

# Phosphate Outlook

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Marriott Marriott Waterside Hotel and Marina  
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# Topics and Take Aways

- **Current Situation: A Slow Burn** (continues)
  - Weaker Fundamentals
  - Cautious Sentiment
- **2014 Outlook: Hitting Bottom and Beginning to Recover**
  - Record global shipments and a rebound in import demand
    - Positive demand drivers
    - Lower channel inventories worldwide: India DAP example
    - Still a tale of two Hemispheres – Americas vs. Asia
  - Supply uncertainties or the 'when' and 'how much' questions
- **Long Term Outlook: Balanced and Positive**
  - Strong demand outlook underpinned by the food story
  - A new supply ballgame
  - Stable global operating rates



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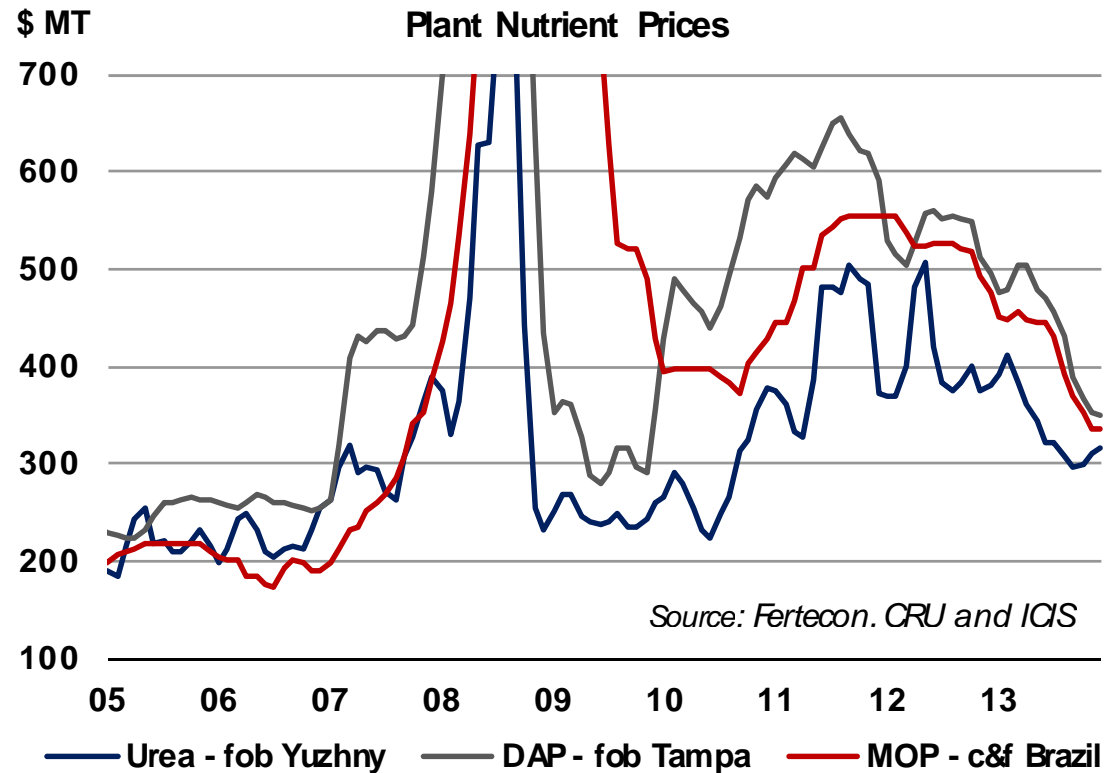
# Current Situation: A Slow Burn (continues)



## Current Situation: A Slow Burn (continues)

- **Weaker Fundamentals**
  - Collapse of Indian import demand
  - Livin' off the pipeline
  - Additional capacity/supplies
- **Cautious Sentiment**
  - Negative price expectations
  - Lower agricultural commodity prices
  - Spillover from high profile events in Russia/Belarus

# A Slow Burn: Prices Down ~40% from 2011 Peaks

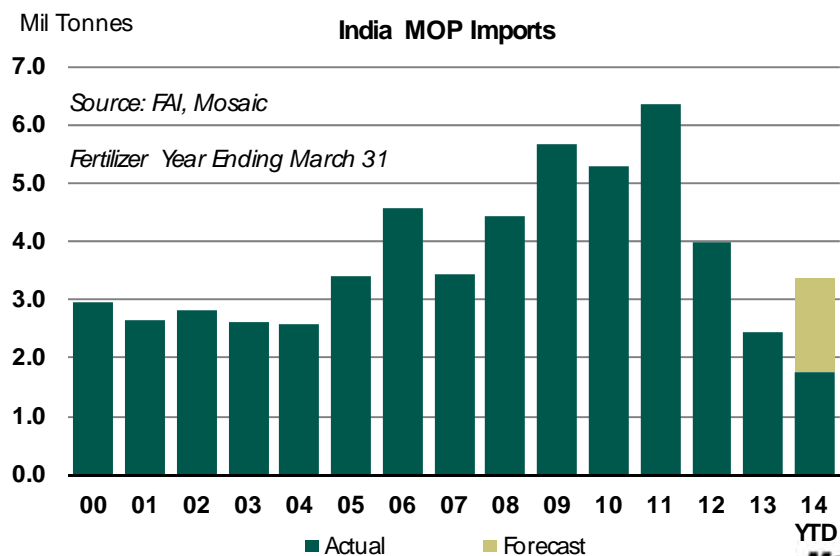
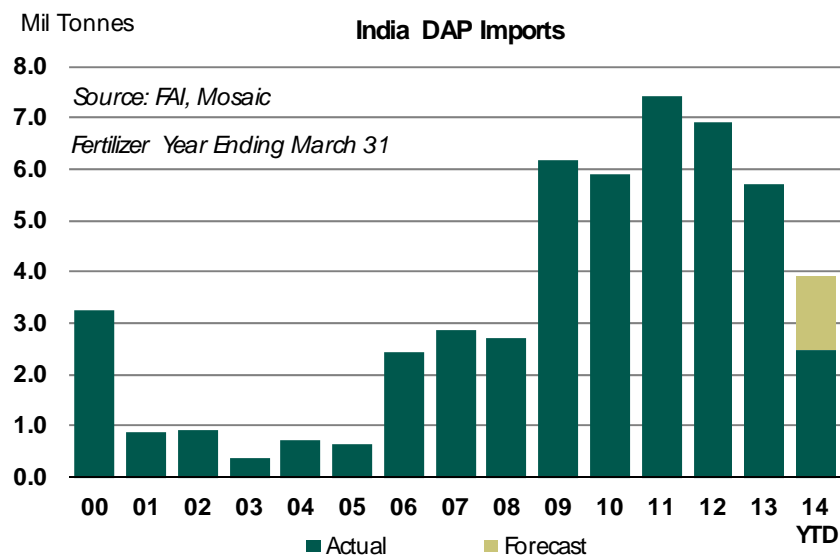
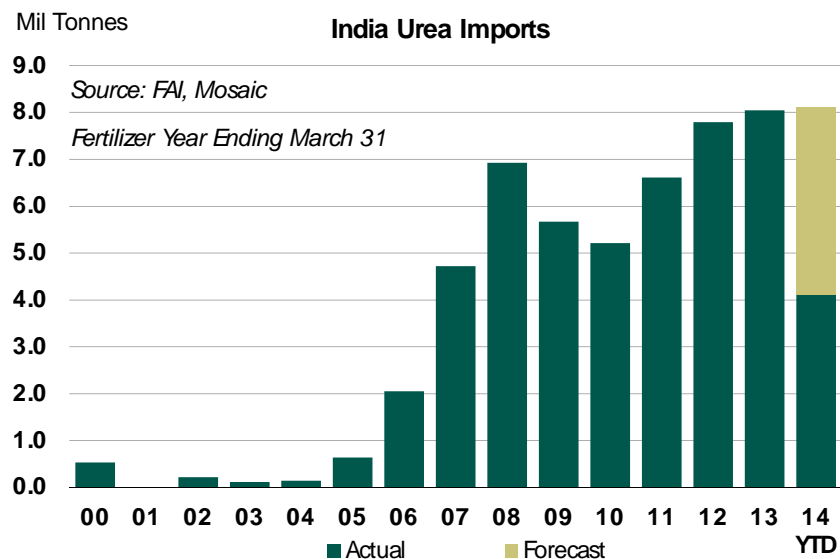
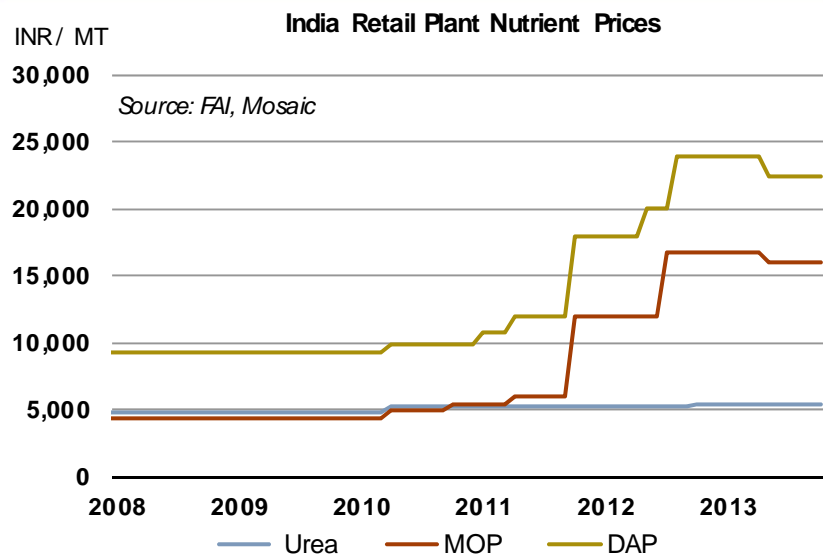


