



Quarterly Commodity Update

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EPAR Brief No. 74

*Prepared for the Agricultural Development Division at the
Bill & Melinda Gates Foundation*

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May 19, 2010

Executive Summary

This report presents data on selected agricultural commodities for the first quarter of 2010 (January through March 2010) and the month of April, where available. More specifically, this report provides a summary of recent changes and trends in prices, demand, supply, and market conditions for key agricultural commodities as well as several goods of particular importance to the Bill & Melinda Gates Foundation and its work. Highlights include:

- The FAO food price index increased 1.46 percent from the fourth quarter 2009 average to the first quarter 2010 average.¹ Prices of staple food cereals in developing countries remain well above pre-crisis levels of early 2008, but are down from their peaks due to good cereal harvests in 2009 and lower international export prices.²
- Cocoa prices for the first quarter of 2010 decreased 3.5 percent from the fourth quarter average of 2009 to reach \$3,297.11 per ton. Increasing supplies and a large expected crop in 2010/2011 are putting downward pressure on long-term prices, though according to market analysts, short-term futures show a slight rising trend in response to increased demand.³
- The ICO composite price for coffee averaged 123.17 cents per pound in the first quarter of 2010, an increase of 2.7 percent from the fourth quarter 2009 average. According to analysts, coffee prices continue to be influenced by reduced production in a number of exporting countries as well as reduced stocks in both exporting and importing countries.⁴
- The average long grain rice price for the first quarter of 2010 was \$12.48 per ctw (equivalent to 100 pounds), which represents an increase of 5.6 percent from the previous quarter average. Rice prices are projected to rise in the short-term but to decline in the long-term. According to the Food and

¹ FAO. (2010). World Food Price Index. Available from <http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/>

² FAO. (2010, February). *Crop Prospects and Food Situation*. Available from <http://www.fao.org/giews/english/cpfs/index.htm>

³ Rosenberg, R. (2010, April 16). *The Soft Spot (6)*. Retrieved from <http://www.insidefutures.com/article/146103/The%20Soft%20Spot%286%29.html>

⁴ International Coffee Organization, <http://dev.ico.org/prices/p2.htm>

NOTE: The findings and conclusions contained within this material are those of the authors and do not necessarily reflect positions or policies of the Bill & Melinda Gates Foundation.

Agriculture Policy Research Institute (FAPRI), the high prices that prevailed from 2007–2009 are unlikely to persist given the projected global supply-demand balance.⁵

- Wheat prices for the first quarter of 2010 averaged \$194.25 per ton, decreasing 6.8 percent from January to April 2010.⁶ Large inventories in several exporting countries, including the U.S. and China, and recent gains in the value of the US dollar compared to foreign currencies have contributed to the gradual decline in international wheat prices this season.⁷
- Maize prices averaged \$165.81 per ton over the first quarter of 2010, which represents a 3.8 percent decline from the previous quarter average. International maize prices decreased by 10 percent between January and March 2010 as world supplies put a downward pressure on prices.^{8,9}
- According to the FAO's measure, soybean prices in the first quarter of 2010 averaged \$371.40 per ton, which represents a nearly 5 percent decrease from the 2009 fourth quarter average.¹⁰ World prices for oilseeds and derived products remained above historic levels in the first quarter of 2010.¹¹ Record soybean production in 2009/2010 resulted in only a modest increase in soybean stocks as soybean use also hit record highs.¹²
- Crude oil prices averaged \$78.64 per barrel in the first quarter of 2010, which represents an increase of 3.4 percent from the 2009 fourth quarter average.¹³ Crude oil prices continued to rise in April as market conditions tightened amid strengthening demand.¹⁴
- Cashews prices have continued to increase in recent months from supply shortages due in part to poor weather and decreased production in India.
- Four of 5 major fertilizer prices (DAP, Phosphate rock, TSP, and Urea) increased in the first quarter of 2010.¹⁵ Potassium chloride prices continued a declining trend amid ample supply and weak demand.¹⁶

⁵ Food and Agriculture Policy Research Institute University of Missouri-Columbia. (2010, March). *US Baseline Briefing Book: Projections for agriculture and biofuel markets*. Available from

http://www.fapri.missouri.edu/outreach/publications/briefing_books.asp?current_page=outreach

⁶ FAO. (2010). World Food Price Index. Available from <http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/>

⁷ FAO. (2010, February). *Crop Prospects and Food Situation*. Available from

<http://www.fao.org/giews/english/cpfs/index.htm>

⁸ FAO. (2010, February). *Crop Prospects and Food Situation*. Available from

<http://www.fao.org/giews/english/cpfs/index.htm>

⁹ FAO. (2010). World Food Price Index. Available from <http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/>

¹⁰ FAO. (2010). World Food Price Index. Available from

<http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/>

¹¹ FAO. (2010, April 14). *Monthly Price and Policy Update (No. 14)*. Available from

<http://www.fao.org/economic/est/publications/oilcrops-publications/monthly-price-and-policy-update/en/>

¹² Food and Agriculture Policy Research Institute University of Missouri-Columbia. (2010, March). *US Baseline Briefing Book: Projections for agriculture and biofuel markets*. Available from

http://www.fapri.missouri.edu/outreach/publications/briefing_books.asp?current_page=outreach

¹³ U.S. Energy Information Administration. *Petroleum Navigator: Spot Prices*. Retrieved from

http://tonto.eia.doe.gov/dnav/pet/pet_pri_spt_s1_m.htm

¹⁴ World Bank Development Prospects Group. (2010, April). *Commodity Markets Review*. Available from

<http://externalization.worldbank.org/external/default/main?theSitePK=2880771&piPK=64691875&pagePK=64691887&menuPK=64696117&contentMDK=21148682>

¹⁵ World Bank. (2010, April 10). *Commodity Price Data (Pink Sheet)*. Retrieved from

- Average monthly cotton prices for February were 80.05 cents per pound. The first quarter average cotton price, according to partial quarter data as of the end of February, was up 11 percent from the 2009 fourth quarter average.¹⁷ Rising cotton prices are attributed to reports that global production for 2009/2010 will experience a larger than expected shortfall.¹⁸
- The FAO Dairy Price Index decreased by 7.8 percent compared to the fourth quarter average.¹⁹ Dairy prices continued to fall amid ample supply and weak demand.²⁰ Milk production is expected to decline in 2010 and demand is projected to increase with economic recovery to restore equilibrium in the market.²¹
- Mango prices in India, the world's largest producer, are up in recent weeks but are expected to fall, despite the continued and growing support in the international market for high-end fruit.²²
- Although data on passion fruit prices are unavailable, the volume of international trade in minor tropical fruits has increased in recent years and medium-term projections through 2014 forecast that demand will continue to grow.²³

Overview of Agricultural Commodity Markets

The FAO food price index consists of 6 commodity group prices (meat, dairy, cereals, oils, fats, and sugar), weighted by average world export shares in each of the groups. This composite index has risen consistently since August 2009, a trend shared by nearly all its components.²⁴ The FAO food price index continued to rise into 2010 with an increase of 1.46 percent in the first quarter of 2010 compared to the fourth quarter 2009 average. In March 2010, the monthly food price index was down 24 percent from its peak levels in June 2008.²⁵

<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:21148472~menuPK:476941~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html>

¹⁶ World Bank Development Prospects Group. (2010, April). *Commodity Markets Review*. Available from <http://externalization.worldbank.org/external/default/main?theSitePK=2880771&piPK=64691875&pagePK=64691887&menuPK=64696117&contentMDK=21148682>

¹⁷ National Cotton Council. (2010). "A" Index Monthly Cotton Prices. Available from <http://www.cotton.org/econ/prices/monthly.cfm>

¹⁸ World Bank Development Prospects Group. (2010, April). *Commodity Markets Review*. Available from <http://externalization.worldbank.org/external/default/main?theSitePK=2880771&piPK=64691875&pagePK=64691887&menuPK=64696117&contentMDK=21148682>

¹⁹ FAO. (2010). World Food Price Index. Available from <http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/>

²⁰ U.S. Department of Agriculture. (2010, April 9). *World Agricultural Supply and Demand Estimates* [WASDE-481-18]. Available from <http://www.usda.gov/oce/commodity/wasde/>

²¹ Food and Agriculture Policy Research Institute University of Missouri-Columbia. (2010, March). *US Baseline Briefing Book: Projections for agriculture and biofuel markets*. Available from http://www.fapri.missouri.edu/outreach/publications/briefing_books.asp?current_page=outreach

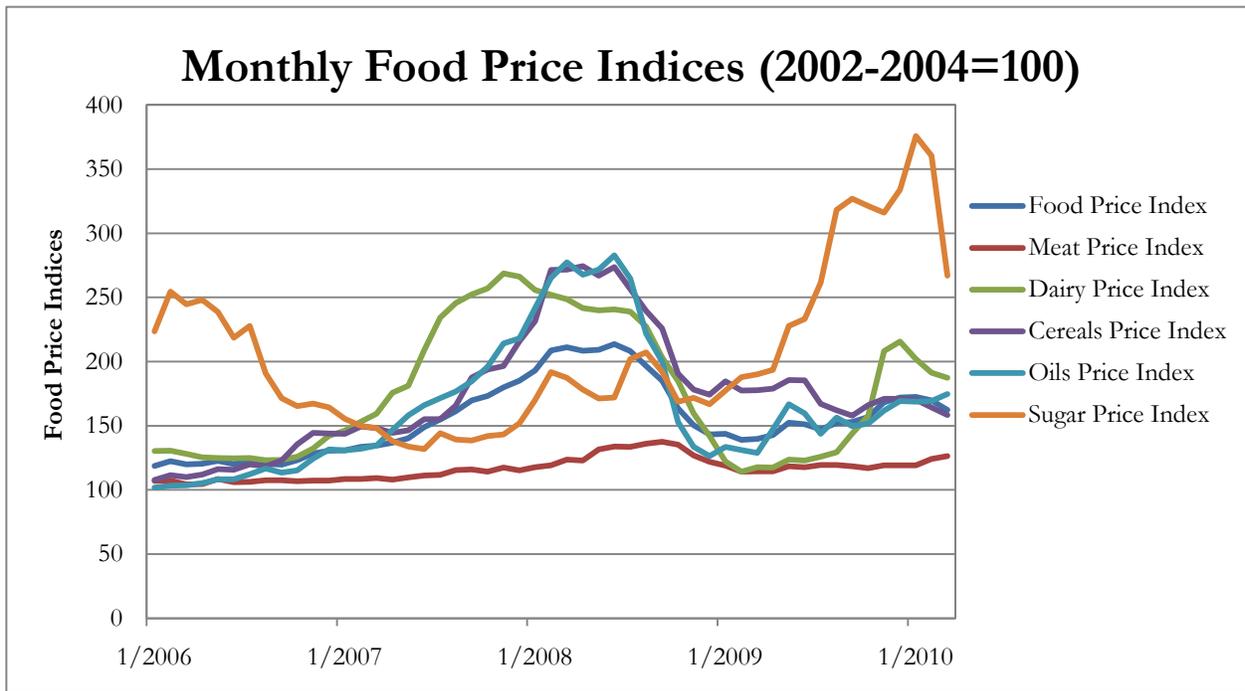
²² Bellman, E. (2010, April 20). *Don't sweat, it's mango season*. Retrieved from <http://blogs.wsj.com/indiarealtime/2010/04/20/don%E2%80%99t-sweat-it%E2%80%99s-mango-season/>

²³ Food and Agriculture Organization. (2005). *Current situation and medium-term outlook for tropical fruits*. Retrieved from www.fao.org/es/esc/common/ecg/218/en/Sit_web_e.pdf

²⁴ FAO. (2009, December). *Food Outlook*. Available from <http://www.fao.org/docrep/012/ak341e/ak341e00.htm>

²⁵ FAO. (2010). World Food Price Index. Available from <http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/>

The FAO Global Information and Warning System on Food and Agriculture's *Food Outlook* is a key source of overall global commodity market analysis. Since it is published biannually, (May/June and November/December), the key findings were reported in the previous *EPAR Commodity Price Update*, dated February 23, 2010. The FAO's other main publication, *Crop Prospects and Food Situation*, is published several times per year and provides some analysis of food prices. In general, prices of staple food cereals in developing countries remain well above pre-crisis levels of early 2008 but are down from their peaks due to good cereal harvests in 2009 and lower international export prices.²⁶



