



Why fertilizer?

FERTILE SOILS GROW MORE

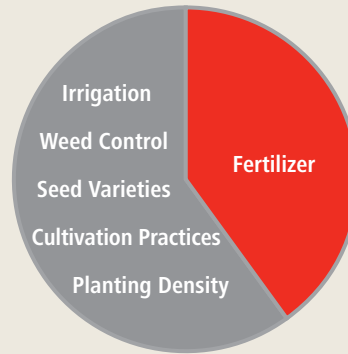
When a crop is harvested, it takes from the soil the nutrients that helped it grow and that give it taste and color and healthfulness for humans and animals. Unless those nutrients are replaced, the size and quality of successive crops will fall – just when world population is rising and people everywhere insist on more and better food. To satisfy all those people, each acre of land must produce more, and that means increased and more balanced use of fertilizer.

Why fertilizer?

Fertilizer Equals Food

Research indicates that more than 40 percent of world food production is a direct result of fertilizer application. Factors such as irrigation, seed varieties and technology, cultivation practices, weed and pest control and planting density contribute the rest.

But fertilizers do far more than boost yields; they strengthen plants and speed growth and maturity. Potash, in particular, improves the physical quality and nutrient value of all crops.



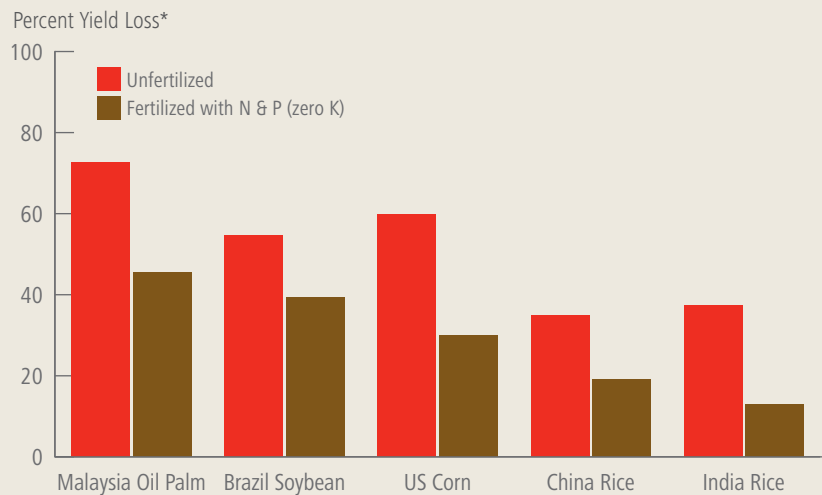
Source: IPNI

Why fertilizer?

Fertilizer Is Critical for Achieving Optimum Yields

With each crop that is harvested, large quantities of nutrients are removed from the soil and must be replaced. While exceptional weather and nutrients resident in the soil can temporarily mask this need, long-term trials prove that without fertilizer, yield losses are dramatic. For example, it is estimated that yields of Malaysia's oil palm crop and the US corn crop could be as much as 75 percent and 60 percent lower, respectively.

Balanced fertilization is essential for optimum yields. Trials demonstrate that significant yield loss will occur when nitrogen and phosphate are applied but potash applications are reduced.



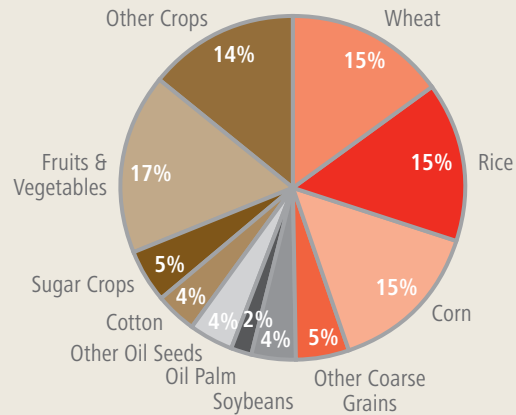
* Yield loss compared to when optimal N, P, K fertilizer is applied; based on long-term yield trials

Source: IPNI

Why fertilizer?

Grains Consume Half of World Fertilizer

Wheat, rice, corn and other coarse grains use 50 percent of world fertilizer. Fruits and vegetables are another large fertilizer consumer, accounting for 17 percent of total use. Oilseeds and other cash crops are fertilizer-intensive but less land is allocated to their production worldwide.



