Rabobank Fertiliser Quarterly Q4 2011

Trends and Outlook for International Markets

Rabobank expects the current level of weakness across the fertiliser complex to persist in the near-term. There is upside potential for fertiliser prices towards the end of Q1 2012 when demand picks up to meet the needs of elevated crop plantings. However, the uncertainty surrounding the outlook for crop prices and a more cautious approach to farm decision-making could lead to reduced fertiliser purchases and applications, particularly during the early part of the upcoming planting period. Delaying fertiliser purchases could result in further fertiliser price slides in Q1 2012.

Overview

Across the fertiliser complex, global benchmark prices for nitrogen and phosphate witnessed falls of more than 20 percent through the final quarter of 2011 (see Figure 1). Urea pricing has fared the worst. This is not surprising given the softer tone which emerged across most agri-commodity prices when markets became caught up in the EU debt crisis, forcing risk-averse global investors to liquidate their positions in agri-commodities. Overall, uncertainty and anxiousness intensified around the EU debt crisis, leading to deteriorating market sentiment across most markets, fertiliser included.

At the farmgate, high farm input prices and weaker crop prices have combined to erode farmer confidence. This has led to short-term demand destruction, particularly in Europe and North America, where buyers are postponing purchases.

Importantly, solid underlying fundamentals across the fertiliser complex persist. On the supply side, inventory levels downstream remain relatively tight. Meanwhile, a resurgence of civil unrest in the Middle East and North Africa (MENA) has caused further supply disruptions. While softer prices across most agri-commodities are expected to continue into 2012, a significant price collapse will be avoided (see Figure 2).

The key reason for avoiding a significant price collapse across the agri-commodity complex is persistence of solid fundamentals. Inventory levels are tight for the major crops, which effectively puts a floor on price levels (see Figure 3). The US corn market provides the strongest case: consecutive years of below-trend yields have led to significant tightening of available supplies, pushing the stocks-to-use ratio near historical lows. World corn stocks-to-use ratio is currently nearing a 40-year low.

Further softening in crop prices could lead to a mild level of demand destruction for farm inputs as farmers look to reduce costs in order to maintain profit margins. Hence, most supply chain participants will likely remain cautious.

However, looking to 2012, end-user application should remain relatively buoyant, supported by historically higher levels for agri-commodity prices and positive farm economics. This will likely see farmers stretch for maximum productivity through high application rates of farm inputs.

Overall, Rabobank retains a neutral view on the price direction for fertilisers through Q1 2012. Global fertiliser prices will remain elevated, supported by underlying fundamentals. Counteracting this, cautious buying from end users is likely to remain a feature in the early stages of 2012 while uncertainty around the EU debt crisis lingers.

Outlook

The outlook for Q1 2012 remains clouded due to economic uncertainty in Europe. Downside risks due to the macroeconomic environment are likely to persist.

However, reasonably sound market fundamentals across the fertiliser complex should exert influence over price determination in Q1 2012. Nevertheless, the evolution of the economic situation in Europe will continue to play an important role in setting market tone.

As key planting period approaches in 2012, supply chains will need to be filled, thereby helping find a floor in the market. However, the stocking situation varies across different markets, with Brazil and the US being reasonably stocked but the European supply chain relatively empty. This will play a pivotal role in determining how long the buyers can keep their ‘wait and see’ approach.

Overall, short-term requirements appear sufficient to meet the needs of global supply. Tight inventory levels still persist in some supply chains meaning that markets will be susceptible to sudden price swings. Capacity additions in the N and P segments should improve supply in 2012, but the full impact is not expected to be felt until late in Q1 2012 at the very earliest.

Fertiliser application rates should remain high in 2012 and be supported by high farm incomes as farmers strive for maximum productivity growth. Restored business and farmer confidence could potentially boost fertiliser demand quickly. However, a

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**Table 1: Global benchmark fertiliser prices, Q4 2010-Q4 2011**

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Q4 10</th>
<th>Q1 11</th>
<th>Q2 11</th>
<th>Q3 11</th>
<th>Q4 11</th>
<th>Q1 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea²</td>
<td>374</td>
<td>310</td>
<td>508</td>
<td>500</td>
<td>368</td>
<td></td>
</tr>
<tr>
<td>DAP³</td>
<td>553</td>
<td>549</td>
<td>598</td>
<td>587</td>
<td>465</td>
<td></td>
</tr>
<tr>
<td>MOP⁴</td>
<td>360</td>
<td>380</td>
<td>440</td>
<td>470</td>
<td>490</td>
<td></td>
</tr>
</tbody>
</table>

Reported prices at the end of each quarter as of Q4 2010. Exception: 15 Dec for Q4 2011

¹ Prilled urea (Yuzhnyy)
² DAP US (NOLA)
³ Granular potash (Vancouver)

Source: Rabobank, CRU, 2011

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further reduction in agri-commodity prices does present some risk of partial demand rationing.