Source: FAO Food Price Index

²⁶ FAO. (2010, February). *Crop Prospects and Food Situation*. Available from <http://www.fao.org/giews/english/cpfs/index.htm>

Cocoa

According to the ICCO, average first quarter cocoa prices for 2010 decreased 3.5 percent from the fourth quarter of 2009 to reach \$3,297.11 per ton.²⁷ The drop in prices reflects optimistic mid-crop prospects in key West African cocoa producing countries, as well as a correction from a 30-year cocoa price high in 2009. The sharp increase in cocoa prices at the end of 2009 occurred as concerns mounted over a world production shortfall because of poor weather, labor strikes, and export disruptions from political instability in Côte d'Ivoire, which accounts for approximately 40 percent of global cocoa output. Although cocoa prices decreased on a quarter-to-quarter basis, prices increased by 6 percent over the month of March on expectations of decreased production from Côte d'Ivoire.²⁸

The ICE Futures U.S. Cocoa contract is the benchmark for world cocoa prices. Trading in cocoa futures typically experiences a seasonal lull beginning in April and lasting until the onset of Côte d'Ivoire's main crop harvest in October.²⁹ However, on April 16, cocoa futures experienced the highest one-day gain in 4 months in response to stronger-than-expected first quarter North American grinds, a key measure of demand.^{30,31,32} Cocoa futures for July delivery were up 3.4 percent from December 16.³³ While cocoa markets experienced a deficit during the 2009/2010 production year, increased supplies are expected in 2010, which may put downward pressure on world cocoa prices, according to market analysts.³⁴

²⁷ International Cocoa Organization. (2010, March). Cocoa Market Review. Retrieved from <http://www.icco.org/statistics/monthlyreview.aspx>

²⁸ World Bank Development Prospects Group. (2010, April). *Commodity Markets Review*. Available from http://siteresources.worldbank.org/INTDAILYPROSPECTS/Resources/1324037-1124814752790/CommodityMarketsReview_April2007.pdf

²⁹ Henschen, H. (2010, April 19). *DJ ICE Cocoa Review: Slides on risk aversion, stronger dollar*. Retrieved from <http://news.tradingcharts.com/futures/5/4/138415545.html>

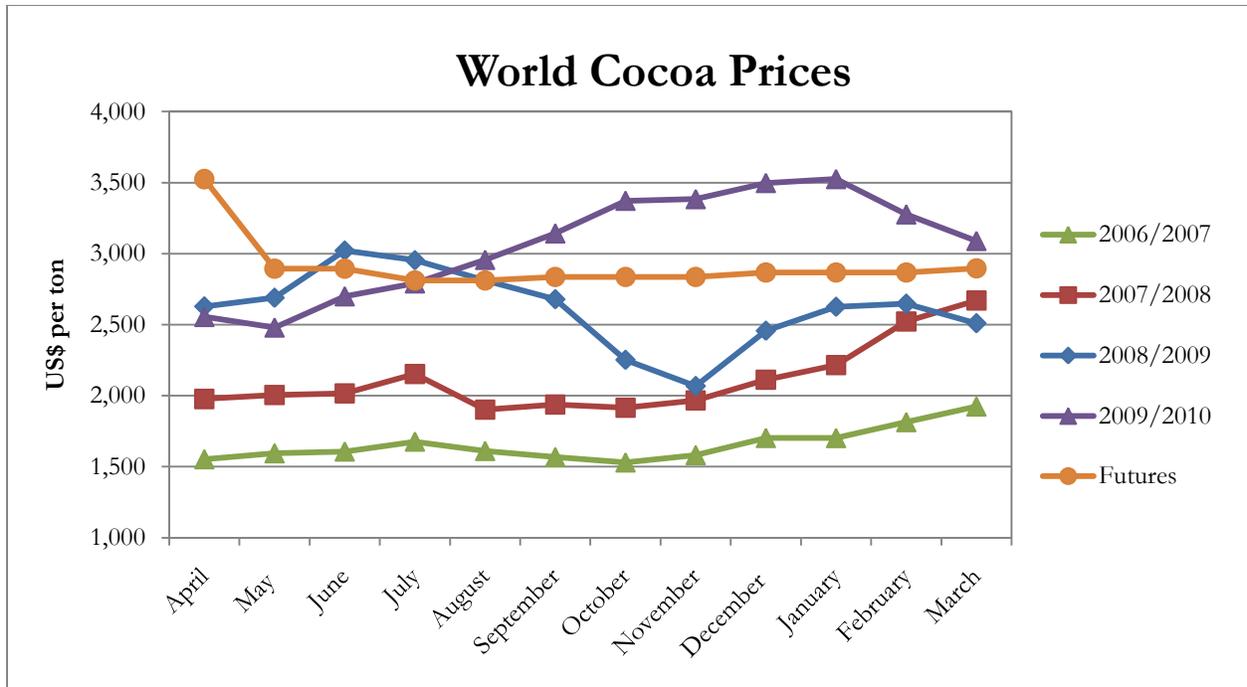
³⁰ Reuters. (2010, April 18). *COMMODITIES – Down on Goldman probe, China tightening talk*. Retrieved from <http://news.alibaba.com/article/detail/markets/100278943-1-commodities-down-goldman-probe%252C-china-tightening.html>

³¹ Shankar, M. & Tian, Y. (2010, April 16). *Cocoa advances in London, N.Y. as demand exceeds expectations*. Retrieved from <http://www.businessweek.com/news/2010-04-16/cocoa-advances-in-london-n-y-as-demand-exceeds-expectations.html>

³² Brough, D. & Hunt, N. (2010, April 16). *SOFTS – Cocoa rises on bullish grind data*. Retrieved from <http://www.forexyard.com/en/news/SOFTS-Cocoa-rises-on-bullish-grind-data-2010-04-16T125034Z>

³³ Shankar, M. & Tian, Y. (2010, April 16). *Cocoa advances in London, N.Y. as demand exceeds expectations*. Retrieved from <http://www.businessweek.com/news/2010-04-16/cocoa-advances-in-london-n-y-as-demand-exceeds-expectations.html>

³⁴ Rosenberg, R. (2010, April 16). *The Soft Spot (6)*. Retrieved from <http://www.insidefutures.com/article/146103/The%20Soft%20Spot%286%29.html>



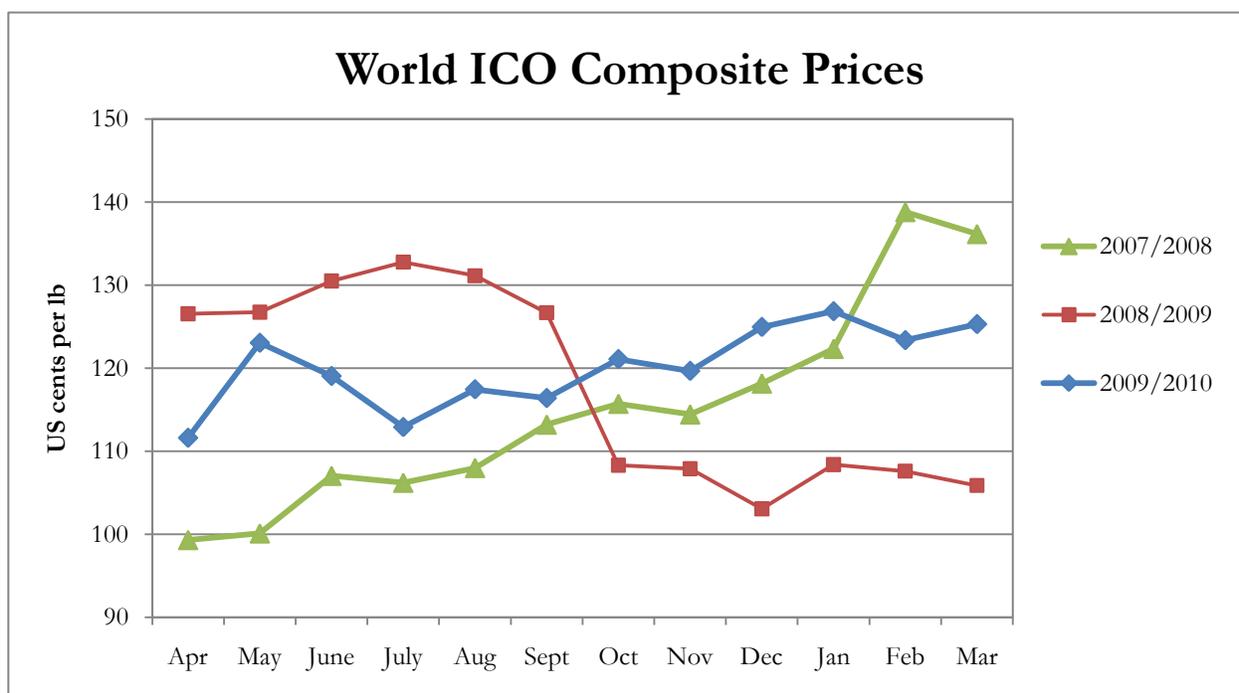
Sources: International Cocoa Association, New York Mercantile Exchange (NYMEX)

Notes: Cocoa futures represent NYMEX settlement prices as of Monday, May 15, 2010. Cocoa futures are traded in March, May, July, September and December; the previous month's settlement price is graphed in off months.

Coffee

The ICO Composite Price provides an overall benchmark of green coffee of all major origins and types. The index is a composite of 4 indices: Colombian mild Arabicas, Brazilian mild Arabicas, other mild Arabicas and Robustas. Coffees are grouped into these indices based on country of origin with premium prices commanded by Colombian and other mild Arabicas. Coffee futures reflect prices for Grade 3 washed Arabica coffees from all origins, all other grade Arabicas are sold through other channels.

The ICO composite price averaged 123.17 cents per pound in the first quarter of 2010, which represents an increase of 2.7 percent from fourth quarter 2009 average prices.³⁵ Rising coffee prices continue to reflect lower production in a number of exporting countries, as well as reduced stocks in both exporting and importing countries. Despite contributions from relatively new coffee producers, namely Vietnam and Indonesia, production for the first 5 months of the 2009/2010 coffee year (October 2009–February 2010) was down almost 11 percent from the same period the previous year, drawing down world stocks to very low levels, especially in exporting countries.^{36,37} And demand for coffee has never been stronger, due to increases from Asia and other developing countries. According to analysts, it is likely that demand will continue to outstrip supply in coming months.³⁸ Poor crops from Colombia and Honduras are also lending some support to the coffee market; however, this is projected to be short-lived.³⁹



Source: International Coffee Association

³⁵ International Coffee Organization, <http://dev.ico.org/prices/p2.htm>

³⁶ International Coffee Organization. (2010, March). *Coffee Market Report*. Available from <http://www.ico.org/index.asp>

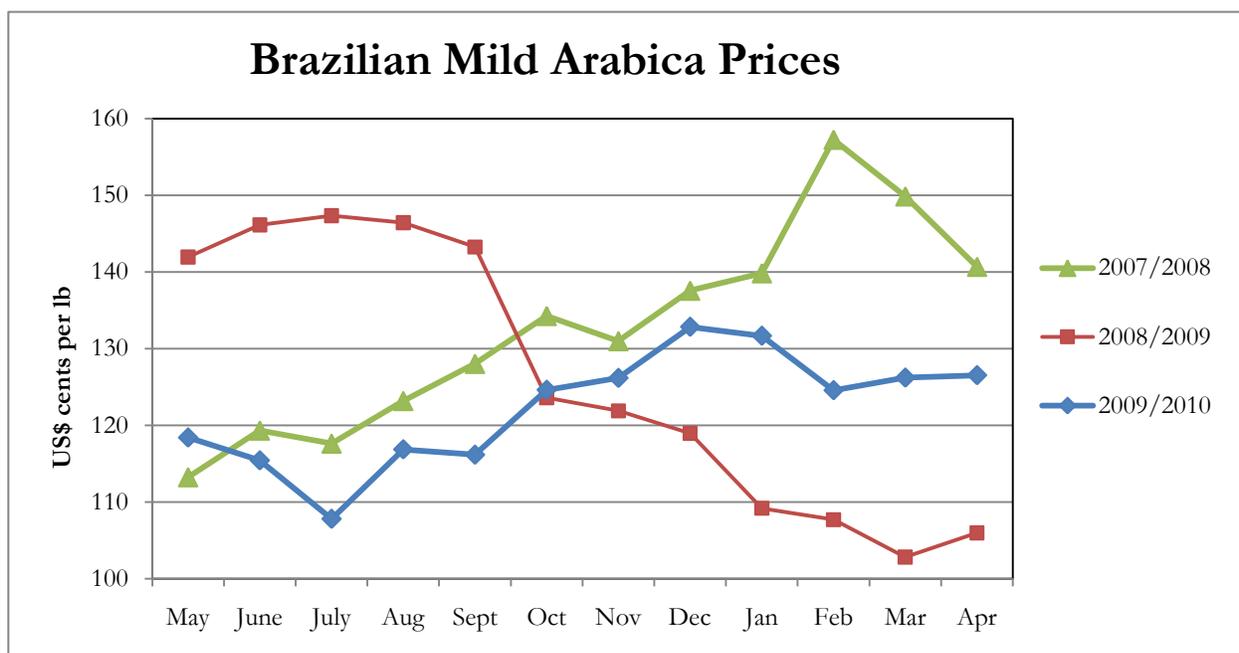
³⁷ Rosenberg, R. (2010, April 16). *The Soft Spot* (6). Retrieved from <http://www.insidefutures.com/article/146103/The%20Soft%20Spot%286%29.html>

³⁸ International Coffee Organization. (2010, March). *Coffee Market Report*. Available from <http://www.ico.org/index.asp>

³⁹ Rosenberg, R. (2010, April 16). *The Soft Spot* (6). Retrieved from <http://www.insidefutures.com/article/146103/The%20Soft%20Spot%286%29.html>

Note: The ICO Composite Price is an index price calculated by the International Coffee Association and not a traded commodity. The ICO Composite Price provides an overall benchmark of green coffee for all major origins and type.⁴⁰ There are no futures prices represented on this chart because the ICO Composite price is a calculated statistic.

