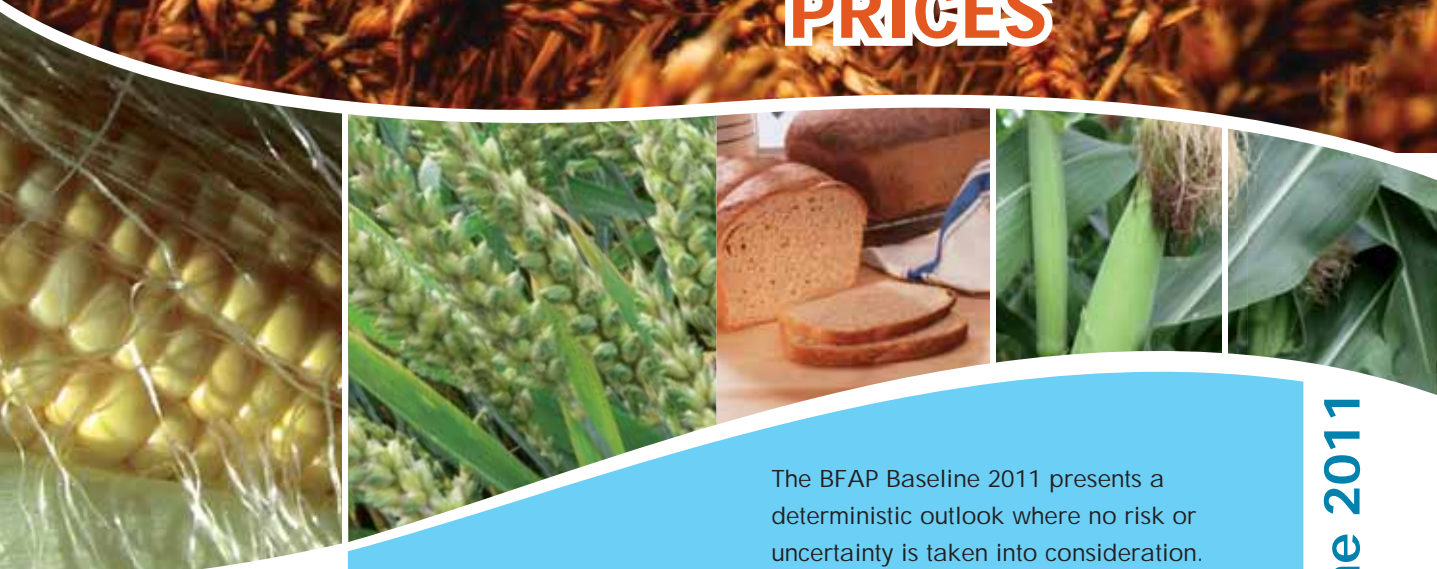


# THE IMPACT OF WEATHER ON FOOD PRICES



The BFAP Baseline 2011 presents a deterministic outlook where no risk or uncertainty is taken into consideration. Market projections are generated under the assumption that normal weather conditions will prevail. However, as world stock levels are at historic lows, weather conditions in the main growing regions of the world pose significant risk, and commodity and food prices in 2012 could trade at much higher levels than is portrayed in the Baseline.

BFAP Baseline 2011



Bureau for Food and  
Agricultural Policy (BFAP)



The impact of the weather on commodity prices is one of the key drivers of food inflation and since BFAP has received many requests in the past to highlight the food price impacts of given scenarios, we issue this statement to simulate the impact of a specific weather scenario on local food retail prices.

To illustrate the possible impact of adverse weather conditions on food retail prices, it is assumed that the average and the range in which world maize prices trade increase by 30% above the baseline due to a lack of sufficient rainfall and excessive heat in the US in the second and third quarter of 2011.

The exchange rate is left unchanged from the baseline with the most likely exchange rate for 2012 at R7.20/US\$, with a possible movement between R6.50 and R7.50. Figures 1 & 2 present the probability distributions for the white maize and wheat SAFEX prices for 2012 under these assumptions.

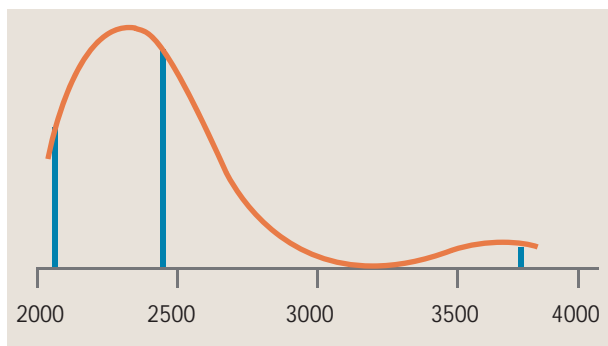


Figure 1: SAFEX white maize price, 2012 (R/ton)

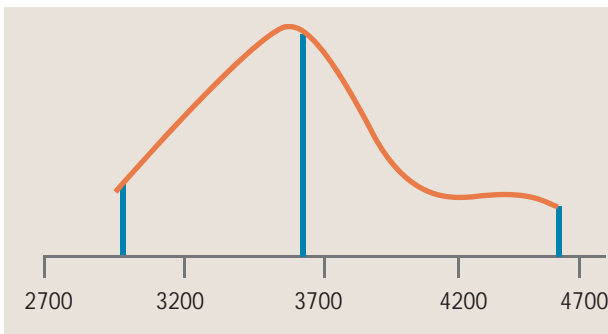


Figure 2: SAFEX wheat price, 2012 (R/ton)

The simulation illustrates that there is a high probability that the SAFEX white maize price will trade around R2450/ton, with a possible minimum price of R2040/ton and a possible maximum price of R3780/ton. The high prices in the probability distribution occur if SA would also receive less rain and the local maize market moves to import parity. In other words, this is a situation where a drought pushes local prices to import parity and the import parity prices are high due to a weak exchange rate and a high world price. The most likely price for wheat is approximately R3700/ton, with a minimum price of R3150/ton and a maximum of R4600/ton. Since SA is a net importer of wheat and trading at import parity, there is less variability in the SAFEX wheat price.

The projected spread in possible white maize and wheat prices will drive the maize meal and bread prices. Tables 1 and 2 summarize the projected increase in maize meal and bread prices over the next year and illustrate that maize meal will most likely trade around 17.5% higher at retail level in 2012 under adverse weather conditions in the American maize producing regions. If a drought occurs on top in SA during the 2011/12 production season, maize meal prices could increase by as much as 42.6%. Under the same conditions bread could be 25.7% more expensive.

	Average 2011	Baseline 2012	Scenario 2012
Probability	R/kg	R/kg	R/kg
Mean	5.25	5.51 5.0%	6.17 17.5%
Min		5.12 -2.5%	5.74 9.3%
Max		5.97 13.7%	7.49 42.6%

	Average 2011	Baseline 2012	Scenario 2012
Probability	R/loaf	R/loaf	R/loaf
Mean	8.43	8.77 4.0%	9.60 13.9%
Min		8.26 -2.0%	8.86 5.1%
Max		9.53 13.1%	10.60 25.7%

