

**ANNEX: Additional Price Analysis**  
September 2011

# Afghanistan

This annex offers an analysis of price dynamics in the Afghan wheat market as well as a benchmark (expected) price against which the significance of actual price changes are judged.

## Major findings

- **Domestic prices have not been volatile over the past five years (except in 2008)**
- **Recent increase in world prices could lead to great volatility in domestic prices**
- **Prices are currently lower than their four year average by 11%**
- **Prices are expected to be 19400, 19800, and 20000 afghani/ton in October, November and December respectively**

## Five Year Overview of Price of Wheat in Afghanistan (October 2006- September 2011)

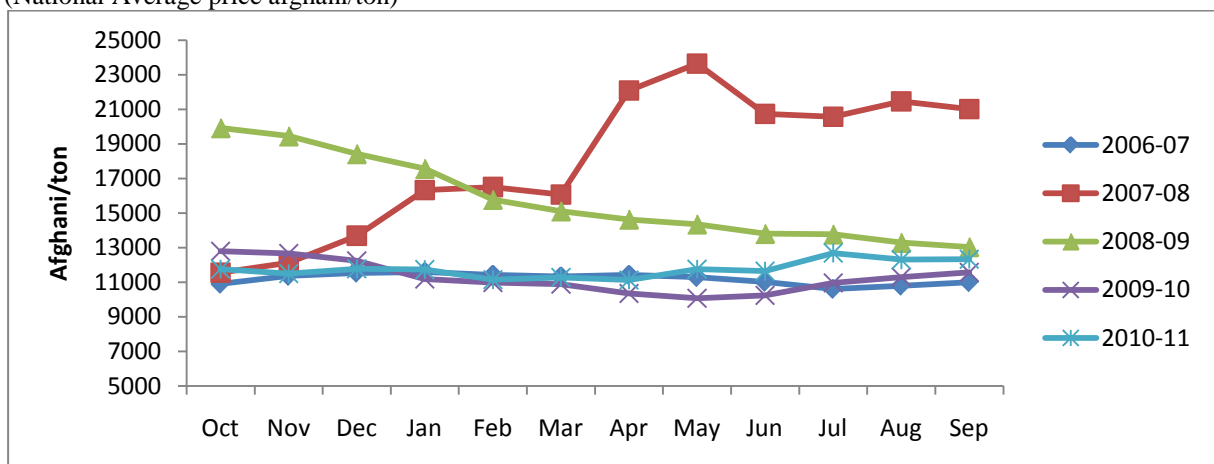
Real price of wheat (i.e. adjusted for inflation) remained unchanged in 2006 and most of 2007. However, prices began to rise at the end of 2007. In September 2008 domestic prices were on average 81% higher than October 2007.

Prices peaked in May 2008 and were 109% (in real terms) above their May 2007 level. World price of wheat (always measured in real afghani unless stated otherwise) actually decreased by 10% during the same period. This decline in world prices was preceded by great volatility as prices rose from mid 2007 to Jan 2008 by 64% only then to retreat to below early 2007 levels. The domestic prices in Afghanistan did not experience this sharp decline and continued to rise.

Domestic prices gradually declined after May 2008, continued their decline throughout 2009, and bottomed in the first half of 2010. Price levels were on average 11% lower in September 2010 than in the same month in 2009. In the second half of 2010, prices rose by 20%, only to decline in the first quarter of 2011. Prices bottomed in April 2011 and began a rise in May 2011 and have risen by more than 10% since then.

Volatility measured by coefficient of variation (CV) was 4% for the period spanning from October 2010 to September 2011, which is significantly lower than the preceding 12 months.

Figure 1: 12 Monthly Real Wheat Prices in Afghanistan  
(National Average price afghani/ton)



### Comparison of Actual Prices with Benchmark (Expected) Prices

Commodity future markets can be helpful predictors of what grain prices will be in the next few months (short-term). Unfortunately, there are no future markets for staple grains in the majority of developing countries. The ESA Price Monitoring Model is a simple tool designed to assist policy makers, farmers and traders in assessing whether recent price trends are in line with those typically observed in the past.

**ESA Price Monitoring Model:** The purpose of the model is to determine whether short term price movements of a commodity exceed a benchmark which takes into consideration seasonality, inflation and historic variability. The model uses only data on past prices and the consumer price index (CPI) to capture these characteristics. It establishes an expected level of price for the following month along with a range of uncertainty generated by past deviations from that expected price level. Price movements can be interpreted as “excessive” if they fall above or below the uncertainty band.

An additional feature of the model is to show the current level of prices relative to an average of past prices (adjusted for inflation). In other words, the model demonstrates whether current prices are higher or lower than past average prices (for details on the model please see: <http://www.foodsec.org/web/publications/briefs/> )

**Results:** In September 2011 wheat prices in Afghanistan were about 2300 afghani/ ton (11%) lower than their average of the past four years.

Actual prices have been close to the expected prices except in the months of July and August. In July prices were above the benchmark by more than 10%, which should have raised concerns. This is marked red by the model to indicate that this deviation from the expected price is extreme relative to 70% of previous deviations.

The price in October is expected to be near the 19400 afghani/ton level with about a 70% chance that the deviation will be less than or equal to  $\pm 3.5\%$ . Prices are expected to increase mildly in November and December, if normal seasonal patterns hold. Food security concerns for Afghanistan should arise if wheat prices reach above 20100 afghani /ton in October.

Figure 2: Price Monitoring Model (prices afghani/ton)