Arabica accounts for approximately 70 percent of the world's coffee crop.⁴¹ Brazilian natural Arabica prices averaged 127.48 cents per pound in the first quarter of 2010, down 0.3 percent from the fourth quarter 2009 to the average in the first quarter of 2010. Despite a minimal quarter-to-quarter change, Arabica prices moved considerably throughout the first quarter. Average monthly prices declined by 4 percent from January to March of 2010. Prices show a rising trend with the first half of April up 1.5 percent from the most recent minimum in February.⁴² Coffee futures currently reflect a 5 percent increase in prices over the coming year.⁴³ Analysts project coffee futures to be headed lower, however, with expectations of a bumper crop in Brazil.^{44,45}



Source: International Coffee Association

Robusta prices were also down 3.6 percent from the previous quarter average.⁴⁶ Vietnam grows 96 percent Robusta coffee and is the world's largest producer, accounting for 35 percent of global production in the 2009/2010 season.^{47,48} The Vietnamese government is currently presumed to be stockpiling coffee and farmers are holding back sales in an effort to buoy prices.⁴⁹

⁴⁰ More information on the ICO Composite Price available from the ICO Web site:

http://www.ico.org/about_statistics.asp

⁴¹ Christian, J. (2006). *Commodities rising*. Hoboken: John Wiley and Sons.

⁴² International Coffee Organization, <http://dev.ico.org/prices/p2.htm>, as of April 19, 2010

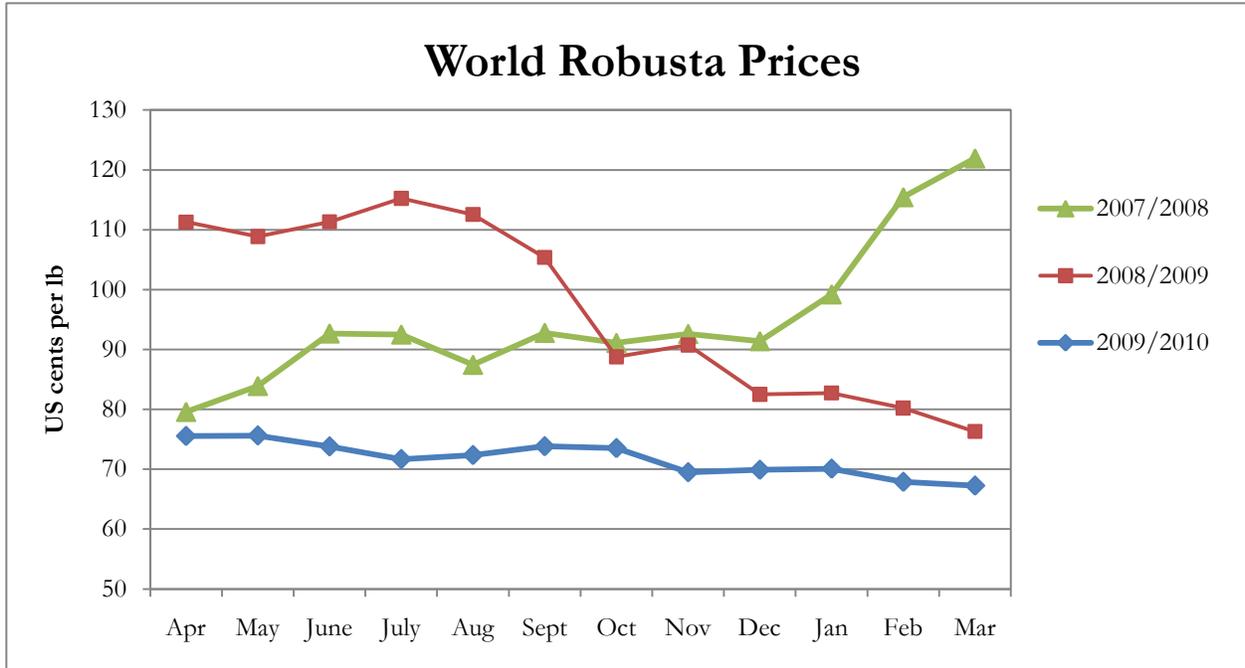
⁴³ New York Mercantile Exchange, April 20, 2010

⁴⁴ Rosenberg, R. (2010, April 16). *The Soft Spot (6)*. Retrieved from <http://www.insidefutures.com/article/146103/The%20Soft%20Spot%286%29.html>

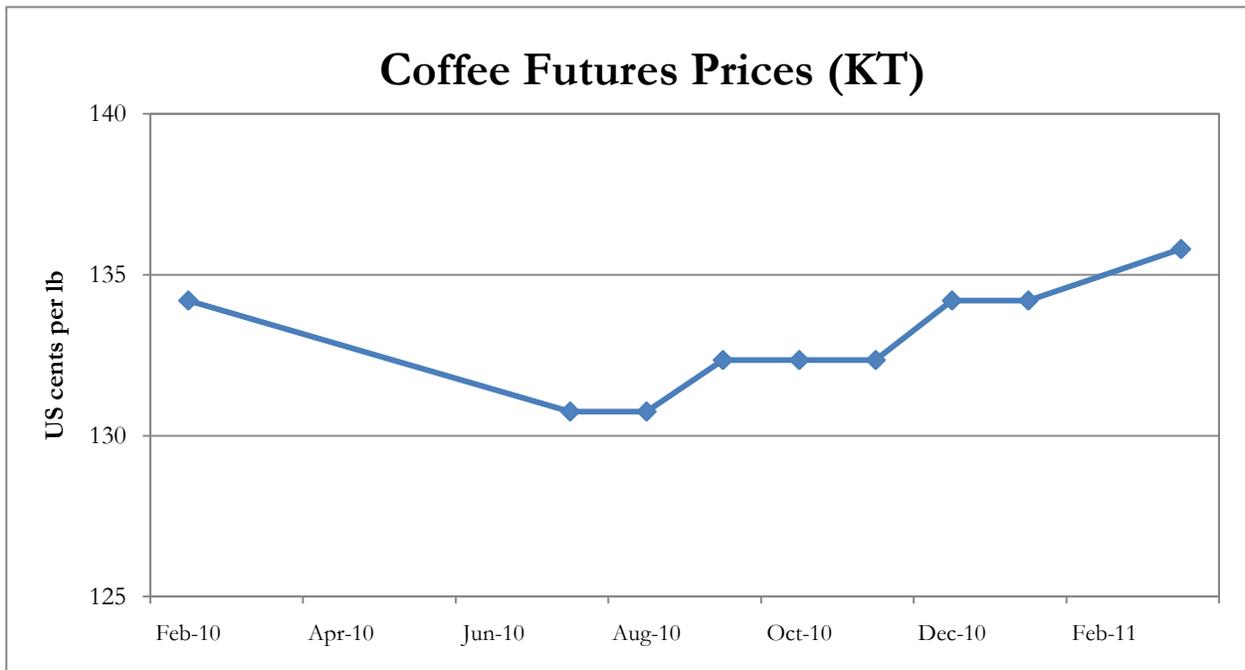
⁴⁵ Henshen, H. (2010, April 19). *DJ ICE Coffee Review: Slips in spread trading, bearish spillover*. Retrieved from Dow Jones Newswire Web site: <http://news.tradingcharts.com/futures/5/8/138419285.html>

⁴⁶ International Coffee Organization, <http://dev.ico.org/prices/p2.htm>

⁴⁷ Marsh, A. (2007). *Diversification by smallholder farmers: Vietnam Robusta coffee*. Retrieved from



Source: International Coffee Association



Sources: International Cocoa Association, New York Mercantile Exchange (NYMEX)

Notes: Coffee futures represent NYMEX settlement prices as of May 17, 2010 for Grade 3 washed Arabica. Coffee futures are traded in March, May, July, September and December. The previous month's settlement price is graphed in off months.

http://www.fao.org/AG/Ags/publications/docs/AGSF_WorkingDocuments/agsfwd19.pdf

⁴⁸ USDA. (2009, December). *Coffee: World markets and trade*. Available from <http://www.fas.usda.gov/http/coffee.asp>

⁴⁹ Rosenberg, R. (2010, April 16). *The Soft Spot* (6). Retrieved from <http://www.insidefutures.com/article/146103/The%20Soft%20Spot%286%29.html>

Rice

Long grain rice prices averaged \$12.33 per cwt (equivalent to 100 pounds) in the first quarter of 2010. Between January and March, average rice prices declined 14 percent from \$13.03 per cwt to \$11.21 per cwt amid projections for record rice production this year. Ample Asian supplies, especially increased supplies from Thailand and Vietnam (the world's 2 largest exporters), and weak new sales continue to depress global trading prices, though consistently strong demand from South America provides some underlying support.^{50,51,52}

A recent FAO report tentatively forecasts that rice production will increase by 4 percent to reach 710 million tons (474 million tons, milled basis) in the 2010 season, noting that this forecast the first of the season. Rice producers south of the equator have already begun harvesting crops for the 2010 season while producers north of the equator are still early in the production process.⁵³ According to the USDA, large crops are expected for most of Asia including record or near-record crops in Bangladesh, Burma, Cambodia, India, Indonesia, the Philippines, Thailand, and Vietnam. The U.S., EU-27, and Nigeria are also projected to have large crops in the 2010/2011 season. Global ending stocks of rice are forecast to increase by 6.3 million tons or 7 percent from 2009/2010 to reach 96.6 million tons, the largest level since 2002/03. The stocks-to-use ratio measures the level of carry over stock for rice as a percentage of total use for the commodity, which can serve as a useful indicator of supply and demand for rice. For 2010/2011, the most recent report from the USDA forecasts the stocks-to-use ratio at 21.3 percent, up from 20.4 percent in 2009/2010. The stocks-to-use ratio for 2010/2010 is projected to reach the highest level since 2003/2004.⁵⁴

Despite projections of record rice production, rice futures have risen several times in recent weeks. Several news sources note that rice futures have risen in response to signs of tightening supplies, announcements of lower U.S. and major exporter stocks of rice, and speculation of import increases in India.⁵⁵

⁵⁰ USDA Economic Research Service. (2010, April 12). *Rice Outlook*. Available from <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1285>