Source: IFA, Fertecon

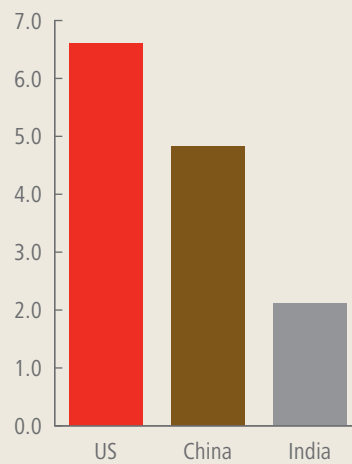
Why fertilizer?

More Potash Required in Fertilizer Applications

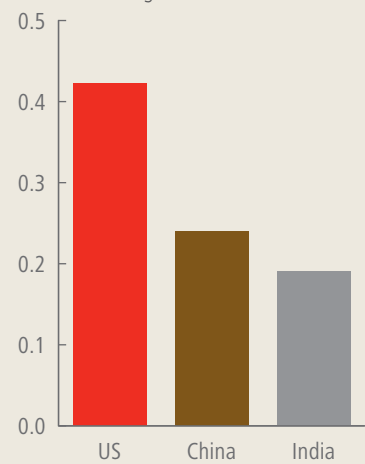
Yield per acre and the potash-to-nitrogen ratio are closely related. US farmers have long understood the benefits of balanced fertilization, and the appropriate inclusion of potash in their fertilizer mix is a key reason for their higher productivity.

For decades, countries such as China and India have under-applied potash compared to other nutrients that are more readily available from domestic resources. They are gradually correcting this nutrient imbalance, but this process will take time, education and more money in the hands of farmers.

Grain Yield – MT/Hectare



Potash to Nitrogen Use Ratio



Source: USDA, Fertecon, PotashCorp

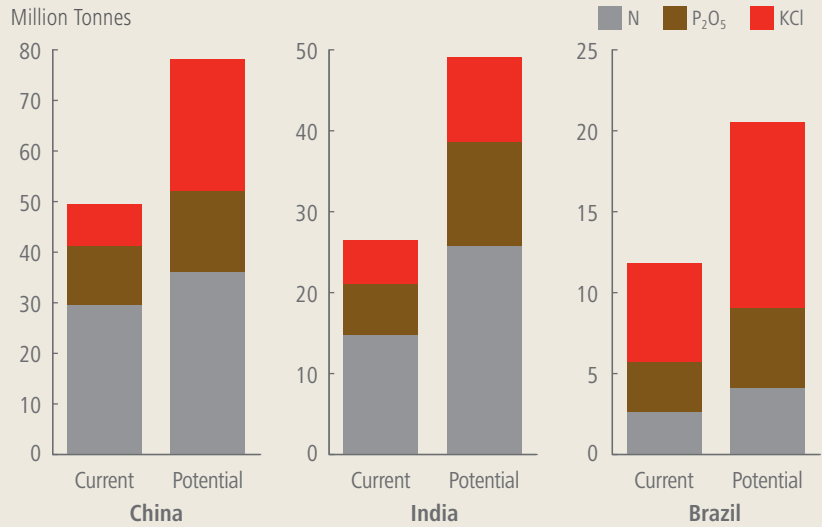
> IMPROVED FERTILIZATION CAN RAISE YIELDS

China, India and Brazil Need More Fertilizer, Particularly Potash

China, the world's largest fertilizer consumer, still needs to apply more of all three nutrients – approximately 25 percent more nitrogen, 40 percent more phosphate and more than triple its current potash application – to meet scientifically recommended levels and maximize production.

With soils deficient in all three nutrients, India, too, has a substantial need for fertilizer. Consultants suggest its nitrogen and phosphate consumption could increase by more than 80 percent, while there is potential for potash to almost double.

Brazil is unique. Because of its large soybean acreage, it uses less nitrogen but its naturally deficient soils need still more of all three nutrients, especially potash.



