

# Another price shock for phosphate?

We turn our attention to the global phosphate market, where market phosphate rock prices were flat throughout the second quarter of 2016. Though demand is increasing, phosphorus is regarded as a rare resource and its supply may not be able to keep pace with demand. Phosphate rock is a difficult to extract as well as a slow-forming product and cannot be produced artificially, while in addition to this phosphorus cannot be replaced by any known alternatives.

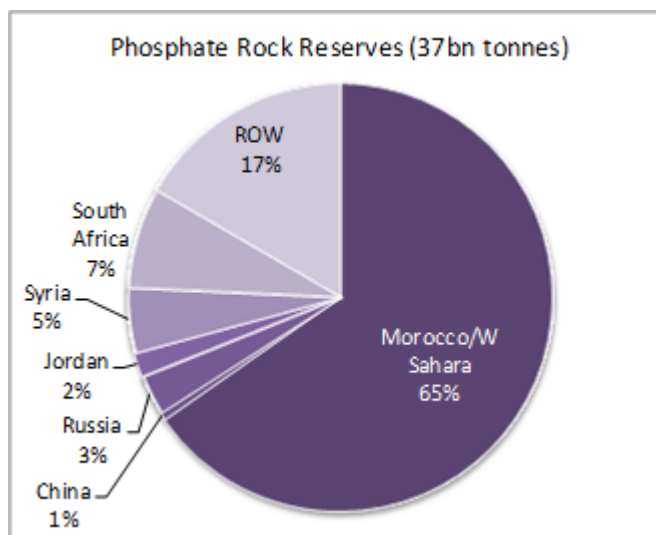
It is uncertain exactly how much time the international community has before phosphate runs out. Some speculators have indicated that we have 100 years' worth of mineable resources, some regard this notion as nothing more than hype especially as this year we are experiencing subdued demand and excess supply despite bumper harvests at the end of 2015.

Rock phosphate, is the major source of phosphorus, and an essential element for plant and animal nutrition. It is thus used as an organic fertiliser in its raw form, and is the raw material for production of processed phosphate (or phosphatic) fertilisers, phosphoric acid and other industrial chemicals and animal-feed.

Globally, there exist more than 300 bn tonnes of phosphate resources including 67bn tonnes of mineable reserves in more than 23 countries. Currently, total global production is 200m tonnes per annum. Phosphorus is scarce also because only one-fifth of the phosphate mined specifically for food production ends up in the food eaten globally.

Phosphate rock is unevenly distributed across the globe resulting in only a small number of countries controlling the world's remaining reserves. Morocco, China, Algeria, Syria &

South Africa together control 88% of the world's phosphate. Morocco alone controls 75% of the world's high-quality reserves, and the Kingdom's share is expected to increase to 80-90% in the coming decade. The sensitivity of the market to supply shocks is evident as in the 2008 phosphorus price crisis, which was spurred in part due to China placing limits



on phosphorus exports.

The global phosphate markets' supply is heavily concentrated in North Africa, with OCP, the state-owned Moroccan miner having exclusive access to almost three quarters of the world's phosphate reserves. While Morocco claims rightful ownership of the land and phosphates of Western Sahara, this occupation is condemned by the UN and not recognised by any other nation. Many of Scandinavia's major banks and pension funds have divested from companies importing 'conflict phosphates' from Western Sahara via Morocco.

All the importing countries are vulnerable to price fluctuations and supply disruptions in producing countries.

With this background in mind, it is perhaps not hard to understand why producers of phosphate globally would look to increase output given that global food production is so dependent on the fertilizer and that world reserves may be set to decline within the coming decades. At Core Consultants, our macro analysis that determines the outlook potential for commodities details five Core themes that is driving policy,

decision making and market behavior. One these themes is the security of supply, notably food supply.

In this sense, Phosphate developer Avenira has signed another offtake deal for its phosphate, which it will imminently start producing from its Baobab project in Senegal. The agreement follows the offtake agreements announced in July with established international fertiliser companies Actatrade SA and Getax Agrifert DMCC. Avenira continues to engage with other parties on further offtake arrangements set to cover the balance of planned annual production, which it expects to convert into formal agreements in the near term.

In addition to this, Israel Chemicals (ICL) formed a joint venture with Yuntianhua to mine phosphate rock, while the US based Mosaic Company (MOS), which is the largest producer of phosphate globally continues to expand production capabilities. Mosaic's key strategic investments and acquisitions include a distribution facility in Brazil as well as Paraguay and a joint venture in Saudi Arabia.

The global phosphate market remains one to keep an eye on in coming months and years, especially as the next supply side shock could trigger a massive price increase as seen in the years of the 2008 global financial crisis.