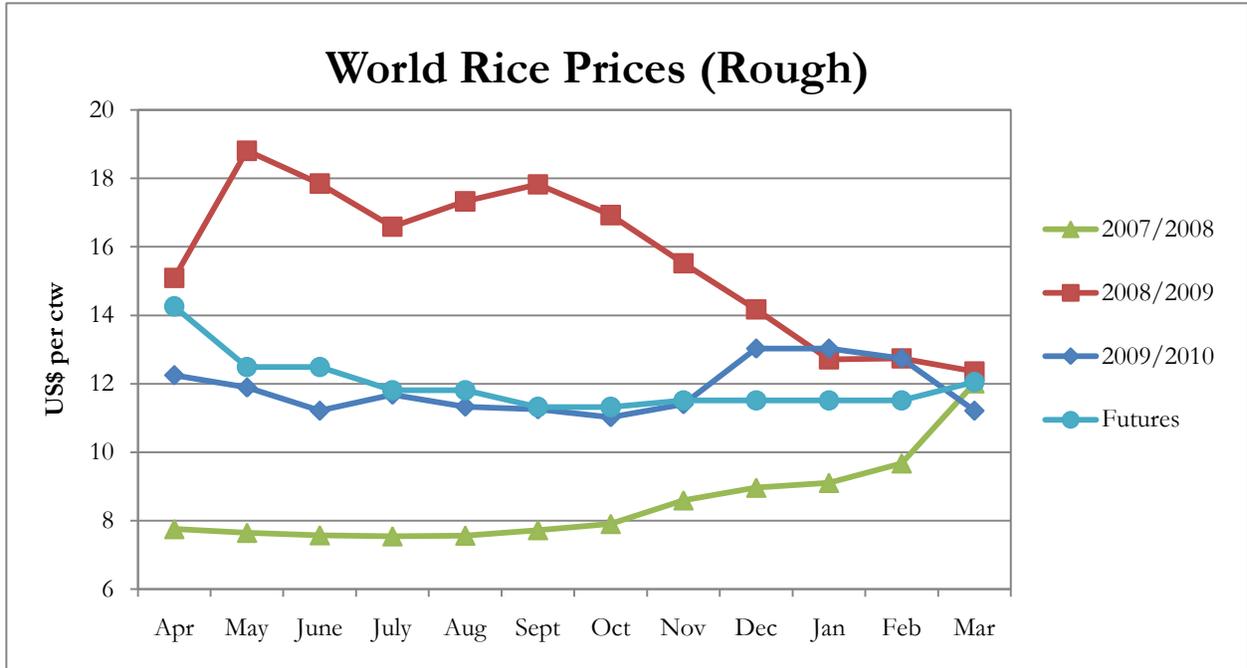
⁵¹ Berry, I. (2010, April 7). *Rice rises as stockpile report sinks in*. Retrieved from http://online.wsj.com/article/SB10001424052702304172404575168382271451588.html?mod=googlenews_wsj

⁵² World Bank Development Prospects Group. (2010, April). *Commodity Markets Review*. Available from <http://externalization.worldbank.org/external/default/main?theSitePK=2880771&piPK=64691875&pagePK=64691887&menuPK=64696117&contentMDK=21148682>

⁵³ FAO. (2010, May 2). *Crops Prospects and Food Situation*. Available from <http://www.fao.org/giews/english/cpfs/index.htm>

⁵⁴ USDA Economic Research Service. (2010, April 12). *Rice Outlook*. Available from <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1285>

⁵⁵ Bloomberg Business Week. (2010, May 9). *Rice Production to Rise to Record This Year FAO Says (Update 1)*. Retrieved from <http://www.businessweek.com/news/2010-05-09/rice-production-to-rise-to-record-this-year-fao-says-update1-.html>

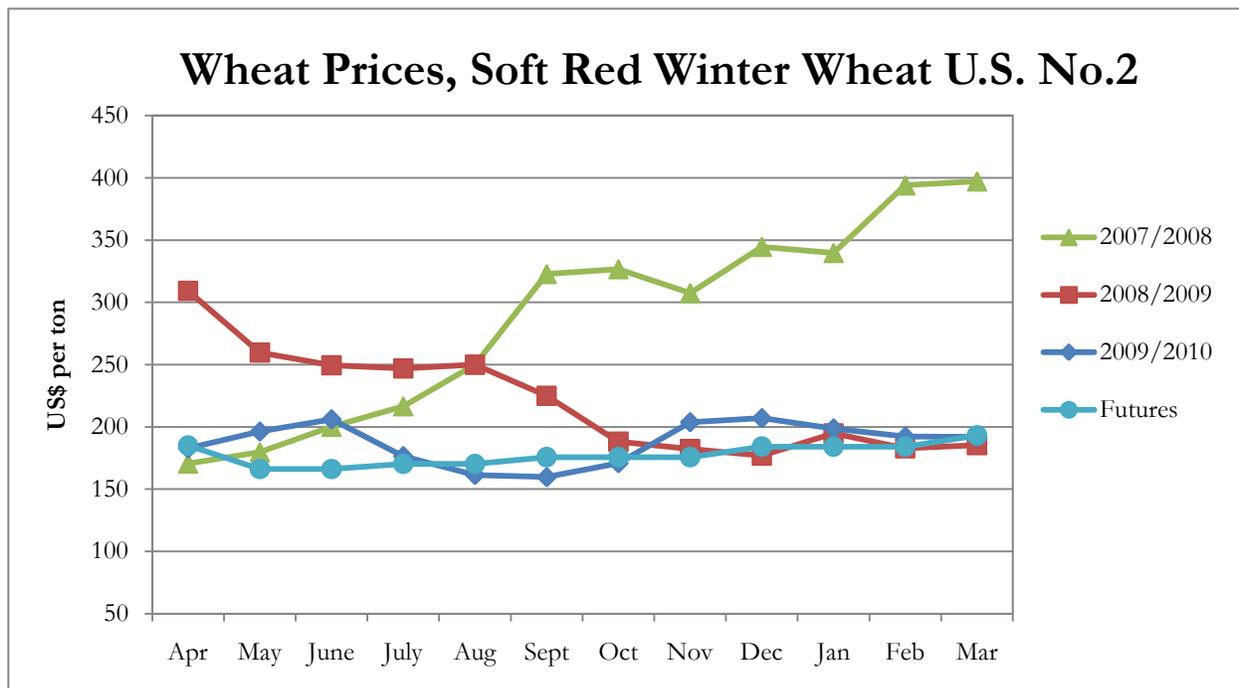


Source: USDA Economic Research Service, Chicago Board of Trade

Notes: Rice futures represent NYMEX settlement prices as of May 15, 2010. Rice futures are traded in January, March, May, July, September and November; the previous month's settlement price is graphed in off months.

Wheat

Wheat prices for the first quarter of 2010 averaged \$194.25 per ton, decreasing 3.5 percent from January to March. Prices for the first half of April reflect a decline in average wheat prices by an additional 3.5 percent since March.⁵⁶ Several factors have contributed to the gradual decline in international wheat prices this season, among which are large inventories in several exporting countries, including the U.S. and China, and recent gains in the US dollar.⁵⁷



Sources: United States Department of Agriculture Economic Research Service, Chicago Board of Trade

Notes: Wheat futures represent NYMEX settlement prices as of May 15, 2010. Wheat futures are traded in March, May, July, September and December; the previous month's settlement price is graphed in off months.

India is the world's second largest wheat producing nation, behind China. According to the most recent production forecast from the USDA, India is expected to produce 11.5 percent of total world wheat output in 2009. Despite being a significant producer of wheat, India accounts for less than 1 percent of world wheat exports.⁵⁸ Given its low share of world exports, wheat prices in India are not likely to have a significant impact on commonly reported world wheat prices, which are typically based on world export shares. This briefing provides data on wheat prices in India because of its importance to the Foundation.

Wholesale spot prices for Indian wheat in all 4 geographic zones declined between January and April 2010. The East zone demonstrated the greatest decline of 11.9 percent from January, while South zone prices decreased only 1.8 percent over the first quarter of 2010.⁵⁹ The central government has fixed the Minimum

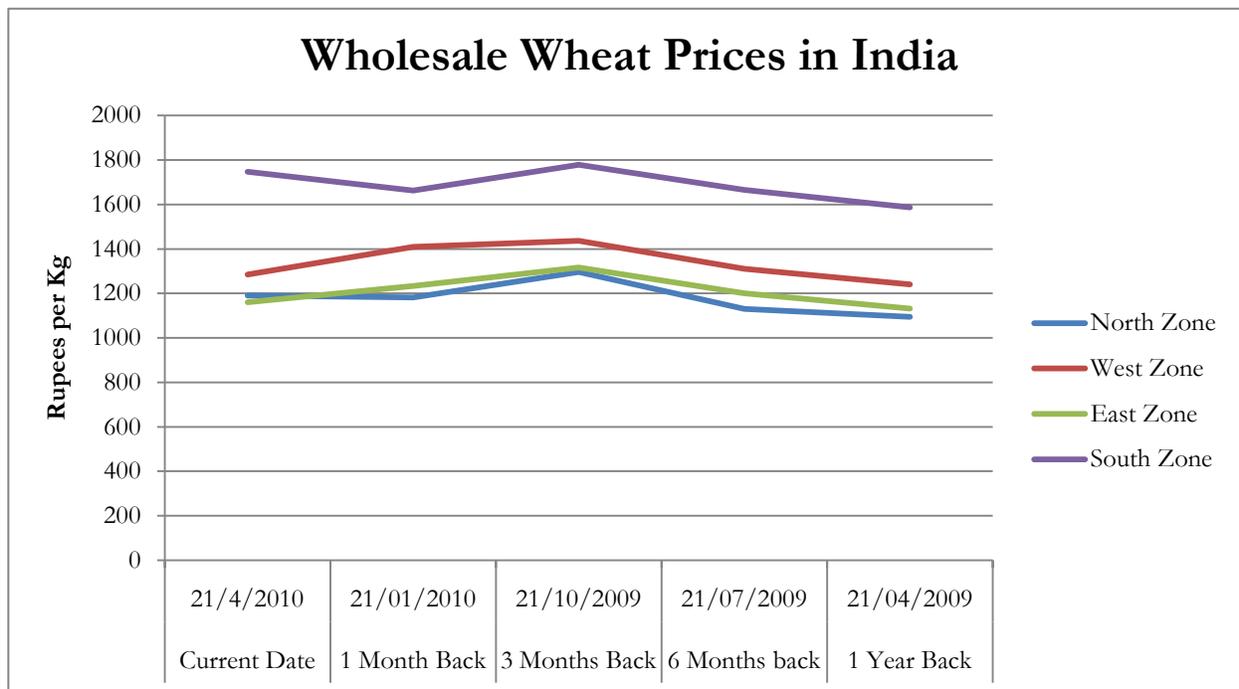
⁵⁶ FAO. (2010). World Food Price Index. Available from <http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/>

⁵⁷ FAO. (2010, February). *Crop Prospects and Food Situation*. Available from <http://www.fao.org/giews/english/cpfs/index.htm>

⁵⁸ U.S. Department of Agriculture. (2010, April 9). *World Agricultural Supply and Demand Estimates* [WASDE-481-18]. Available from <http://www.usda.gov/oc/commodity/wasde/>

⁵⁹ Government of India, Ministry of Consumer Affairs, Food, and Public Distribution, Department of Consumer

Support Price (MSP) at Rs. 1,100, although farmers and the state governments in Punjab and Haryana petitioned for a higher MSP.⁶⁰ This season, India is expected to produce a bumper crop of winter sown food grains, mainly wheat, despite unusually hot weather. Temperatures in March rose 3–4°C above normal, which is expected to hasten the ripening of wheat grains and reduce their size.⁶¹



Sources: Government of India, Ministry of Consumer Affairs, Food, and Public Distribution, Department of Consumer Affairs, Price Monitoring Cell, Prices of Essential Commodities

Notes: Data is available only in the time increments displayed in the chart above.