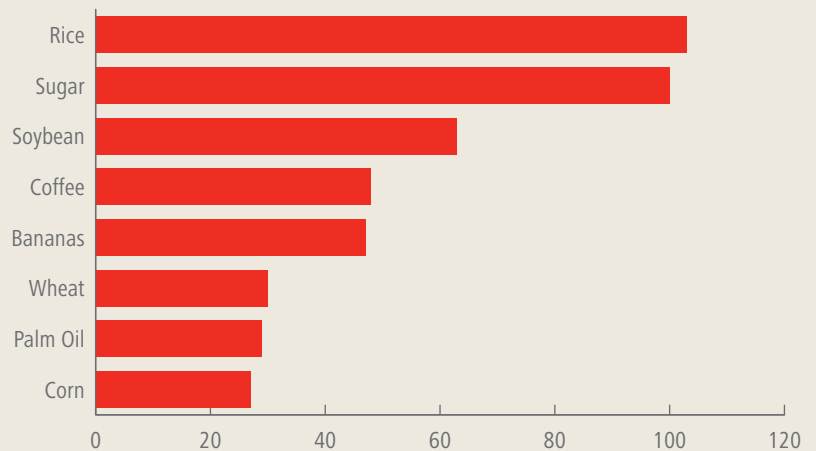
Source: IPNI, Fertecon, PotashCorp

> AGRICULTURE COMMODITY PRICES

Crop Prices Well Above Historical Averages

Tight grain and oilseed supplies have a predictable impact on crop commodity prices. Prices for most major crops grown around the world remain well above their 10-year averages. For example, the export price for rice, a diet staple in many Asian countries, is double its 10-year average. We expect that higher crop commodity prices will provide farmers with an incentive to plant – and apply the crop nutrients necessary to improve yields.

July 2009 Price – Percentage Change Compared to 1999-2008 Average



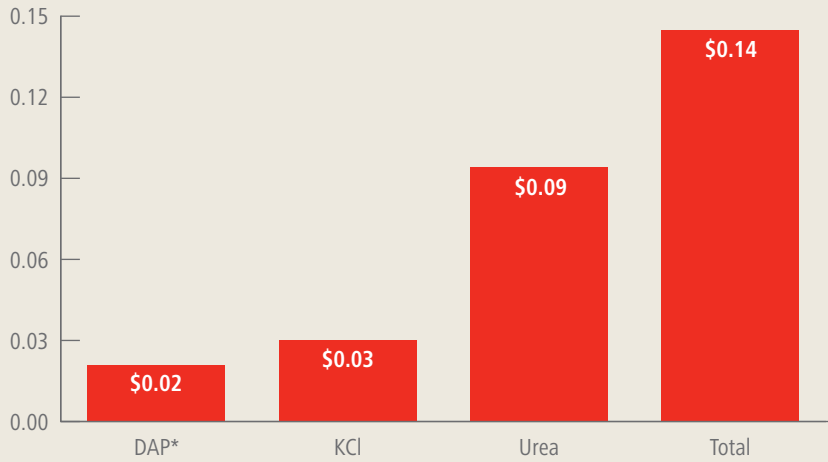
Source: World Bank

Why fertilizer?

\$100/ST Potash Price Adds Only \$0.03/Bushel to US Corn Cost

While crop prices have declined from levels witnessed in 2008, the cost of fertilizer is still a relatively small percentage of total revenue at current crop and fertilizer prices. For example, in the US, a \$100-per-ton increase in potash prices adds on average only three cents to the production cost of a bushel of corn.

\$US/Bushel Cost per \$100/Short Ton Fertilizer Price



* P₂O₅ cost of DAP only (assumes urea provides 100% of crops' N requirement)

Source: USDA, PotashCorp

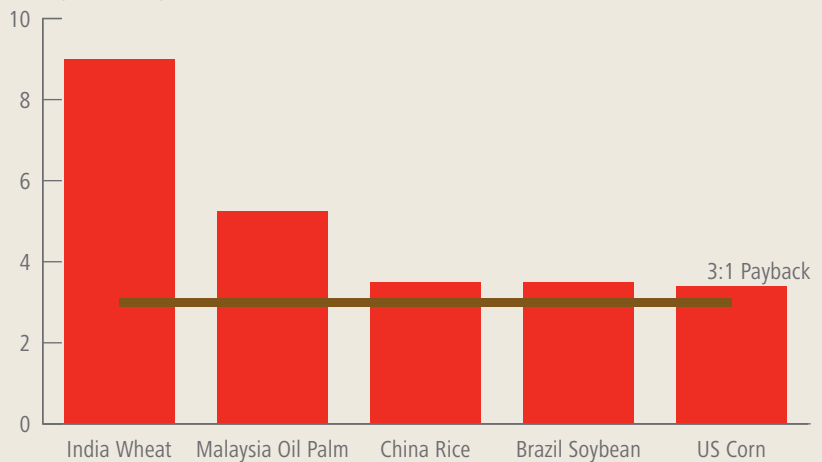
Why fertilizer?