As a result, the Rabobank outlook for pricing in Q1 2012 is fairly neutral, but with the possibility of further downward pressure in the early stages of Q1 2012. This is likely to be followed by a modest rally in prices as farmers start to buy again. The timing of fertiliser application is key to optimising yields so end users will need to acquire fertiliser products in Q1 2012 in line with the busy planting period, which runs between March and June.

Key downside influences

The greatest downside risk to the fertiliser pricing is a significant deterioration of the debt crisis in the EU, and its spill-over effect on the global economy. This would negatively impact agri-commodity markets. If bearish factors lead to weaker-than-expected agri-commodity prices in Q1 2012, this could trigger demand-rationing for fertilisers, softening the supply/demand balance.

Cautious buying activity, particularly by end users in Europe, may continue well into Q1 2012 due to prolonged economic turmoil. A continued lack of trading activity on the back of deferred purchases would accentuate the softer tone to the markets. Farmers may also choose to mine their soils for P & K if prices for both crops and fertilisers are not favourable before planting.

Brazil is currently carrying a high inventory load of fertiliser nutrients. An estimated 5.5 million tonnes of stocks sit along the supply chain, exceeding the inventories held at the same time last year by 2.1 million tonnes. This will reduce the need for purchases in Q1 2012.

Supply of fertilisers will improve over the course of 2012 as investments in new capacity come on-line. Production could potentially reach the market earlier than expected, although this is an unlikely scenario.

Key upside influences

A quick resolution to the EU debt crisis could trigger a flow of investor money back into agri-commodities, effectively restoring farmer confidence and necessitating a rebuilding of the supply chain. Furthermore, price falls witnessed so far might be enough to entice supply chain participants who have been on the sidelines back into the market, effectively reigniting the market.

Simmering unrest in Tunisia and Egypt has continued to be problematic throughout Q4 2011. The recurrence of supply disruptions due to civil unrest across the MENA region could continue to affect supply and support prices.

Stronger-than-expected demand could emerge in Q1 2012 across the US given the current positive crop margins and acreage landscape. Also, most buyers in South America are expected to return to secure product for shipment in the early stages of 2012 in line with seasonal demand, and this could prove stronger than expected and help prices rally.

Additionally, prices of most fertiliser feedstocks (such as natural gas) remain high in key production regions, further enhancing the view that fertiliser prices are likely to remain elevated despite recent price weakness.
Urea

Through Q4 2011, the urea market has been the weakest of all the nutrient markets with the benchmark urea price falling over 25 percent (see Figure 4).

A key driver has been the slow demand during the Northern Hemisphere autumn application season as buyers became reluctant to purchase large quantities. Falling agri-commodity prices and economic uncertainty have fuelled the weak market sentiment.

Figure 4: Global benchmark price of urea, FOB (Yuzhnyy), Dec 2009-Dec 2011

![Graph showing global benchmark price of urea, FOB (Yuzhnyy), Dec 2009-Dec 2011](source: Rabobank, CRU, 2011)

However, demand for fertiliser in South Asia, including Thailand since the flood waters started to recede, has remained firm and supportive of prices.

On the supply side, civil unrest in Egypt led to disruptions at Damietta port during Q4 2011. These supply-side issues did provide some price support, especially since Egypt accounts for close to 9 percent of global urea trade.

Looking forward, global urea benchmark prices are expected to remain elevated around current levels, but further downward pressure during Q1 2012 cannot be ruled out.

The catalyst for a softer tone to global urea markets is that demand is seasonally weak. Farmgate purchases/orders of nitrogen in Q1 2012 will be a key price determinant, particularly in key regions in the Northern Hemisphere.

At the same time, additional capacity in the MENA region (e.g. in Algeria and Qatar) is expected to begin entering the export markets. This will improve the supply/demand balance. In addition, this new product supply will come from production facilities that are low on the cost curve due to their access to cheaper gas.

Demand support needed from the Northern Hemisphere

India is likely to have met most of its urea import requirement for the rabi crop season which began in October/November. This suggests that import volumes in Q1 2012 could be low. The latest figures show the volumes of Indian urea imports will reach close 4.22 million tonnes in 2011-2012 rabi season, highlighting the increasingly important role it plays in nitrogen markets.

Rabobank expects the demand focus to shift to Europe and the US in Q1 2012. Nevertheless, import purchases in India and Pakistan in this period will continue to be important price determinant given the impact they have on market balances.

Pakistan imports continue to support the global urea market. Despite the government’s commitment to supply gas to the fertiliser industry, gas supply disruptions continue to challenge local urea manufacturers. The local sector is running at around 45 percent urea production capacity and until a permanent solution is found, local supply will be tight, thus maintaining a need for import replacements heading into the 2011-2012 rabi application season. By the end of 2011, Pakistan’s urea imports are expected to have surpassed 1.2 million tonnes, highlighting just how short the market has been.

