

As a newly established coffee originating business, Tanzania-based Kijani Hai has been going from strength to strength. With the Bühler DA MultiVision optical sorter installed at the heart of its new export line, the company has recorded a 20% increase in its annual savings thanks to less physical loss of coffee.

Established in the UK in the early 1970s, the CTCS Group is an independent, multi-discipline service provider and partner to suppliers and manufacturers in the coffee, peanut and edible seeds industries worldwide. In 2019, CTCS Green Coffee – a subsidiary of the Group – set up an originating business called Kijani Hai in Tanzania, a country renowned for its high-quality coffee.

Kijani Hai procures, processes and exports green Arabica coffee from across the country. The company has 21 staff and four field operations, working with more than 9,000 farmers. Kijani Hai also holds Organic and Rainforest Alliance



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Certifications (RFA). The company exported more than 2,800 tons of coffee in 2020 but is expecting to achieve 5,000 MT within the next two seasons.

## Sustainability and female empowerment

In tandem with Bühler's commitment to reduce energy, water consumption and waste in its customers' value chains by 50% by 2025, Kijani Hai similarly maintains a strong focus on sustainability. The company's name originates from a Swahili phrase which translates into English as 'Living green'. "We like to think of ourselves as eco warriors in suits," says Alex Wield, Coffee Trader at the CTCS Group.

"As a coffee grower, your environment is your business –that's not up for debate. Deforestation in Tanzania is rife, so to counter this we planted 23,000 avocado, macadamia and coffee trees in Mbinga last year. We also set up a bee keeping course in Iringa for our farmers. These activities provide other sources of income from the same plot of land. It's all about ensuring diversity of income for our farmers because when the farmer is protected, the environment is protected: the two go hand in hand – that is how we maintain our green export."



Kijani Hai is also committed to improving women's role in coffee processing. "We work with Lupembe Mamas – part of our Kibanga co-operative – where we promote the women's coffee separately to develop a premium for their coffee," Wield adds.

## A focus on technology

As a start-up focused on increasing its export markets, Wield states that he was keen for Kijani Hai to nvest in a high-tech export line that would be able to keep the coffee quality homogeneous, whilst being able to handle increasing volumes. "South Africa was our original export market, but the aim was always to create a global reach. To do this, we knew that the right technology was key and the best way to support our growing business.

"In the past my team and I have operated both the SORTEX A and B and they work well withstanding the tests of volume and time, so Bühler was already on my radar. For this operation however, we needed something suited to a lower output. From a business overview we also didn't want to be tied into a high overhead & high capex scenario. Most of my team was familiar with Bühler's software and the technology, so it seemed the most logical decision to look into their more cost- effective optical sorters that would suit a smaller operation," Wield states.

## Impressive cost savings

In May 2019, the Kijani Hai team installed a Bühler DA MultiVision optical sorter to the middle of its new export line, before bulking and after the gravity table separation. The sorter features a high-resolution RGB color camera which enables Kijani Hai to detect up to five color defects in one sorting pass, minimizing the need for product re-sorting. The DA MultiVision has allowed Kijani Hai greater control of its operations. "With the color sorter we can process much faster," Wield says.

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Indeed, he shares the company's notable cost savings as a result of using the optical sorter. "In general, without an optical sorter we would expect a physical loss of 0.2% of the coffee (approximately 15.000 USD), but with the optical sorter, the losses are much closer to 0.0%.

"Our processing data also shows that the cost of hand-picking is 1.4 USD per 60 kg bags or 23 USD/MT. The marginal cost of machine processing is 0.29 USD per 60 kg bag or 4.8 USD/MT. On the 2,500 MT that we processed this year, the saving has been around 45,500 USD – excluding building and depreciation costs." Thanks to its investment in the latest technologies such as the DA MultiVision, in addition to the South African market, Kijani Hai is now able to export its coffee to Germany, Holland, Italy, UK, Australia, New Zealand, Japan, Korea, Taiwan, China, US, and North Africa.

"Looking ahead, we hope to expand internally within Tanzania and externally as we're always looking to bring Tanzanian coffee to new customers. CTCS will be maintaining its focus on East Africa and Central America – we eagerly anticipate whatever the future holds." Wield concludes.