Affairs, Price Monitoring Cell, Prices of Essential Commodities

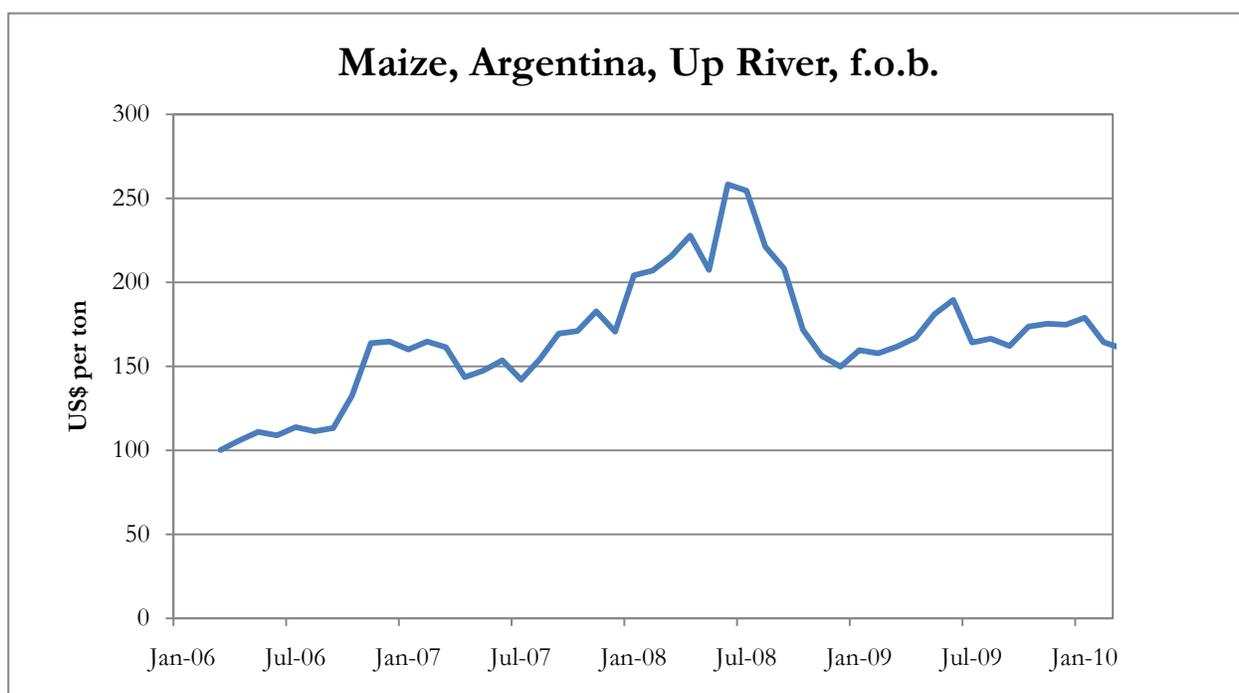
⁶⁰ Indo-Asian News Service. (2010, May 10). *Haryana seeks Rs.1,275 per quintal minimum price for wheat*. Retrieved from http://www.thaindian.com/newsportal/business/haryana-seeks-rs1275-per-quintal-minimum-price-for-wheat_100361607.html

⁶¹ Pawar, S. (2010, April 14). *India's winter crop output likely to be bumper*. Retrieved from <http://www.commodityonline.com/news/India%E2%80%99s-winter-crop-output-likely-to-be-bumper-27393-3-1.html>

Maize

Maize prices averaged \$165.81 per ton over the first quarter of 2010, a 3.8 percent decline from the previous quarter average.⁶² Large world supplies, particularly a 2009 bumper crop in the United States, have put downward pressure on international maize prices in recent months. In addition, the slump in the world economy and the recent appreciation of the US dollar contribute to depressed prices.⁶³ Prices declined over 10 percent from January to March, ending the quarter with the average price for March at \$160.50 per ton and declining further to a partial month average of \$159.50 by April 22.⁶⁴

World maize production is expected to reach a record 805.7 million tons this year, due mostly to improved production prospects for Brazil, South Africa and Ecuador. South Africa's crop is projected to be the largest in 30 years and the second largest on record. Production increases are only partially offset by projected declines in Mexico and Venezuela and more modestly in North Korea, Thailand, Iraq, Peru and Myanmar. World ending stock projections for 2009/2010 have been revised upward due to increased production with little change in consumption.⁶⁵



Source: FAO Commodity Outlook

⁶² FAO. (2010). World Food Price Index. Available from <http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/>

⁶³ FAO. (2010, February). *Crop Prospects and Food Situation*. Available from <http://www.fao.org/giews/english/cpfs/index.htm>

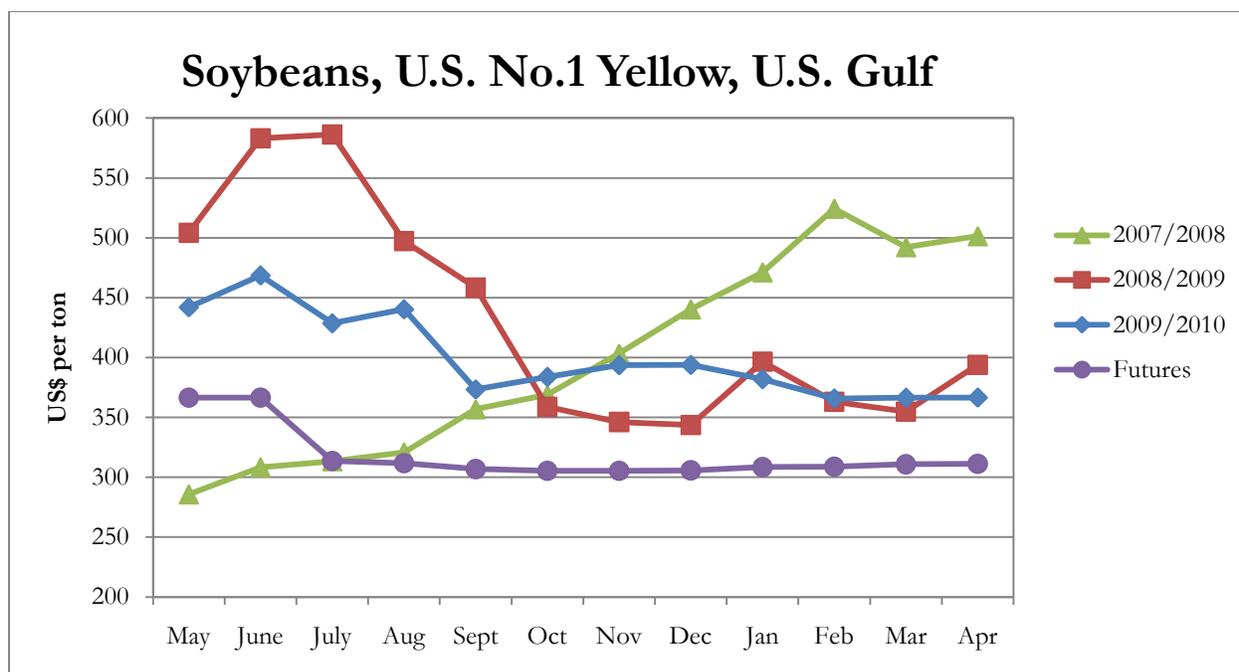
⁶⁴ FAO. (2010). World Food Price Index. Available from <http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/>

⁶⁵ USDA Economic Research Service. (2010, April 13). *Feed Outlook*. Available from <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1273>

Soybeans

Soybean prices in the first quarter of 2010 averaged \$371.40 per ton, which represents a decline of almost 5 percent from the 2009 fourth quarter average. Average monthly prices decreased 4 percent between January and March to reach \$366.47 per ton in March. April prices are up slightly as of April 22 with a partial month average of \$366.58 per ton.⁶⁶

World prices for oilseeds and derived products remain above historic levels.⁶⁷ Better growing conditions in 2009/2010 increased soybean supplies and put downward pressure on prices.⁶⁸ While record harvests in South America have been confirmed, several factors have prevented prices from falling including logistical problems in Brazilian ports, labor unrest in Argentinean ports, unusually high freight rates from Latin America, a strengthening Brazilian currency, and unusually tight stocks in the U.S., another major supplier.⁶⁹ Furthermore, record soybean production in 2009/2010 was accompanied by record soybean use, resulting in only a modest increase in soybean stocks.⁷⁰



Sources: FAO Commodity Outlook, Chicago Board of Trade (CBOT)

Notes: Soybean futures represent NYMEX settlement prices as of May 17, 2010. Soybean futures are traded in January, March, May, July, August, September and November; the previous month's settlement price is graphed in off months.

⁶⁶ FAO. (2010). World Food Price Index. Available from <http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/>

⁶⁷ FAO. (2010, April 14). *Monthly Price and Policy Update (No. 14)*. Available from <http://www.fao.org/economic/est/publications/oilcrops-publications/monthly-price-and-policy-update/en/>

⁶⁸ Food and Agriculture Policy Research Institute University of Missouri-Columbia. (2010, March). *US Baseline Briefing Book: Projections for agriculture and biofuel markets*. Available from http://www.fapri.missouri.edu/outreach/publications/briefing_books.asp?current_page=outreach

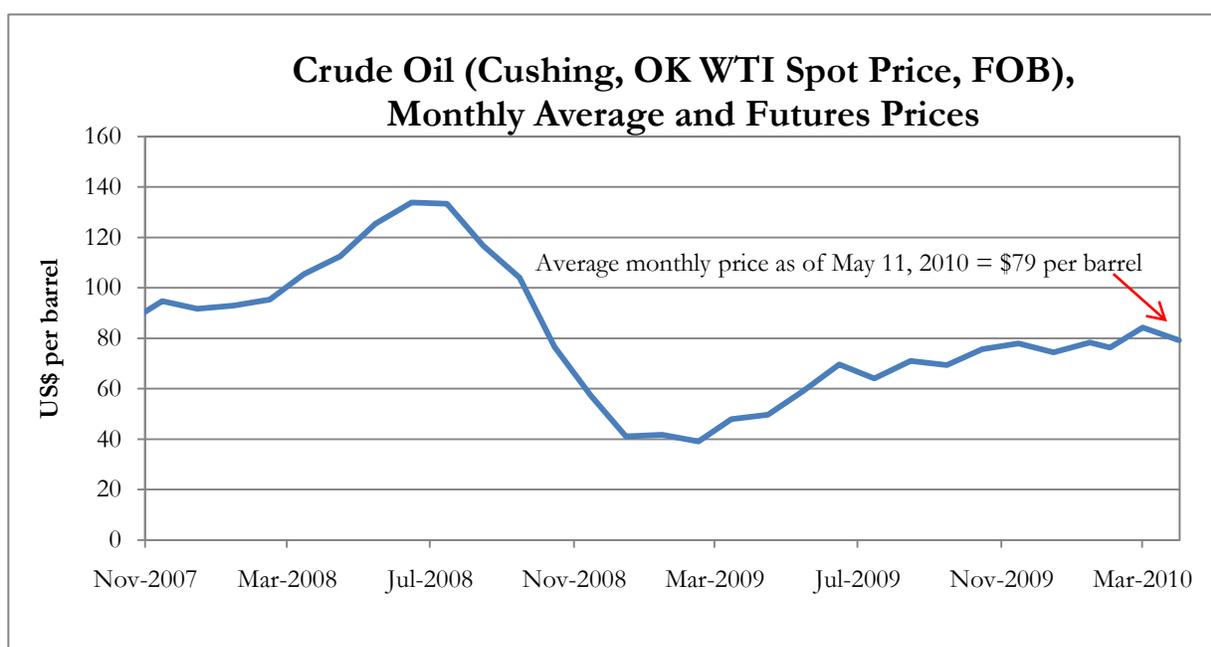
⁶⁹ FAO. (2010, April 14). *Monthly Price and Policy Update (No. 14)*. Available from <http://www.fao.org/economic/est/publications/oilcrops-publications/monthly-price-and-policy-update/en/>

⁷⁰ Food and Agriculture Policy Research Institute University of Missouri-Columbia. (2010, March). *US Baseline Briefing Book: Projections for agriculture and biofuel markets*. Available from http://www.fapri.missouri.edu/outreach/publications/briefing_books.asp?current_page=outreach

Crude oil

Crude oil prices averaged \$78.64 per barrel in the first quarter of 2010, an increase of 3.4 percent from the 2009 fourth quarter average. Prices increased 3.7 percent from January to reach a March 2010 monthly average of \$81.20 per barrel. Rising prices are part of a longer trend with crude oil prices more than doubling since February 2009.⁷¹ Inventories of crude oil remain high but have fallen significantly from their peak last year.⁷² Crude oil prices continued to rise in April amid strengthening market demand.

According to the most recent market analysis from the Joint Oil Data Initiative (JODI), crude oil production in January and February remained almost constant and was less than 1 percent higher than the previous year.⁷³ Global demand for crude oil increased 5 percent between January and February 2010, ending February 4.3 percent higher than the previous year.⁷⁴ Analysts suggest that concerns over the European debt crisis have affected recent oil prices but project that crude oil demand will gain this year and prices may rise if markets shrug off concern that a debt crisis in Greece may spread to other European nations and slow growth.⁷⁵



Source: U.S. Energy Information Administration (EIA)

Notes: This chart presents the most recent data available on WTI spot prices from the Energy Information Administration as of May 11, 2010.

