



# Red Sea, Sudan

Food Security Monitoring, December 2015



**World Food Programme**

## Executive Summary

- Food security in November 2015 had deteriorated compared to November 2014 and May 2015. The deterioration was the most pronounced in Tokar locality, compared to Agig and Durdeeb localities. Food insecurity was also more prevalent in Tokar.
- Main drivers of food insecurity included weakening purchasing power, limited access to diversified income sources in some areas (especially heavy reliance on firewood-based livelihoods in Tokar), increased prices of non-cereal foods, and the poor performance of the current agricultural season, compounded by chronic and structural poverty. Late and short flooding waves of Khor Baraka, which is the main irrigation source for the agricultural activities in this locality, also contributed.
- Household food consumption deteriorated in Durdeeb and Tokar localities. Despite a worsening of diets, most households were still found to have acceptable food consumption.
- Sorghum prices were at the same level as in the same time last year, but far above the five-year average. The price of sorghum was expected to keep increasing in the coming months, due to the current poor agricultural production caused by insufficient rains in the rainfed areas of Gedaref state, the main sorghum's supplies for Red Sea state's markets.
- In November 2015, the cost of a local food basket increased by 47 percent compared to May 2015, leading to a weakening of purchasing power across the surveyed localities in Red Sea state. Fewer than half of sampled households were able to afford the local food basket.
- In another sign of a food security deterioration in Tokar, the proportions of households who reported having experienced food access issues in that locality increased substantially compared to May 2015 and same time last year. The perception of food access was opposite in Durdeeb and Agig, where the proportion of surveyed households who reported having food access issues decreased compared to November 2014.

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### A Description of the Sample

Data collection for round four was carried out in November 2015, which is the beginning of the harvest season. A total of 600 households distributed across 25 sentinel sites were surveyed in Red Sea state.

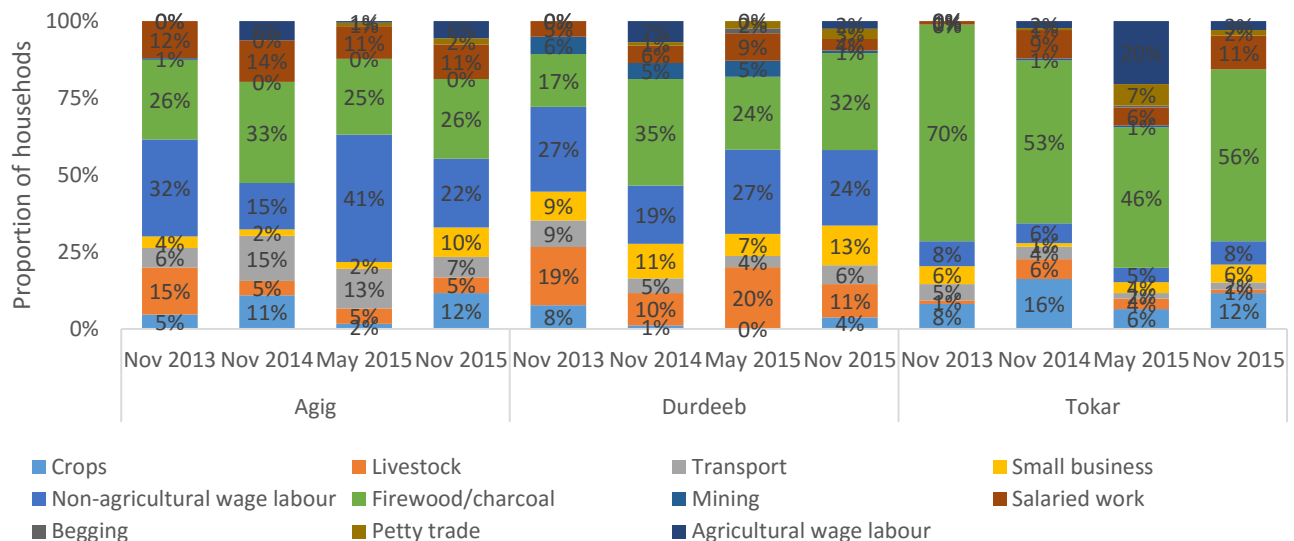
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## Livelihoods

In November 2015, firewood collection, charcoal making, and non-agricultural wage labour were the main income sources among sampled households. The livelihood pattern was similar to previous rounds of food security monitoring.

In Tokar locality, 56 percent of the sampled households depended on firewood collection and charcoal making, largely unchanged from the same time last year. It was also the main livelihood in the other two localities. The widespread use of largely unsustainable income sources, such as firewood collection and charcoal making, indicated scarce generating opportunities. The large number of households engaged in firewood and charcoal livelihood activities may increase the risk of environmental degradation. Non-agricultural wage labour remained the second most important livelihoods activity for the sampled households across the three localities.