Urea	
2011 Peak:	\$505
Current:	\$318
Change:	-37%

DAP	
2011 Peak:	\$656
Current:	\$350
Change:	-47%

MOP	
2011 Peak:	\$555
Current:	\$335
Change:	-40%

# Collapse of Indian Import Demand



# Livin' off the Pipeline: India DAP Example

Million Tonnes DAP	2013/14	2014/15
Producer/Importer Beginning Inventory	1.45	1.20
Production	3.67	3.80
Imports	3.90	5.70
Producer/Importer Sales to Retailer Dealers	7.82	9.70
Retail Dealer Sales to Farmers	9.82	10.30
Retail Inventory Change	-2.00	-0.60
Producer/Importer Ending Inventory	1.20	1.00
Producer/Importer Inventory Change	-0.25	-0.20
Total Pipeline Inventory Change	-2.25	-0.85

Our Delhi team estimates that DAP demand by farmers remains strong due to an outstanding monsoon and profitable farm economics. The government has raised minimum support prices for major crops, retail urea prices remain stable at the extremely low level of \$80-\$85 per tonne, and retail P&K prices, while up sharply from pre-reform levels, have declined modestly in 2013/14. As a result, retail dealer DAP sales to farmers are projected to total 9.8 million tonnes this fertilizer year.

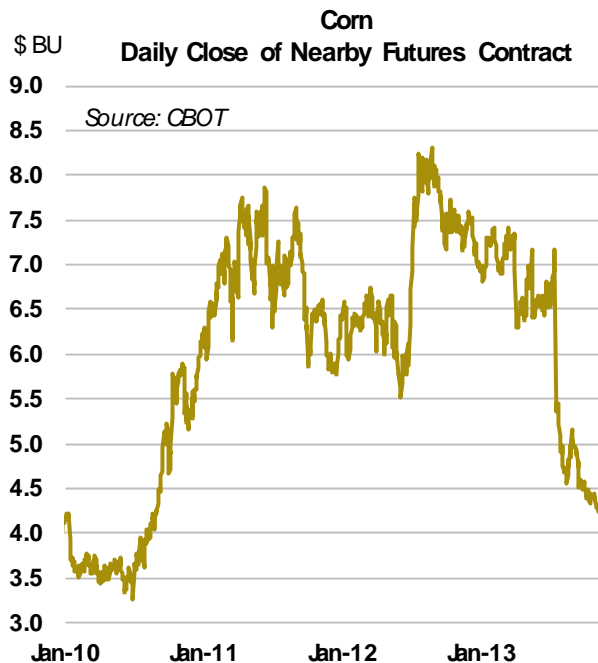
Producer and importer sales, however, are projected to drop to 7.8 million tonnes, implying of retail inventory decline of 2.0 million tonnes. In addition, producer/importer inventories also are projected to decline 250,000 tonnes in 2013/14.



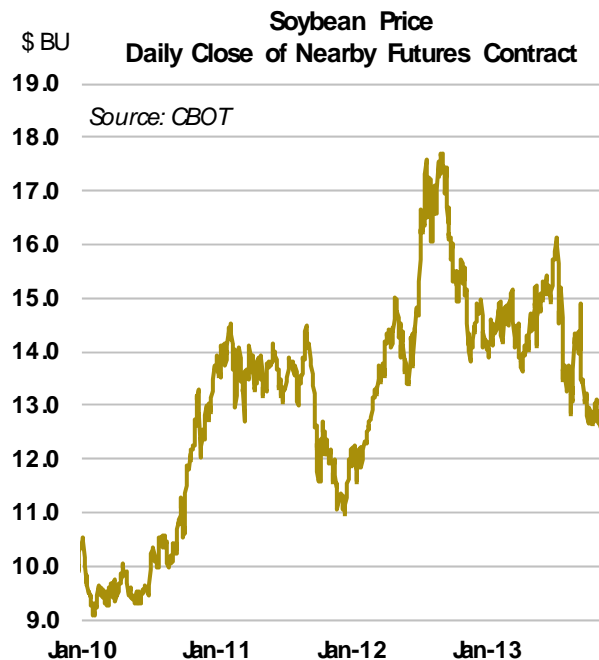
# Lower Agricultural Commodity Prices

2012/13: How high to allocate the short crop to its highest valued uses?

2013/14: How low to unleash pent-up demand?



<u>Corn</u>
2012/13: \$6.79
Current: \$4.22
2013/14: ????

