

## Smart farming project to boost KZN food security

The KwaZulu-Natal province is revolutionising farming to increase productivity, through the use of the latest technology to water crops, monitor pesticides in fields and grow the economy.



Image source: Gallo/Getty

The Smart Farming Project was launched by Dube-Ncube, in partnership with Fuze Institute and the University of KwaZulu-Natal, as part of a province-wide "Smart Province" drive to boost food security and economic growth at Fuze's Ukulinga Research Farm.

The farm has been the site of unique and ground-breaking research in several agricultural disciplines, providing an invaluable resource for close to 5,000 smallholder farmers in the region.

The innovative solution incorporates state-of-the-art technology, including smart sensors, automated irrigation, crop monitoring and automated harvesting, amongst others.

The smart farming system is designed to integrate seamlessly into any farming operation, regardless of the size of the farm.

The key components include a smart greenhouse which incorporates smart automated irrigation systems, sustainable energy generation, and a mobile app for real-time insights and remote control of greenhouse functions.

Unveiling the project at Ukulinga Research Farm in Mkhondeni, Pietermaritzburg, on Saturday, Dube-Ncube emphasised the importance of investing in the province, and the role of technology in farming.

"We are proud to launch this ground-breaking smart farming technology solution that combines innovation, efficiency and sustainability. Investing in technology is key to growing our economy and ensuring sustainable food production in the region.

"We need to embrace the concept of smart farming and the use of technology, to ensure that many more people are employed in the value chain and we have resilient farming," Dube-Ncube said.

The launch highlighted the importance of smart farming technologies to upskill and capacitate residents in the province, particularly rural women and youth, to improve the quality of life for rural communities, by reducing the need for manual labour and providing new opportunities for economic development.

The Premier said government investment through Unemployment Insurance Fund (UIF) Funded Projects, will ensure that 14 771 food handlers are trained and employed by the provincial Education Department.

She noted that, with an average of five members per cooperative, each supporting an average of three family members, Fuze Institute Smart Farming initiative will uplift close to 80 000 lives out of poverty and boost family incomes.

"Over and above that, more than 3 000 unemployed youth graduates will be trained in smart farming, including agricultural drone operators. The smart farming technologies we introduced today can help farmers improve their sustainability by reducing their water usage and their reliance on pesticides and herbicides," the Premier said.

Moreover, she said, sensors can be used to monitor soil moisture and nutrient levels, and drones can be used to survey crops for pests and diseases.

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