

Price Monitoring and Analysis Country Brief

Bolivia

May-August 2011

Key Messages

- Prices of rice, yellow maize and wheat flour have shown a decreasing trend in recent months thanks to the new harvest in March 2011.
- Food security was expected to improve but agencies report high prevalence of undernourishment and a situation of serious hunger.
- Localized food insecurity was reported due to extreme weather conditions which have constrained access to food in isolated rural communities.
- The government has put in place measures to support farmers' access to credit and to improve water infrastructure for agriculture. It has also assisted people requiring food assistance in areas hit by the cold wave.

Background

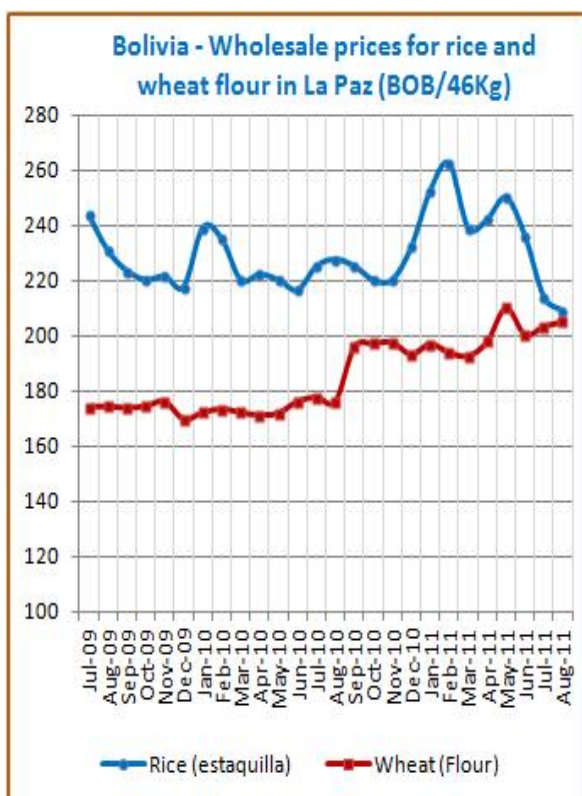
Bolivia's total population is about 9.9 million, while the annual growth rate is 1%. Latest estimates report the prevalence of undernourishment at 27%.

Economic Indicators	View Data
Total Population (millions) - 2010 (WB)	9.929
Population growth rate - 2010 (WB)	1%
GNI per capita, \$ PPP - 2010 (WB)	4610
Population below 1\$ PPP per day - 2007 (MDGI)	11%
Rural population - 2010 (WB)	33%
Agriculture, value added (% of GDP) - 2010 (WB)	13%

Food Consumption	
Undernourished Population - 2006/2008(FAO)	27%
Cereal share in total dietary energy consumption - 2007 (FAO)	47%
Meat share in total dietary energy consumption - 2007 (FAO)	10%
Health Indicators	
Pop. with sustainable access to improved sanitation - 2008 (WHO)	25%
Life expectancy at birth (years) both sexes - 2009 (WHO)	68
Pop. with access to improved drinking water sources - 2008 (WHO)	86%
Prevalence of HIV among adults aged >= 15 years - 2009 (WHO)	0.2%

Prices

Rice prices dropped thanks to the new harvest in March. In Aug, rice (estaquilla) prices went down by 9% to 215 BoB/46kg. Since May, both in Santa Cruz and in La Paz, prices fell by 17% to 208.75 BoB/46kg, and in Cochabamba fell by 7% to 235 BoB/46kg. Maize prices (yellow) declined with the main harvest. In Aug, prices were 30 BoB/arroba (11.5kg) in La Paz; 18.15 in Santa Cruz and 19.84 BoB/arroba in Cochabamba; dropping by 14, 8 and 27% respectively. Wheat flour prices slightly declined: in August in La Paz prices were 204.88 BoB/45kg and in Santa Cruz 202.62 BoB/45kg. In Aug maize price in La Paz was 29% above price of maize N2 Yellow.



Source: GIEWS Country Briefs

Food Security Situation Assessment

Food security situation is expected to be generally good thanks to good harvests and declining prices. However, a decrease in rice production is expected as the crop was affected by the dry weather during sowing season and by localized flooding. Food emergency assistance was required in the department of Potosi where the impact of the cold frost has affected food security conditions of rural families living in those areas. FAO Hunger map depicts the situation as high prevalence of hunger, with 27% of the population classified as undernourished. IFPRI Global Hunger Index describes the situation of hunger in Bolivia as serious.