Balanced Fertilization Provides Long-Term Economic Benefits

Strong potential returns for farmers around the world provide the economic incentive to apply fertilizer. The long-term payback from balanced fertilization is 3:1 or higher, whether the crop is rice in China, soybeans in Brazil or corn in the US. Strong oil palm prices in Malaysia provide a significant return to growers at 5:1.

Wheat growers in India generate a return of approximately \$9 for every \$1 they invest in fertilizer, due to their nutrient-deficient soils and government-subsidized fertilizer prices.

Return per Dollar Spent on Fertilizer – \$US



Based on August 2009 crop and fertilizer price estimates

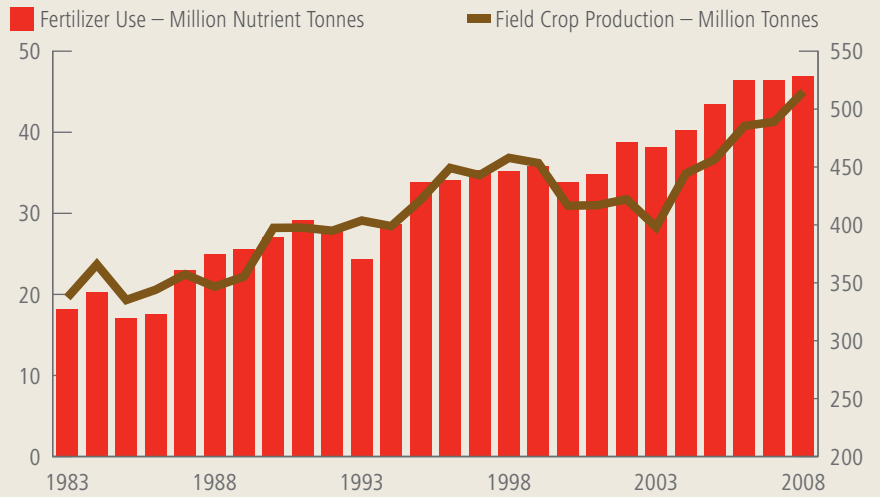
Source: IPNI, USDA, PotashCorp

> CHINA FERTILIZER USE AND CROP PRODUCTION

Higher Fertilizer Usage Feeds China's Crop Growth

With 1.4 billion people and growing demands for higher-quality food, China is focused on protecting its food supply. It typically allocates its limited resources, including land, water and fertilizer, to those crops of greatest importance; more than one-third of its fertilizer applications go on nutrient-intensive fruit and vegetables.

China has to produce more with less, therefore maximizing yields is becoming increasingly important. The correlation between fertilizer use and increased production is clear, and we believe it will be an essential part of the solution in the coming years.



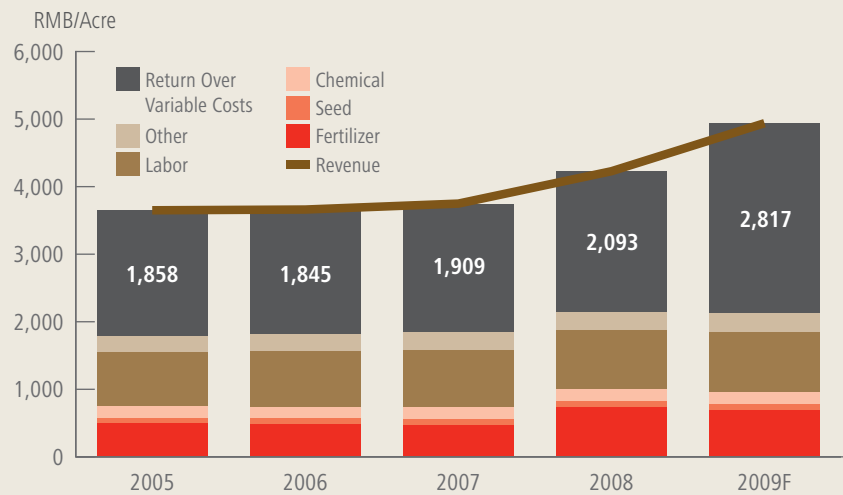
Source: USDA, Fertecon, PotashCorp

> CHINA PADDY RICE ECONOMICS

China Focused on Improving Farmer Economics

China's Minimum Purchase Price Program, established in 2004 for crops, has helped improve grower returns. As part of the mandate, the government raised crop prices in 2008 and 2009 to increase incomes for the nation's 800 million farmers and ensure an adequate domestic food supply. This program, combined with government subsidies to farming, should lead to stronger economics in the coming years.

