THE FERTILIZER INDUSTRY

PLANT FOOD IN A BAG, FIRMS WITH A COMMON CAUSE

Producing and marketing nitrogen, phosphorus and potassium take a lot of investment, so the industry is dominated by big business.

A 2009 report by the Food and Agriculture Organization of the United Nations predicted that the world would need 70% more food by 2050 to keep up with growing demand. That was powerful ammunition for those who want to raise output by intensifying agricultural production and using more genetically modified organisms, pesticides and mineral fertilizers.

In Africa, fertilizer use is very low – only 8 kg per hectare in 2006. A proposal to start a continent-wide fund to finance fertilizer production, distribution, procurement and use targeted an increase of an average 50 kg per hectare by 2015. The fund has not started operating yet, but individual countries have started their own support programmes. Today, some African countries spend more than half their agricultural budgets on fertilizer subsidies – although there are more efficient and sustainable ways of increasing food production and fighting hunger.

These subsidies are good news for a small group of fertilizer manufacturers that enjoy enormous bargaining power. The industry is highly concentrated. MarketLine, a consultancy, estimates that global fertilizer sales totalled 192 billion dollars in 2013; the world's 10 largest companies accounted for 35 percent of these sales. In all major fertilizer producing countries, except China, the top four firms control more than half the production capacity. In some countries, there is only one production company.

Large deposits of exploitable minerals are rare, and they are located in a handful of countries where businesses rely on political patronage. Establishing a fertilizer plant requires sizable investments. Furthermore, enterprises often handle several steps in the chain: mining the raw materials, processing, manufacturing the finished products, trading and distribution.

Such integration creates obstacles for market entry and competition. Firms exploit their market power; collusion is said to be common. The International Food Policy Research Institute found that during the food price crisis in 2007–8, prices for fertilizers spiked higher than oil or agricultural products. The leading fertilizer producers earned record profits in these years.

The industry has strong ties to related sectors. Mining is integral to potash and phosphate production, while energy firms supply the natural gas and electricity needed to produce nitrogen fertilizers. Whereas most of the major players in the mined fertilizer sector began as state-owned enterprises – as is true of other extractive industries such as petroleum and gas – today, full government ownership is rare. An exception is Belaruskali, which is fully owned by the government of Belarus, a major potash producer.

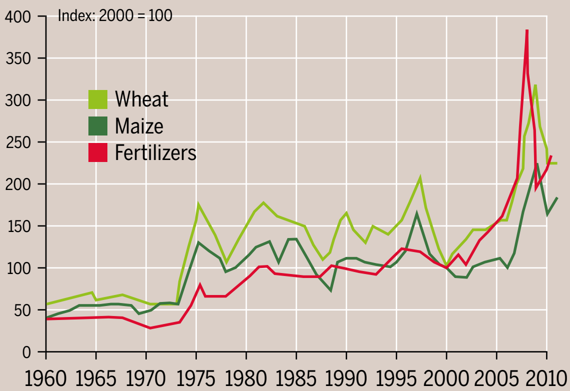
Consolidation is now the trend, despite the fact that individual companies are constantly buying or selling off regional assets, investing in other companies, launching joint ventures or refining (legal) cartel arrangements – a feature that has been common to the fertilizer industry for over a century. Canpotex is a distribution company jointly owned by the Saskatchewan-based industry. Its shareholders include Agrium, the world's largest fertilizer company, Mosaic (#3), and PotashCorp (#4). PotashCorp also owns between 14 and 32 percent of four other major fertilizer players, including Sinofert (#6) and ICL (#7). In 2014, ICL sold its phosphate mining and manufacturing business to Mosaic (#3) for 1.4 billion dollars.

Intrigue sometimes emerges from the sector's shadows, for example when a "potash war" broke out between Russia's Uralkali (#8) and Belaruskali, partners in a pricing cartel known as the Belarusian Potash Company. When Uralkali pulled out of the cartel in late July 2013, it accused Belaruskali of cutting side deals. A month later, Uralkali's CEO was arrested in Belarus, extradited to Moscow and put under house arrest. The break-up of this cartel resulted in potash prices plummeting by 30 percent.

Demand is now on the rise again, especially from large developing countries, and analysts are cautiously optimistic that prices will regain their former levels. The shock of the cartel's collapse was displaced by bigger news when