⁷¹ U.S. Energy Information Administration. *Petroleum Navigator: Spot Prices*. Retrieved from http://tonto.eia.doe.gov/dnav/pet/pet_pri_spt_s1_m.htm

⁷² World Bank Development Prospects Group. (2010, April). *Commodity Markets Review*. Available from <http://externalization.worldbank.org/external/default/main?theSitePK=2880771&piPK=64691875&pagePK=64691887&menuPK=64696117&contentMDK=21148682>

⁷³ Launched in 2001, JODI is a joint project of six organizations: Asia Pacific Economic Cooperation (APEC), Statistical Office of the European Communities (Eurostat), International Energy Agency (IEA), Latin-American Energy Organization (OLADE), Organization of Petroleum Exporting Countries (OPEC) and UN Statistics Division (UNSD).

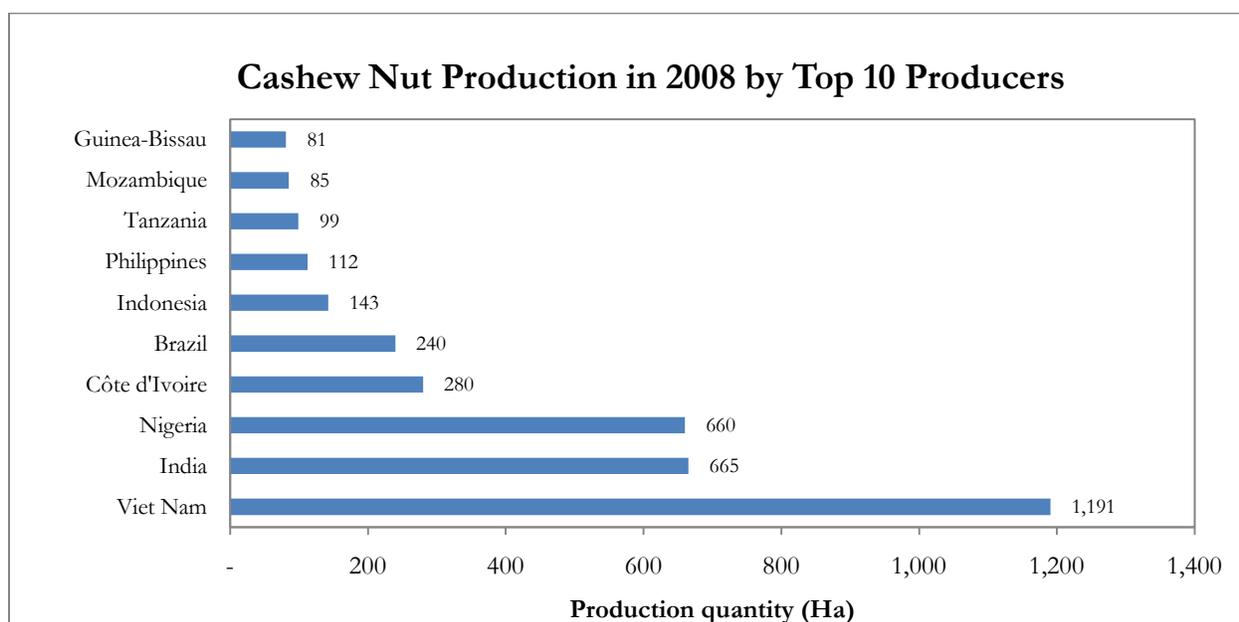
⁷⁴ International Energy Forum. (2010, April). *The Joint Oil Data Initiative Report*. Retrieved from <http://www.ief.org/whatsnew/Pages/JODIReport.aspx>

⁷⁵ Tuttle, R. & Galal, G. (2010, May 10). *Oil ministers see demand rising, price may exceed \$85*. Retrieved from <http://www.bloomberg.com/apps/news?pid=20601072&sid=aXbyUkadN008>

Cashews

There is currently no world cashew price measure available from the FAO, USDA or other primary commodity price data sources, though some country-specific information is available. The Cashew Association of Viet Nam, for example, forecasts that export prices for cashews from Viet Nam will continue to rise in this year, possibly reaching \$5,213 per tonne, due to rising world demand and potential supply shortfalls from hot weather in growing regions. According to the Ministry of Agriculture and Rural Development, Viet Nam exported 41,000 tonnes of cashews in the first 4 months of 2010, which represents a decline of 7.7 percent in export volume but an increase of 9 per cent in export value compared to last year's levels.⁷⁶ Reports also indicate that cashew prices are facing upward pressure from reduced production in India, due to unfavorable weather.⁷⁷

As shown in the chart below, Viet Nam and India are the largest producers of cashews. Several countries in Sub-Saharan Africa rank in the top 10 producers and exporters of cashews including Nigeria, Côte d'Ivoire, and Tanzania.

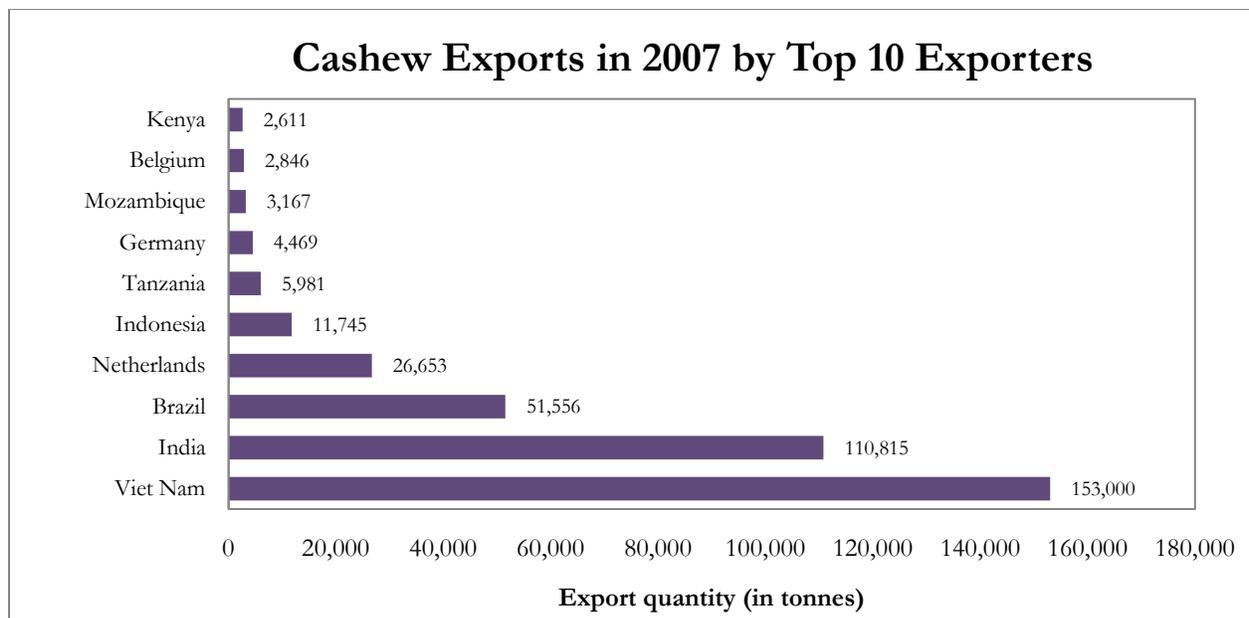


Source: FAOSTAT

Notes: The year 2008 is the most recent cashew production data available from the FAO.

⁷⁶ Viet Nam News. (2010, May 19). Hot weather creates cashew shortage. Retrieved from <http://vietnamnews.vnagency.com.vn/Economy/199406/Hot-weather-creates-cashew-shortage.html>

⁷⁷ Times of India. (2010, May 9). Weather-hit, cashew production down 35%. Retrieved from <http://timesofindia.indiatimes.com/City/Goa/Weather-hit-cashew-production-down-35/articleshow/5908606.cms>

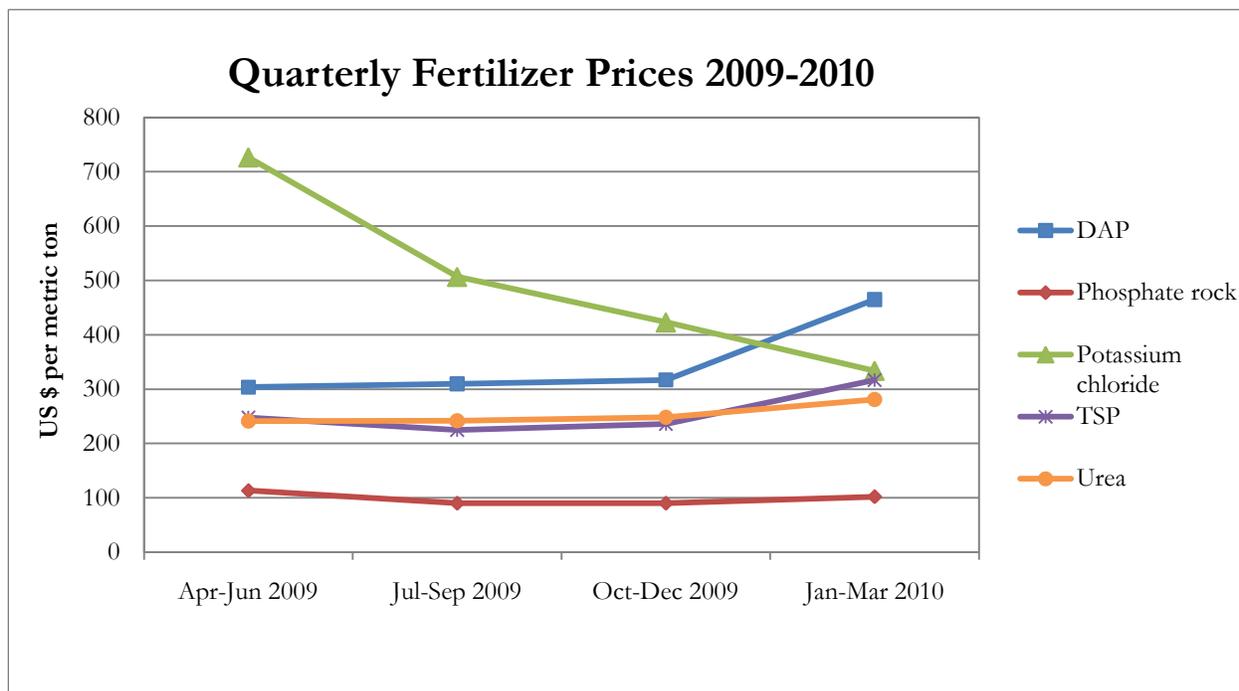


Source: FAOSTAT

Notes: The year 2008 is the most recent cashew production data available from the FAO.

Fertilizer

Prices for four of the 5 main fertilizers (DAP, Phosphate rock, TSP, and Urea) increased in the first quarter of 2010. Average DAP and TSP prices increased significantly, up 46 and 34.5 percent, respectively, from the previous quarter.⁷⁸ Increases in TSP prices are attributed to strong demand from the Asian subcontinent.⁷⁹ Potassium chloride continued a declining trend, falling 20 percent from the previous quarter average amid continuing weak demand and surplus capacity.^{80,81}