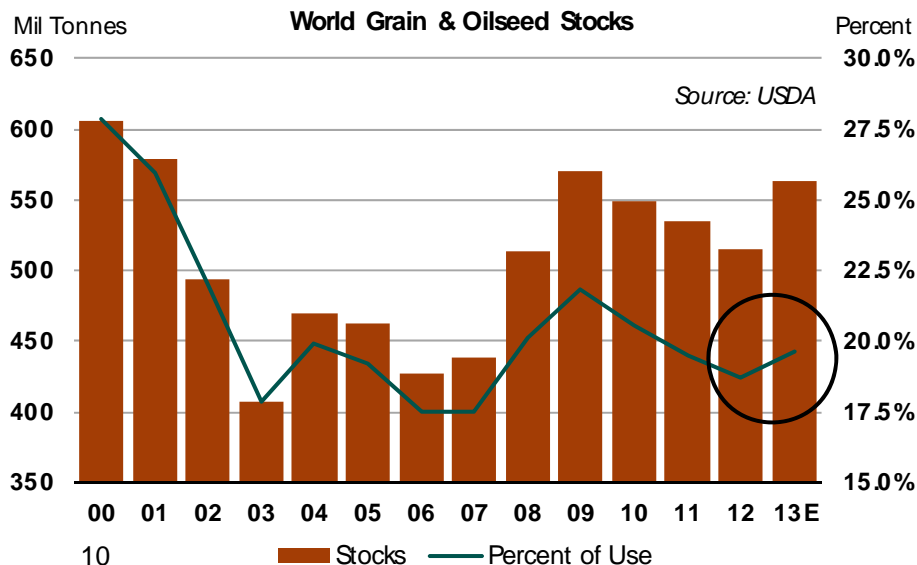
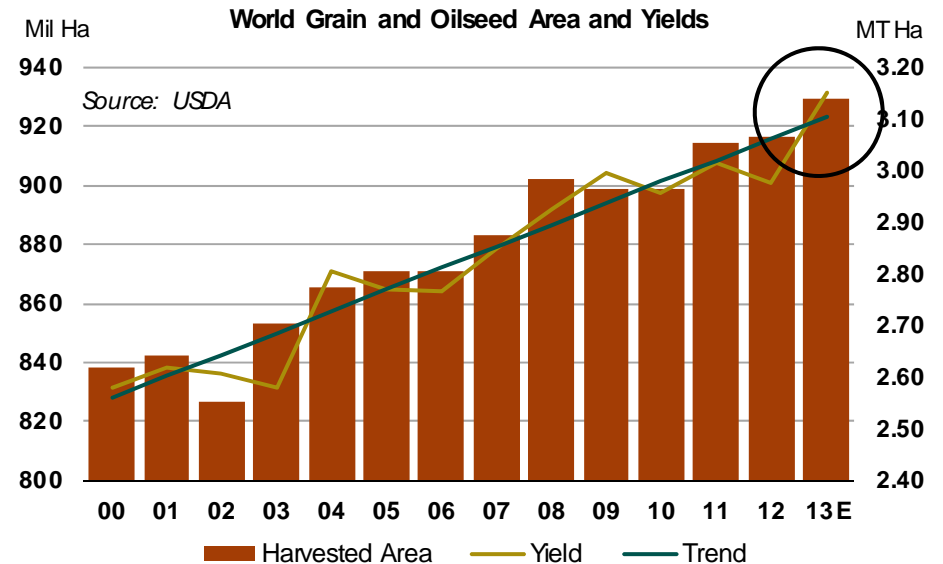
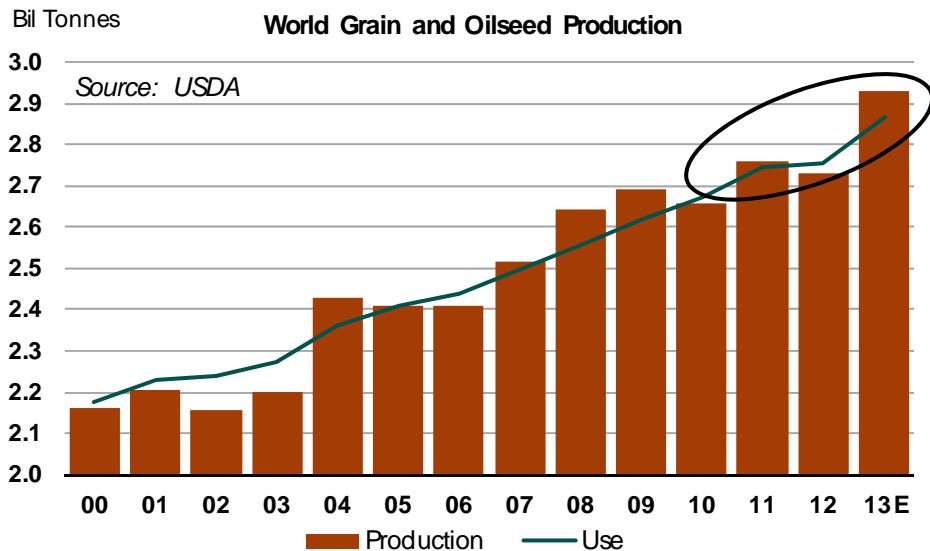


<u>Soybeans</u>
2012/13: \$14.74
Current: \$12.81
2013/14: ????



<u>HRW Wheat</u>
2012/13: \$8.20
Current: \$6.99
2013/14: ????

# Lower Agricultural Commodity Prices



The USDA projects that 2013/14 global grain and oilseed production will surge to a record-smashing 2.93 billion tonnes due to record harvested area and a record average yield.

Global grain and oilseed use increased at a compound annual growth rate of 2.4% during the five years prior to 2012. Use increased just 0.4% in 2012 due to the short crop last year (but still the second largest ever produced!). USDA projects that global use will jump 3.5% in 2013 due to ample supplies and more moderate prices.

If current supply and demand projections are on target, global grain and oilseed stocks will increase significantly this year and make up most of the declines during the last three years.

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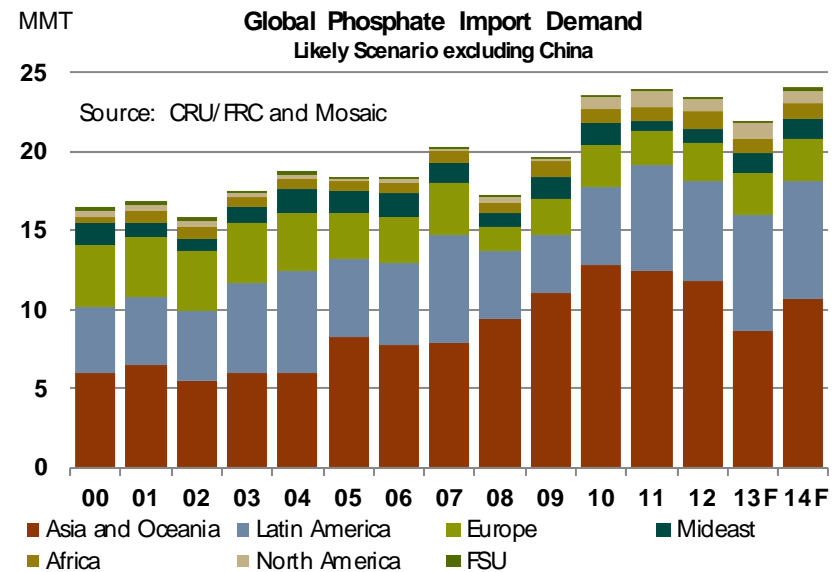
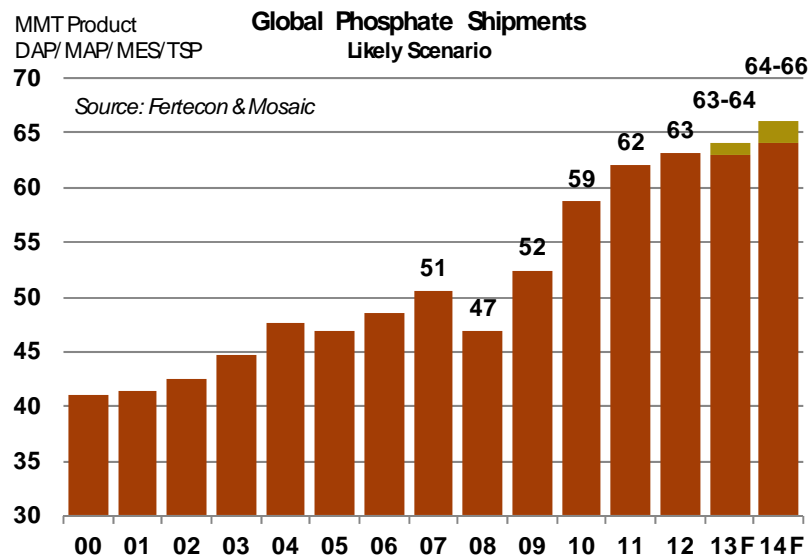
# 2014 Outlook: Hitting Bottom and Beginning to Recover