FIGURE 1: MAIN LIVELIHOOD



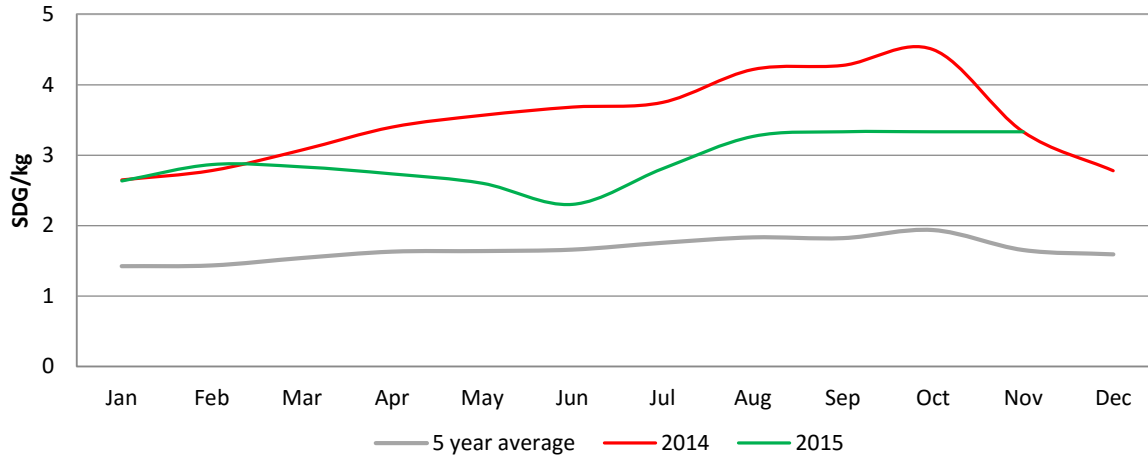
## Markets and Prices

The price of sorghum (the main staple food) was stable in Red Sea state in the second half of 2015, during a time of the year when prices normally decline. The price was at the same level as in same time last year. However, the price was far above the five-year average, and it was expected to increase in the coming months, due to the low agricultural production brought on by late and short rainy season. The impact of poor agricultural conditions were felt in important supply areas such as the rainfed schemes of Gedaref state.

The terms of trade between sorghum and goat is higher by 40 percent compared to same time last year, but less by 20 percentage points compared to May 2015, in a trend that favoured livestock producers. This trend

was due to stable sorghum prices and increasing goat prices. Prices of goats were likely to witness a decrease in the coming months due to the poor pasture condition resulting from the poor rains.

FIGURE 2: SORGHUM PRICES IN PORT SUDAN MARKET



## Purchasing Power

The price of a local food basket was used as a benchmark against which to compare household income, to determine the level of purchasing power. In November 2015, the cost of local food basket was 5.6 SDG per capita, which was 47 percent higher than that in May 2015.

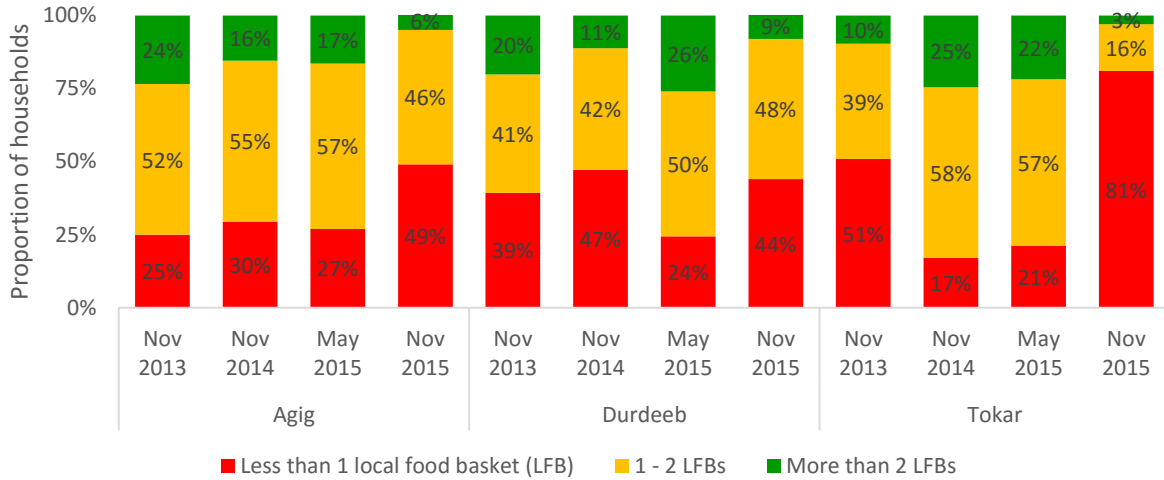
A significant deterioration in purchasing power compared to May 2015 and same time last year was observed across the localities especially in Tokar locality.

