

How Technology is Driving Farmer Profits in the Right Direction

With Antois van der Westhuizen, Managing Director at John Deere Financial

Agriculture is currently one of the most dynamic sectors to conduct business in. The expected economic growth rate coupled with the growth of the middle class in Sub-Saharan Africa, and the continent's untapped agricultural potential present role players in this sector with enormous economic opportunities. Coupled with a good harvest season driven by strong rains this year, this means that many farmers have gone from bust to boom and from famine to feast, with the promise of a second consecutive bumper corn crop due to excellent summer rains and favourable weather.

One thing that doesn't change like the seasons is the pressures that farmers face from a financial perspective, with margins in agriculture ever under pressure. This is driven by the fact that farmers are price-takers on commodity prices with world markets dictating what happens in the industry. Farmers are further challenged with input providers, who are also price-takers linked to world market prices, driving up input costs. This is topped off with the added financial pressure brought about by taxes; water tax and land tax, all of which are outside the control of the farmer.

What can Farmers do to Improve their Profitability?

"The natural thought process would be to produce more to earn more," says [Antois van der Westhuizen](#), Managing Director at [John Deere Financial](#). "Unfortunately, this is not a statement that can be made lightly, as a lot of farmers are very dependent on weather and rain.

"Farmers are successful because they maximise their outputs and minimise the inputs they have available to them," continues Antois. "In a situation where you can control very little of what your inputs and outputs are going to be, farmers need to influence the way they produce, the quality of their products and they need to build a reputable name that consumers grow to trust."

With the proper use of technology, farmers can maximise the return they get out of specific inputs they have available to them. Farmers know what their outputs are, and by reverse-engineering the process with the help of technology, predictions can be made to minimise the inputs required to deliver the same outputs, saving the farmers costs along the way.

Technology like the new John Deere See and Spray™ Select utilises technology to only spray directly on weeds, reducing the amount of spray used. "If only 25% of herbicide is used, costs will be cut but still result in the same yield," says Antois. "Suddenly, the price squeeze for farmers decreases. They're getting the same outputs, at a much lower cost, and increasing their margins."

*When it comes to farming, it's about how
technology can help you farm smarter*

Technology can be utilised to assist in weather forecasting, and more accurately determine when best to apply fertiliser and chemicals, further improving Rands per plant profitability.

Product quality can also be enhanced by using technology - for example, the picking and packaging process is essential for A-grade products destined for export markets. Using the right technology allows farmers to manage the process, minimising potential damage and ensuring only the best quality product reaches the market that will fetch better prices.

Sustainable farming might have an ecological cost to consider as well, but keeping the soil in a good condition should form part of a farmer's long-term strategy. Technology can assist with lowering use of fertilisers and pesticides, resulting in a better quality product, better soil conditions and a greener brand.

Furthermore, technology is shaping the way we can help farmers manage the way they apply for finance better. "Financing today allows farmers to determine which cash flow cycle they are in," says Antois, "which is then linked to the repayment plan. Today's financing products are much more adaptive to the needs of the farmer."

The way credit scoring has evolved has also been driven by technological advancements. "With credit bureaus now providing credit scores and credit histories, we are able to provide finance a lot faster than in the past," says Antois. "The advantage of this is quicker and easier decision-making possibilities for farmers."

"Technology cuts down the decision-making time substantially as credit processes are all done electronically," says Antois. "The visibility for customers has also improved as real-time updates are now available on the progress and status of their application."

"We've come a long way from farmers planting and hoping for the best outcome, without knowing what the result will be," concludes Antois. "Today, with the help of technology and how it's applied, you can manage your costs, get your production to the best level possible, and finance the entire operation in a very efficient and effective way. The only uncontrolled variable remains nature – but at least technology can still give you a heads up."