## Hitting Bottom and Beginning to Recover

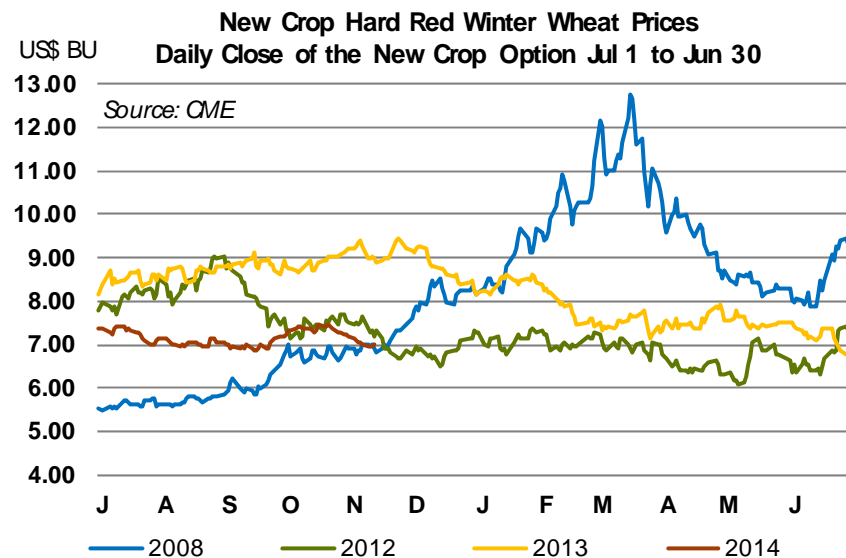
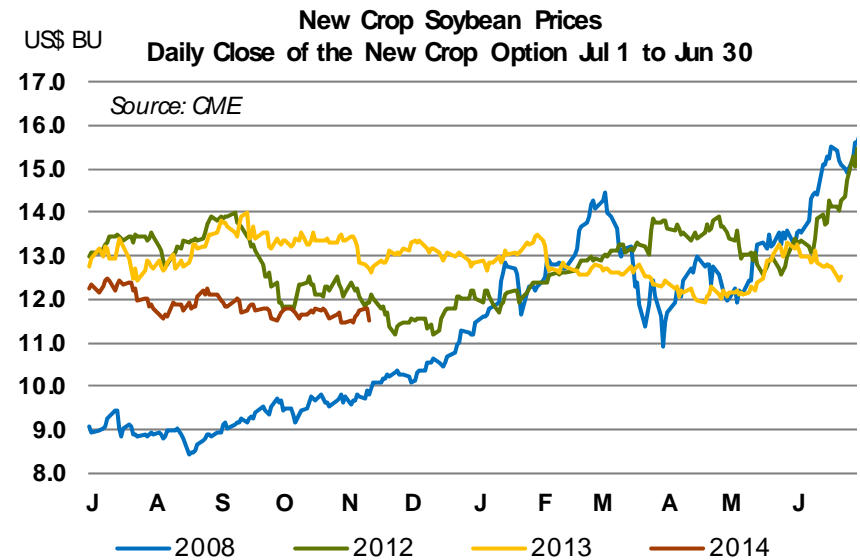
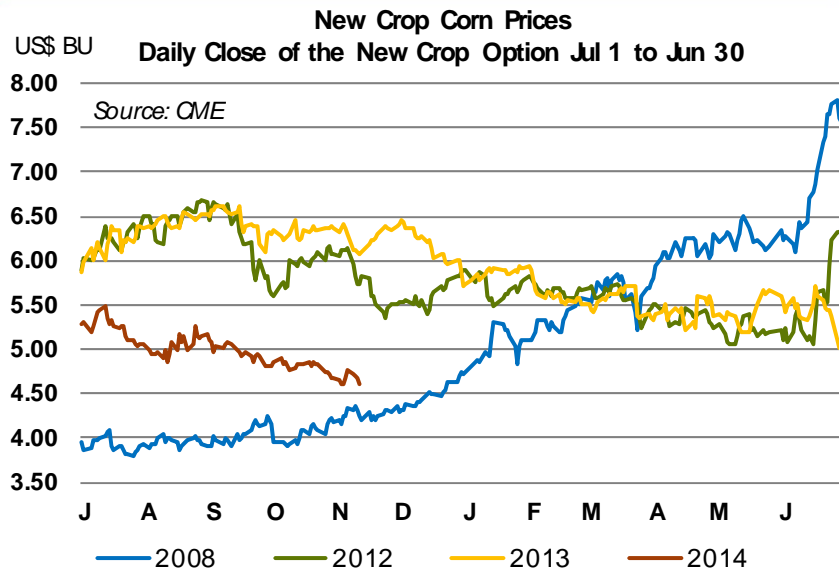
- Record Global Shipments and a Rebound in Import Demand
  - Positive demand drivers
  - Lower channel inventories worldwide – India DAP example
  - Still a tale of two Hemispheres – Americas vs. Asia
- Supply Uncertainties or the When and How Much Questions
  - How much will China export?
  - When will Ma'aden Phase I ramp up to capacity?
  - How much will OCP produce and export?
  - When will the first Jorf Phosphate Hub come online?
  - How much will Tifert produce and when will Jifco start up?

# Record Shipments and a Rebound in Import Demand





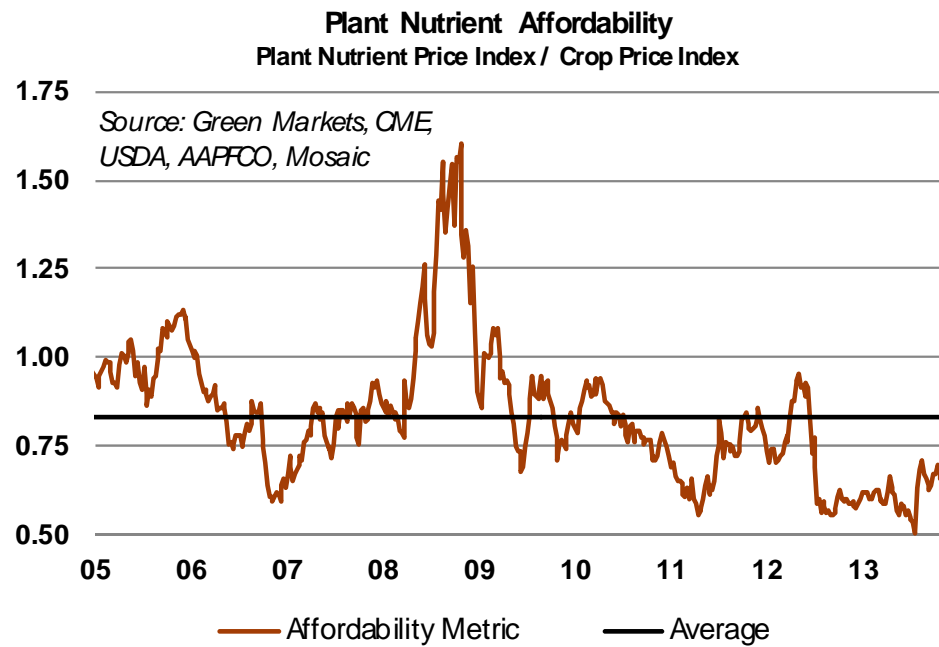
# Positive Demand Drivers



S/C Ratio 11/15/13: 2.51

Lower but still relatively high 2014 new crop prices

# Positive Demand Drivers



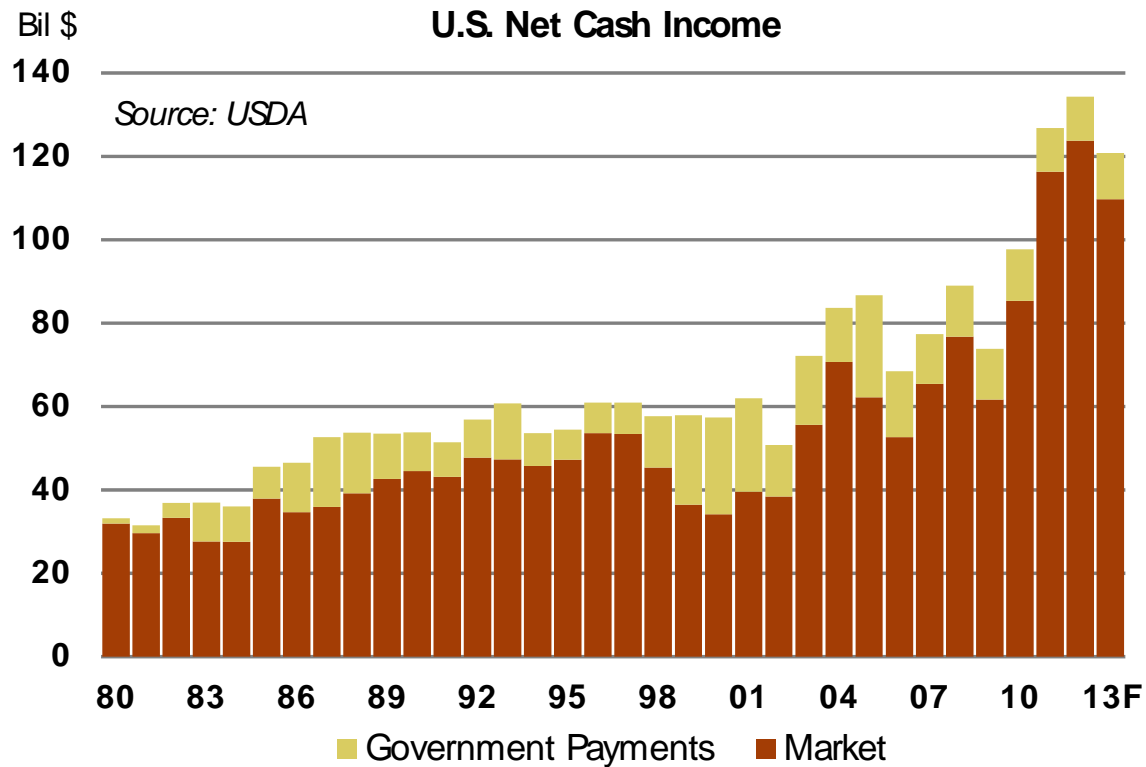
Affordable plant nutrients

Our homemade Plant Nutrient Affordability metric is a ratio of a plant nutrient price index and a crop price index.