The proportion of households who could not afford the cost of a local food basket significantly increased in Tokar locality from 21 to 81 percent. A less dramatic deterioration was seen in Agig, while purchasing power remained at the same level as at the same time last year. The weak purchasing power was due to heavy dependency on livelihoods that generate low income, such as firewood collection and/or charcoal production, combined with high food prices and less opportunities related to agricultural works resulting from the below-average agricultural season.

### The Local Food Basket

The local food basket consisted of the following food items: cereals (sorghum), milk, dry vegetables, cooking oil, goat meat, cow meat, onions and sugar. The amount of each food item was computed so as to minimize the cost of the basket, while meeting the minimum requirement of 2,100 kilocalories per person per day. Households were classified as having poor purchasing power (households that could not afford the cost of one local food basket), borderline purchasing power (households that could afford between one and two baskets) and acceptable purchasing power (households that could afford more than two baskets).

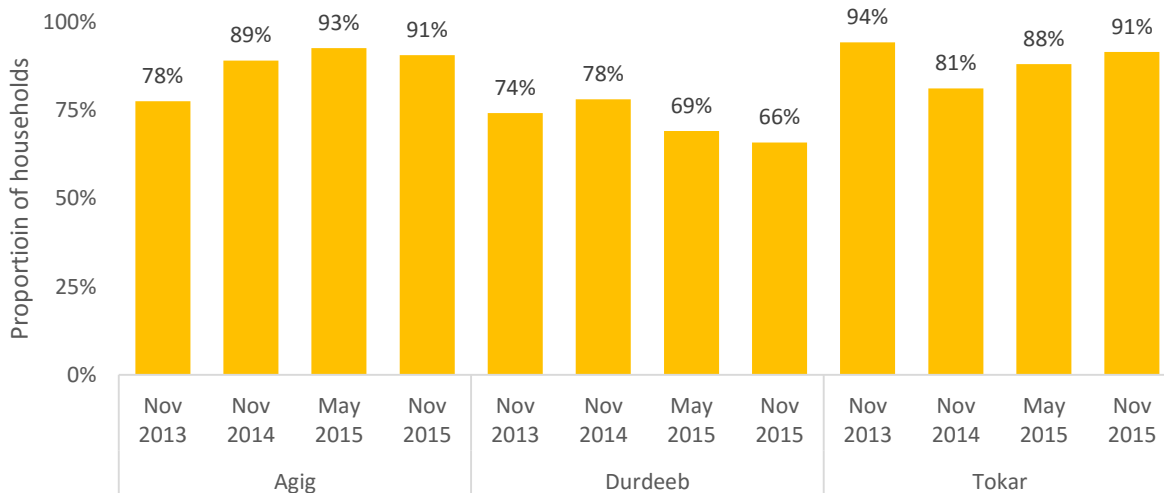
FIGURE 3: HOUSEHOLD PURCHASING POWER



## Household Expenditure

The expenditure on food as a percentage of total expenditure was used as a proxy indicator of household economic stress: The greater a household's the share of food expenditure, the greater the likelihood of increased vulnerability to price and income shocks. A commonly used threshold for the share of food expenditure (above 65 percent) was used to identify households more exposed to economic vulnerability. The proportions of households spending more than the threshold remained very large in Agig and Tokar localities compared to the same time last year. Households tended to spend large proportion of total monthly food expenditure on cereals, followed by milk, cooking oil and sugar.

