Salt of the Earth

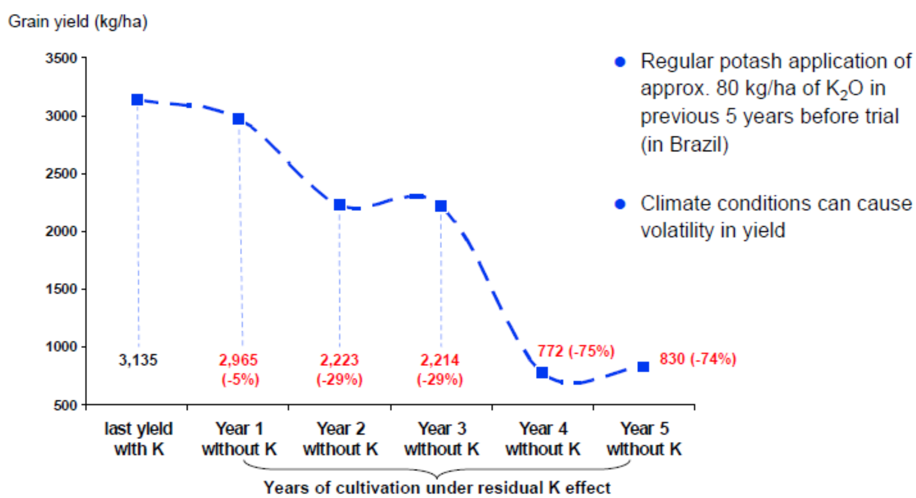
BHP Billiton's bid for Potash Corp likely to drive Chinese potash investment in Belarus, Russia, and Africa

Gabe Collins, Co-founder China Signpost

A successful deal would give BHP control over more than 20% of global potash production. This share would rise as the Canadian deposits BHP already owns are brought online and additional capacity expansions are completed at mines now owned by Potash Corp. Potash Corp estimates that it will account for nearly one-quarter of global potash production in 2015, according to its latest investor presentations. Beijing is unlikely to want to become even more dependent on BHP Billiton, which is already one of China's major iron ore and non-ferrous metal suppliers. China's leaders are especially sensitive to foreign influence over supplies of grain and key agricultural inputs such as fertilizers, particularly one like potash that cannot be synthesized.

Potash is the only large-scale source of potassium for agriculture. Although potash is not applied as frequently as nitrogen fertilizers, going more than one season without potash application can have significant effects on grain productivity. Soybean test plots in Brazil showed a 29% decline in yield relative to the base year in years two and three and 75% decline in year four without potassium application (**Exhibit 1**).

Exhibit 1: Impact on soybean yield from lack of potassium (Brazil)



Source: K+S, Potash in Brazilian agriculture

Uralkali says 28% of China's potash fertilizer use supports cultivation of rice, the national staple grain. USDA data show that during the last four market years, China's rice production has exceeded consumption by an average of only 1.3%, a relatively thin margin for a country that is by far the world's largest rice consumer (more than 135 million tonnes of demand projected for the 2010/11 market year). Food production problems could trigger serious unrest in China and other major rice consuming countries if potash supply issues increase production costs or cause production shortfalls that force China to import large quantities of rice.

BHP says it would eventually sell potash produced in Canada directly, rather than through the export cartel Canpotex, which controls 20% of global potash export volume. Beijing would likely be happy to see potash sales outside the purview of Canpotex, or for that matter, BPC, the other main global potash export cartel. Nonetheless, the potash market share that BHP would have would likely be perceived as a food security threat as China's food consumption becomes increasingly meat intensive and demand for feed grains rise accordingly. For reference, producing a kilo of chicken requires more than 2 kg of grain, while pork requires an average of 3.5 kg feed grain, and beef, up to 8 kg of grain to produce 1 kg of meat.