A BIG EARNER

Grain and fertilizer prices during the commodity boom of 2002–08



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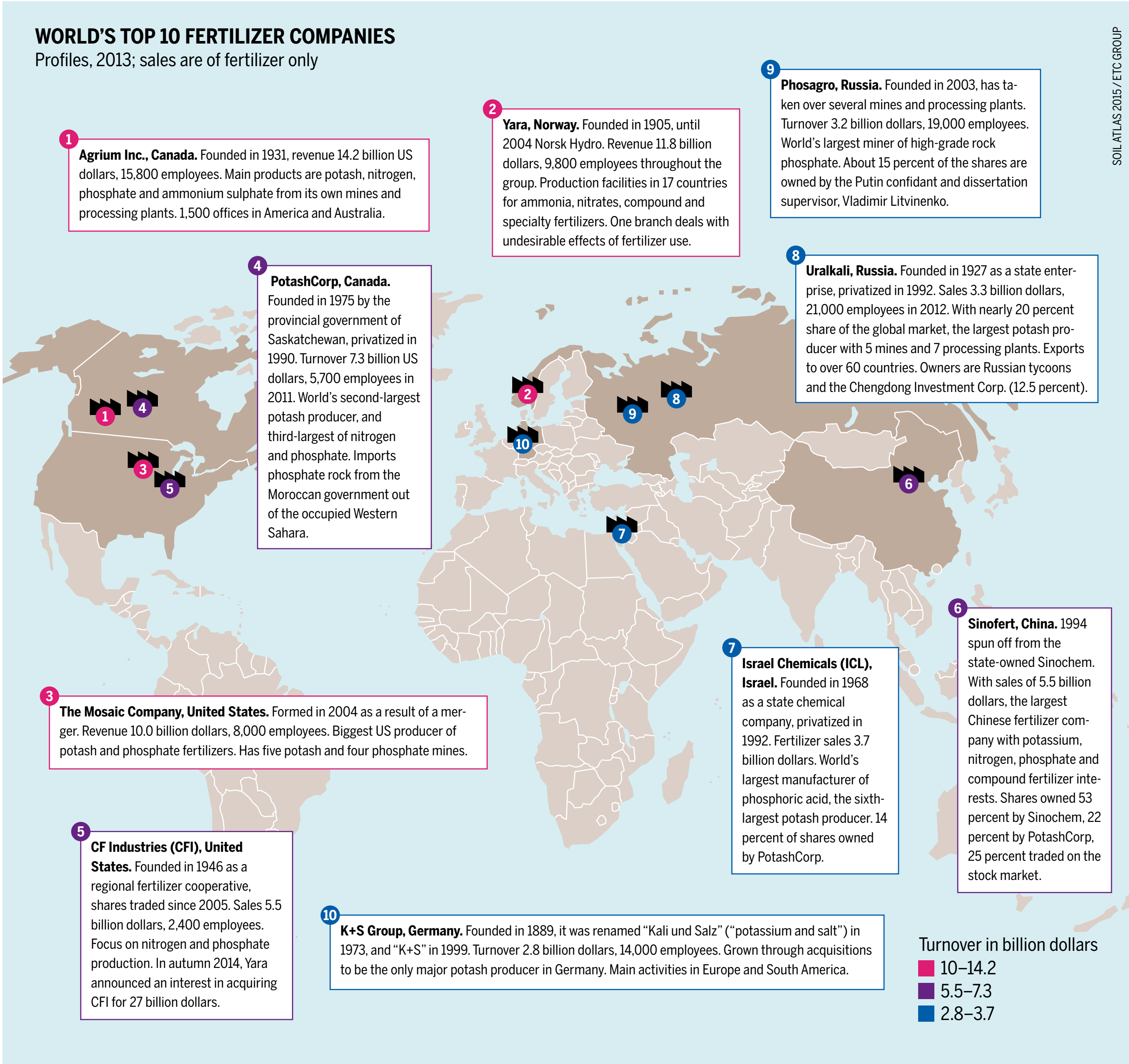
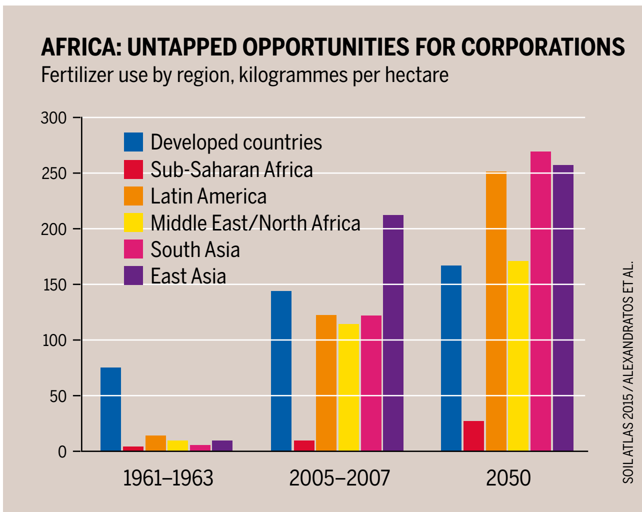
Many observers think the explosion in fertilizer prices in 2008 was caused by speculation and collusion among producers



Four of the top five fertilizer companies are North American. Mutual shareholdings and close government links are a feature of the industry

Norway-based Yara International (#2) announced a possible "merger of equals" with US-based CF Industries (# 5) in September 2014. Access to cheap natural gas in the USA, especially thanks to hydraulic fracturing (i.e., fracking), translated into a 43 percent operating profit margin last year for CFI, more than five times greater than Yara's. But negotiations to form the world's largest nitrogen producer collapsed in October. Global fertilizer sales are expected to increase to nearly 230 billion dollars by the end of 2017. However, the number of firms that profit from these trends will not change.



Producers want sales – and they like subsidies. African governments are paying for a problematic product