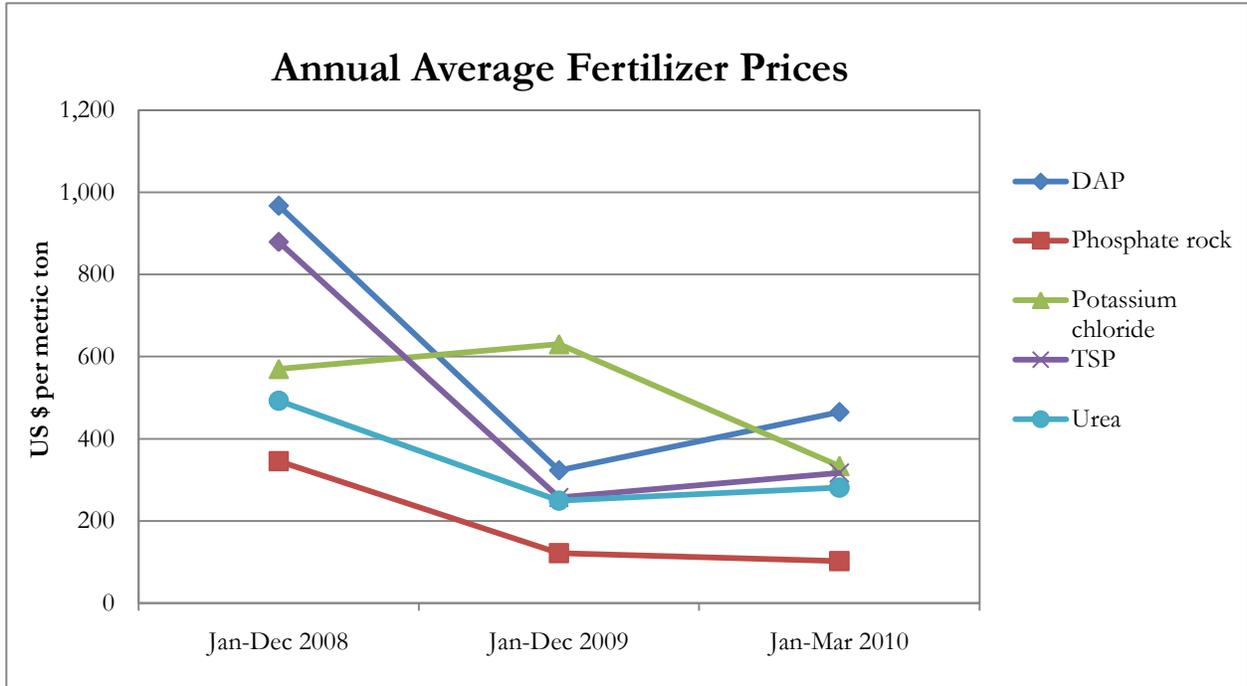
Source: World Bank Pink Sheet

⁷⁸ World Bank. (2010, April 10). *Commodity Price Data (Pink Sheet)*. Retrieved from <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:21148472~menuPK:476941~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html>

⁷⁹ World Bank Development Prospects Group. (2010, April). *Commodity Markets Review*. Available from <http://externalization.worldbank.org/external/default/main?theSitePK=2880771&piPK=64691875&pagePK=64691887&menuPK=64696117&contentMDK=21148682>

⁸⁰ World Bank. (2010, April 10). *Commodity Price Data (Pink Sheet)*. Retrieved from <http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:21148472~menuPK:476941~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html>

⁸¹ World Bank Development Prospects Group. (2010, April). *Commodity Markets Review*. Available from <http://externalization.worldbank.org/external/default/main?theSitePK=2880771&piPK=64691875&pagePK=64691887&menuPK=64696117&contentMDK=21148682>



Source: World Bank Pink Sheet

Cotton

Cotton prices for the “A” Index are considered the proxy for world prices.⁸² Cotton prices averaged \$81.08 per pound in the first quarter of 2010, up 14.4 percent from the previous quarter average.⁸³ Rising cotton prices are attributed to reports that global production for 2009/2010 will face a larger than expected shortfall.⁸⁴ The bulk of the reduction in cotton supply comes from output reductions in major cotton-producing countries, including China, the U.S., Uzbekistan and the African Franc Zone. In particular, production in the African Franc Zone is projected to drop 8 percent in 2009/2010 to the lowest output in almost 2 decades. Infrastructure and credit problems contributed to a gradual decrease in cotton production and the recent food crisis in 2008 required governments to prioritize food grain production over cotton.⁸⁵

Cotton futures reflect increased short-term prices amid tightening stocks but a decline in the long-term. According to market analysts, futures are in a two-month trading range likely to persist until this year’s crop is planted. Factors important to cotton prices in the coming months include evidence of increased demand for cotton goods and the downward revision of global production estimates.^{86,87} Global cotton area harvested is down 1 percent from a year ago, and is at its lowest in 2 decades. Yields are also expected to decline around 4 percent from last year while exports are expected to rebound from last year’s historically low levels.⁸⁸

⁸² The “A” Index is an average of five quotations from a selection of upland cottons traded internationally. A more detailed description available from the National Cotton Council Web site:

<http://www.cotton.org/econ/prices/monthly.cfm>

⁸³ National Cotton Council. (2010). “A” Index Monthly Cotton Prices. Available from <http://www.cotton.org/econ/prices/monthly.cfm>

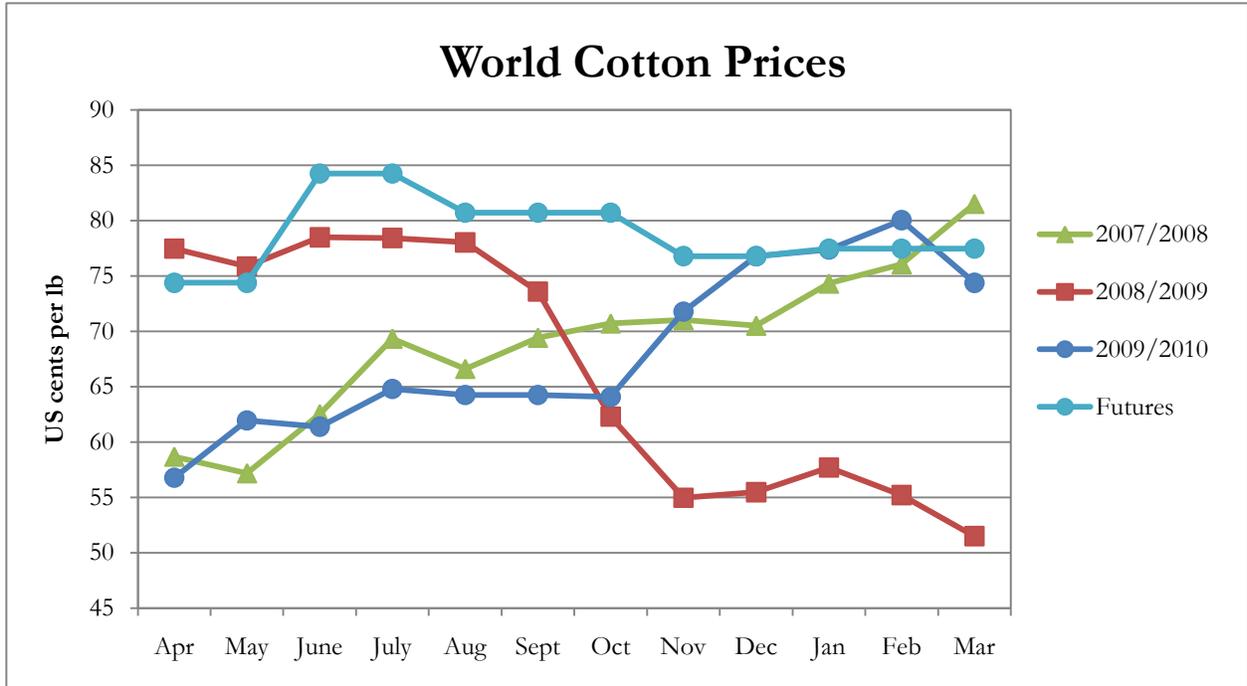
⁸⁴ World Bank Development Prospects Group. (2010, April). *Commodity Markets Review*. Available from <http://externalization.worldbank.org/external/default/main?theSitePK=2880771&piPK=64691875&pagePK=64691887&menuPK=64696117&contentMDK=21148682>

⁸⁵ USDA Economic Research Service. (2010, April 12). *Cotton and Wool Outlook*.

⁸⁶ Rosenberg, R. (2010, April 16). *The Soft Spot (6)*. Retrieved from <http://www.insidefutures.com/article/146103/The%20Soft%20Spot%286%29.html>

⁸⁷ USDA Economic Research Service. (2010, April 12). *Cotton and Wool Outlook*.

⁸⁸ USDA Economic Research Service. (2010, April 12). *Cotton and Wool Outlook*.

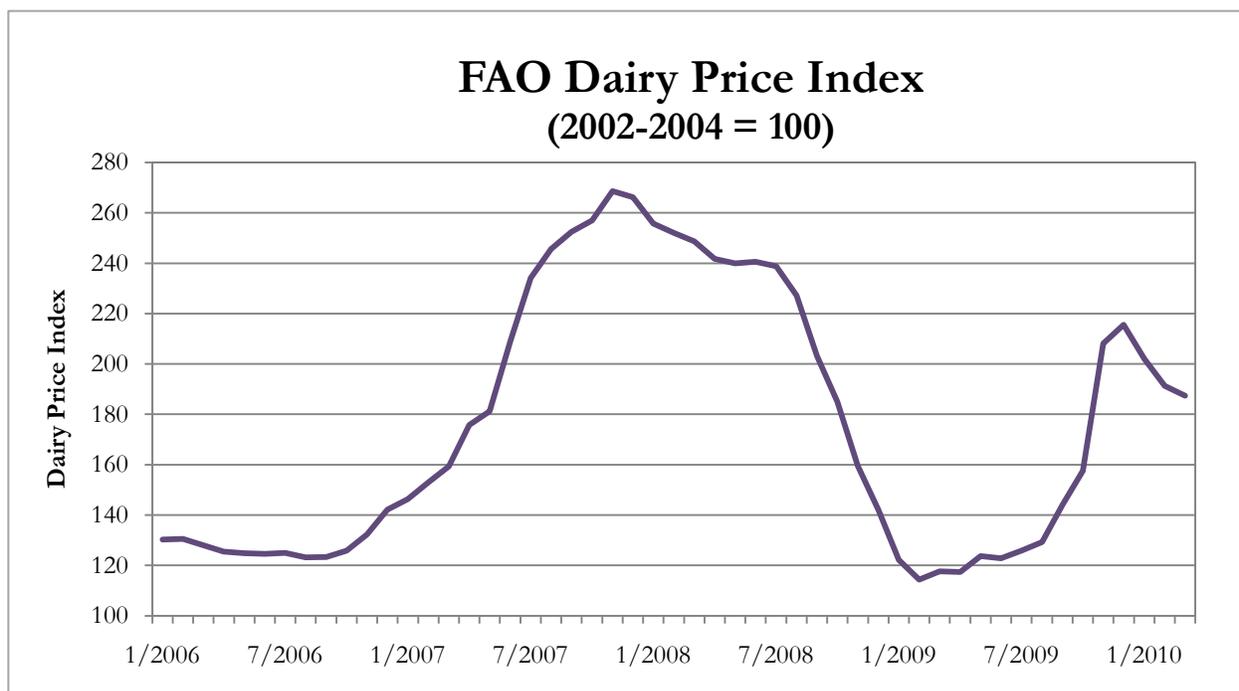


Sources: FAO Commodity Outlook, New York Mercantile Exchange (NYMEX)

Notes: Historical cotton prices from the FAO represent prices for the cotton index “A.” Cotton futures represent index “A” NYMEX settlement prices as of May 15, 2010. Cotton futures are traded in March, May, July, October and December; the previous month’s settlement price is graphed in off months.

Dairy

The FAO Dairy Price Index contains price quotations for butter, skim milk powder (SMP), whole milk powder (WMP), cheese, and casein (protein found in milk, which is used as a binding agent in food products). The index is weighted for average export shares between 2002 and 2004. The Index remained stable between the fourth quarter of 2009 and the first quarter of 2010 with a change of less than one-tenth of a percent. While the 2010 first quarter average showed no change from the previous quarter average, the dairy price index decreased by 7.8 percent between January and March.⁸⁹ According to the FAO, falling prices reflect higher production and weaker demand than expected.⁹⁰ Low world dairy prices in 2009 were combined with increasing milk production costs from high feed prices and energy-related inputs, resulting in one of the worst years on record for the dairy industry. Milk production is expected to decline in 2010 as demand is projected to increase with the economic recovery, bringing the market back into equilibrium.⁹¹



Source: FAO Dairy Price Index

⁸⁹ FAO. (2010). Dairy Price Index. Available from <http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/>