Rice farmers have enjoyed economic gains – and their increasing return over variable costs should provide the motivation and the money to improve their fertilization practices.



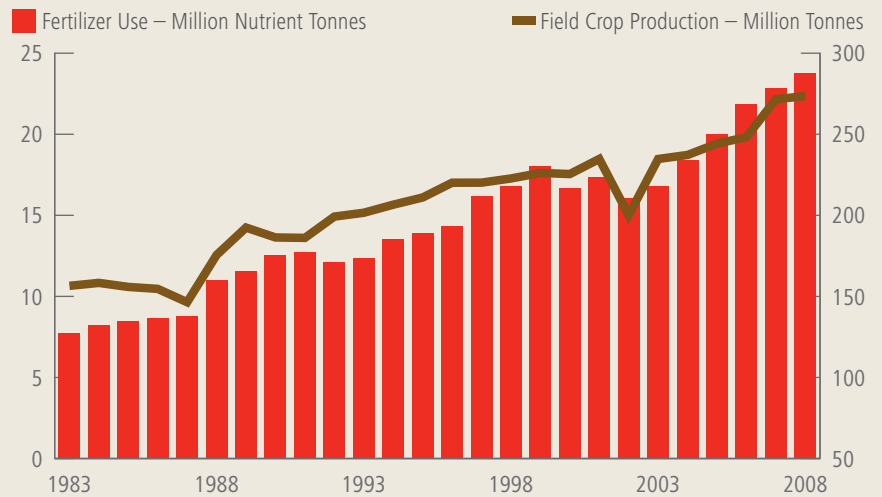
2008 based on farm price of \$465/MT KCl, \$680/MT DAP and \$289/MT Urea, \$4.70/bu paddy rice price and 131 bu/acre
 2009F based on farm price of \$625/MT KCl, \$424/MT DAP and \$275/MT Urea, \$5.50/bu paddy rice price and 132 bu/acre
 Source: USDA, IPNI, Brilliant Pioneer Consultants, PotashCorp

Why fertilizer?

Fertilizer Raising India's Crop Yields

Like China, India has been focused on meeting the long-term challenge of growing enough food for its massive population.

Rice and wheat account for half of India's fertilizer consumption. Its harvested area of these crops is not expected to increase significantly due to limited availability of land, so yields must be improved to meet the country's growing demand for food. Both fertilizer use and crop production have been rising steadily, but more fertilizer is needed.



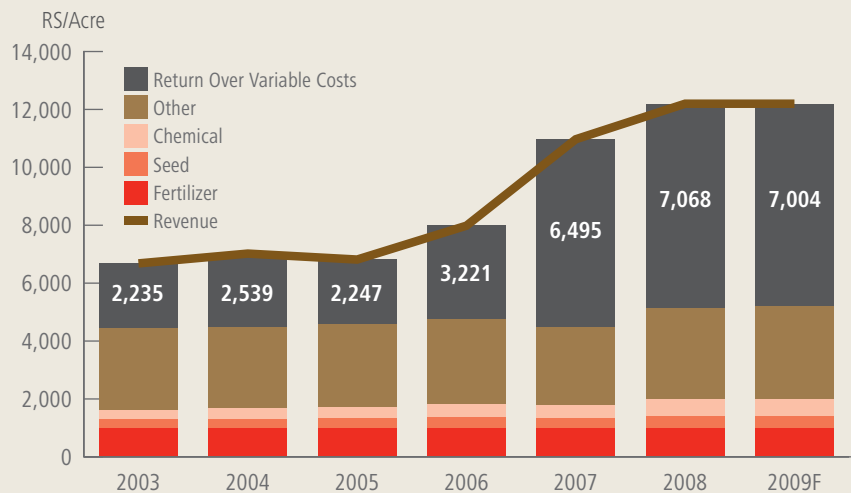
Source: USDA, Fertecon, PotashCorp

Why fertilizer?

Subsidies Drive India's Strong Farm Economics

India has hundreds of millions of smaller farmers who are gaining economic strength and improving their understanding of the benefits of better farming practices and balanced fertilizer application.

