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# Planet-first farms

## Strengthening regenerative agriculture in schools and farms in Kenya

### Project Brief

#### Summary

The Kenya Agricultural and Livestock Research Organization (KALRO), in collaboration with Imperial College London through the Catalyzing Change for Healthy Food Systems (CCHeFS) initiative, have established a planet-first demonstration farm. The farms are being used as a training site for school teachers and farmers on regenerative agriculture practices. KALRO envisions that the demonstration farm will encourage the reproduction of planet-first farms in schools and farms throughout the semi-arid region of Kenya.



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## Context

Declining productivity, land degradation and reduced soil water retention capacity continue to negatively impact crop and livestock farming in Kenya. This is particularly apparent in the arid and semi-arid lands (ASALS) where climate change shocks and landscape shifts are increasing more than 2.8 million people's vulnerability to acute levels of high food insecurity. Consequently, accessibility, availability and affordability of healthy and nutritious foods is a serious challenge for most households and school-aged children—leading to a prevalence of the triple burden of malnutrition (i.e. stunting, wasting, and obesity).

To combat these challenges and build the resilience capacity of communities, the Kenya Agricultural and Livestock Research Organization (KALRO), in collaboration with Imperial College London, have established a planet-first demonstration farm. The development of the demonstration farms was informed by the previous work of the Alliance for Green Revolution in Africa (AGRA), which indicated that farms in Kenya that utilise regenerative agriculture (RA) practices have improved soil health and crop yields. Although the AGRA report suggests a positive impact on soil health and crop yields, a lack of policy and institutional support for RA has led to low uptake of RA practices on farms. To encourage uptake, KALRO's demonstration farm aims to train school teachers and farmers on RA practices so they can replicate the planet-first farms in their own communities. Critically, these initiatives will be led by a national Community of Policy and Practice (CoPP) and local champions.

## What is a planet-first farm?

At KALRO Mtwapa in Coastal Kenya, a pilot farm was built in a way that utilises a variety of RA practices to enable the restoration of soil health, water use efficiency, and promotion of biodiversity. This was named a planet-first farm and is used to showcase crops (Maize, sorghum, pulses, cassava, pigeon pea, horticultural and oil crops) and pastures which are important to local communities. At the KALRO pilot farm, schools and farmers learn to identify and prioritise RA practices that are suitable and applicable in their communities. They are trained to identify the best RA

practices through the application of qualitative indicators—such as the extent to which a specific practice increases yields, improves soil organic matter, water retention, biodiversity (especially population of bees in the ecosystem), above ground biomass, greening the environment, and climate risk management. Based on these indicators, RA practices such as the use of zai-pits, tied ridges, minimum tillage, mulching, cover cropping, biodiversity, and biochar technology have already been identified as highly relevant for most schools and farmers.

Every month, hundreds of school children and farmers are trained on this farm. KALRO is hopeful these trainings will support the successful establishment of planet-first farms across Kenya's ASALs region.

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*"I was inspired to start this farm to reduce malnutrition among school-aged children and to reduce hunger in households impacted by climate change shocks and stressors. It is envisaged that RA villages in communities will transform food systems to become more regenerative, resilient, productive and equitable for current and future generations."*

Dr. Simon Omondi, Director  
KALRO Industrial Crops Research Institute

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## Next steps

Moving forward, KALRO plans to support the scaling and promotion of planet-first farms in schools and farms in the semi-arid regions of Kenya. This action will be supported by the newly established national CoPP who will play a catalytic role in spreading awareness of the initiative, influencing institutional support, and developing advocacy and policy frameworks for scaling RA practices.

The project will also assess empirical data and document the impact of RA practices around the following categories: crop yield, water availability, soil carbon, risk management, nutrient-use efficiency, emission reduction and biodiversity.





### About this project brief

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