

Agrochemicals:

Dark clouds are gathering for the agricultural industry

By Shané Rudolph, head of research and development, Agri Enterprises

Crop producers are exposed to various external factors that directly impact food production and food security. Numerous producers must implement risk mitigation measures, such as weed management, to farm successfully.

Weed management is essential in crop production as weeds compete with crops for vital resources, water, nutrients and carbon dioxide. According to the Food and Agriculture Organization of the United Nations, between 26 and 40% of the world's potential crop production is lost annually due to weeds, diseases and pests.

Glyphosate

Glyphosate was introduced to the market in 1971. Since then, it has become a leading herbicide, providing farmers with a cost-effective and efficient weed control solution.

Globally, glyphosate is only supplied by the United States (formerly supplied by the Monsanto Company) and China, with the latter accounting for 60% of global supply. In April 2021, Syngenta Group China officially announced the strategic collaboration with Hubei Xingfa Chemicals Group, providing Syngenta Group China with a competitive advantage on key generic artificial intelligence sourcing.

The largest producer of glyphosate, Bayer, which acquired the Monsanto Company, allocated US\$5,6 billion to research in 2019 to develop alternatives for glyphosate, yet none have been identified. Bayer has removed glyphosate from household products; however, it ruled out any formula changes for the professional and agricultural space, saying there are no alternatives.

Shortage in demand, higher price

The use of glyphosate increased by 20% per year from 1999 to 2010, being the most used herbicide in South Africa. The following occurrences have led to a shortage in the demand and continual rise in the price of glyphosate products:

- **February 2020:** China enforced lockdown regulations, causing a rise in glyphosate prices due to panic buying. Glyphosate prices increased from US\$3/kg to US\$3,21/kg.
- **July 2020:** The Yangtze River flash flood disrupted glyphosate production, directly affecting all agrochemical companies. The price stabilised before this period but increased to US\$3,08/kg thereafter.
- **January 2021:** Hubei in China – a province where glyphosate is produced – enforced lockdown regulations. Prices subsequently increased to US\$4,56/kg.
- **February 2021:** The electricity shortage in Texas, United States, affected Bayer's production of glyphosate. The price therefore rose to US\$4,65/kg.
- A shipping container shortage has caused an international shortage and increase in prices.

In July 2021, the price of glyphosate increased to US\$8/kg with an expected continual rise. The stability of the glyphosate market remains uncertain; therefore, the identification of alternative solutions is essential. However, no other herbicide is as effective as glyphosate.

No self-sufficiency for us

South Africa is over-reliant on glyphosate imports from China. The continual events as listed, paired with a shortage of containers, directly impacts local producers. However, producers are not only affected by international events, but also fluctuating national incidents such as:

- The political unrest in KwaZulu-Natal that led to the destruction of the chemical giant UPL, a glyphosate provider, which contributed to the scarcity of glyphosate in South Africa.
- The lack of availability and continual price hikes have eliminated price formulation abilities for input suppliers, preventing buyers from determining

the cost of glyphosate before it reaches South African shores.

- The uncertainty surrounding the Land Bank, which causes a liquidity gap within the local agricultural industry. For producers to access inputs, input suppliers will be required to provide credit facilities to bridge the gap within the market. The consequences of this gap will lead to higher input costs, large-scale consolidation, price and liquidity pressure.

The availability of glyphosate for future production is uncertain, compromising agriculture within South Africa. The restrained availability will only be distributed to commercially established farmers, excluding medium- to small-scale producers as they cannot absorb the high prices, which will have a direct impact on food security.

In conclusion

Price escalations are increasing with as much as 30% on the input side in the short term. The limitation within the market adds immense pressure on staple-crop producers, shifting the financial impact throughout the value chain to the final consumer. China is potentially strangling chemical companies regarding both the availability and price of agrochemicals. Input costs are becoming a severe financial impediment for producers.

What makes matters worse is that this is a global supply chain issue, with our domestic challenges putting us on the back foot. Industry role-players must use predictive analytics to share knowledge with producers on the price/availability of input supplies, or face severe downward trends in the entire food value chain. 🌱

For more information, contact Agri Enterprises at 012 643 3424 or email info@agrienterprises.co.za