

# Food Price Watch



POVERTY REDUCTION AND EQUITY GROUP

POVERTY REDUCTION AND ECONOMIC MANAGEMENT (PREM) NETWORK

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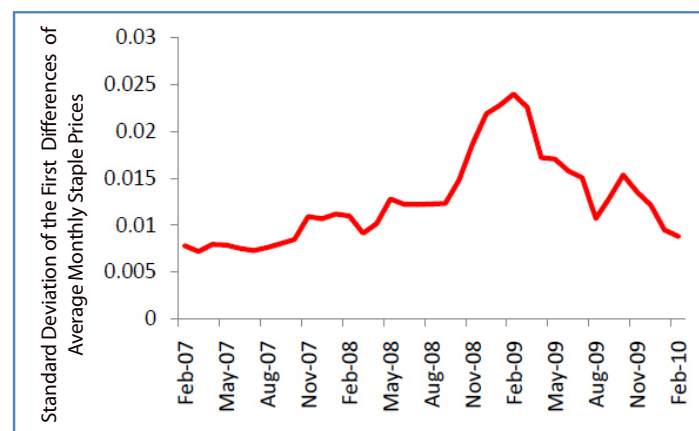
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Summary: Analysis of domestic staple food price data since 2006 suggests that food price volatility is a growing concern. In recent months domestic food prices have risen sharply in South Asia and in parts of Sub-Saharan Africa, even though global grain prices have declined over the past year. The reasons behind these local price spikes include domestic supply disruptions and macro-policy factors. In countries where staple food prices have risen rapidly, estimates suggest undernourishment (hunger) could increase by between 2-3%.

## Recent volatility of domestic staple prices appears higher than that prevailing before the 2008 global food price crisis.

Average food price volatility for a sample of 26 low income countries has been higher over the past year than it was in 2006/07 (see figure 1). Price volatility creates additional risks and is a particular burden for low income producers who are least able to hedge against these fluctuations, as well as for poor consumers. Increased volatility tends to lead to greater government intervention in agricultural markets often with sizeable fiscal costs. Staple food prices fluctuated most in the Democratic Republic of Congo, Zimbabwe and Uganda in the 12-month period leading up to February 2010 (table 1).

**Figure 1: Volatility of the Price of Main Staples in 26 Countries**



NOTE: All domestic prices are in USD. The chart shows the standard deviation of the first difference of the average monthly staple food price in the previous 12-month period e.g. the February 2007 estimate is based on February 2006-February 2007 prices.

**Table 1: Countries with highest volatility of domestic prices in the 12-months up to February 2010**

	Coefficient of variation of main staple price
Democratic Republic of Congo	0.48
Zimbabwe	0.26
Uganda	0.21
Burundi	0.19
Nigeria	0.17
Malawi	0.17

## Prices of main food staples are rising rapidly in South Asia and parts of Sub-Saharan Africa.

In the one year prior to February 2010 wheat prices rose by 24% in Lahore, Pakistan and by 14% in Mumbai, India. Sharp increases in sugar and pulses prices led to food price inflation rising to about 20% in India in early 2010. Rice prices rose by 27% in Bangladesh between October 2009 and February 2010. In Burundi, the price of beans increased by 58 percent in the four months leading up to February 2010. Sharp increases in the price of staples have also occurred in Zimbabwe, Sudan, Chad, Haiti and Somalia over the past quarter and in Tanzania, Chad, Mali and

**Table 2: Countries with the largest increase in the price of the main food staple**

Price Increase, Annual average up to year ending Feb. 2010			Price Increase, October 2009-February 2010		
Location	Commodity	% Increase	Location	Commodity	% Increase
Sudan (Khartoum)	Sorghum	39.8%	Burundi (Bujumbura)	Beans	58.0%
Pakistan (Lahore)	Wheat	23.9%	Zimbabwe (Harare) a/	Maize	36.0%
Tanzania (Dar es Salaam) /a	Maize	21.2%	Sudan (Khartoum)	Sorghum	28.2%
Chad (Abeche)	Sorghum	20.8%	Bangladesh (Dhaka)	Rice	26.9%
Mali (Bamako)	Millet	17.0%	Chad (Abeche)	Sorghum	23.5%
Kenya (Nairobi) /a	Maize	16.3%	Haiti (Port-au-Prince)	Rice	22.9%
India (Mumbai)	Wheat	13.6%	Somalia (Lasanod)	Sorghum	20.6%

NOTE: a/ USD price as LCU data unavailable. b/ Of the 58 countries monitored by FAO / GIEWS, this table only considers countries for which price data was available at least up to February 2010. All price increases reported correspond to current LCU prices.

Kenya over the past year (see Table 2). Among countries that were on our “watch list” in the previous quarter, the price of the main staple has declined in Uganda (-54%), Nigeria (-32%) and Kenya (-11%) while countries like Sudan, Tanzania and Chad continue to remain on the list.