CURRENT EMERGENCY ASSESSMENT

Exceptional shortfall in aggregate food production supplies	Widespread lack of access	Severe localized food insecurity	FAO/GIEWS CPFS 2011
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Bolivia is not covered by FEWSNET. FEWSNET coverage is limited 14 African countries 1 Caribbean (Haiti) and 1 Central Asia (Afghanistan). Food security status is given for different parts of the country in each case. [FEWSNET](#)

SCALE OF HUNGER (% of Undernourishment)

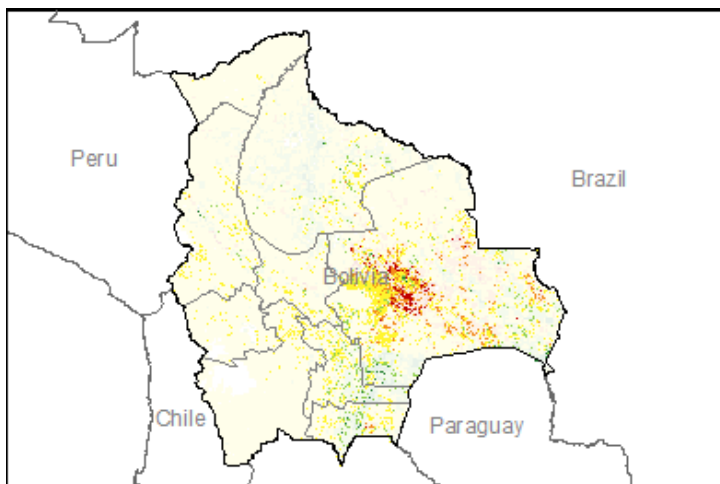
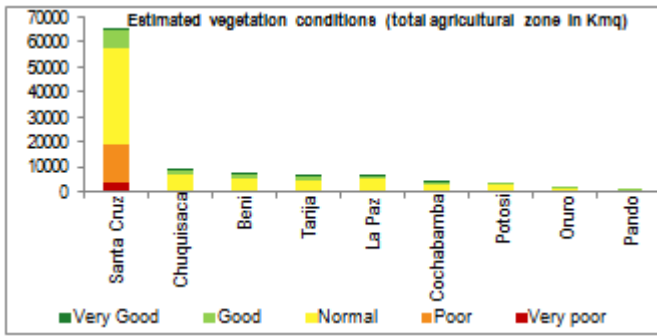
Very high (>= 35%)	High (25-34%)	Moderately high (15-24%)	Moderately low (5-14%)	Very low (< 5% under.)	FAO Hunger Map
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FAO Hunger Map classifies all countries of the world into five based on % of population undernourished.

Extremely alarming	Alarming	Serious	Moderate	Low	IFPRI/2011 GHI
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Vegetation Condition

Normal conditions are observed for the major part of the country except for the province of Santa Cruz. The general indicator of vegetation condition provided below is the absolute difference between the NDVI for August 2011 and the average of the last 10 years, calculated on the agricultural zones derived from the GLOBCOVER 2005 database (ESA).



Source: JRC MARS – FoodSec

Crop phase in the reference period

Sowing	Potatoes - Wheat (East plains)
Growing	Wheat (East plains) - Barley
Harvesting	Sweet potatoes - Wheat (Andinean) - Barley - Maize - Potatoes - Rice - Soybean

Natural Disasters, Drought and Conflicts

An intense and long-lasting snow storm has affected the southwest of Bolivia (department of Potosi) in July. Main accesses to the populated areas in this region were blocked, leaving thousands of rural families, approximately 7,000 people, stranded with limited access to food assistance. The snowfall has also affected approximately 41,000 heads of alpacas.

Refugees and IDPs	2008	2009	n.a.
Total in the country	755	713	n.a.
Total outside the country	615	738	n.a.

Source: UNHCR Statistical Online Population Database, United Nations High Commissioner for Refugees (UNHCR), Data extracted on 01/12/2010.

Disaster Type (last year)	Date	Location	Alert
Earthquake	2011-04-27	Potosi Province	1/3
Earthquake	2011-04-01	Potosi Province	1/3
Flood	2011-02-14	North of Cochabamba	1/3

Source: Global Disaster Alert and Coordination System - 3 = 1000 or more people killed or 800000 or more people displaced. 2 = 100 or more people killed or 80000 or more displaced.

Food Balance Sheet

Early estimates indicate a 4% increase in maize production compared to the average for last year. The 2011 total cereal production is forecast at 2.07 million tonnes, representing almost the same level as the 2010 production which was estimated to be 6% higher than the 2009 harvest and the last five year average.

Bolivia				
Cereal production				
	2006-2010 average	2010	2011 forecast	change 2011/2010
	000 tonnes			percent
Maize	876	900	934	4
Rice (paddy)	465	500	483	-3
Sorghum	335	350	333	-5
Others	367	382	366	-4
Total	1 975	2 075	2 077	0

Note: percentage change calculated from unrounded data.
Source: FAO/GIEWS Country Cereal Balance Sheets

Source: GIEWS Country Briefs

Government Policies

The government has supported the financing of water infrastructure to ameliorate water supply and sewage facilities. It has also facilitated farmer access to credit. The government, together with WFP has been responding to the food emergency caused by the cold waive in Potosi.