The plant nutrient price index is a weighted average of indices for urea, DAP and MOP prices. These indices are calculated using weekly published spot prices at key U.S. pricing points. Weights are N, P, and K percentages of total U.S. nutrient use from 2005 to 2007.

The crop price index is a weighted average of indices for corn, soybeans and wheat. These indices are calculated using the weekly average of the daily closing price of the front month futures contract. Weights are the shares of total U.S. production of these three crops from 2005 to 2007. The base year for all indices is 2005.

# Positive Demand Drivers



Near Record U.S. Net Cash Farm Income

# Lower Channel Inventories: India DAP Example

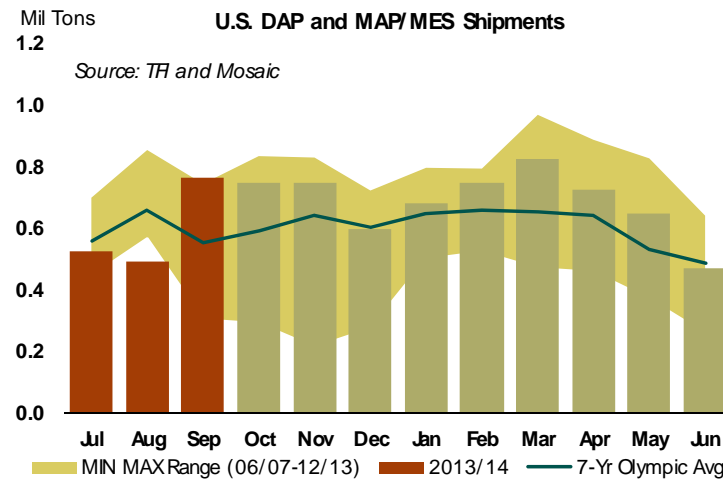
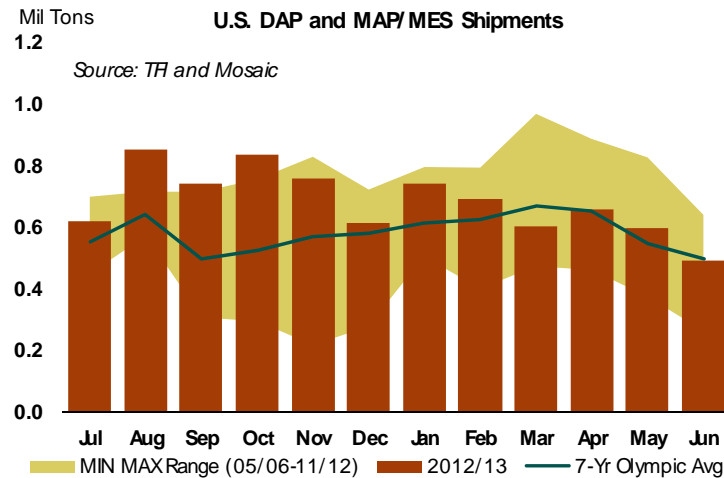
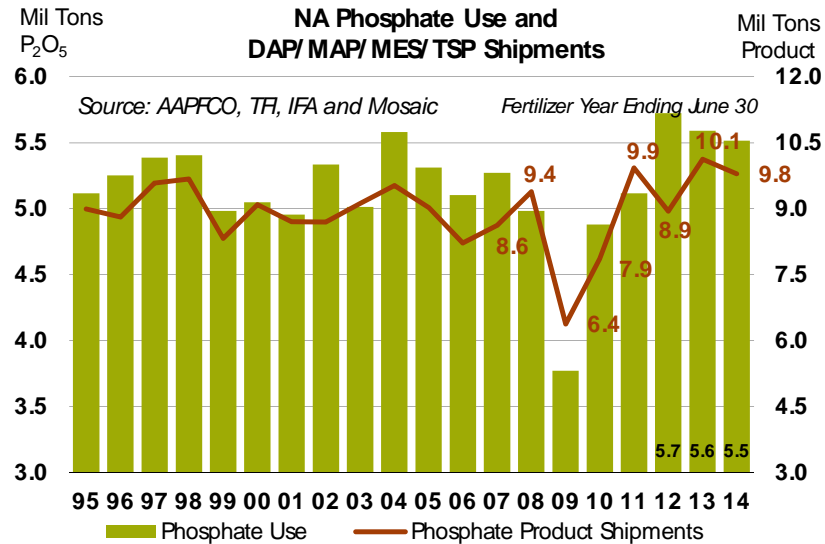
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# Still a Tale of Two Hemispheres

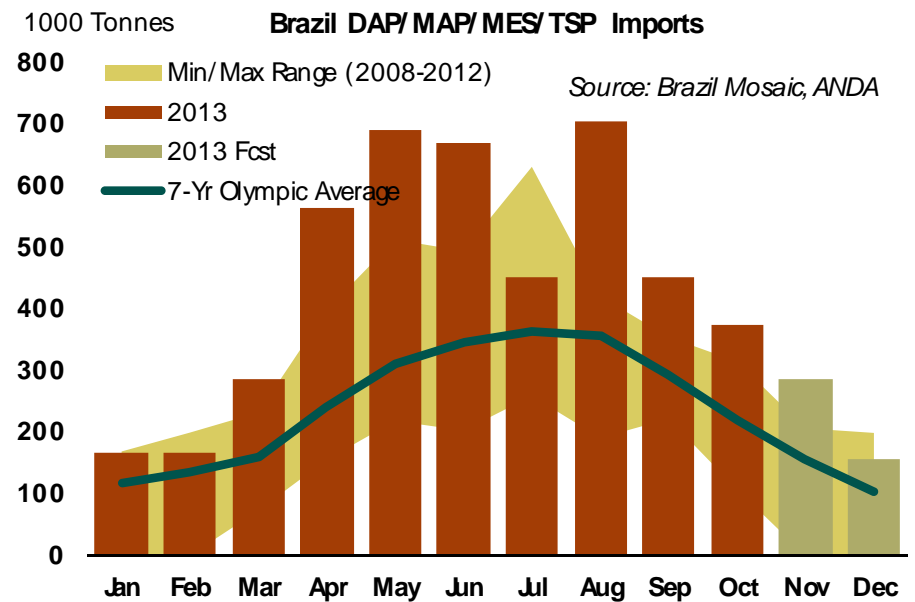
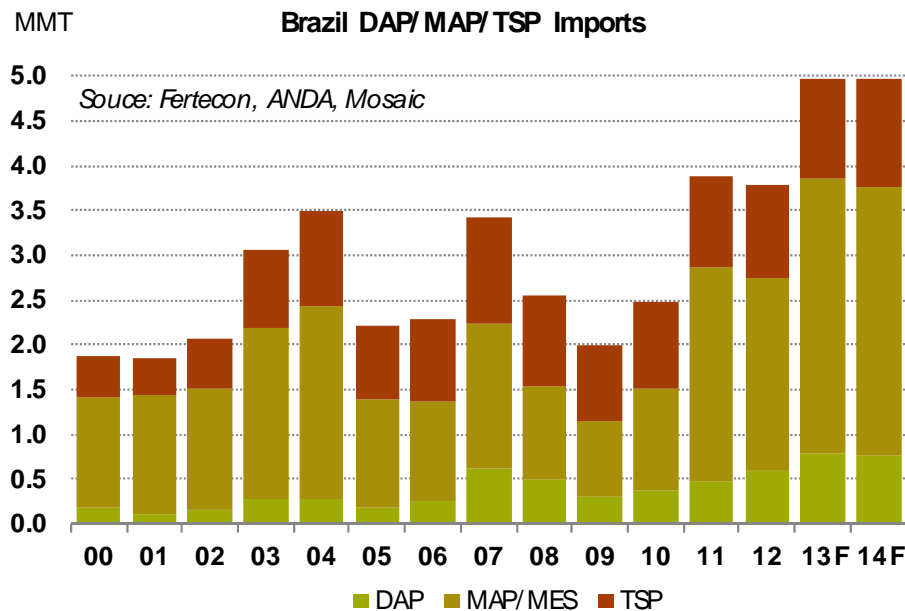
## Americas – Outstanding Demand Prospects





