TRENDS IN STAPLE FOOD PRICES IN SELECTED VULNERABLE STATES IN SUDAN
- Issue No 5 - March 2011 -

This bulletin provides information on price changes for the most commonly consumed staples and their potential impacts on the cost of the food basket and is a compliment to the Monthly Market Update produced by FAO/SIFSIA/Ministry of Agriculture and Forestry and Ministry of Animal Resources and Fisheries. *Please see Annex 1 for more information on the approach which follows the one used in the HQ produced Quarterly Bulletin covering 60 countries.*

Staples contribute 40-80 percent of energy intake for the most vulnerable population groups in developing countries. Therefore, even a small increase in staple food prices has a high impact on overall food consumption, especially when the food basket is composed of very few food items.

The bulletin covers eight states in Sudan over the period January to March 2011.

Highlights:

Overall: In South Sudan, significant cereal price increases, ranging from 38% (maize) to 225% (sorghum), were reported in Q1-2011 compared to Q1-2010. This is due to localized insecurity problems that have reduced sorghum supply on markets, while influx of returnees has created additional demand for sorghum on many markets. The high cereal price increases, which occurred mainly from Q4-2010 to Q1-2011, are partly due to the referendum. In North Sudan, the harvest season in the mechanized rain-fed area is approaching its end. Prices of sorghum have reduced in many surplus states compared to Q4-2010. The decline in sorghum prices has triggered local procurement of sorghum by the government's Strategic Reserve Corporation (SRCO) from many surplus regions.

- **Blue Nile State:** Sorghum prices declined sharply prior to the harvest season. The good prospect for the sorghum harvest was the main reason for that drop. However, a gradual upward trend has been observed after SRCO announced a floor price.
- **North Darfur State:** Food aid sorghum makes up for 75 percent of the caloric intake for conflict affected households in this state. A stable sorghum food aid price during the first quarter of year 2011.
- **South Darfur State:** A stable sorghum price during the first quarter of year 2011 and sorghum prices remain high in comparison to the long term average.
- **South Kordofan State**: A very steep decline in sorghum price prior to harvest. Currently, many big farmers are releasing relatively small quantities of their harvest on markets hoping for high prices in the very soon future. Sorghum and millet make up for 68 percent of the caloric intake for households in this state. Sorghum and millet prices remain high in comparison to the long term average.
- **West Darfur State:** Sorghum prices increased compared with the last quarter and remain high in comparison to the long term average.
- **White Nile State:** A significant drop in sorghum prices compared with the last quarter. Prices of the sorghum remain high in comparison to the long term average.
- **Central Equatoria State:** A significant increase in prices of maize compared with the last quarter. Maize makes up for 73 percent of caloric intake for households in the state.
- **Upper Nile State:** A very high increase in prices of sorghum compared with the last quarter leading to a very high price impact on the overall cost of the basic food basket.

Table 1: Price trends for main staple food commodities (change from last quarter)

Country	Staple food	Change from Last Quarter			Change from 5 year average		
		Downward ↓	Stable →	Upward ↑	Downward ↓	Stable →	Upward ↑
Sudan	**Sorghum**	Kosti (White Nile) Damazine (Blue Nile) Kadugli (South Kordofan)	Nyala (South Darfur) Elgeneina (West Darfur)	Malakal (Upper Nile)			Damazine (Blue Nile) Nyala (South Darfur) Kadugli (South Kordofan) Elgeneina (West Darfur) Kosti (White Nile) Malakal (Upper Nile)
	Millet		Kadugli (South Kordofan)	Kosti (White Nile)			Kosti (White Nile) Kadugli (South Kordofan)
	Sorghum food aid		Alfashir (North Darfur)				Alfashir (North Darfur)
	Maize			Juba (Central Equatoria)			Juba (Central Equatoria)

Table 2: Evolution of household purchasing power

Region	State	Region Fact Sheet	
		Evolution of Purchasing Power	Main Reasons
North Sudan	Blue Nile	Stable terms of trade between adult male goat (medium size) and sorghum in February compared with January 2011.	Slight changes in the prices of sorghum and livestock.
	North Darfur	The terms of trade between adult male goat (medium size) and sorghum in February compared with January 2011 highly favor goat owners against grain producers.	A significant drop in sorghum prices during February
	South Darfur	The terms of trade between adult male goat (medium size) and sorghum in February compared with January 2011 slightly favor grain producers against goat owners (-5% decrease in the terms of trade).	A slight increase in sorghum price while goat price remained stable
	South Kordofan	Stable terms of trade between adult male goat (medium size) and sorghum in February compared with January 2011.	A slight increase in the prices of sorghum and livestock.
	West Darfur	The terms of trade between adult male goat (medium size) and sorghum in February compared with January 2011 favor goat owners against grain producers (10% increases in the terms of trade).	Stable sorghum prices and increase in goat prices.
	White Nile	The terms of trade between adult male goat (medium size) and sorghum in February compared with January 2011 slightly favor goat owners against grain producers (4% increase in the terms of trade).	Drop in prices of sorghum and livestock
South Sudan	Central Equatoria	The terms of trade between livestock owners (bull) and maize in February compared with January 2011 favor bull owners against grain producers (6% increase in the terms of trade).	Decline in the prices of maize and livestock.
	Upper Nile	The terms of trade between livestock owners (bull) and sorghum in February compared with January 2011 favor bull owners against grain producers (15% increase in the terms of trade).	A sharp decline in sorghum price during February

