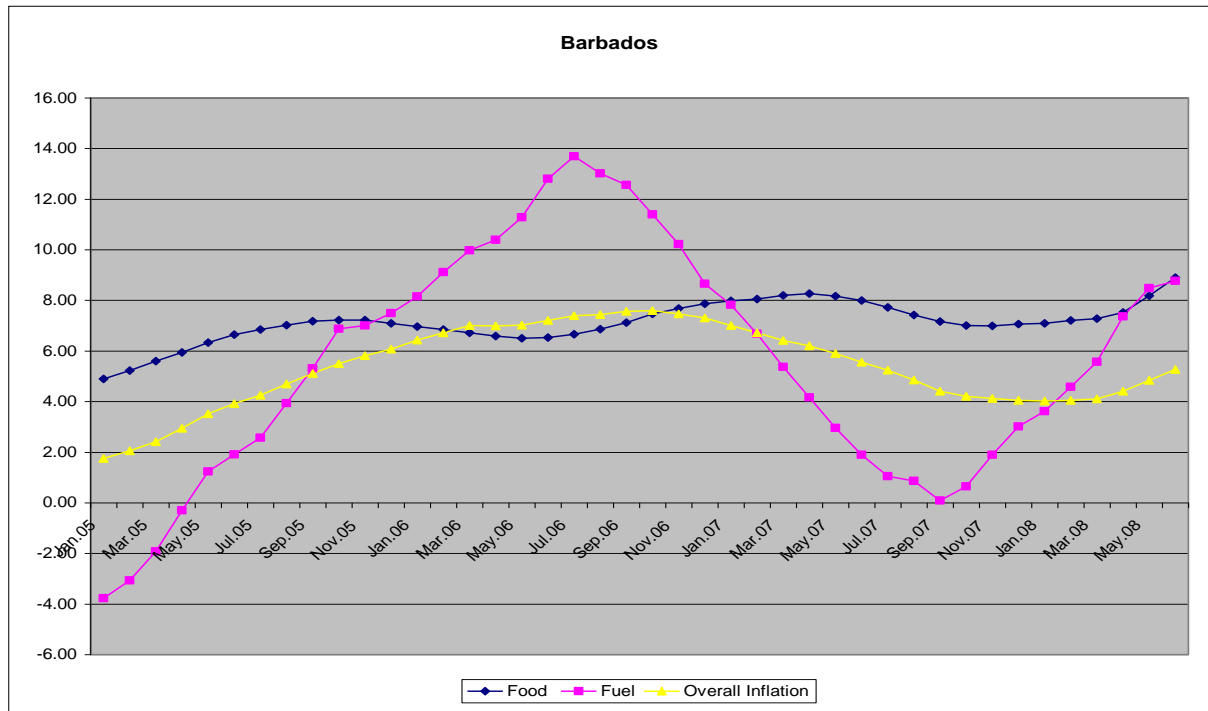
Figure 6



Source: Statistical Offices and the Eastern Caribbean Central Bank

Figure 7 below shows the movement of the overall inflation, food inflation and fuel inflation in Barbados from May 2005 to March 2008. The graph indicates that food inflation exceeded the overall inflation during the period January 2007 to March 2008. It also highlights higher increase in costs of fuel between November 2005 and January 2007.

Figure 7: Food, Fuel and Overall Inflation 2005 - 2008



Source: The Barbados Statistical Services

4. Conclusion: Possible Effects on Household Poverty, Women and Children

All states in the Eastern Caribbean have ratified or signed the Convention of the Rights of the Child and hence have the moral responsibility to ensure that all children have access to basic rights such as health, protection and education. Still, ensuring these rights in a context of limited private and public resources may be challenged.

Rising costs of living, expressed by the level of inflation, is not always immediately accompanied by higher income levels at the household level. The high level of inflation will automatically increase the level of income-poverty in the Eastern Caribbean, especially as how it is measured through the CDB methodology. In the CDB-led Country Poverty assessments, poverty is defined on the basis of indigence lines (based on minimum food requirements) and poverty lines (minimum food requirements plus an element of non-food expenditure).

Beyond income-poverty, rising food and energy prices can increase other social risks affecting the general well-being of vulnerable women and children. Examples are changes in the labour market, reduction in basic services and social protection. Having less income at the household level may impact fiscal space since rising food import bills tend to deflate the economy's revenue collection. This is likely to reduce the ability of governments to ensure expenditures on social services such as health and education, with possible adverse effects on the right to education and health.

Specific attention should be paid to prevent the increase of child labor. Parents may withdraw children from school to reduce costs or to assist the household in generating income. Potential opportunities for increased agricultural production can increase demand for agricultural workers which may be a motivating factor to encourage increased children's involvement in the labour market. Careful attention should be paid to what extent children will be affected by parents' coping strategies to supplement declining household income.

Also change in the consumption patterns of women and children may be a direct consequence of food poverty. Increases in food prices have a direct impact on poor households' real income. As a greater proportion of household consumption expenditure is spent on food in low-income families, any increase in food prices is therefore likely to have a disproportionate effect on the poor. There is a risk of transition of change in the household diet away from protein - and micronutrient-rich foods (meat and vegetables) - to less expensive staples. This can lead to increased risks for low birth weight and under nutrition which are already relatively high with 12 per cent in 2005 in Barbados and 11 per cent in St. Lucia in 2004.

A less measurable, but very important possible consequence of increase financial pressures on households, is the level of psychological stress of parents and caretakers, which directly affects children in households and can further increase the already high level of domestic violence, incest and child abuse in the Eastern Caribbean sub-region.

To reduce incidence of increased social risks, governments can encourage children to stay in school by providing incentives such as: school feeding programmes, raising parents' awareness on the rights for quality education for every child and increase access to credit among poor people to reduce the risk of households responding to economic shocks. Another important mechanism is the development of efficient and targeted social safety net programmes which take into account the different socio-psychological needs and rights of families in conditions of poverty and vulnerability.

Countries should consider reducing their dependence on imported food by promoting domestic production of selected agricultural products, taking into account the possible SIDS specific constraints (actual or potential) in productive resources such as land, water and labour.

The countries of the Eastern Caribbean should endeavor to strengthen decision-making on appropriate policy interventions, by harmonizing and utilizing existing data collection systems and mechanisms to identify and monitor the most vulnerable children and women affected by the increased costs of living.

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