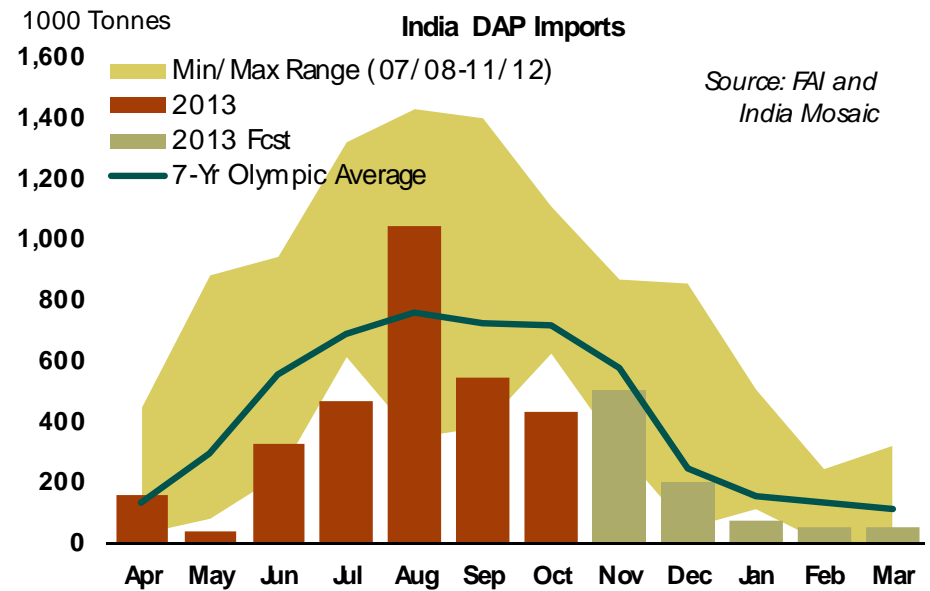
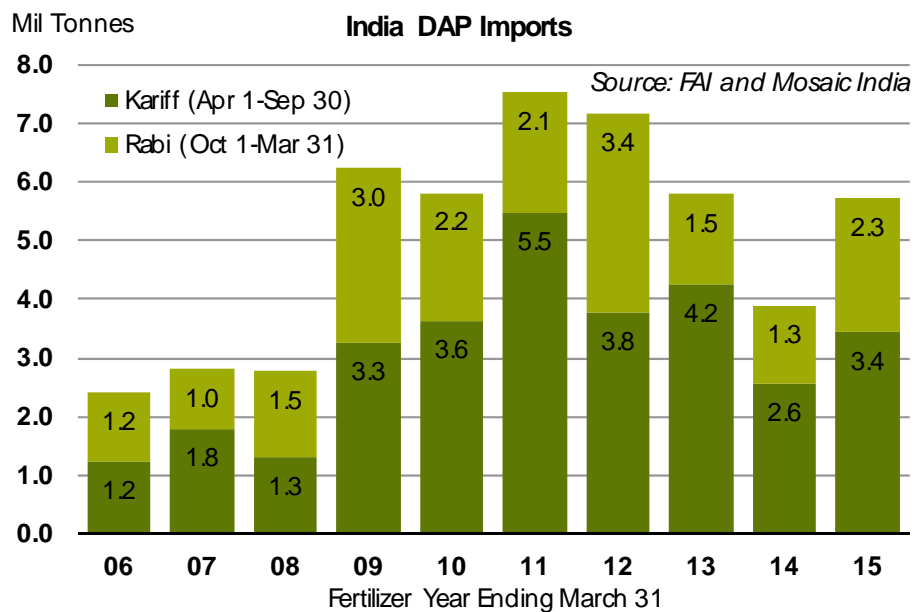
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## Americas – Outstanding Demand Prospects



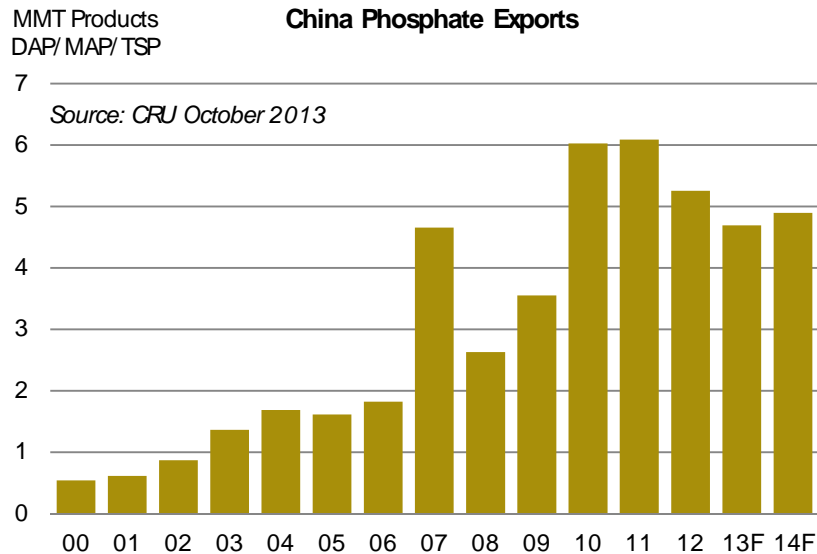
# Still a Tale of Two Hemispheres

## India – The Beginning of a Recovery



# Supply Uncertainties – How Much . . .

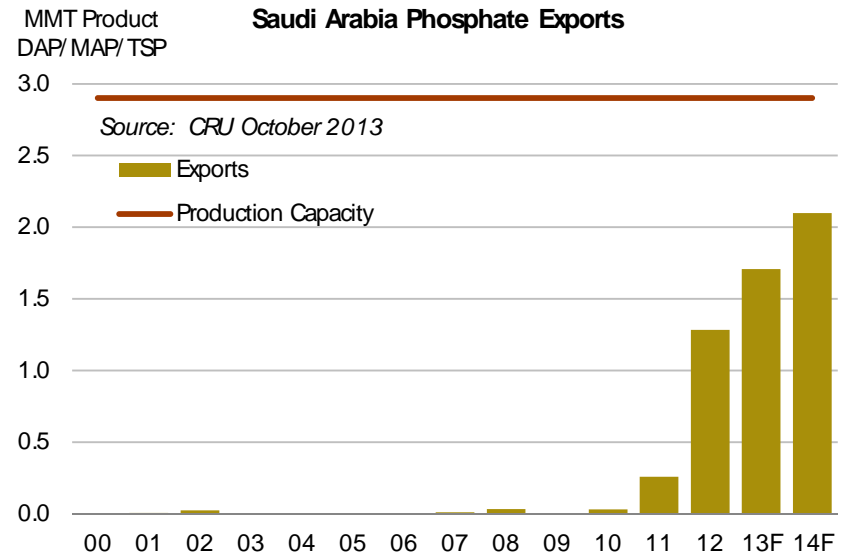
. . . phosphate will China export?