Table 3: Magnitude of quarterly price changes and contribution to the cost of the food basket, by state and commodity

Region	State	Main staple food	% Caloric contribution	Change from Last Quarter (% change)	Monthly change from last Year (% change)	Quarterly change from last year (% change)	Quarterly change from Last 5 years (% change)	% Contribution to the cost of the food basket		Price trends of the main staple	Remarks
								Commulative imapct of the quarter	Commulative imapct from 5 year average		
North Sudan	Blue Nile	Sorghum	63%	-15%	-25%	-25%	27%	-9%	17%	-15%	Low impact with downward price trend of sorghum
	North Darfur	Sorghum food aid	75%	-9%	19%	43%	138%	-7%	104%	-9%	Low impact with stable sorghum price
	South Darfur	Sorghum	75%	-9%	0%	-2%	91%	-7%	69%	-9%	Low impact with stable sorghum price
	South Kordofan	Sorghum Millet	60% 9%	-12% 5%	-7% 0%	-26% 1%	11% 64%	-7%	12%	-12%	Low impact with slight decrease in sorghum price
	West Darfur	Sorghum	75%	8%	23%	15%	111%	6%	84%	8%	Moderate impact with stable sorghum price
	White Nile	Sorghum Millet	60% 9%	-1% 16%	-14% -9%	-21% 1%	22% 61%	1%	19%	-1%	Low impact with stable sorghum price
South Sudan	Central Equatoria	Maize	73%	38%	55%	38%	86%	28%	63%	38%	Very high impact with high increase in sorghum price
	Upper Nile	Sorghum	71%	110%	95%	225%	278%	78%	197%	110%	Very high impact with high increase in maize price

Imapct Codes

- Low price impact on the cost of the food basket (<5%)
- Moderate price impact on the cost of the food basket (5- 10%)
- High price impact on the cost of the food basket (11-20%)
- Very high price impact on the cost of the food basket (>20%)

Price Trend Codes

- >-10% Change from previous quarter
- >10% Change from previous quarter
- <-10% Change from previous quarter

Annex 1: Approach

The analysis is based on quarterly price indices[1] of the main caloric contributors to household food consumption. It uses:

i) The price change from last quarter calculated as a percentage change from the precedent quarter. Real prices are calculated by dividing each quarterly price by its 5-year average. The change between the two quarters is reported in column E (Table 2).

ii) The monthly (year-on-year) price change calculated as a percentage change from 12 months earlier. Column F (Table 2) reflects the percentage change of the most recent monthly price data available (e.g. November 2008) compared with the same month of the previous year (i.e. November 2007).

iii) The quarterly price change from the last quarter calculated as the quarterly percentage changes from the corresponding seasonal price of last year, (Column G). This average percentage change indicates whether the price has changed from the recent quarter compared to the same quarter of the previous year.

iv) The quarterly price change from the last 5-years (3 years for south) calculated as the quarterly percentage change (say from September to November 2008) from the corresponding seasonal average prices of the last 5 years (Column H). This estimate indicates whether there is a structural shift of the current price from its long-term seasonal pattern[2].

The percentage changes of these quarterly price indices indicate the extent to which recent price changes can be considered normal or abnormal as compared to the quarter before. Column D displays the caloric contribution of each food item to households' total energy intake.