The wheat crop is a priority in India and, with subsidized input costs, farmers are enjoying growing returns. While the economic benefits are clear, one of the government's challenges over time is to improve the infrastructure to get more fertilizer into the hands of more farmers.



2009F based on \$96/MT KCl, \$201/MT DAP and \$104/MT Urea (maximum retail prices as set by the government); \$6.30/bu minimum support price and 41.5 bu/acre

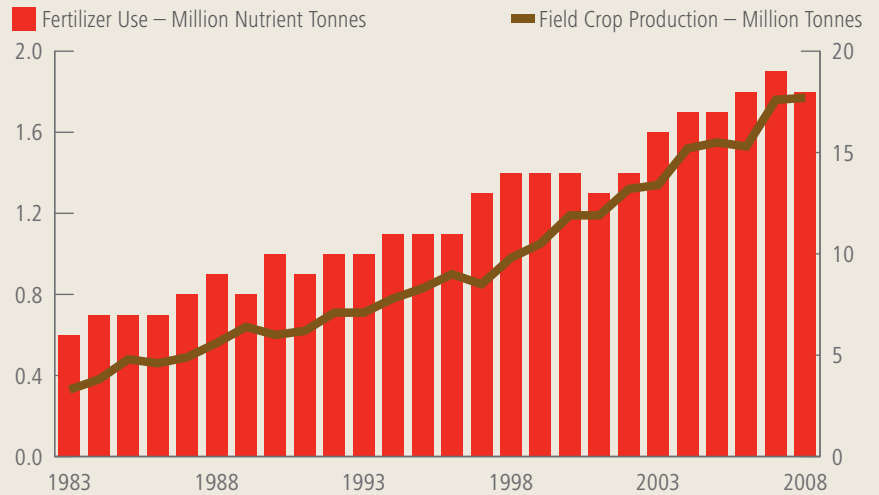
Source: IPNI, Ministry of Agriculture Government of India, PotashCorp

> MALAYSIA FERTILIZER USE AND CROP PRODUCTION

Palm Oil Driver of Fertilizer Demand

The world depends significantly on production in Malaysia and other Southeast Asian countries of palm oil, rubber and rice; the region accounts for 90 percent, 78 percent and 21 percent of global output, respectively. More than 70 percent of the fertilizer used in Malaysia goes on nutrient-intensive oil palm, which particularly requires the quality nutrient, potash.

The impact of lower nutrient applications on this crop is quickly evident, reducing both the quality of oil palm fruit and the yields – as was seen in the first half of 2009.



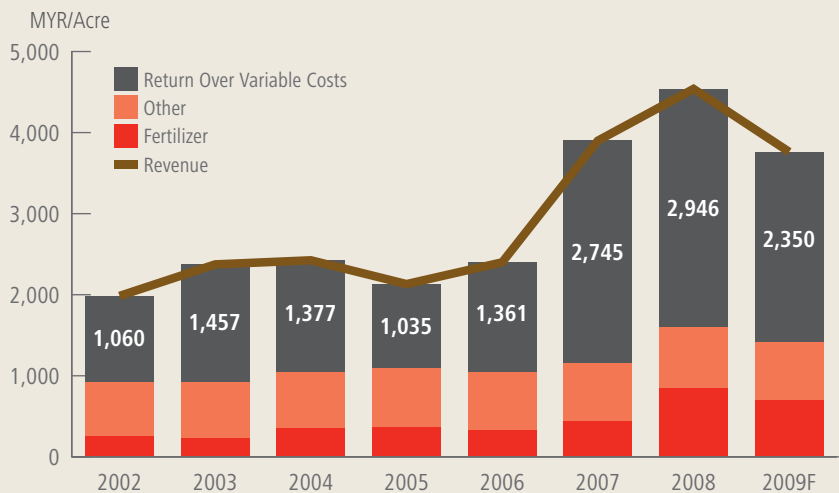
Source: USDA, Fertecon

> MALAYSIA OIL PALM ECONOMICS

Malaysian Plantation Returns Remain Well Above Historical Levels

Oil palm growers benefited from sharp increases in prices for this crop in 2008. While prices have since backed off those record highs, the economics remain very attractive. Since 2006, revenue for Malaysian oil palm has increased nearly 60 percent, substantially increasing the return over variable costs.

High, stable returns depend on growers' maintenance of current yield levels, which are put at risk without proper fertilization.



