



A drone on CDC banana farm. Photo Credit: Elias Ngalame

Drones drive production growth on Cameroon's banana plantation

By Ngalame Elias

USE of drones for farm operations, including spraying and watering, is revolutionising crop management and production on Cameroon's Tiko Banana Plantation.

The plantation in the West African country's South West region is operated by the Cameroon Development Corporation (CDC), a state-owned company that grows, processes and markets cash crops for export.

"We are using drones that are equipped with advanced sensors and cameras that can capture high-resolution images of farmland. The equipment has revolutionised production," says Ejangue Thomas, CDC TIKO area chief of staff.

The CDC drones, he says, are also helping smallholder farmers to collect adequate data required to improve their yields.

Data from the drones are analysed, giving valuable insights into the

health of crops, soil conditions, and the presence of pests or diseases.

One of the most significant advantages of using drones is their ability to perform aerial spraying. Traditional methods of spraying crops involve manual labour and are often inefficient, leading to overuse or underuse of pesticides and fertilisers. Drones, on the other hand, can precisely target specific areas that need treatment, reducing waste and minimising environmental impact.

This precision not only saves costs but also ensures that crops receive the right amount of care, leading to higher yields.

In addition to spraying, the drones are being used for watering crops.

“Drones help to identify areas that require more water and distribute it evenly, ensuring that every part of the field receives adequate hydration. This targeted approach reduces water usage and helps in conserving this precious resource,” says Bide Emmanuel of the Tiko Banana Plantation.

By mapping fields and monitoring crop growth over time, the banana farmers are able to make informed decisions about planting, harvesting, and resource allocation.

“This data-driven approach is particularly beneficial to farmers where unpredictable weather patterns and soil conditions can significantly impact agricultural output,” Bide says.

A document by the Southwest Development Authority (SOWEDA) describes drones as powerful solution to many of the challenges in agriculture in Cameroon and other African countries.

“By facilitating an information revolution, drones encourage the emergence of ever more efficient agricultural management systems which support precision agriculture. In the context of agriculture, drones are being used to revolutionise crop management, livestock monitoring, and even the spraying of fertilisers and pesticides,” the document says.

By utilising high-resolution cameras and sensors, drones can capture valuable data about crop health, nutrient levels, and irrigation needs.

This information allows farmers to make informed decisions, optimising their farming practices and maximising yield, CDC technical officials say.

Additionally, drones equipped with thermal imaging cameras can detect anomalies such as water stress or pest infestations, enabling early interventions and preventing crop damage.

Furthermore, drones provide an efficient solution for monitoring livestock, reducing labour costs, improving animal welfare and minimising environmental footprint.

Moreover, they save time and resources, allowing farmers to focus on important tasks and make critical decisions promptly.

Thanks to the use of drones the CDC, produced and exported over 2,586 tons of bananas in October 2023, representing an increase by 58 percent, compared to the 1,636 tons exported in October 2022, according to data compiled by the sector association - Assobacam.

This marked the CDC's second-best performance since the beginning of 2023, following the 2,592 tons of bananas produced in January that year.

The significant increase in CDC production accordingly notably boosted Cameroon's overall banana production. Officially the country's banana production increased by 10 percent in October 2023, year-on-year.

According to the Assobacam data, the production rose from 17,930 tons in October 2022 to 19,721 tons in October 2023, up 1,791 tons.

This also marked the sector's second-best performance since the beginning of 2023, following the 19,734 tons produced in September 2023.



The use of drones for farm operations, including spraying and watering, is revolutionising crop management and production on Cameroon's Tiko Banana Plantation. Photo Credit: Agri Farming