Consumer and market oriented measures	n.a.
Producer oriented measures	Credit support; Irrigation
Trade policy measures	n.a.
Safety net (increased or introduced)	Food transfer

Different sources

Current events to watch (Click to see the full report)

GIEWS Country Briefs: Bolivia 20-October-2011
[De nombreux états insistent devant la Troisième Commis...](#)
[El Derecho Humano a la Alimentación en Bolivia: Inform...](#)
[The Human Right to Food in Bolivia: Report of an Inter...](#)
[Gobernación, Defensa Civil y el PMA hoy entregan alred...](#)

For more information, contact: Information-for-action@fao.org
 Website: www.foodsec.org

Powered By the GIEWS Workstation

The Programme on Linking Information and Decision Making to Improve Food Security is funded by the European Union and implemented by the Food and Agriculture Organization of the United Nations.

* For a further analysis of prices in Bolivia please see: [Annex](#)

ANNEX: Additional Price Analysis
September 2011

Bolivia

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

Major findings

- Domestic prices are 30% lower than their four year average
- Prices are at their lowest level in real terms over the past five years
- Prices are expected to be 5110, 5200, and 5330 Boliviano/ton in November, December and January respectively

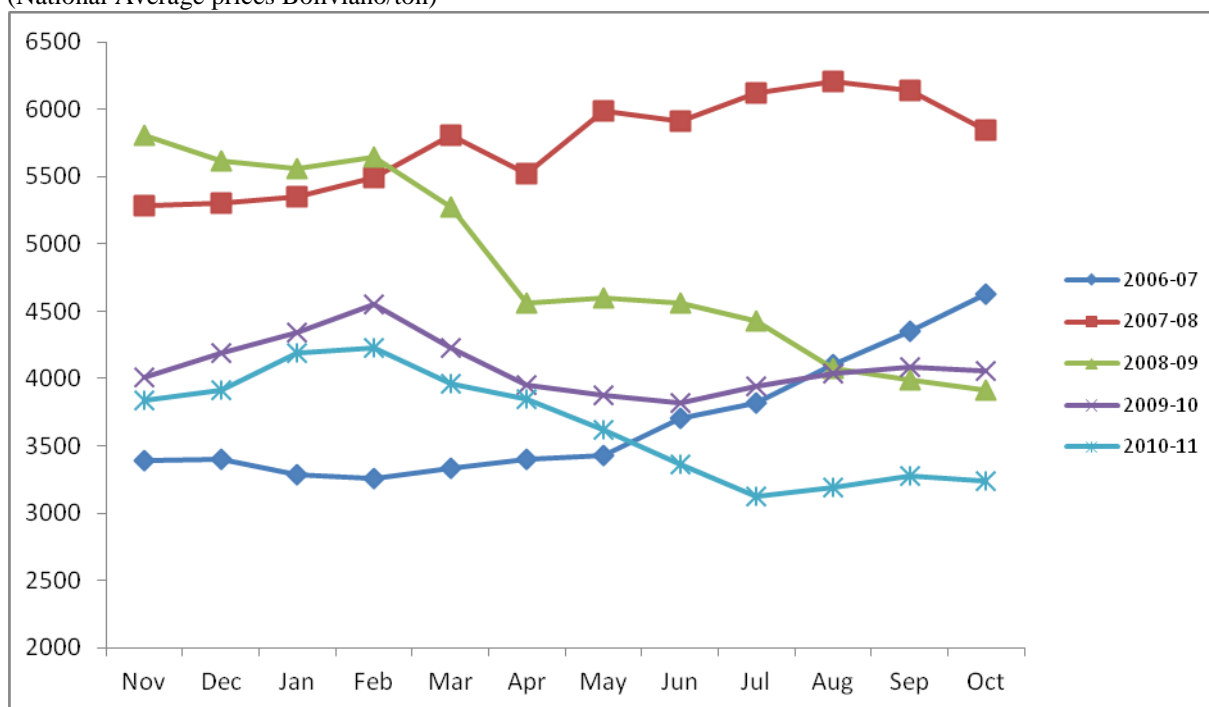
Five Year Overview of Price of Rice in Bolivia (October 2006-September 2011)

Rice prices in Bolivia have decreased in real terms (i.e. after adjusting for inflation) by 6% during the past five years (from October 2006 to September 2011).

Prices began a steady decline from February 2011 and by July were lower by 26%. From July to October prices have been stable. Prices are at their lowest level of the past five years. In the middle of 2007 prices began to rise and remained at higher levels for most of 2008. Prices have decreased and did not return to the 2008 levels.

Volatility increased during the period from November 2010 to October 2011 and was 11% compared to 5% for the preceding 12 month period.

Figure 1: 12 Month Real Rice Prices in Bolivia
(National Average prices Boliviano/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 October 2011 rice prices in Bolivia are about 2100 Boliviano/ ton (30%) lower than their average of the past four years.

The prices are not showing any sign of returning to their past four year average. During the past five months only in June and July actual prices missed the benchmark and fell outside the uncertainty band where 70% of previous deviations had fallen. In June and July prices were 8.8% below and 7.8% above the benchmark. Prices have been within the uncertainty band in recent months.

The price in November is expected to be near the 5110 Boliviano/ton level with about a 70% chance that the deviation will be less than or equal to $\pm 3.5\%$. Prices are expected to continue a steady upward trend over the next three months if normal seasonal patterns hold. Food security concerns should arise if prices rise above 5300 Boliviano/ton in November.

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