FIGURE 4: PROPORTION OF HOUSEHOLDS SPENDING MORE THAN 65 PERCENT OF THEIR EXPENDITURES ON FOOD



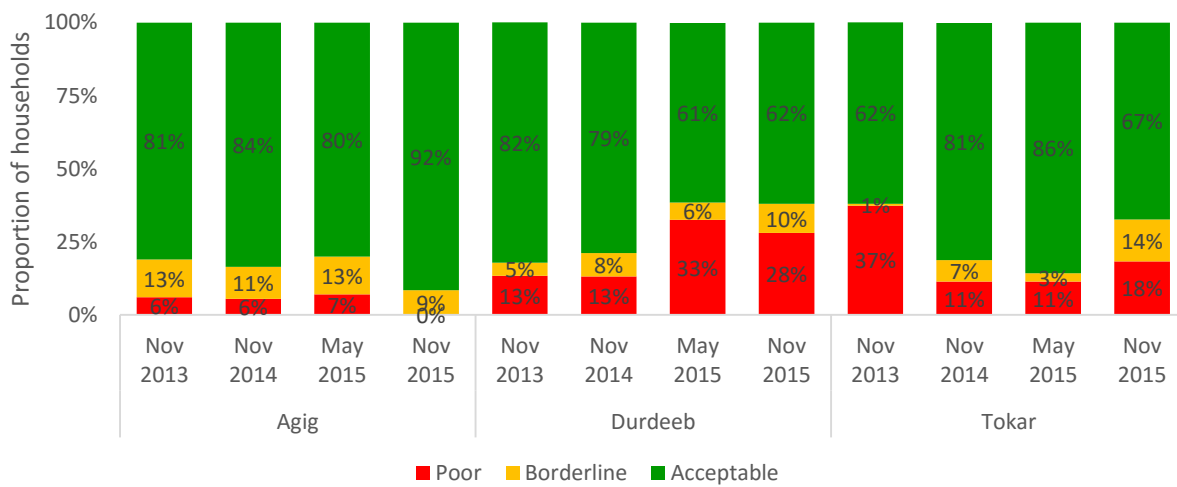
## Household Food Consumption

Household food consumption showed an improvement compared to May 2015 and the same time last year in Agig, while in Durdeeb and Tokar, food consumption had deteriorated substantially over the same period. Household food consumption was worse in Durdeeb locality compared to Agig and Tokar. On average, 62 percent of sampled households in Durdeeb had acceptable food consumption. The deterioration could be attributed to a significant drop in purchasing power and decline in food access.

### The Food Consumption Score

Food consumption data was collected and analyzed using standard WFP methodology: the variety and frequency of different foods consumed over a seven-day recall period was recorded to calculate a weighted food consumption score. Weights were based on the nutritional density of the foods. Using standard threshold, households were classified as having either poor, borderline or acceptable food consumption.

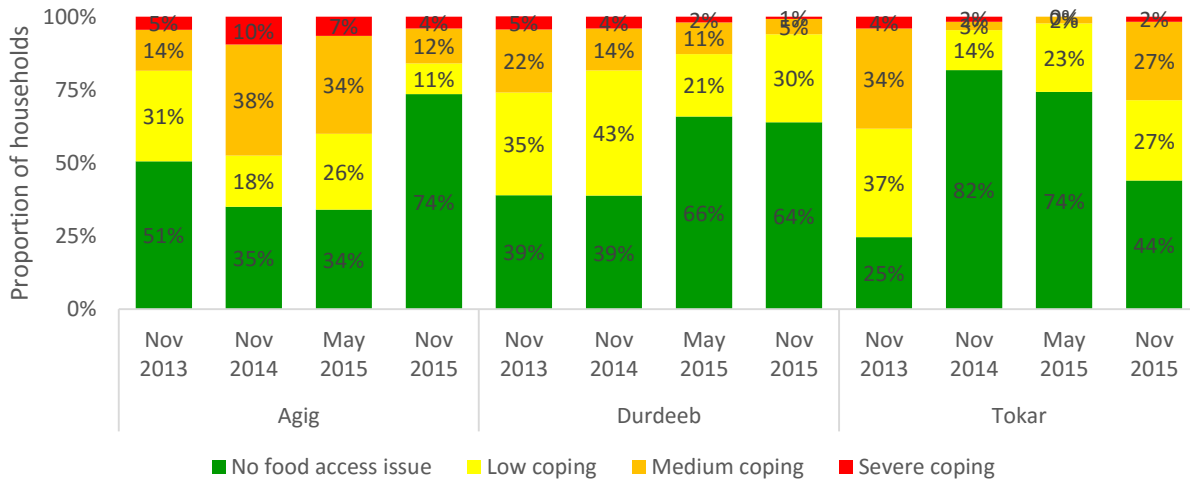
FIGURE 5: HOUSEHOLD FOOD CONSUMPTION



## Perceived Food Access

Households were asked if there were times in the one week prior to the data collection when they did not have enough food (or money to buy food). If they experienced such situations, they were asked what strategies they employed to cope with the shortage. The proportions of households reported food access issues in Tokar locality significantly increased compared to that in May 2015 and the same time last year. In Durdeeb, the proportion of households reported access issues remained as same level as that in May 2015. In November 2015, the survey saw a significant deterioration of food access in Tokar locality. This could be resulted from limited income sources and late and short flooding waves of Khor Baraka, which is the main irrigation source for the agricultural activities in this locality.

FIGURE 6: PERCEIVED FOOD ACCESS



## Food Security

The food security situation had deteriorated in many part of the state compared to what they were at the same time last year and May 2015. The proportion of food secure households had diminished across the localities compared with what they were in May 2015: Tokar locality saw a 54 percentage points decline, while the corresponding figure for Agig locality was 13 percentage points. The deterioration was less pronounced in Durdeeb locality, where the proportion of food secure households dropped by 6 percentage points. Food insecurity was more prevalent in Tokar compared to the other Agig and Durdeeb, mainly due to the major deterioration in purchasing power in that locality. Other drivers of food insecurity included increased prices of non-cereal food items and the poor agricultural season.

FIGURE 7: FOOD SECURITY