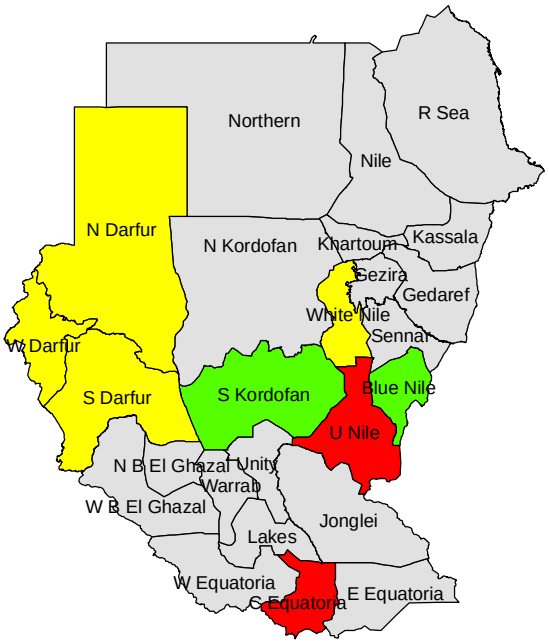
Assuming that the caloric contribution is a proxy of the relative importance of the food item in the food basket, the likely impact of the last quarter average price change on the cost of the food basket is captured in column I (i.e. the percentage price change in column E weighted by the caloric contribution of the food item in column D). The long-term likely impact is presented in column J (i.e. the percentage price change in column H weighted by the caloric contribution of the food item in column D). The likely impact of price changes is considered low when the estimated cumulative percentage impact on the cost of the food basket is below 5 percent (Column J). Between 5 percent and 10 percent it is considered moderate. Above 10 percent the likely impact on the cost of the food basket is considered high and very high above 20 percent. Households with diverse calorie sources are likely to be less affected by price rises than households with a single calorie source, unless significant price increases are witnessed for each major caloric contributor of the food basket.

While this approach can be used for early warning, results should be interpreted with caution as they do not capture the impact of the long-term trend in food prices. Furthermore, the approach measures only direct impacts while an indirect impact is not accounted for. For instance, substitution and income effects due to price changes are disregarded. Similarly, it does not provide insights into the causes of the price increases. Finally, this approach does not account for the severity of the likely impact which may differ between households due to different incomes and food baskets by wealth or livelihoods groups and coping capacity.

[1] Prices are calculated as indices, using reference years, i.e. last year to capture 12-month percentage changes and last 5 years to capture percentage changes from the long term patterns.

[2] Prices normally vary throughout a year due to seasonal patterns of the production cycle. Accounting for seasonality helps differentiating between normal seasonal price variations with additional changes which can be considered abnormal, depending on the magnitude of those changes.

Price Trend of the main Staple

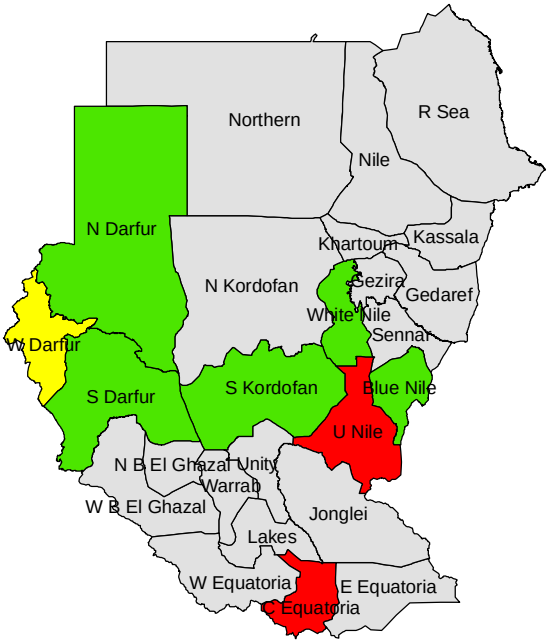


Price Trend Codes

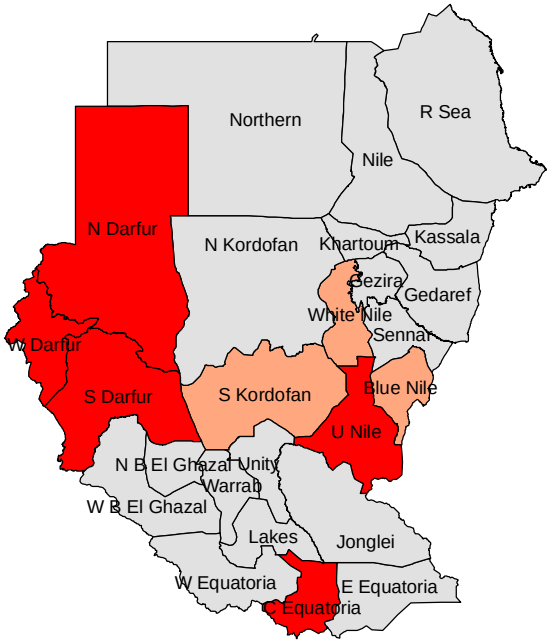
- >-10% Change from previous quarter
- >10% Change from previous quarter
- <-10% Change from previous quarter

Magnitude of Quarterly Price Changes and Contibution to the Cost of the Food Basket by State

Commulative Impact of Quarter Change



Commulative Impact from 5 Year Average



Imapct Codes

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