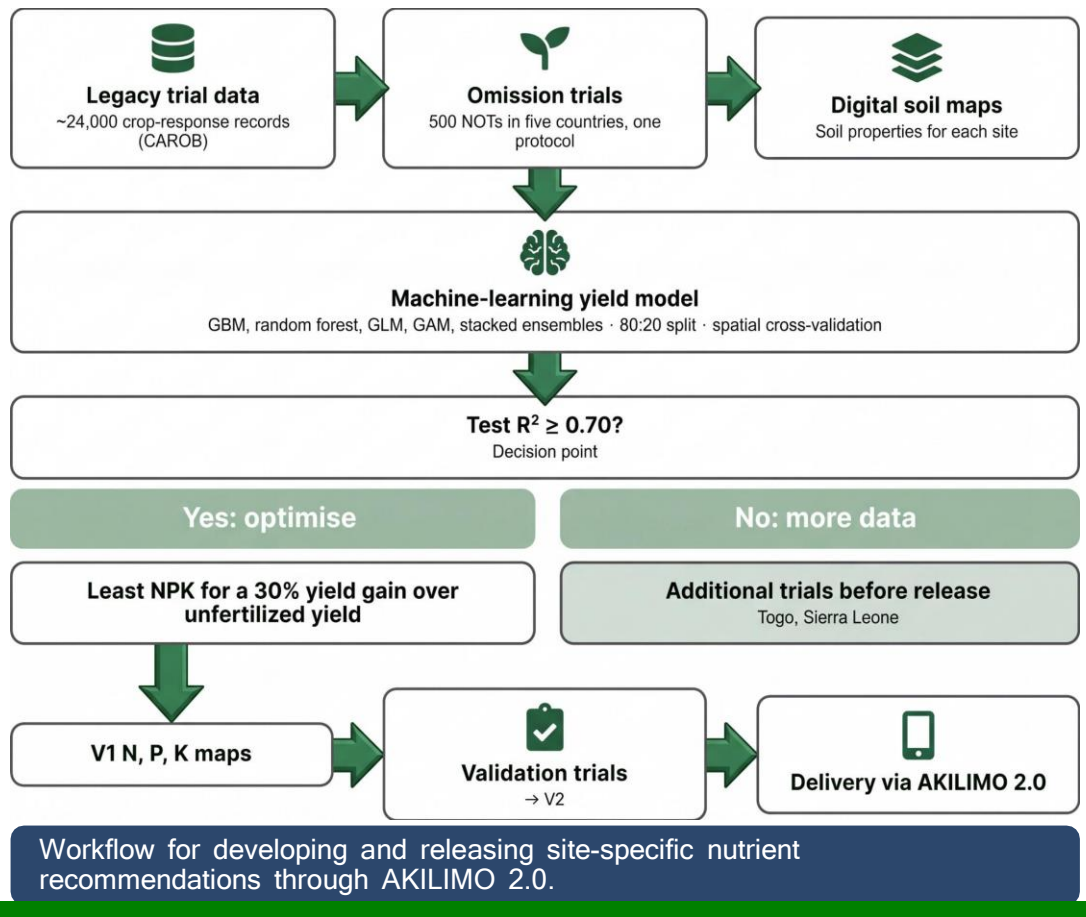
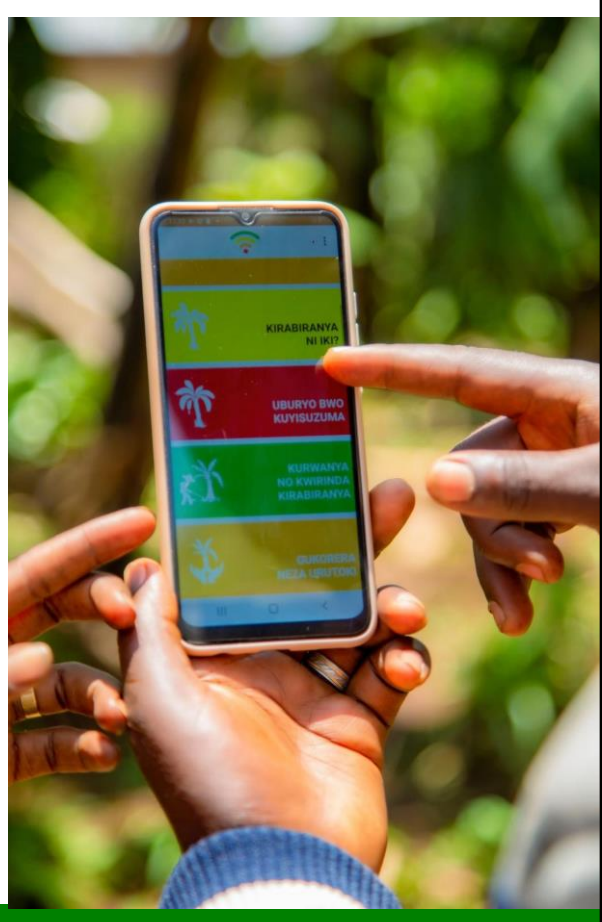


Workflow for developing and releasing site-specific nutrient recommendations through AKILIMO 2.0.



Site-Specific Nutrient Management for Smallholder Farmers using AKILIMO 2.0

Farming Systems Agronomy Program

Blanket fertilizer recommendations do not reflect the variability in soils, climate, and crop response across smallholder farming in West Africa and the Sahel. The Regional Hub for Fertilizer and Soil Health, with national research partners, is developing site-specific nutrient recommendations for maize and rice.

Data from about 500 nutrient omission trials (NOTs) in five countries were combined with trial data and digital soil maps, and machine-learning models generated N, P and K requirements for each crop-soil combination.

Benefits/Impact

Version 1 recommendations met the accuracy for maize and rice in Nigeria and Ghana, and for rice in Liberia, covering **5.1 million hectares of maize** and **5.2 million hectares of rice target watersheds**. These recommendations are being validated for delivery to farmers and extension agents through AKILIMO 2.0.

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Regional Hub for Fertilizer & Soil Health