The autumn application demand for fertiliser across the Northern Hemisphere, including the US and Europe, has passed. Demand for fertiliser at the farmgate was lighter than expected H2 2011. Farmers became cautious, preferring to defer purchases of urea and other nitrogen fertiliser products due to growing expectations of weaker crop prices. The reduced demand at the farmgate led to limited buying activity further along the supply chain as retailers and distributors remained wary of carrying heavy inventory loads.

Q1 2012 will signal the beginning of buying in the US and Europe ahead of the spring crop season. As a result, Rabobank expects farmer demand for spring applications in Europe and the US to accelerate during Q1 2012 to compensate for the lack of autumn applications. Essentially this may lead to anticipated supply pressure as high volumes of nutrients would need to be shipped quickly in order to meet end-user requirements.

Based on Rabobank’s current forecasts, CBOT corn, currently a key driver for other grain and oilseed prices, will average USD 6.10 per bushel during Q1 2012. This is largely due to the tight stocks-to-use ratio. Additionally, Rabobank expects the US corn planted area to expand again in 2012/13, reaching 93.5 million acres.

Following the seasonal pattern, South American demand should decrease in the beginning of the year. Brazilian urea imports were heavy during the entire year in 2011 (see Figure 5) and the fertilizer chain will be probably operating on higher inventory levels. Import demand is expected to pick up in the end of Q1 2012 ahead of application for the second corn crop beginning in the end of February 2012.

Figure 5: Brazilian urea imports, Jan-Nov 2009 to 2011

![Graph showing Brazilian urea imports, Jan-Nov 2009 to 2011](source: Rabobank, ICIS Pricing, 2011)
Supply situation to improve despite the absence of Chinese exports
With approximately 40 percent of the global urea capacity, China is heavily influential. Supply from China remains limited now that the low export window has closed for the year. As of 1 November, a 110 percent urea export tax is being imposed on shipments not previously customs-cleared, so product volumes will trickle out in Q1 2012. By the end of 2011, China had shipped around 4 million tonnes of urea to global markets, representing close to 10 percent of the global urea trade.

As the higher export tax on Chinese urea exports will keep China out of the global export market till June end, Rabobank expects that export supply will remain tight under the new policy for 2012 even though the effective tariff under new formula would be lower.

However, new urea capacity is due to come online in Algeria and Qatar. This includes an increase in export-oriented urea production: 1.3 million tonnes from Qafco V in Qatar and 1.2 million tonnes from Sorfert in Algeria. This new supply is expected to reach the market in early 2012 and represents around 6 percent of annual trade of urea.

When new supply does eventually reach the market, it will exert some downward pressure on prices. This is likely to occur in the later stages of Q1 2012. However, unforeseen delays are always possible.

The Damietta port in Egypt was closed during much of Q4 2011. It has since reopened. The challenge markets now face is that port congestion will impede quick product movement through the early stages of 2012.

Outlook and price forecast
The short term outlook for urea is neutral. In addition to supply-demand balance, corn pricing during the next quarter will play a pivotal role in determining urea price direction. Farmers are cautious, and a further softening of crop prices could see an increase in demand rationing as corn farmers look to maintain profit margins but cut input costs.

Nonetheless, global urea prices will remain elevated supported by the high input costs for producers in Ukraine and China. However, if confirmed, cuts to Russian gas prices delivered to Ukraine could alter this scenario.

Phosphates
Global phosphate prices over Q4 2011 were slightly softer with benchmark price drifting 21% percent lower since Q3 2011 (see Figure 6). Cautious purchasing from buyers in key import markets was evident in Q4 2011. At the same time, production is ramping up as strategic investments in capacity reach the final stages. An uncertain macroeconomic environment clouds the phosphate market, causing the end users to delay purchases.

India remains the world’s largest importer of diammonium phosphate (DAP), which makes India an important driver in the world market. The latest figures show that import volumes exceeded 4.8 million tonnes of DAP during 2011, of which 90 percent was shipped in 2H (see Figure 7).

Conversely, demand in other major markets, including Europe and the US remained rather subdued. The lighter demand should trigger extended purchasing in Q1 2012 with pipelines needing refilling.

Overall, we expect the market balance for the global phosphate market to remain reasonable and to support sustained historically high prices. The global supply chain is still carrying low inventories.

Demand needs to re-emerge to support phosphate prices
Focus is shifting to the spring application demand in the Northern Hemisphere, particularly in the US and Europe where fertiliser purchases will go into full swing in latter part of Q1 2012. However, as the season approaches, farmer sentiment remains cautious.