2009F based on estimated delivered plantation prices of \$700/MT KCl, \$400/MT DAP and \$165/MT AS; US\$650/MT palm oil price and 20.14 MT/ha

Return based on a mature oil palm plantation

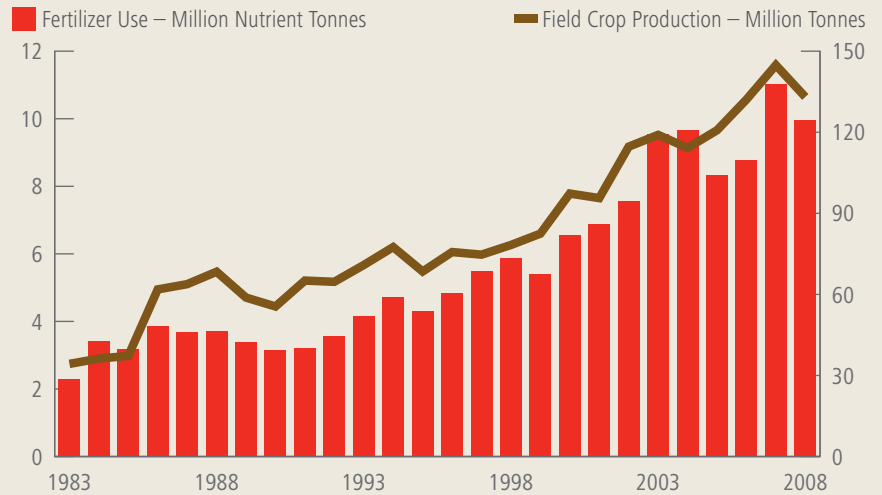
Source: Malaysian Palm Oil Board, IPNI, PotashCorp

Why fertilizer?

Brazil's Soils Are Particularly Potash-Deficient

As a major producer for China's massive soybean demand, Brazil has expanded its soybean area by nearly 60 percent in the last 10 years and allocates almost one-third of its fertilizer usage to this key crop.

Given the natural limitations of Brazil's soils, the impact is quickly visible when farmers apply less fertilizer. This was particularly evident this past year when less than optimal growing conditions combined with reduced fertilizer applications – especially potash, which helps crops better withstand drought – resulted in significantly lower production.

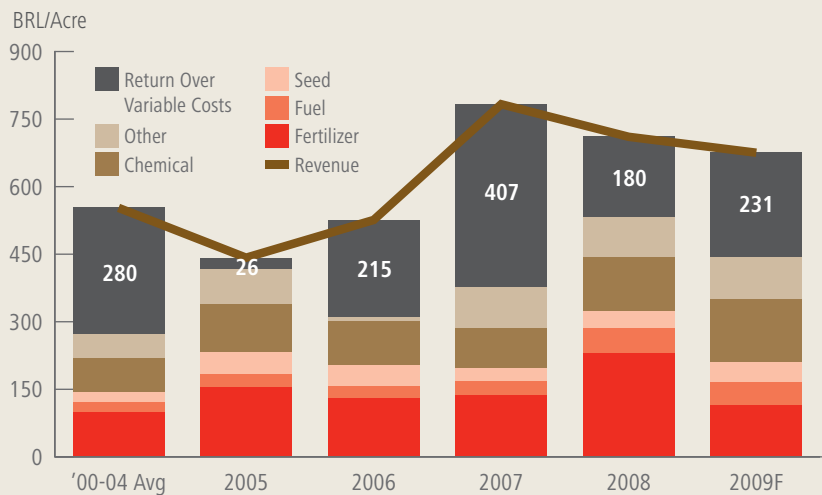


Source: USDA, Fertecon

Why fertilizer?

Farmer Returns Supported by Strong Soybean Prices

Brazilian farmers continue to enjoy historically high margins, but they operate in one of the most market-based agricultural economies in the world and it was significantly impacted by the collapse of global credit markets last year. The government is actively working to improve farmers' access to credit, allowing them to capitalize on high crop commodity prices that are generating healthy returns for their efforts.



