

INNOVATION AND IMPACT

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INTERVIEW

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AGRI-FINANCE

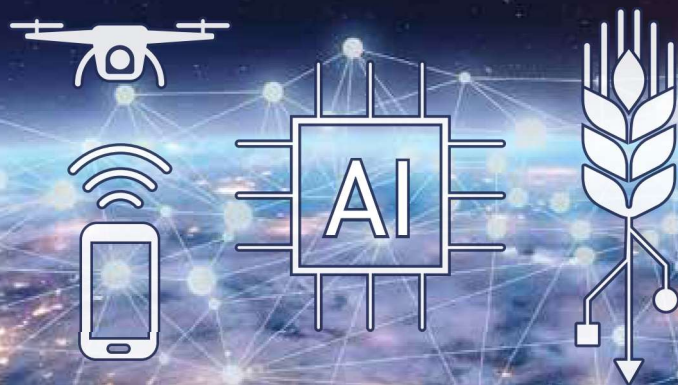
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Final issue

N°195 | December 2019 - February 2020

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Smart farming

TRANSFORMING AGRICULTURE WITH ARTIFICIAL INTELLIGENCE



A global perspective on agribusiness and sustainable agriculture



SUSTAINABLE STIMULANT

Restoring quality for Zimbabwe's coffee-farming communities

Terracing and tree management are being adopted by Zimbabwean farmers, amongst other environmentally-friendly land management techniques, to revive coffee production and sustainable livelihoods.

Tonderayi Mukeredzi

Farmers in eastern Zimbabwe are receiving training and materials to produce coffee using climate-smart, sustainable practices. Through a 5-year AAA Sustainable Quality™ training programme (2017–2021), run by Nespresso in partnership with TechnoServe, smallholders are improving the quality and quantity of their coffee crops using land management practices, such as agroforestry.

“We used to randomly apply fertilisers but we have been taught new ways to build soil nutrition, such as through the use of composts. Last season, I used 17 composts after training and for my current coffee crop, I used 24 composts,” says David Muganyura, who grows coffee on a 2-ha plot. Muganyura is also growing banana trees as shade cover for the coffee plants to moderate temperature and

conserve crop moisture. Despite growing coffee for over three decades, Muganyura admits that the new, sustainable coffee farming methods are helping him to increase productivity. “For many years, we have been struggling to revive coffee production until TechnoServe came to provide us with environmentally-friendly ways of growing coffee,” says Muganyura, who has seen coffee production increase among local smallholders from 10 to 30 t since 2018.

Miriam Mwarazi, another coffee farmer and member of the Batanai women's coffee growing group, was previously using unsustainable farming techniques. “I used to carry huge knapsacks to spray the crop but we were taught integrated pest management, which involves using insect trappers. Hence, I no longer use sprays because they are harmful to the environment,” she explains. “The training programme has taught us to terrace our land to protect it from landslides or erosion, and to use mulching to preserve moisture in the fields,” Mwarazi adds.

Although Nespresso has no contract with the farmers, being a part of the AAA programme enables them to sell their coffee to the company, which pays a premium to the farmers if they grow the crop sustainably. Nespresso says it will invest over €9 million over the next 5 years, as part of a ‘Reviving Origins’

programme, to bolster high-quality coffee production in Zimbabwe and other coffee-producing regions, such as Colombia and Puerto Rico.

Yann De Pietro, Nespresso's sustainability and digital manager says that at the start of the programme, adoption of good farming practices was very low with only 3% of farmers adopting more than half of the practices. However, after training was delivered in 2017 and 2018, the volume of export-quality coffee doubled from 26 to 51%. According to Daniel Weston, Nespresso's head of sustainability, the company bought 20 t of coffee from the smallholder farmers in 2018. “This project is not only bringing back some of the world's best coffee – it is bringing back economic opportunities in Zimbabwe's hard-hit rural areas,” says William Warshauer, president and CEO of TechnoServe.

Midway Bhunu, TechnoServe's programme manager for the Nespresso Zimbabwe Reviving Origins programme says farmers are implementing nurseries to increase production on their farms. “We have established group level nurseries for shade trees as well as locally-adapted indigenous trees, which provide shade and coexist easily with coffee plants during long dry spells, and where farmers don't have adequate rainfall or irrigation, they need shade,” says Bhunu. Seventeen nurseries have been prepared from which 5,000 shade trees will be planted at the beginning of the rainy season in November/December. “We have also provided harvesting and processing workshops to the farmers to achieve the quality Nespresso is looking for,” Bhunu adds. ■

Zimbabwean coffee farmers are implementing new, sustainable coffee farming methods to increase productivity



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