## Key Issues

- 2014 export tax (potentially less restrictive)
- Production economics
- Domestic off-take
- Indian import demand

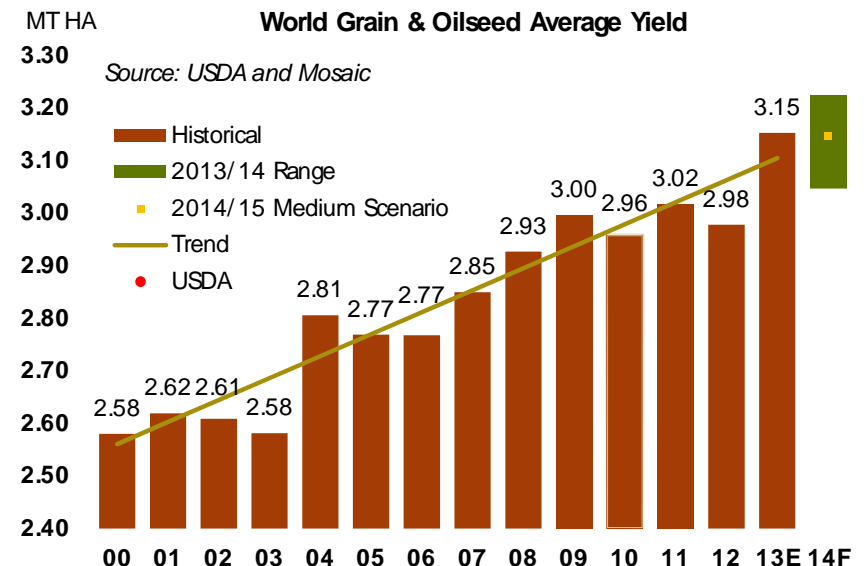
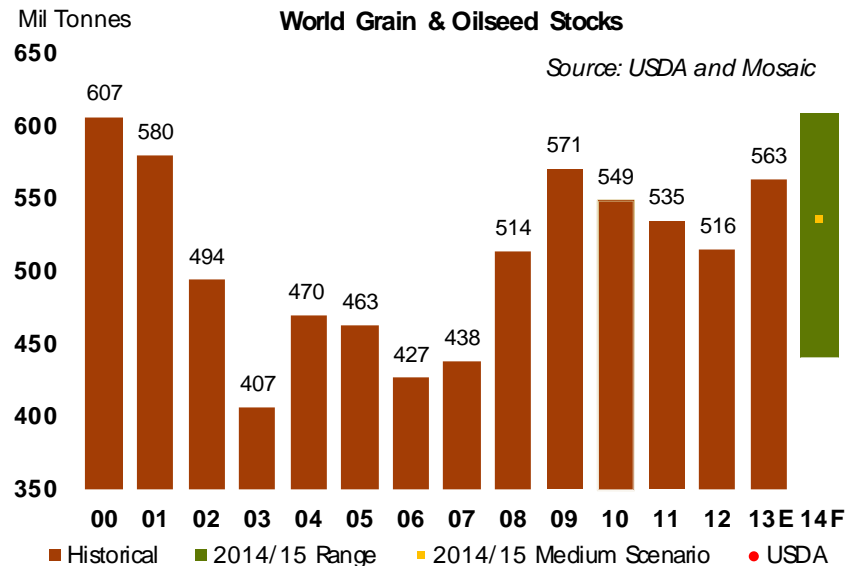
. . . phosphate will Saudi Arabia export?



## Key Issues

- Mine and plant ramp-up to capacity
- Indian import demand

# 2014/15: Wide Range of Potential Scenarios



- 2013/14
  - Rebuilds the drawdown of the last three years
- 2014/15
  - Wide range of potential scenarios
  - Most likely scenario results in a significant drawdown
  - Low scenario depletes stocks to food-crisis levels
  - High scenario builds stocks to 2000/01 levels

2014/15 Grain and Oilseed Scenario Assumptions

	Low	Medium	High
Harvested Area Change	-0.50%	0.00%	0.50%
Yield Deviation from Trend *	Largest Negative	0.00	Largest Positive
Dem and Growth	2.0%	2.5%	3.0%

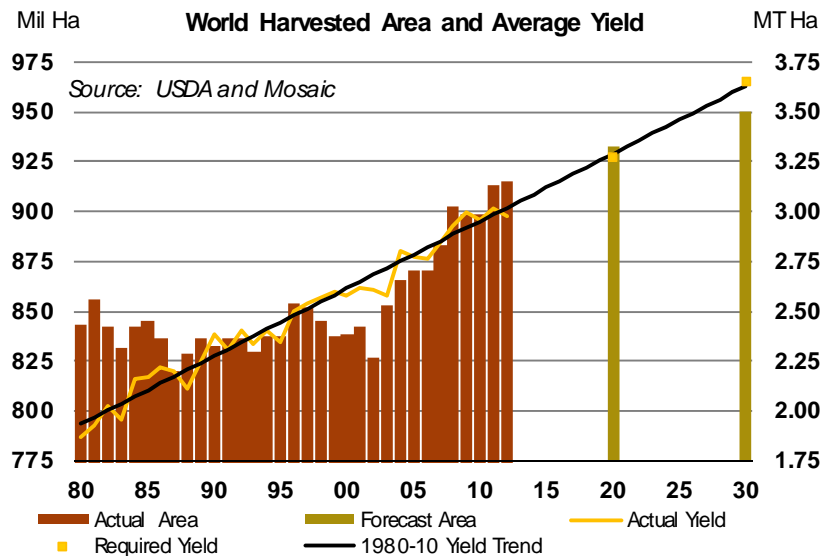
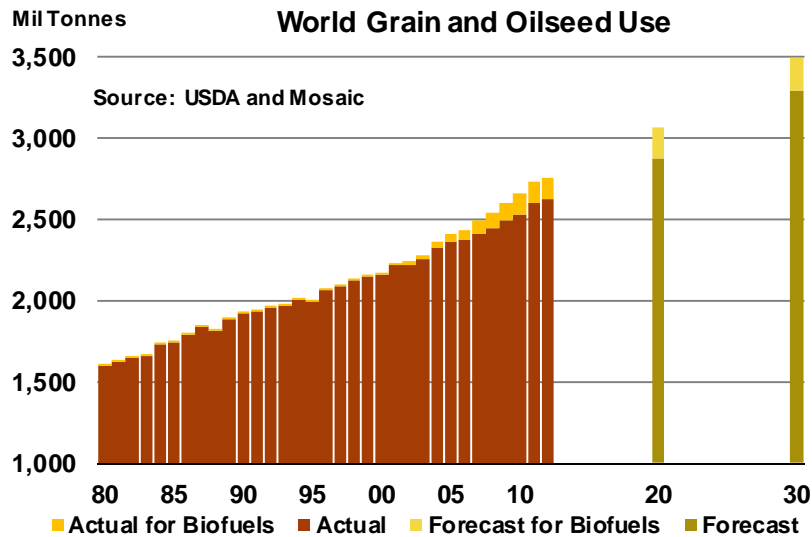
\* Trend yield for 2000/01 to 2012/13 crop years.

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Long Term Outlook:  
Balanced and Positive

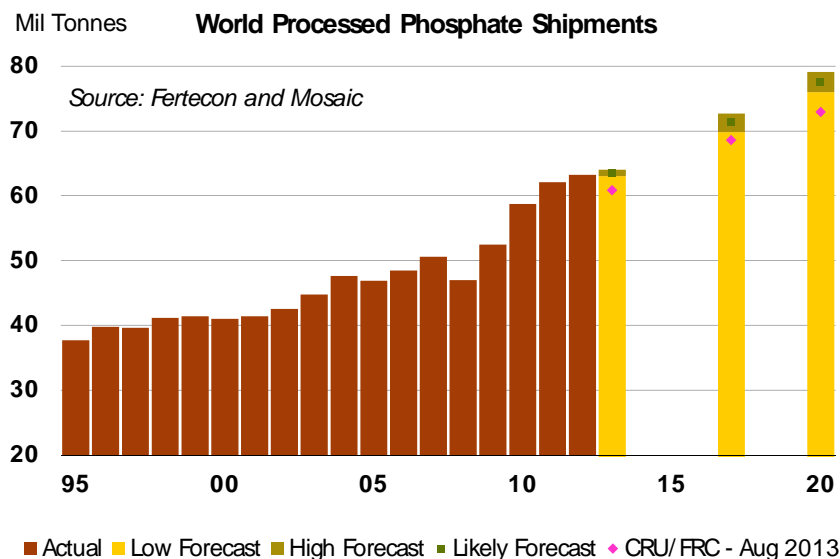


# Solid Demand Drivers



Available on [Mosaicco.com](http://Mosaicco.com)