2009F based on an estimated farm price of \$720/MT KCl, \$505/MT DAP and \$455/MT Urea; \$8.30/bu farm price and 43.1 bu/acre

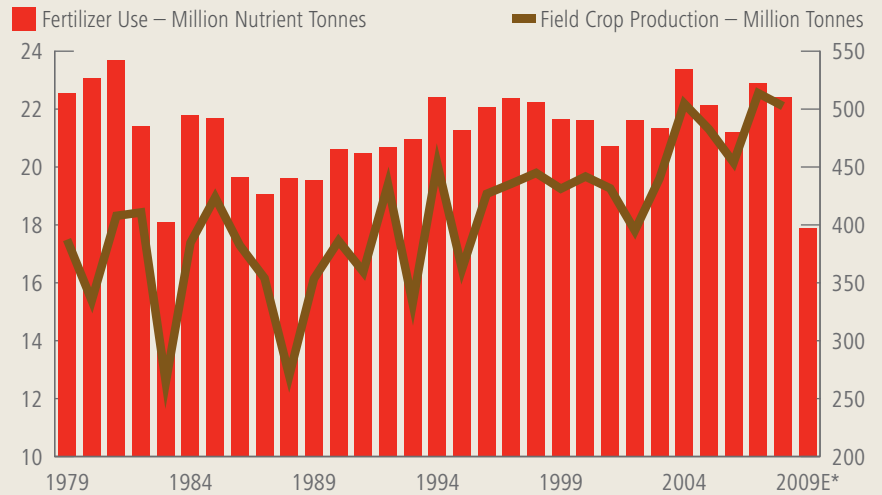
Source: CONAB, IPNI, PotashCorp

> US FERTILIZER USE AND CROP PRODUCTION

Reduction in Fertilizer Use Is Not Sustainable

Corn is one of the major crops grown in the US and a significant user of all three primary nutrients, accounting for approximately 45 percent of total fertilizer use. This market's sophisticated farmers utilize best farming practices and balanced fertilization programs, which have driven several decades of relatively stable nutrient use.

The global economic crisis caused an unprecedented deferral in the use of all three nutrients in the 2008/09 fertilizer year. While the impact on yields for this year will depend largely on weather and nutrients available in the soil, the long-term need for sustainable crop production makes it essential that nutrients are replenished.



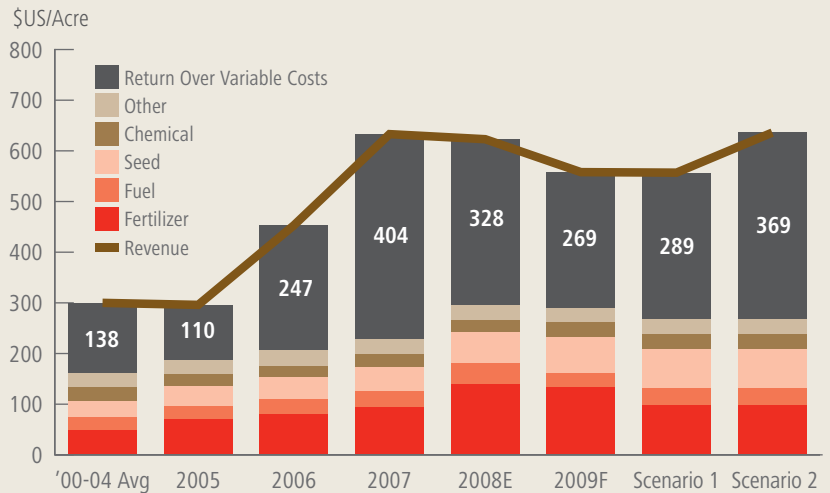
* Nutrient use on a fertilizer year basis (2009 = July 2008 - June 2009)

Source: USDA, TFI (AAPFCO), PotashCorp

> US NATIONAL AVERAGE CORN ECONOMICS

Farmer Returns Remain Well Above Historical Levels

Record farm earnings in five of the last six years have been driven by historically strong crop margins. Despite the recent deferral of nutrient applications, which we believe was primarily motivated by reasons other than economic, the returns generated from use of fertilizer for crop production in the US remain attractive. New-crop corn prices are projected to provide margins more than twice the average during the first five years of the decade and in line with the higher returns achieved more recently.



2009F based on \$853/ST KCl, \$638/ST DAP and \$486/ST Urea, \$3.50/bu corn price and 159.5 bu/acre
 Scenario 1 based on \$650/ST KCl, \$400/ST DAP and \$375/ST Urea, \$3.50/bu corn price and 159 bu/acre
 Scenario 2 based on \$650/ST KCl, \$400/ST DAP and \$375/ST Urea, \$4.00/bu corn price and 159 bu/acre

Source: USDA, PotashCorp