Turning to South America, with phosphate stocks in Brazil sufficient to meet immediate requirements, particularly for the second corn crop, the safrinha crop, import purchases will be lighter in Q1 2012.

On the other hand, demand from the largest import market, the Indian subcontinent, will subside after most of the rabi application concludes during November-December. Hence, the focus of suppliers will shift westward, although this demand will not be sufficient to absorb the supply surplus in the market.

China export policy and new capacity developments
China remains a significant exporter of phosphates (DAP/MAP) meaning it is a balancer in the market. Although phosphate
exports from China will remain negligible until end May 2012 due to a 110 percent export tax, exports from other sources, including Saudi Arabia, Tunisia, Morocco, Russia and the US, should keep the markets well supplied.

The Ma’aden Phosphate Company (MPC), which started commercial production at its new plant in 2H 2011 plays a considerable role in future supply. The plant is expected to reach full capacity output during 2012, possibly in the first quarter. At full capacity the project will contribute 3 million tonnes per year of DAP exports, equivalent to 20 percent of current world trade.

This additional capacity is placed low on the cost curve, so it will add some pressure to pricing. November 2011 was dominated by news from Tunisia that local protests had once again disrupted the supply of phosphate rock. As we head into the new year, an easing in these supply disruptions will alleviate some of the supply-side pressure.

**Outlook and price forecast**

The short-term outlook for phosphate markets is neutral to weak. Some price pressure is expected during the next quarter as demand in South Asia slows to seasonally low levels. Also, global economic uncertainty, threats to the outlook for crop prices and a fragile EU situation will play a more significant role in determining DAP/MAP demand and hence pricing, as compared to the relatively inelastic nitrogen demand. Potentially, we could see the resurgence of soil mining for P if input prices do not soften in line with agri-commodity prices. Also, adding to the weak outlook is the sharp depreciation of the Indian rupee which led to successful re-negotiation of USD 35/tonne discount on contracted DAP by Indian importers with the Russian supplier, PhosAgro.

**Potash**

Traditionally, trading activity in potash markets is generally slow during the last months of each calendar year, since it is the off season for application in many key regions. Price direction will come in the latter stage of Q1 2012.

Prices for potash have held steady over Q4 2011 (see Figure 8). However, like other nutrient markets, potash markets have been relatively subdued. Evidence of weakening global demand for potash has been intensifying lately as buyers resist higher prices, particularly in India.

Between April and November 2011, Indian imports declined to 2.5 million tonnes, 48 percent lower than during same period in 2010, when import volume reached approximately 4.8 million tonnes. Buyer resistance has also intensified in India following the depreciation of the Indian rupee against the US dollar. This has sparked discussions to re-negotiate supply contracts for 2012.

The nature of the global potash market, with limited market participants on supply side of the market, creates a less volatile trading environment. This tends to shield the potash market from the severe shifts in prices.

Nevertheless, participants in the potash markets did not escape the uncertainty and anxiously surrounding the impact of the debt crisis in the EU.

Anxiety about the macroeconomic scenario caused a slowdown in the demand for potash during Q4 2011 and will continue to generate some instability in the global consumption of K-based fertilisers in the coming months. Shipments to South America were cancelled as importers anticipated declines in international prices.

China is the largest import market for potash. Low domestic demand through autumn application means that Chinese importers are in no hurry to finalise import contracts for 1H 2012. Expectation is that China will not reach a settlement with exporters before February 2012. Hence, lighter imports in Q1 2012 should not be ruled out. The latest figures show that import volumes in the first ten months of 2011 totalled 5.38 million tonnes, up 27 percent compared to 2010.

Turning to Brazil, a higher potash inventory load is likely to limit import purchases in the first months of 2012.

**Outlook**

The outlook for the global potash market is neutral. New business is likely to remain sparse amid continued uncertainty. A further softening in pricing is possible if China decides to remain out of market beyond February 2012. However, in recent years, potash market is generally more resilient to price movements than other nutrient markets.

Another crucial price determinant will be contract re-negotiations in India, a major importer of potash. The Indian rupee has depreciated heavily against the US dollar in recent months, severely affecting local buyers’ purchasing power. The currency is being dragged lower by weak domestic equities amid investor concerns over slowing growth and lacklustre policy-making (see Figure 9).
As a result, high fertiliser prices in local currency terms are testing demand. Indian fertiliser importers have been pushing for downward revisions to agreed contract prices for Q1 2012 by USD36/tonne to compensate for the sharp depreciation of the currency. The concern in India is that the potash price for domestic end users is too high and will cause demand destruction. While sellers are resisting the pressure so far, it is expected that sellers will be willing to reach a compromise in order to maintain sales.

Rabobank International

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**Figure 9: Average weekly USD/INR exchange rate, Dec 2010-Dec 2011**

USD/INR

Source: Rabobank, Oanda, 2011

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