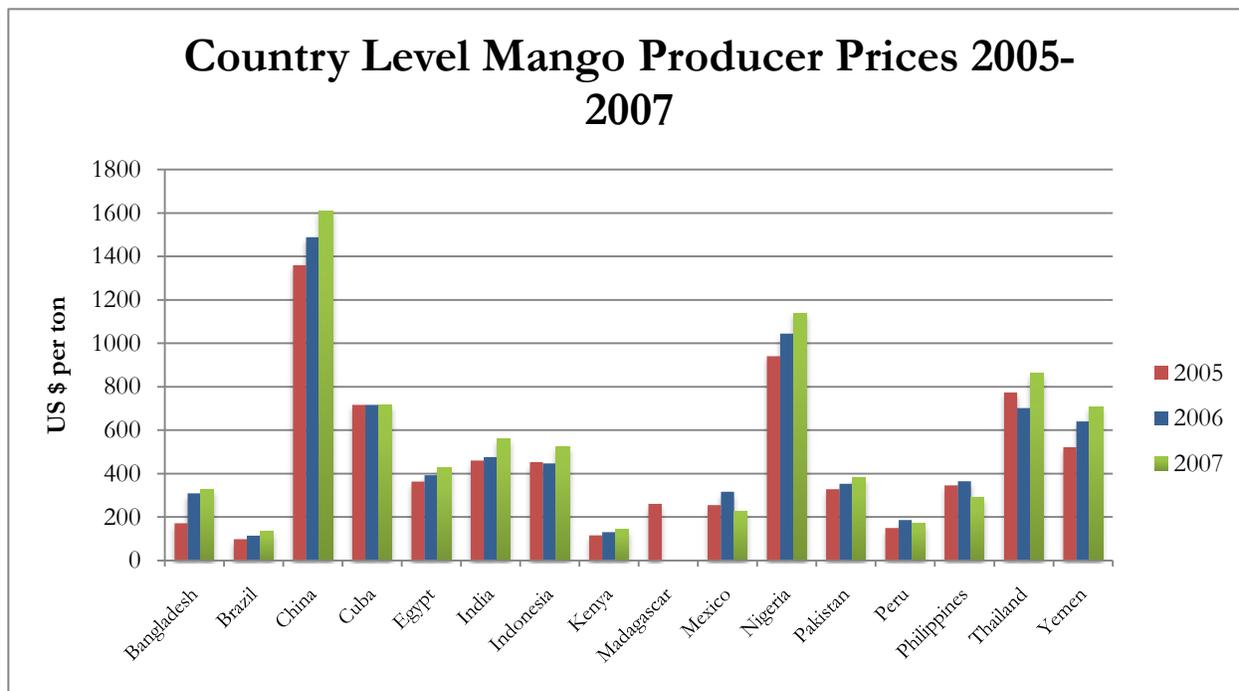
⁹⁰ U.S. Department of Agriculture. (2010, April 9). *World Agricultural Supply and Demand Estimates* [WASDE-481-18]. Available from <http://www.usda.gov/oce/commodity/wasde/>

⁹¹ Food and Agriculture Policy Research Institute University of Missouri-Columbia. (2010, March). *US Baseline Briefing Book: Projections for agriculture and biofuel markets*. Available from http://www.fapri.missouri.edu/outreach/publications/briefing_books.asp?current_page=outreach

Mangoes

Among internationally traded fruits, mango ranks second to pineapples in quantity and value. Most international trade in fresh mangoes takes place within short distances.⁹² India, Mexico, and Brazil are the top international exporters, accounting for over 70 percent of mango exports from 2005–2007.⁹³ Although Asia accounts for 75 percent of world production, its dominance does not translate into international trade.⁹⁴

Mango prices in India, the world’s largest producer, are up in recent weeks but are expected to fall. Many experts are predicting a bumper crop as a longer-than-usual winter could translate into more fruit on more mango trees. This possible mango surplus is expected to hit the market in late April, leading to lower prices. Prices are not predicted to fall much, due to the growing international market for high-end fruit.⁹⁵



Source: FAOSTAT

⁹² De La Cruz Medina, J. & H.S. García. (2003). *Post Harvest Compendium, Chapter XX: Mangoes*. Retrieved from http://www.fao.org/inpho/content/compand/text/Ch20sec1_2.htm

⁹³ FAOSTAT

⁹⁴ De La Cruz Medina, J. & H.S. García. (2003). *Post Harvest Compendium, Chapter XX: Mangoes*. Retrieved from http://www.fao.org/inpho/content/compand/text/Ch20sec1_2.htm

⁹⁵ Bellman, E. (2010, April 20). *Don't sweat, it's mango season*. Retrieved from <http://blogs.wsj.com/indiarealtime/2010/04/20/don%E2%80%99t-sweat-it%E2%80%99s-mango-season/>

Passion fruit

As a minor tropical fruit, data on passion fruit remain scarce because most countries do not routinely record or collect them. In addition, prices are difficult to compare across markets because of a lack of international standards. Only 5 percent of tropical fruits produced are traded internationally as fresh fruit. Over 90 percent are consumed domestically and the remaining 5 percent are traded as processed products. The World Customs Organization mandates the collection and reporting of disaggregated data on an individual fruit only if the value of trade exceeds US\$50 million.⁹⁶

Based on the most recent market analysis from 2005, production of minor tropical fruits expanded by 3 percent in 2004. While Asia was the major producer of tropical fruits that year, Latin America and the Caribbean accounted for about 61 percent of fresh fruit world exports. Asia was the dominant supplier of processed tropical fruits accounting for 75 percent of exports. Projections at the time of this analysis were that demand for tropical fruits would continue to grow, although at a slower pace than the previous decade.⁹⁷

Conclusion

Many changes in commodity prices over the course of the first quarter of 2010 are in response to revised supply estimates for the 2009/2010 agricultural season. Prices of staple food cereals in the first quarter of 2010 remain above their pre-crisis lows of early 2008 but most prices are trending down from the high crisis prices of 2008, as observed in the first quarter of 2010.⁹⁸

In closing, we note the announcement of a new resource to report international commodity market performance over time. On May 5, 2010, Standard & Poor's announced the launch of a new World Commodities Index exclusively tracking commodities traded outside of the U.S. Of commodities reported in this brief, the index includes corn, cocoa, crude oil, Robusta coffee, and wheat. The index is calculated in U.S. dollars and is production-weighted to reflect the significance of each commodity to the world economy.⁹⁹ The next EPAR commodity price update in July 2010 will include a report of this index.

Please direct all comments or questions to Leigh Anderson at eparx@u.washington.edu

⁹⁶ Food and Agriculture Organization. (2005). *Current situation and medium-term outlook for tropical fruits*. Retrieved from www.fao.org/es/esc/common/ecg/218/en/Sit_web_e.pdf

⁹⁷ Food and Agriculture Organization. (2005). *Current situation and medium-term outlook for tropical fruits*. Retrieved from www.fao.org/es/esc/common/ecg/218/en/Sit_web_e.pdf

⁹⁸ FAO. (2010, February). *Crop Prospects and Food Situation*. Available from <http://www.fao.org/giews/english/cpfs/index.htm>

⁹⁹ Standard & Poor's. (2010, May 5). *S&P World Commodity Index*. Available from <http://www.standardandpoors.com/indices/sp-world-commodity-index-%28wci%29/en/us/?indexId=wci>

Appendix 1: Factors that Contribute to Agricultural Commodity Price Volatility

Agricultural commodity prices are influenced by a variety of complex factors including macroeconomic forces and changes in the fundamentals of demand and supply; such as fluctuations in income, supply shocks resulting from bad weather or crop disease, input costs, government interventions and changes in the prices of related goods.

In general, a weakening U.S. dollar is associated with rising agricultural commodity prices and vice versa. Recently, commodity market analysts have attributed the moderating in agricultural commodity prices in part to gains in the value of the U.S. dollar relative to other currencies. Despite the apparent relationship, it is unclear how much of recent fluctuations in agricultural commodity prices can be attributed to changes in the value of the U.S. dollar.

Recently, the FAO and others have noted that macroeconomic factors including fluctuating exchange rates, volatile oil prices, and rising liquidity from low interest rates have played an increasing role in the fluctuations observed in agricultural commodities markets. They note that although supply and demand will continue to be the primary factors that shape commodities markets in 2010, the global food system has arguably become more susceptible to volatility driven by external, non-food economy events.¹⁰⁰

Short-Term Factors

A brief survey of literature from the FAO, USDA and IFAP reveals the main factors that contribute to short-term volatility in agricultural commodity prices.^{101,102,103} These factors include:

- Changes in demand due to shifts in incomes (purchasing power) and consumption
- Productivity improvements and new technologies
- Shocks to production (weather, disease, war, etc.)
- Changes in global stocks and reserves
- Short term government policies
- Energy and input prices and availability (labor, credit, water, fertilizer, seed, etc.)
- Biofuel policies and technology prospects
- Changes in the value of the U.S. dollar
- Developments in financial markets and speculative fund positions
- New investments in agricultural production
- Spillover effects between commodity prices including crude oil

¹⁰⁰ FAO. (2009). *Food Outlook*. Retrieved from <http://www.fao.org/docrep/012/ak341e/ak341e00.htm>.

¹⁰¹ Sarris, A. (2009, July). *International Farm Policy Challenges to 2050* [Presentation, IFAP Commodity Conference]. Retrieved from <http://www.ifap.org/en/newsroom/documents/InternationalFarmPolicyChanges2050.pdf>

¹⁰² Schnepf, R. (2008). *High Agricultural Commodity Prices: What Are the Issues?* [Congressional Research Service (CRS) Report for Congress]. Retrieved from <http://fpc.state.gov/documents/organization/104685.pdf>

¹⁰³ FAO (2009). *The State of Agricultural Commodity Markets, High food prices and the food crisis – experiences and lessons learned*. Retrieved from <ftp://ftp.fao.org/docrep/fao/012/i0854e/i0854e.pdf>

High Agricultural Commodity Prices in 2008¹⁰⁴

Numerous studies and research briefings consider the factors contributing to the observed spikes in agricultural commodity prices in 2008. According to the USDA, the sharp increase in agricultural commodity prices observed in 2008 was due to several contributing factors including:

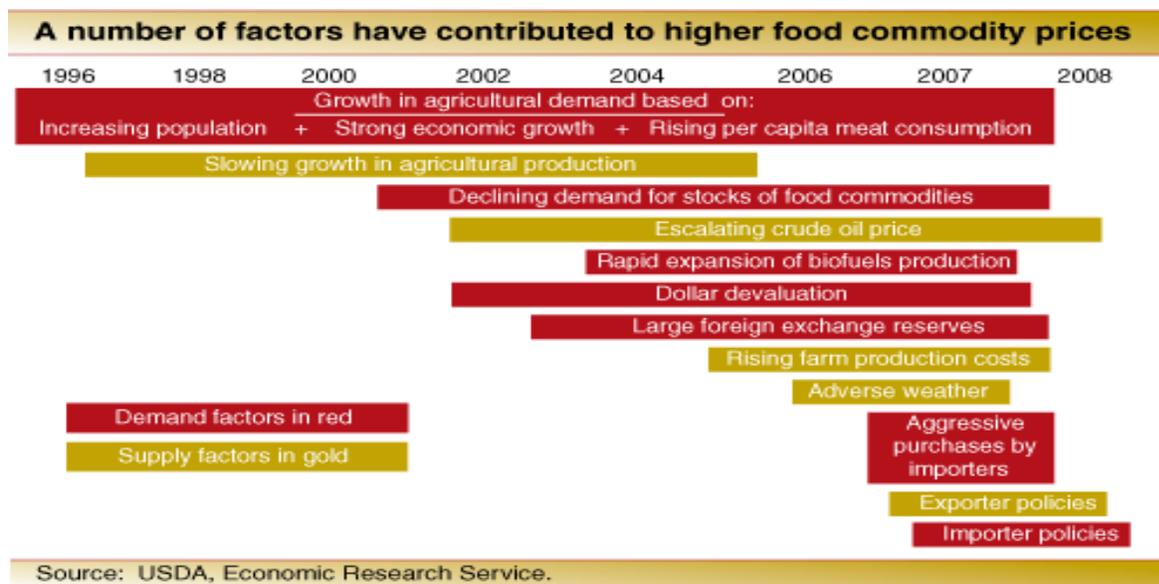
Changes in demand: Trends of more rapid expansion in demand and slower growth in production of agricultural commodities began in the 1990s. These changing dynamics contributed to declining global demand for stocks of grains and oilseeds since 2000.

Rising energy prices: The price of crude oil increased between 2000 and 2008, contributing to more expensive inputs. In addition, changing biofuel policies provided incentives to expand biofuel production in some countries.

Value of the dollar: Commodity prices were influenced by the declining value of the U.S. dollar, which allowed some countries to increase food commodity imports.

Rising production costs: In 2006 and 2007, rising energy prices and adverse weather in a number of countries reduced global production of grains and oilseeds, which contributed to short-term price volatility.

The figure below from the USDA shows the factors that contributed to higher agricultural commodity prices between 1996 and 2008.



¹⁰⁴ Trostle, R. (2008, May). *Global Agricultural Supply and Demand: Factors Contributing to the Recent Increase in Food Commodity Prices*. Retrieved from <http://www.ers.usda.gov/Publications/WRS0801/>