**These domestic price increases appear unrelated to global grain price movements which have declined marginally in the year leading up to March 2010.**

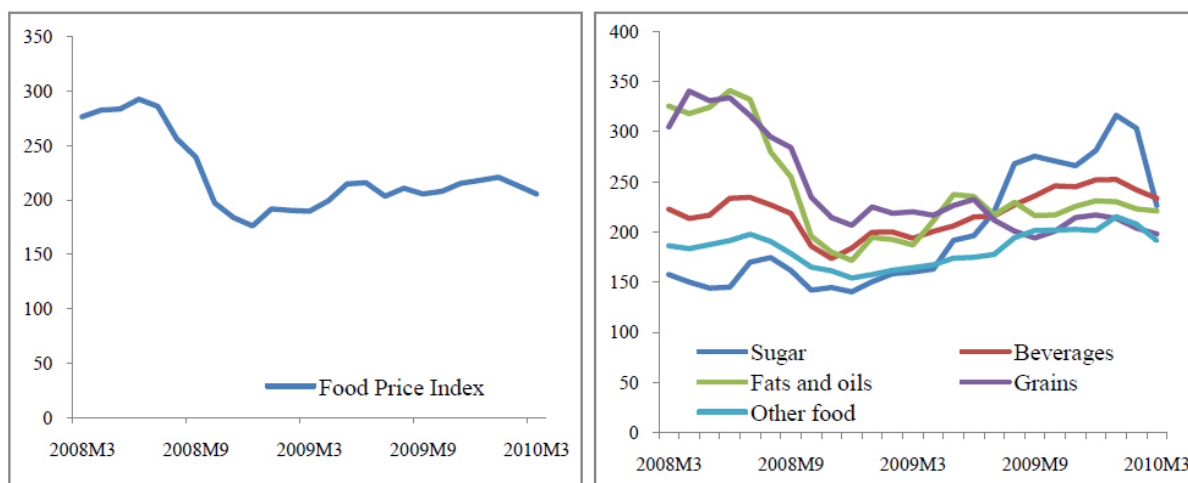
The World Bank index of grain prices was 10 percent lower in March 2010 compared to a year earlier while the overall food price index was 8 percent higher (figure 2). Recent months have seen declines in global food prices - since January the World Bank food price index declined by 7%. Rice prices fell by 6% between February and March 2010 due to increased supply by Vietnam

and Thailand. Sugar prices dropped 25 percent between February and March 2010 due to the supply response resulting from the sharp increase in global sugar prices in 2009<sup>1</sup>.

**The reasons behind these domestic price spikes include climatic shocks, conflict and macro-policy factors.**

Burundi, Chad, Somalia, Sudan and Zimbabwe suffer from widespread lack of access to food on account of ongoing civil and military strife, and adverse weather patterns in major food growing regions in 2009/10 led to staple food price rises. In Chad, Niger and Mali poor rains in 2009 have led to a sharp drop in output. FAO estimates that Chad’s foodgrain output in 2010 has fallen by 12% and the influx of refugees from Sudan’s Darfur region and from the Central African Republic is creating additional pressures on food security.

**Figure 2: Trends in Food Prices in International Markets**



Source: World Bank, DECPG

### Box 1: Unpacking Food Price Inflation in India

Inflation as measured by the wholesale price index (WPI) was just under 10 percent in March 2010 with the largest contributor coming from food price increases. The wholesale food price increase was close to 20 percent in January 2010 driven primarily by the prices of sugar, pulses, and cereals. A poor monsoon in FY2008/09 and the worst drought in decades in FY2009/10 led to lower agricultural output e.g. food grain output is estimated to have declined by 7.5 percent in FY2009/10. Sugar production also declined by 2 percent, 18 percent, and 12 percent, respectively, in the three years since FY2007/08. Sugar prices increased 42 percent in the fiscal year leading to February 2010 and with a share of 15 percent in the WPI-Food, sugar on its own constituted 41 percent of the food price increase. Pulses registered an average rate of price rise of 28 percent, while cereals increased 14 percent in the fiscal year leading to February 2010. In the four major cities for which FAO monitors the price of staples, the average retail price of rice increased by 19 percent in Chennai in the 12-months leading up to February 2010 while the price of wheat increased by 12.7 percent in Chennai and 13.6 percent in Mumbai. Egg, meat and fish also registered high price increases, but their share in the index is small. The high cost of food was the reported reason behind demonstrations in several cities in April 2010.

*Main source: India Economic Update (2010 forthcoming), The World Bank*

The price rise in Haiti is likely due to the January earthquake. In South Asia, India has suffered from crop shortfalls due to poor rains leading to higher cereals prices while the spike in sugar prices played a major part in the increase in the wholesale food price index (see Box 1). Drought has affected wheat output and prices in Pakistan.

Exchange rate movements have also contributed to domestic grain price rises – for instance the value of the Pakistani rupee fell by 7% against the US dollar in the year leading up to February 2010. Tariffs on foodgrains also play a role. In Kenya domestic maize prices have declined sharply due to the lifting of the duty on maize imports coupled with favorable weather conditions in late 2009.

**Table 3: Estimates of the Impact of Main Staple Food Price Increases on Undernourishment**

	% Increase in the price of the main staple in 2009	Additional undernourished people	% Increase over 2008
Pakistan (wheat)	23.9	462,419	2.1
Tanzania (maize)	21.2	229,613	2.2
Mali (millet)	17.1	73,293	1.9
Kenya (maize)	16.3	311,929	3.3

**Estimates of the impact of these higher staple prices on undernourishment illustrate the importance of strengthening food security policies.** A model which links changes in food prices to changes in calorie intake<sup>2</sup> is used to estimate the impact of the

increase in main staple prices on undernourishment (hunger). We present the results for four countries where prices have risen sharply in the year leading up to February 2010 and find that the increase in the number of hungry people increases by between 2-3% in these countries.

#### Note

1. Source: Commodity Markets Review, April 2010, Development Prospects Group, The World Bank

2. Estimation is based on the model developed in Tiwari and Zaman (2010), "The Impact of Economic Shocks on Global Undernourishment", Policy Research Working Paper #WPS5215, World Bank.