Bottom Line:

Further expansion of domestic potash production at China's flagship producer Qinghai Salt Lake is likely to be constrained by availability of fresh water supplies and countervailing demands for increased lithium and magnesium production from Qinghai's salt lakes. Thus, securing foreign supplies of potash will remain a priority. There is a significant probability over the next six months that Chinese investors could purchase a stake in Belarus Potash Company and possibly Uralkali or Silvinit of Russia in order to secure existing supplies. To diversify future supplies and profit from growing global grain demand, Chinese fertilizer producers may also invest in frontier potash projects in Ethiopia and the Republic of Congo.

Potential outcomes, ranked by probability that event materializes by March 2011

1) (25%) Sinofert or other Chinese companies purchase a minority stake in Belarus Potash Company to help ensure stable supplies. Belarus has said it is willing to sell a large, but non-controlling minority stake and Chinese investors are said to have expressed interest.

2) (20%) Chinese investors seek long-term "loans for potash" agreements with Uralkali or Silvinit of Russia. Chinese banks already have "loans for resources" set-ups in place with Russian oil and coal producers, so there are strong precedents for such a deal in the potash space. Loans are more likely than share purchases. Uralkali's free-float was only about 17% as of 15 June 2010 (last time company reported this data). Therefore, Chinese buyers would likely not be able to easily accumulate a significant minority equity stake on the open market. In addition, the probability of Uralkali and Silvinit merging in the near future is

rising and Chinese investors may be hesitant to risk investing ahead of a merger while the Russian parties will likely not want to add another heavyweight to merger negotiations.

3) (20%) Chinese investors acquire greenfield potash resources in Africa. Allana Potash (Ethiopia) would be attractive due to its proven reserves and proximity to the Indian Ocean, over which potash could be easily shipped to China. Allana tells us China Minerals provided 35% of the project's initial capex in exchange for the right to 20% of production at a discount to market potash prices. It also tells us production is likely to begin in 2013 and that production costs may be as low as US$80 per tonne, as opposed to Potash Corp, which produces at closer to US$150 per tonne. Locking up frontier assets would also reduce the options for other large miners that China depends on—such as BHP and Rio Tinto—to buy potash reserves. Chinese investors have access to state-backed financing and can also help build the infrastructure needed to develop the mines and export the potash produced.

4) (15%) Chinese consortium led by Hopu, China Investment Corp, or other major investor counterbids for entire Potash Corp or significant portion of company's assets. A number of obstacles stand in the way of this happening. First, amassing more than US$45 billion in capital support to top BHP's bid will be tough. Second, the government of Canada's Saskatchewan province already expresses reservations about potential Chinese ownership of a critical asset like Potash Corp. Third, a range of North American agricultural interests would likely oppose Chinese ownership of one of their key fertilizer suppliers.

5) (10%) The Chinese government attempts to use its new anti-monopoly regulatory powers to block a BHP-Potash Corp merger.

6) (5%) Chinese consortium seeks to purchase a minority blocking share in Potash Corp to hinder a sale to BHP. This tactic proved ineffective in 2008 when Chinalco bought a strategic stake in Rio Tinto and it is not likely a top arrow in the quiver of Sinofert or other Chinese fertilizer investors.

7) (5%) The proposed BHP/PCS deal is abandoned, no other acquisition attempts arise, and the market situation returns to its original state.

About Us

China Signpost© *aims to provide high-quality China analysis in a concise, accessible form for people whose lives are being profoundly affected by China's political, economic, and security development. We believe that by presenting practical, apolitical China insights we can help citizens around the world form holistic views that are based on facts, rather than political rhetoric driven by vested interests. Our sole objective is to foster better understanding of key internal developments in China, its use of natural resources, its trade policies, and its military and security issues.*

China Signpost© *founders Dr. Andrew Erickson and Mr. Gabe Collins have more than a decade of combined government, academic, and private sector experience in Mandarin Chinese language-based research and analysis of China. Dr. Erickson is an associate professor at the U.S. Naval War College and fellow in the Princeton-Harvard China and the World Program. Mr. Collins is a private sector commodity specialist focused on China and Russia.*

The authors have published widely on maritime, energy, and security issues relevant to China. An archive of their work is available at www.andrewerickson.com.

The views and opinions contained in China Signpost© *are those of the authors alone and in no way reflect the views or policies of the authors' employers.*