**Summary**

A sudden coronavirus (or Covid-19) outbreak has severely affected phosphate production in China. Phosphate fertilizer prices are likely to rise, due to product shortages and higher production costs. However, downstream demand is uncertain and export market pressures remain high, both of which put China’s phosphate fertilizer industry under greater pressure in 2020. Manufacturers should look for opportunities to gain new growth amid the difficulties.

**Chinese Phosphate Fertilizer Production Is Severely Affected**

The domestic fertilizer market is stagnating as a result of the novel coronavirus. Labor shortages and logistical restrictions have become top concerns for manufacturers. Many producers have had to cut or halt production, especially small and medium-sized enterprises (SME). In order to ensure the normal progression of production and spring plowing, the government has issued an emergency notice to ensure the transportation and circulation of agricultural products. Currently, the situation has improved, with the number of new confirmed cases falling for 16 consecutive days, except in Hubei province. With the exception of Hubei province, the domestic fertilizer market has recovered a little.

**Figure 1: Hubei is the largest phosphate producer in China**

![Hubei phosphate production chart]

Source: Baininfo, Rabobank 2020

**Figure 2: China’s phosphate fertilizer production volumes continue to decrease**

![Phosphate production volume chart]

Source: National Bureau of Statistics, Rabobank 2020
But for Hubei, the province most affected by the epidemic, the resumption of production may be delayed even further. For the moment, road transportation remains restricted. And the government has announced to strengthen the traffic control and maintain the blockade in Hubei. Hubei has always been the largest phosphate fertilizer manufacturer in China, accounting for about 30% of the country’s capacity. The epidemic makes it difficult for phosphate fertilizer enterprises to resume work, and the utilization rate has dropped by about 30% to 40% YOY, causing production to decline. On the other hand, traffic controls have isolated a majority of Hubei’s regions, making it difficult to transport products. Prices are likely to increase as a result of rising production costs and tight supplies.

Lots of Uncertainties From Demand Side

If the outbreak is well controlled and transportation restrictions are lifted in March (the peak season for phosphate fertilizer application to many crops), demand will increase to make the most of the short farming season and push up phosphate fertilizer prices. That may be good news for manufacturers who experienced a market trough in 2019. But it is important to be aware that the impact of the outbreak on consumer markets may continue, potentially driving down prices for agricultural products and affecting farmers’ intentions to invest in fertilizer due to lack of capital.

While the domestic market is uncertain, the export market is decidedly not optimistic. In 2019, DAP export volumes declined 24.9% YOY, to 6.47m metric tons. This was mainly because new capacity in the Middle East was put into production, which led to falling global phosphate fertilizer prices and weakened the competitiveness of Chinese products in overseas markets. In addition, India and Pakistan, the major importers of Chinese phosphate fertilizer, continue to reduce imports, due to their high inventories. Under such circumstances, China’s high prices for DAP are uncompetitive in overseas markets.

**Figure 3: Chinese DAP doesn’t have a price advantage in the global market**

Source: CRU, Rabobank 2020
Risks and Opportunities Coexist

Food security is critical, given the pressures of global population growth and economic growth in developing countries, and these factors will promote moderate growth of the phosphate fertilizer market. In the long term, South Asia, Central and South America, and Africa will be the key growth markets. There may be a gap of phosphate supply in 2020, due to the loss of capacity in China and the US, which could be the start of a new cycle. Likewise, the coronavirus outbreak will act as another catalyst for supply-side reforms, accelerating the exit of SME in China and leaving room for the further development of large enterprises. It is worth thinking about how to improve the phosphate fertilizer industry fundamentally and achieve long-term development. Rabobank believes that the following three aspects will be opportunities for Chinese manufacturers:

1. Product portfolio optimization – Most Chinese phosphate fertilizer players are still focusing on DAP and MAP production with little added value. It is time to develop specialty fertilizers with features that provide comprehensive nutrition for crops, improve fertilizer utilization rates, and solve various soil problems.

2. Improve phosphorus utilization – Adapt the basic fertilizer manufacturing process to align with modern agricultural developments. Achieve industry transformation via advanced phosphate fertilizer production technology, industry chain extension, and product differentiation.

3. Business model revolution – China’s model of agricultural production is transforming in scale, standardization, and intensiveness. Big farmers will rely more on technology, knowledge, resources, and financial services. The era when the market was dominated by products is over and will be replaced by the dual drivers of ‘product + service’ in the future.