# Strong Demand Prospects



## Key Assumptions

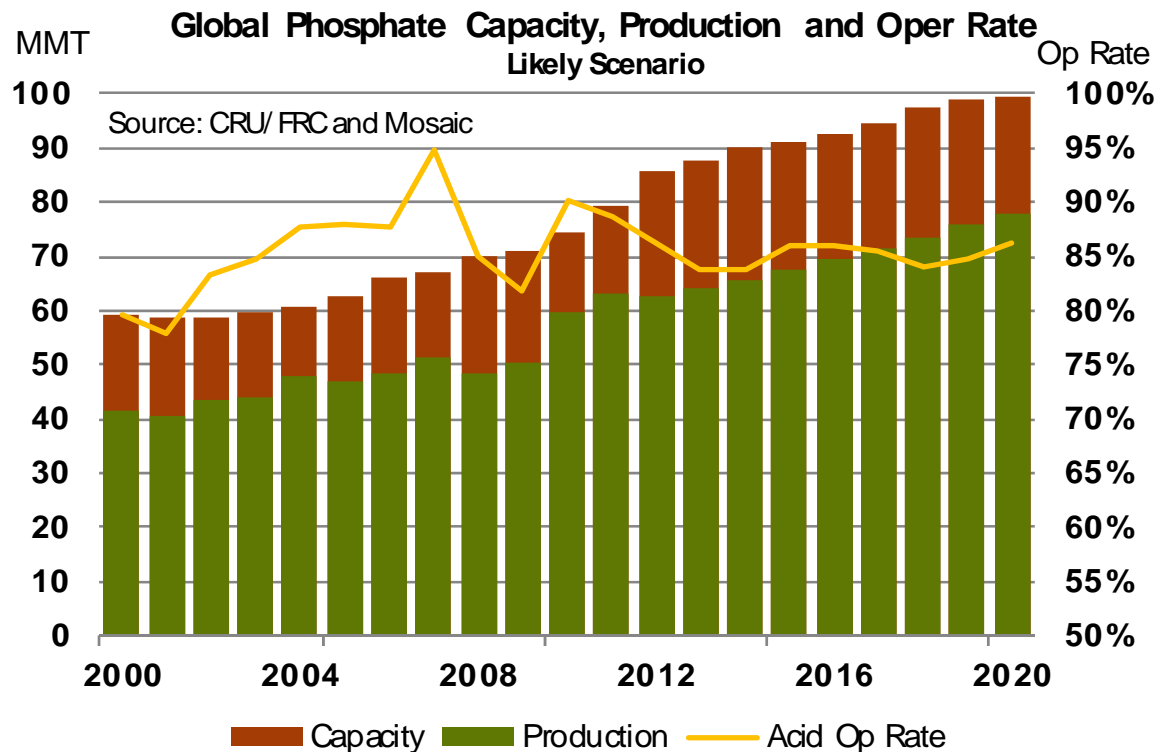
- Agricultural commodity prices continue to trade at elevated levels
- Farm economics remain profitable worldwide
- More moderate and less volatile phosphate prices
- More balanced nutrient use in China and India
- Continued strong growth of phosphate intensive crops such as soybeans and palm oil.

## Global Phosphate Shipments Forecast

M M T DAP / M AP / TSP	Mosaic				CRU / FRS	
	Low	Likely	High	P <sub>2</sub> O <sub>5</sub>	D / M / T	P <sub>2</sub> O <sub>5</sub>
2010 Shipments		58.7		40.6	60.5	42.9
2020 Forecast	76.0	77.6	79.1	50.8	72.9	52.1
Change	17.3	18.8	20.4	10.1	14.2	9.2
CAGR 2010-20	2.6%	2.8%	3.0%	2.3%	1.9%	2.0%

Source: CRU / Fertecon Research Centre Data File August 2013

# Balanced and Positive Outlook



*Based on our likely demand scenario and capacity estimates, global phosphoric acid operating rates are projected to remain relatively stable at about 85% of capacity from 2014 through 2020. This is in line with the average since 2000, but projected rates do not exhibit as much volatility as during the last decade.*

# Phosphate Outlook Key Features

## 1. New Supply Ballgame: China's Expansion Program Expected to End

*On the supply side of the ledger, a key feature of our analysis is the expectation that China's massive 15-year expansion program will come to an end and that new low cost capacity planned or under construction, mostly in Morocco and Saudi Arabia, will supply the bulk of projected demand growth during the last half of this decade and beyond.*

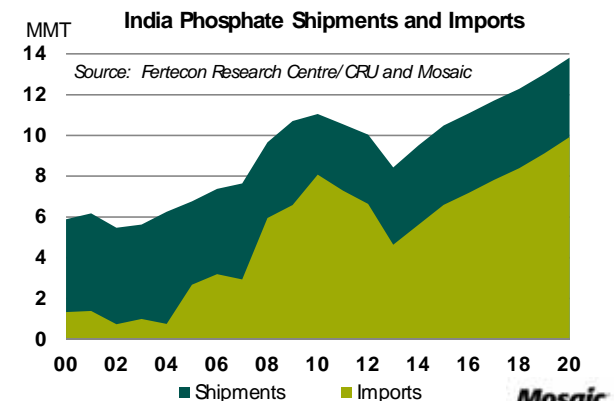
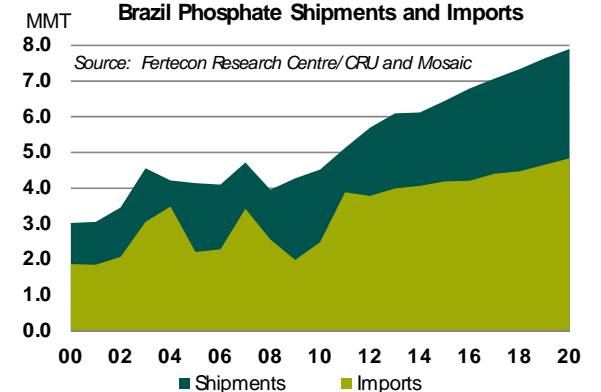
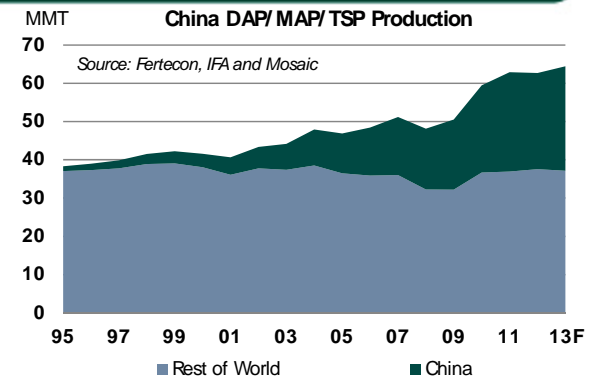
## 2. Brazil Remains a Key Growth Market and Still Largely Dependent on Imports

*Brazil shipments are forecast to climb 5.7% per year or 3.4 million tonnes from 4.5 million in 2010 to 7.9 million in 2020. Increases in domestic production are projected to meet roughly one-third of this growth with imports capturing the remaining two-thirds. Brazil's imports are forecast to climb from 2.5 million tonnes in 2010 to 4.8 million in 2020.*

## 3. Demand Growth Gets Back on Track in India

*In India, a combination of expected subsidy changes and more stable and moderate prices is projected to put phosphate demand back on a growth trajectory during the last half of the decade. Shipments are projected to grow 2.3% per year or 3.0 million tonnes from 11.1 million in 2010 to 13.8 million in 2020. Domestic DAP fabrication is expected to remain at about 4.0 million tonnes, so imports of high analysis solid products are forecast to increase to around 10.0 million tonnes by the end of the decade. Imports peaked at 8.1 million tonnes in 2010.*

## 4. Generally Positive Demand Prospects Elsewhere







# Thank You!

## Phosphate Outlook

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